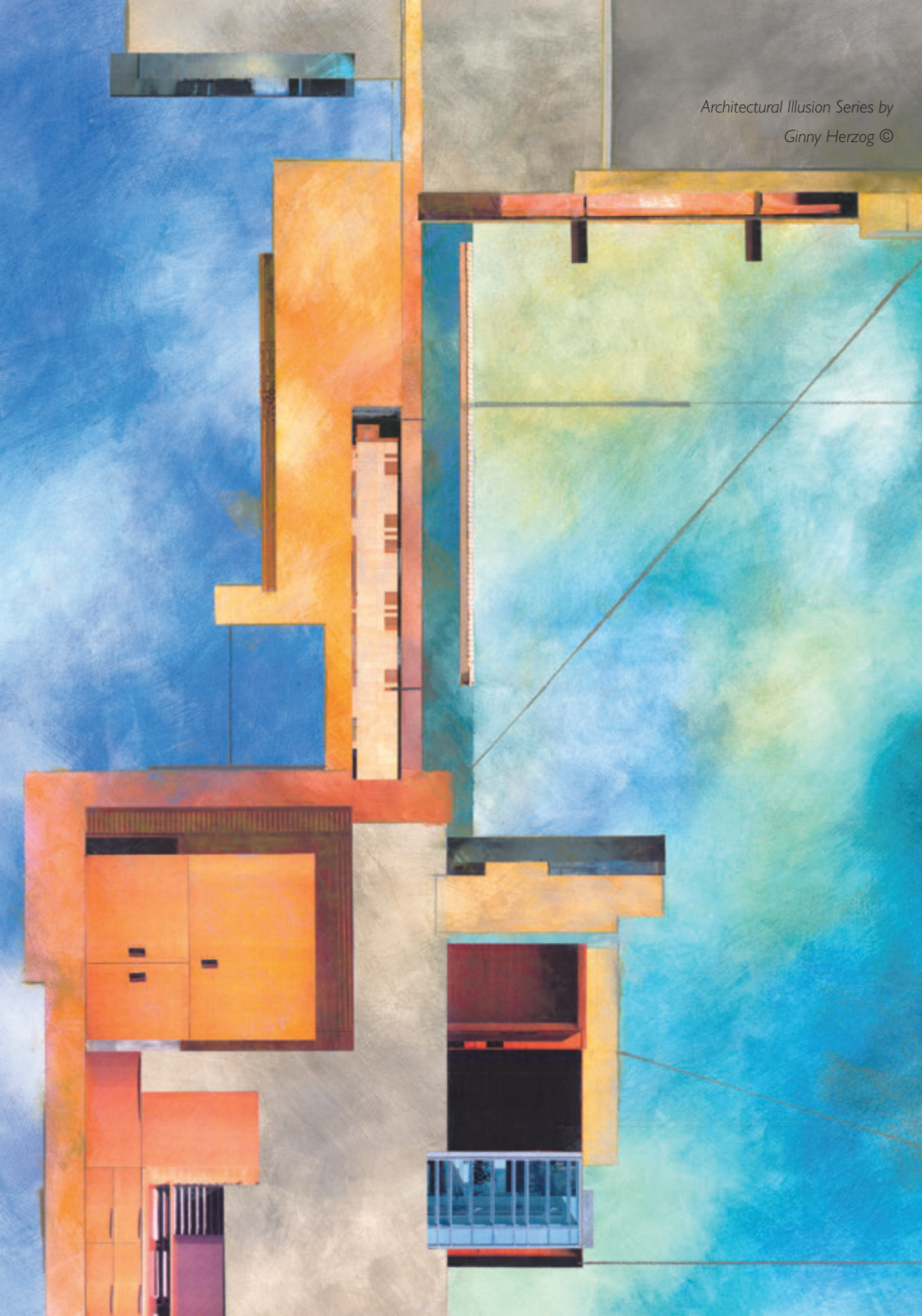


# The GRAPHISOFT® story

Architectural Illusion Series by  
Ginny Herzog ©



# The GRAPHISOFT® story

Hungarian perestroika from an entrepreneur's perspective

by Gábor Bojár

Translated from *Graphi-sztori*, 2005.

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*To my wife who is, with me, one of Graphisoft's parents and creators,  
not only because she pawned her jewelry to finance our start-up,  
but for innumerable other reasons, and who worries about what will become of me,  
now that I am no longer involved in the company's day-to-day operations.  
Don't worry. I like writing books just as well.*

*Budapest, April 2005*



*Motto:*

*“Never let the facts obscure your vision.”*

*Tamás Hajós*



# Contents

<b>Preface</b> .....	9
<b>Chapter 1.</b> Early inspirations: diaper service or software company? .....	11
<b>Chapter 2.</b> Investing in the future: laying the groundwork for success ..	27
<b>Chapter 3.</b> ArchiCAD is born: lessons in PR, marketing and the importance of compatibility .....	41
<b>Chapter 4.</b> The pivotal question: focus or diversify? .....	59
<b>Chapter 5.</b> Conquering the world: building a global ArchiCAD distribution network .....	75
<b>Chapter 6.</b> The British Empire: the bigger the market, the greater the challenge .....	95
<b>Chapter 7.</b> From hopeless case to success story: the battle for Germany and German-speaking countries .....	113
<b>Chapter 8.</b> The American mirage: country bumpkins in the big city .....	135
<b>Chapter 9.</b> Americanizing our American business: for here or to go? ..	153
<b>Chapter 10.</b> Making good at home: our bite of the Hungarian Apple ...	177
<b>Chapter 11.</b> The first Golden Age: tasting the capital market .....	205
<b>Chapter 12.</b> Japan and the great promise of China: embracing cultural diversity .....	225
<b>Chapter 13.</b> Going public: the benefits and the pitfalls .....	249
<b>Taking stock</b> .....	271
<b>Appendix:</b> Sample collection of buildings designed using ArchiCAD ..	279
<b>Index</b> .....	305





## Preface

This book, *The Graphisoft Story*, grew from a throw-away comment at a company party. Our guests were being regaled with one of the many anecdotes from Graphisoft's colorful past, when the wife of a co-worker, who had obviously heard many other such stories, suggested that these anecdotes really ought to be published.

That made me think. We were growing bigger by the day. Our new employees didn't really know where we had come from. They had missed out on so many of our "growing pains." Their experience of us only started when they first walked through the door. I initially wrote the Hungarian-language version of the Graphisoft story so that they, too, would fully understand our history and appreciate our culture and spirit.

When I look at the business market in Hungary today, it saddens me. The entrepreneurial spirit that was so present in the early 1980s has been all but swallowed by complacency. Our "big uncle" the EU, has robbed us of our motivation to succeed. The ready availability of EU funding has created in us a certain laziness – an expectation that the world owes us a living. Hungarian writer, Gyorgy Konrad once asked – What is left when there is no devil?<sup>1</sup> And I wonder...

It wasn't unlike the 1950s when the one area open to competition was sport. We produced excellent chess players, swimmers, and gymnasts because sport

1. Konrad, Gyorgy. Quoted by Michael Heim in "Central European Writers in America." *Partisan Review* Vol. LIX No. 4. 1992.



was the only medium through which we could express our individual prowess, where people could compete, where ambition and staying power mattered. Back then, we were depressed as a nation and the only way to break away from the uniform Orwellian life was to have ambition – to reach outwards and upwards – to stand apart from the crowd.

When the first door opened in 1982 with the Small Enterprise Legislation, it was easy to find ambitious people ready, willing and able to make the most of what this chink of daylight promised. We had entrepreneurial talent oozing from our pores. Although there were times when the road ahead was mired in red tape and littered with potholes, when the world seemed to be conspiring against us, we had what was important: the best and most ambitious talents.

We learned many lessons along the way about ourselves, our management styles, about surviving in the international market and, in my own “immodest” way, I feel it important that as many people as possible have the opportunity to learn from our mistakes and from our successes.

Finally, this book is for those who would like to know more about those exciting times behind the Iron Curtain from a very specific point of view, that of an entrepreneur. Perestroika had turned the world as we knew it upside down. While the transition from a one-party dictatorship to a parliamentary democracy was exciting in itself, the transition from a centrally planned economy to a market economy brought with it new ways of doing business.

So, whether you are a budding entrepreneur or interested in how businesses operated behind the Iron Curtain or whether you simply enjoy a good read, this book has something for you.

It charts the rise of Graphisoft since its inception in 1982. It takes you on a journey that will span the world – China, Japan, the United States, Europe – where my personal observations and anecdotes are coupled with the lessons we learned along the way. It ends in 1998, when Graphisoft went public and was registered on the Stock Exchange. The events since then tell the story of a different Graphisoft, with different lessons and different messages. Maybe that era, too, will, some day, deserve a book.

Travel with me and enjoy.

Gábor Bojár



## Chapter I

# Early inspirations: diaper service or software company?

### Childhood influences

Among many things I inherited from my parents is a sense of boundless ambition and a conviction that no matter which career I pursued, I had to be the best. It went without saying that my father was the best photojournalist in the world (or in Hungary anyway), and that my mother was the best secretary in the world (or in Hungary anyway). She was not only the fastest typist, she didn't make any typing mistakes either; in fact she corrected her bosses' mistakes. She was very proud of this and often boasted about it – which may be why she never climbed too high up the career ladder! I, too, can probably attribute many of my workplace conflicts to this absolute self-confidence. But my father was equally responsible for my “modesty”: he often and emphatically dissuaded me from pursuing a career in photography, since I could not be the best at it (because he himself was already the best!). Moreover, he said, it would hinder my career if everyone kept comparing me to him. He cited the Hungarian writer, Ferenc Karinthy, as an example. Ferenc was constantly being compared to his more famous father, Frigyes. So much more was expected of him because he was his father's son and because he was related to such a gifted man, his own talent was never given due recognition.

Yet even my father could not destroy my genetically coded self-confidence. At the end of my first grade in school, one of my classmates easily convinced me that the following year we would no longer be classmates. Because of my outstanding ability, I would be promoted to the third grade. Not even my glaringly





mediocre grades gave me pause for thought. I saw no conflict between my limitless ambition and the regularly repeated remonstrance of my parents and teachers:

– You could easily be a straight-A student, if you weren't so lazy!

Things continued like this until my seventh-grade teacher, when handing out my report card, gave the usual complaint a new twist:

– You should be ashamed of yourself; with your ability you could easily be a B student! – I was outraged.

– What do you mean B student?

I had gotten used to the A-student variation. And from then on, I *was* an A-student. I owe that excellent teacher, Mr Ferenc Bódi, a huge debt of gratitude.

It never occurred to me to pursue a career in law or economics, although in hindsight, these subjects would have been more useful than my physics degree. My innate knack for business manifested itself early on. It must have been around the second grade when my classmates were obsessed with trading marbles and dice. One of them had accumulated lots of marbles, and was willing to trade two marbles for a single die. Communication and the flow of information within the classroom were not perfect as a boy in a different corner of the classroom, out of hearing range of the first kid, had plenty of dice and was willing to trade two dice for a single marble. I immediately recognized the possibilities and completed the transaction. While at first I had neither marbles nor dice of my own, I ended up with one of each following the trade. But to do the trade, I first had to borrow at least one of the marbles for a few minutes in order to get the two dice, and then trade one of the dice to get the other marble. This “loan” was my downfall. The lender came over to see what I was up to with the loaned marble and uproar ensued. The school principal summoned my father to take him to task: what sort of “holdover bourgeois tactics”<sup>2</sup> was he teaching me? I learned two lessons from this incident: first, conducting business requires “operating capital” (if I’d had that, I wouldn’t have had to ask for “supplier’s credit” and been found out right away). Second, a temporary failure in information flow between the parties is not an adequate basis on which to conduct business. A true and sustainable value-added element is necessary for long-term success.

2. According to Marxist theory, the bourgeois were considered “class enemies” and in Communist countries, people labeled bourgeois were treated with suspicion and/or suffered harsh discrimination, and were sometimes persecuted.



At the time, of course, I didn't appreciate these wise lessons and after a tongue-lashing from my terrified father after his run-in with the principal (this schoolyard incident occurred during the Communist police state crackdown following the 1956 Hungarian revolution), I had no desire to pursue a career in business. Although my parents were careful at home not to use words – or politically suspicious phrases – that would get me into trouble in school, their hearts and consciences were such that the expression “bourgeois” could never have a negative connotation for me. A good ten years later, when I was drafted into the Army, I came into contact with boys from families with sincere Communist convictions who did not really accept me as one of them.

– Gábor, your problem is that you are too “boo-zhwa,” they teased. Yet even then I didn't consider it a negative term.<sup>3</sup>

In sum, I had no desire to study the highly politicized subjects of economics and law. My grandfather, who had seen a great deal in his lifetime, advised me to study engineering instead, and to concentrate on math, because two plus two always equals four, regardless of which political system happens to be in power. Perhaps this instinct for survival, born from the bitter experience of the past few centuries, helps explain the relatively high quality of mathematics instruction in Hungary and the relatively high number of Hungarian Nobel Prize winners in the sciences.

So I planned to become an engineer, until one of my classmates (Péter Horung, who became an outstanding engineer, and later my co-worker and one of Graphisoft's co-founders) let me into a secret: engineers have to be precise! As precision was not one of my stronger points, I decided to become a scientist, which is closer to art than engineering.

## University studies and my first job

While at college, it never occurred to me to aspire to anything less than the Nobel Prize. But even if Graphisoft had not been born, and if I had indeed become a scientist, I think I would not have made it through the middling ranks. Apart from genius (which I never for a moment doubted I had) I needed other very important traits for a scientist: patience and the ability to study a single, narrow topic very intensively, neither of which I possessed. In fact,

3. In fact, the term bourgeois loses none of its positive association for me even after attempts by contemporary politicians to associate the term with political values that have as much to do with genuine bourgeois values as the Hungarian Socialist Workers' Party had to do with the real working class.



Dr László Szabadváry, my boss at my first job at the Institute of Geophysics, was the one to draw it to my attention.

– Gábor; – he said, – you would make a very poor scientist, since you are unable to really immerse yourself in any single thing. But you are very good at something else: you can understand a great many things quickly and superficially. This, too, is an important ability, and not many people have it: it's called "managerial talent".

At that time, I took this as a criticism (we were, after all, in the throes of building socialism, and the word "manager" didn't sound very flattering). In fact, I was a little insulted. Today, I know that he meant it as a compliment. And his remark was on target: my professional successes at the Institute of Geophysics were far more in the realm of business and organization than in the technical sciences. The most remarkable achievement of the Institute's programming team, which I headed, was to transfer calculation tasks from Budapest's big computing centers (where each job took several weeks) to a programmable hand-held HP calculator that had recently become available. As a result, we could perform calculations almost simultaneously with on-site geological data collection. At the time, this achievement did not need much programming genius as the calculations required were relatively simple, and the HP calculators were much easier to program than the Soviet-made wonder, the MINSZK-32, available in Budapest's computing center and out of service more often than not.

With this new ability to process and calculate data on-site, the efficiency of our bauxite exploration – for that was my team's job – increased exponentially. We even convinced ourselves that we were partly responsible for the successful preservation of the complex of underground hot springs in western Hungary: since our forays relatively close to the surface had become so much more efficient, we could avoid the expensive, more invasive bauxite mining activities that required drainage of the mine waters – a major threat to the hot springs.

## **Gaps in the planned economy and tentative experiments with a market**

In addition to these large-scale benefits to the national economy (we called it "the People's Economy" then); we enjoyed some personal profit as well. The only feasible way to get hold of the necessary HP pocket calculators was through so-called "private import," a highly lucrative operation.



I will try to explain the background to the “private import” phenomenon, although I am afraid the whole thing will be unfathomable to anyone who missed the pleasure of living in a communist environment!

State-owned enterprises had no access, or only very limited access, to convertible currencies or import licenses. At the same time, their forint-denominated budgets for acquiring productive technology were practically unlimited. Consequently, if someone could get their hands on convertible currency, and could purchase the productive technology so sorely needed by the enterprises, then – even after customs duties and even if the convertible currency had to be acquired on the black market at a rate much higher than the official exchange rate – their profit margin could reach several hundred per cent. Of course, an individual had no means of either buying technology abroad or selling it at home until the advent of programmable calculators, and later, of personal computers: these products were both consumer products and productive tools.

This discovery led to the phenomenon of private import. I am proud to say that – true to my childhood marbles and dice trading experience – I was perhaps the first pioneer of this business in 1977/1978.

Employees working abroad, by saving their per-diem allowances or acquiring foreign currency on the black market, could purchase the calculators, which they could then resell in Hungary to their institutes at a handsome profit, using the state-owned consignment store, Bizományi, as a pass-through. The pass-through was needed because a state-owned enterprise could not purchase anything directly from a private individual; the state-owned consignment store was officially established to deal in the trade of second-hand goods. The Bizományi had the sole right to buy items from individuals, and could – in its capacity as a state-owned enterprise – also sell them to other state-owned enterprises.

The transaction required a great deal of preparatory footwork, but it was worth it. The first step, as in any trade transaction, was to identify the buyer and then to acquire the product. In a normal market economy, producing or acquiring the product is easier than finding a buyer. In the planned economy the situation was reversed. The buyer was a given: the state-owned Geophysics Institute was more than willing to pay almost any price for the calculator; since the Institute’s “soft” forint account for such purchases was practically unlimited, not to mention that these calculators were so much better than the colossal MIN-SZK-32. Getting hold of the calculator; however, was more problematic, because (for professional reasons) we wanted the very latest models advertised in the



catalogues, and ordering these was a long and complicated process. First, we had to commission a friend or acquaintance in the West, using their address as the ship-to address. Then we had to find a person with documented, legally purchased foreign currency, since this was necessary for getting the calculator home through customs. If we were lucky, these two roles were filled by a single individual; if not, the transaction became a bit more expensive, but was still worth it. Once we had these elements of the transaction in place, we could deal with the customs issues. In contrast to the usual game, in this case we had to convince the Customs Officer to levy the highest possible duty, since the *Bizományi* would price the calculator based on its value at customs. At first, the officers were incredulous – they were used to bribes to undervalue goods – but they soon saw through the system and became amenable. The final act was to produce both buyer and seller at the *Bizományi* at the same time. In theory, the *Bizományi* could have accepted the product without an identified buyer (it would pay the seller only after it had found a buyer), but this was not a good idea. Neither the Customs Officer, nor the *Bizományi* appraiser, nor even the courier who brought the calculator from abroad, had any idea of the real nature of the calculator, so if this “treasure” got into the wrong hands, it could easily be lost. On one occasion, our buyer inadvertently took home a package of ordinary perforated printer paper, paying a fortune for it, while the extremely expensive, specialized heat-sensitive paper for use with an HP printer – the real object of the trade – was located weeks later, gathering dust and priced at pennies in a *Bizományi* store on the outskirts of Budapest.

Later, by the early 1980s, the private import of domestically unavailable devices took on industrial proportions, partially due to the still-extant import restrictions, but mostly because of the CoCom<sup>4</sup> embargo (the Western countries' prohibition on exporting technology to the Eastern Bloc). Following the example of the *Bizományi*, other state-owned, yet ostensibly profit-oriented firms, such as *Ofotért* and *Migért*, also entered the trade. And these transactions were often a bizarre sight to behold: on any given day, my countrymen returning from their tourist visits to Vienna, traipsed one after the other toward the corner *Ofotért* store, each lugging a monitor, a printer, a few packages of heat-treated paper or other computer-related gizmos currently in demand. Thus did Hungary engage in high-tech imports.

In helping to set up this computer-importing business, I learned another interesting and lasting lesson: I needed a certain amount of investment capital in order

4. CoCom: Coordinating Committee for Multilateral Export Controls



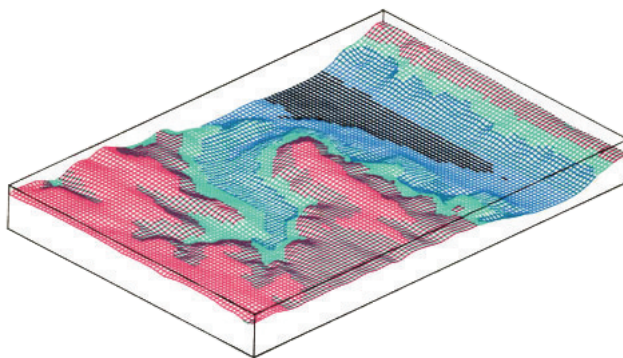
to develop the business more dynamically. I first turned to a well-heeled acquaintance, whose enviable wealth (in terms of the standard for that era) was due – as all his friends knew – to smuggling Western cosmetics and other popular, but domestically unavailable products into Hungary. I suggested that he joined our computer business, where the profit margin was much higher than on his soaps and deodorants. But he refused, saying:

– You know, I know this soap business well – I feel it in my fingertips. I know where to buy my soap in Vienna, I know which truck drivers will smuggle it home and for how much, I know which Hungarian shopkeepers will buy it and for how much, I have a feel for how much I can sell, and so forth – a hundred such considerations. But when it comes to computers, I know none of these things. That business should be run by people who know what they are doing.

This was wise advice. I, too, vowed that henceforth I would not get involved in a business that I knew nothing about, regardless of how tempting the prospect.

## Professional achievements

Aside from our private import business, we at the Institute of Geophysics remained committed to our innovations in software development. We developed a series of mapping programs for use with the ever-more powerful calculators (whose import, incidentally, was becoming ever-more lucrative). These programs would never have worked on the central mainframe computers. In addition to displaying the elevation lines of traditional maps, our program – inspired by my young colleague Ferenc Kaszás, who unfortunately is no longer alive today – could also display depth perspective. To a certain extent, this program provided the inspiration and catalyst for three-dimensional (3D) modeling, the specialty of the future Graphisoft.



*A 3D terrain model created on a hand-held calculator*



But what really made the Institute of Geophysics sit up and take notice was when an American partner institution began using our programs. It had never occurred to anyone on the American end to write such codes for such small calculators. Our Institute did appreciate our achievements, and I must admit that, in comparison to other state-owned institutions, the level of technical achievement and business-management prowess at the Institute of Geophysics was quite high. Can it be mere coincidence that other successful private firms also had their beginnings in the Institute of Geophysics? We all learned a great deal about business management from the Institute's director, Dr Pál Müller.

Despite these positives, I also had bitter experiences during my tenure as an employee at a state-owned company. If a company has no real owner, then the principle of mediocrity – survival of the least competent – is practically pre-ordained. If there is no property to own, then there remain only jobs. And if the only thing that counts is where you rank in the bureaucracy, then talented and ambitious young people are nothing but a threat to their superiors. If there is no competition to serve as an incentive for high achievement, then the rule of mediocrity is bound to prevail.

This shocking recognition was what first awakened in me the desire for my own company. I wanted to be the boss, and would be only too happy to find workers who were more talented than me, because ultimately, the company would be mine, and they would be working for me. This, in fact, is the productive force behind the doctrine of private property.

## **The dream of working abroad**

In Hungary, private ownership was still a while off. Due to a number of conflicts, stemming from my basic dissatisfaction with the rule of mediocrity inherent in a state-owned business, I eventually left the Institute of Geophysics and went to work as a programmer for a computer science institute called SzKI. Although this new position was actually a demotion compared to my former rank at the Institute of Geophysics, SzKI was famous for offering its best programmers on loan to Vienna or Munich as part of a manpower leasing agreement. This represented a terrific opportunity both professionally and personally: we could work with state-of-the-art computers while receiving a per-diem allowance in hard currency. If we were frugal enough, we could save about half of this so, in effect, we ended up making many times the salary we could have made working in Hungary (particularly if we spent our savings on soap and deodorant that could be re-sold





at a high profit back home). As it happened – and I had some influence here – the soap-import business among SzKI workers soon shifted increasingly toward computer-technology import, whose profit margin was higher, making our stint abroad even more lucrative.

To be honest, our interest in working abroad was not only, and not even primarily, motivated by the money we made or by the professional skills we honed. The real attraction was the possibility of tasting the forbidden fruit of living in the West. Hungarian tourists of that era were permitted to go abroad only once every three years. As we returned home, crossing the border into Hungary at Hegyeshalom, the infamous crossing gate that was rebuilt as a massive ostentatious structure following several failed attempts by buses and trucks to crash through it, slammed shut behind us. And we had to face the fact that we were locked in for at least the next three years. From the border crossing, you could see the multi-layered barbed-wire fence snaking along for miles, surrounded by banks of sand which were rumored to be fortified by land mines. In fact, at one point in time, the barbed-wire fences were actually electrified. In time, the Iron Curtain represented by the Hungarian border was lifted slightly and we were allowed to go abroad for three days at a time to attend sporting events without using our three-year “allowance.” The night before the event, we would travel as far as Mosonmagyaróvár (just inside the Hungarian–Austrian border), stay overnight in a motel, and start the next day at dawn to make it to Vienna by morning so that we could take full advantage of our three-day freedom. Naturally, we did not make even a token appearance at the sporting event which served as the excuse for our trip. On the third day, we stayed in the city as long as possible, making it back to the Hungarian border just before midnight, so that, as law-abiding citizens, we would make it back home just in time.

Such were the constraints facing Hungarians who wanted to experience the West. And this is why the opportunity to work abroad meant more than just money: it was a way to break free from these constraints, at least to a limited extent.

As I got to know my co-workers at SzKI, and after experiencing what it was like to work and live abroad, this particular career soon lost its appeal. Never feeling really at home, being tolerated merely as a guest worker, and not being able to spend evenings with family and friends was no fun. My wife, a physician, was making a fairly good salary and we lived relatively well by Hungarian standards at that time. So, I was able to choose not to adopt the lifestyle of a nomad. After all, traveling around isn't all it's cracked up to be if you are always on your own.



This realization was yet another step toward the idea that would become Graphisoft: maybe others, like me, preferred to live here at home, and if we could bring at least some of those well-paying contract jobs from abroad, then we would be happier working at home.

But before this idea could become a reality, two small-scale revolutions were still ahead: one in the realm of computer science, the other in Hungary's political and economic systems. In computer science, the personal computer (PC) revolution brought about some much-needed changes. Thanks to the private import process, these small and relatively cheap PCs made it to Hungary, despite the currency restrictions and import controls, and despite the still more formidable barriers of the CoCom embargo. As for Hungary's economic system, a key transformation took place in 1982 – the year Graphisoft was born. In that year, early forms of privately initiated small enterprises (similar to partnerships) were legalized. Before we go there, however, I need to tell you about a number of other events which led to Graphisoft's conception.

## **Diaper service or software company?**

In 1980, using the tourist visa we were allotted once every three years, my wife and I had our first chance to go to the United States. We were expecting our first child, and wanted to bring home a large supply of disposable diapers (in addition, of course, to the HP pocket calculators whose profits were funding our trip). Disposable diapers were unknown in Hungary at the time. Some of our friends, who had left Hungary to live in the States, didn't understand why we wanted to spend our money on diapers: even then in the U.S.A., disposable diapers were fairly expensive compared to professional diaper-cleaning services. These companies picked up dirty diapers from your home and returned them washed and clean. Our friends insisted that this would be a good idea for Hungary, where labor costs were much lower. But Hungary's laundries provided no such services. Not only would they not pick up the poopy diapers from your home, they would not even take them in for washing; so diapers were washed at home.

- Okay then, instead of buying disposable diapers, why don't you buy a large-capacity industrial washing machine and start up a diaper service yourself? – they asked.
- You'll do a huge business.

Indeed, Hungary had permitted private enterprise in the consumer services sector for some time, and I immediately pictured myself as the happy owner of a booming diaper service. But in the end, things developed differently. Our friends



took us to an IBM computing center; which was so impressive that my resolve to go into the diaper business began to waver. At this point, however, I was so intent on having my own business that if political changes in Hungary had not soon opened up the computer services industry for private enterprise, it is entirely possible that the Graphisoft idea would have found its embodiment in a diaper service.

A few days after we returned home, the (state-controlled) *Magyar Nemzet* newspaper published an article, or rather floated a trial balloon entitled “Private-sector Mathematicians.” The article told of three computer programmers who had formed a partnership and were contracting their services to state-owned companies. My former colleagues at the Institute of Geophysics called my attention to the article and offered to quit the Institute immediately to form a company, as long as I also quit my job at SzKI and joined them. All of them were outstanding programmers whom I had hired as part of my team while at the Institute. Laci Gosztonyi, for example, wrote the world’s first translation program into Prolog and as legend has it, he did it as a bet for a bottle of wine. Around that time, Prolog had been introduced in the professional literature as the up-and-coming fifth-generation programming language. Gosztonyi, who at that time was not yet with our Institute, read about Prolog and liked it so much that he bet his similarly bored colleagues that he could write a functioning translation program for Prolog within a few weeks. Apparently he won the bottle of wine. I don’t know exactly how much of this story is true, but the fact is that by the time we were colleagues at the Institute of Geophysics, Gosztonyi was inventing new programming languages and writing translation programs for them in record time.

So the idea of getting the old team together to form our own private company, to achieve great things according to our own ideals, was definitely appealing. When, in 1982, early forms of privately initiated small enterprises (similar to partnerships) were legalized, the main attraction for us was that our (state-owned) clients would pay us using their “soft-forint funds” rather than using the much more limited “hard-forint” funds. Confusing I know. But let me explain.

A critical element of the planned economy was strict and rigid salary control as a substitute for the cost sensitivity of companies operating under normal market conditions. In the planned economy, there was no market and no cost sensitivity at all, hence the need for an artificial system to prevent salary inflation. Soft-forint funds were practically unlimited, as these paid for the services of other regular, state-owned companies, also subject to the salary control system. Our partnership, however, was not subject to this salary control and we could use our



soft-forint revenues to pay ourselves any salary we liked. If such partnership arrangements really did materialize, they would shake Hungary's otherwise rigorously planned economy right down to its very core. So, disbelievably, we took steps to find out whether the powers-that-be (the Party comrades) really meant what we thought they meant. I asked a lawyer friend, Dr János Kálmán, to investigate. Known for having insider contacts in every possible field, Kálmán learned that the comrades really did mean it and he himself went on to become one of Hungary's premiere experts in partnership and other small enterprise issues.

With this reliable legal information in hand, we turned to our network of friends and obtained their commitment to hire us for a few projects. After that, we quit our jobs and founded the Cortex Partnership.

## **Limits to democratic decision-making in an enterprise**

We chose the cerebral-sounding “Cortex” as our company name to suggest the intellectual nature of our line of work, but also because a name ending in “-ex” implied a serious enterprise: many state-owned international trading companies also had names that ended in -ex (for “export”). We enthusiastically designed a company logo, printed letterhead and business cards, and were inexpressibly proud to own our own company.

But the risk turned out to be much higher than we expected. Despite receiving assurances that the Government was serious about making the partnerships a viable part of the economy, most people were nevertheless uncertain about our status, so the promised jobs materialized very slowly indeed. As one promise after another went up in smoke, my colleagues became increasingly panicked, for their personal finances were far shakier than mine. Some of them were already regretting their recklessness in leaving their safe government jobs for the uncertain waters of private enterprise. I did everything to raise their spirits and to convince them that we must continue developing our programs because sooner or later a client would materialize, and then at least we would have something ready for them. It was then that the legendary “pawnshop story” originated. My wife and I took our family jewels (our wedding rings and a few inherited silver platters) to a pawnshop so that we could continue financing the company. In truth, we didn't necessarily have to hock our jewels; I could have obtained a loan elsewhere, but I wanted to



demonstrate how much I believed in our future. I gave the money we raised to my colleagues to cover their daily expenses, a loan they later repaid using their share of the company's income.

Finally, a few of the many promised jobs did come through and the panic of the early days dissipated. We even reclaimed our rings and platters from the pawnshop. The first to risk contracting their programming tasks out to a private company were the Institute of Forestry and the Central Mining Development Institute. Our friend, Ferenc Réz, was particularly active in finding us business opportunities. I had gotten to know him through our shared enthusiasm for HP calculators, and he was instrumental in getting us a few jobs with companies using them.

All we had to offer was the expertise we'd gained at the Institute of Geophysics: how to draw high-quality topographical maps and view them from multiple angles by rotating 3D surfaces in space. The techniques used at the Institute to display geological calculations were the same techniques we used at the Institute of Forestry to calculate and display the soil erosion caused by topographical changes. Generally, we wrote the program using the client's own computer system. In those days the computer industry was a long way from the level of standardization required to simply transfer a program from one system to another, even if the systems were both manufactured by the same company (such as HP). For the most part, these computers were low-capacity programmable calculators, and we had to engage in much wizardry to condense the solutions we read about in the Western technical journals, written for machines with much higher memory capacity, onto these little calculators.

At around the same time, we got to know Gábor Tari, who later co-founded Graphisoft with me. Because he worked at the Budapest Technical University in a related field, the Central Institute for Mining Development commissioned him, as an expert in the field, to evaluate our work. He was impressed with our little calculators. But when Feri Kaszás, the creator and original author of the 3D modeling program, mentioned how much rewriting had been required to optimize the program in terms of speed, Tari replied that he had never seen a program that couldn't be made to run even faster. At this, Kaszás offered Tari a bottle of champagne if he could find a way to make the program work faster. Although Tari asked for an hour to do the task, he won the champagne within ten minutes.





*Tari at work.*

*(This photo is from much later...the bottle on the table is not the legendary champagne!)*

So we had discovered another genius, and I wanted him to join our company right away. My co-workers, however, who had suffered much more than I from our hand-to-mouth existence during the firm's precarious early days, felt that it was too soon to expand. This disagreement was the first sign that our objectives were fundamentally at odds. My co-workers wanted to be assured of a living wage, while I envisioned an expanding company. Yet in our partnership we were not employees, but rather equal partners who divided the income equally among ourselves and made decisions based on a vote. I was not a boss, just one among equals. The limitations of this democratic system soon became apparent, but I lacked not only the experience to recognize this in time, but also the tactical and diplomatic skills, as well as the courage, to voice and address these issues openly. So our relationship, despite my respect for my co-workers' professional capabilities, became strained.



## The atomic reactor at Paks

Our parting of ways finally came about in connection with a job prospect at the Atomic Reactor at Paks, a small town beside the Danube about one hour south of Budapest.

At that time, the completion and the start-up of the reactor were already several years behind schedule. The original plans were based on those of a much older Soviet reactor, and had recently been updated. This modernization process, however, caused some technical problems. Some of the newer equipment did not fit into place, so parts of the completed building had to be torn down and rebuilt. To prevent such glitches, the engineers created scale models, but these were not detailed enough and took too long to make. The biggest problem was that modifying these models, or trying out several variations, was exceedingly difficult. In the West, engineers were already using 3D computer modeling to avoid such problems, but these machines and software programs came under the Co-Com ban, and could not be imported into Hungary, even if the necessary hard currency was available. Moreover, these machines were so large that the private import option – a lucrative activity that by now had expanded throughout Hungary – was not feasible.

As luck would have it, László Kapolyi, then State Commissioner for Energy Affairs (later Minister of Industry), who oversaw the reactor investments on behalf of the Government, recalled that he had once seen a clever 3D terrain modeling program at the Institute for Geophysics that ran on a very small computer. He instructed one of his assistants to find out whether that program could be used to model the pipeline system of a reactor. We were no longer at the Institute of Geophysics, but Kapolyi's assistant, undaunted, eventually tracked us down.

The idea seemed far-fetched, because the method used for modeling terrain doesn't work for modeling pipelines: the geometric relationships are entirely different. So we had to invent something new. But I was enthralled by the purely business aspects of the situation. The prospect of working on the Paks Atomic Reactor was a tremendous opportunity, one I could not let slip away. The sheer size and reference value of this job far exceeded all our previous assignments, and if we succeeded, we would put ourselves in a whole new position as a company.

By then, however, the differences between those involved with Cortex in terms of ambition and willingness to take risks had become even more starkly evident. My colleagues insisted on waiting until we had a signed contract in hand





before beginning the work. I argued, to no avail, that we had to demonstrate that we could do the work before we could expect to get the contract. This difference of opinion was eventually resolved by the break-up of the company. Tari and I went on to found Graphisoft so that we could take on the Paks Atomic Reactor project.



*The Atomic Reactor at Paks*



## Chapter 2

# Investing in the future: laying the groundwork for success

The name “Graphisoft” was indirectly inspired by a film I had seen about a large company named after its founder and owner. I don’t remember his name, but it began with an “R” and the company logo consisted of a fancy graphic letter “R” that was displayed on the tail of the corporate jet. With my customary optimism (shared by Gábor Tari), it was this image that floated before me as we tried to conjure up a name beginning with “G” (referring to Gábor, our shared first name), picking the fanciest possible font style for the “G” that would some day adorn our corporate jet in gold lettering. So with these important considerations in mind, we came up with the name Graphisoft, a reasonably accurate depiction of our activities at that time.

We could not then have foreseen the difficulties that the Graphisoft name (and the name ArchiCAD) would cause 20 years later in terms of product positioning and marketing. The significance of our software products is no longer that they are “graphical” and “ArchiCAD” is not a true CAD (computer-aided design) program in the classical sense. I learned the hard way that, when creating a new brand name, it is best not to convey the product’s or company’s current features too directly, for these may change over time. Changing the product name, once well established, is not a good idea either.

So choosing the Graphisoft name was a democratic process, but I must add that the remarkably large number of Graphisoft employees named Gábor is not a conscious policy on the part of our human resources department, just pure coincidence.

I learned a few lessons from the failure of Cortex. Apart from the issue of the company name, I established firm boundaries on the democratic process within



Graphisoft. At first, I offered Tari employee status; he became a co-owner only about six months later. From the outset, we had a clear agreement about which decisions I would make alone as boss; which decisions I would need his input on; and which technical issues were his domain, on which I could offer only non-binding advice. The type of democracy practiced at Cortex where every issue was decided by popular vote never arose at Graphisoft. Yet I did not want to rely solely on wage-earning employees, responsible only for their own narrow tasks; I wanted real partners who would share some of the risk involved in the enterprise.

The other owner of our company was an older friend of mine, Péter Hámor, who was involved as an investor. He didn't ask for a business plan or market analysis; he didn't even carry out any due diligence. He simply looked at me and said to himself:

– I trust this guy. This investment will pay off.

As it turned out, he was right. I was very grateful for his trust, which inspired in me a far greater sense of obligation than any number of professionally written business plans ever could. He invested a relatively small sum, but it was enough, since we really only needed enough money to pay Tari's salary during the six-month period before the Paks contract came through. Much more significant than the money was Péter Hámor's trust in us, and the fact that, about once a week, we'd meet in a café to discuss how the business was going and any problems that had arisen. He always led me to the solutions by asking questions. A few years later, a sudden heart attack took his life. I miss him to this day, as a mentor and a partner, but also as a friend.

I know now that most businesses owe their beginnings to such investors or "business angels." Today, 25 years later, I sometimes play such a role in promising new enterprises.

## **Our first revenue-sharing scheme**

We initiated an objectively defined revenue-sharing system that hinged solely on the amount of our revenue, and based on the principle of "we sink or swim together." From our revenue, we subtracted work-related direct costs (such as computer rental fees and subcontractor fees). The remaining money (today I know this is called "gross margin") was divided into three categories: 20 percent went toward utility bills, another 20 percent was set aside as a reserve, and the remaining 60 percent was divided among us as income. Within that last category, we defined particular percentages that were allotted to programming, sales and



general management tasks. Under this arrangement, salaries as such did not exist in the company's list of expenses. Using the reserve funds, we allotted ourselves small advances for personal living expenses, which were then deducted – once the revenue came in – from the fees paid to us out of the revenue-sharing arrangement. If several of us participated in any one particular task (such as programming), then the division of revenue was calculated, based on mutual agreement, according to our relative contributions.

We designed this revenue-sharing scheme so that it would work even if the company expanded and we did well. The scheme continued as company policy for many years only modified when our ongoing projects became increasingly independent of current revenues – such as with long-term product development, which would not generate revenue for several years.

Later, when Tari left his university job for good, he once admitted that it was not so much the prospect of making more money that attracted him to Graphisoft, but rather the fact that, in contrast to other places he worked at, the distribution of income was fair and square.

## **The Paks project comes through**

The Paks project was different from our earlier jobs in several respects. We were not unduly worried that we didn't have a contract in advance, just a hopeful-sounding commitment from a Ministry official (we didn't even know his rank or importance within the Ministry). The real worry was that we were not clear on who our client would be even if the job did materialize: would we be working for the power plant, or for Erőterv (which was managing the investments), or for the Ministry? We could not follow our usual practice of working on our client's computers, since the Ministry – with which we had the closest contacts – had no computers. We had to provide our own. We did this by renting computer time from the Híradástechnika Cooperative (a firm that developed broadcasting technology), with the understanding that if the Paks job fizzled out and we were unable to pay the computer fees, we would provide our services free of charge until we paid off the debt. The confidence placed in us by the boss at the Cooperative, István Erdész, deserves our heartfelt gratitude, because by the time the Paks contract was finally signed six months later, and we became solvent, we had run up a bill of 600,000 HUF in computer rental fees. (By way of comparison, Tari's salary at the time, as adjunct lecturer at the university, was 3200 HUF per month.)



Our months of work on the Paks project were very strenuous, but rewarding. While modeling the complex pipelines, based on hand-drawn, two-dimensional (2D) drawings, we developed two important technologies that later became part of the fundamentals of ArchiCAD.

The first was related to the import of data from 2D plans. There were dozens of these plans, the size of bedsheets, and we were using rulers to measure the type, position, dimension, direction, and length of the pipes to an accuracy of one millimeter. We then had to type all these data into the computer. Tari, who was working double shifts at Graphisoft while still teaching at the university, assigned one of his young students to do this work. Meanwhile, Tari himself created a clever programming language which, taking advantage of the relatively constant dimensions of the ducts, greatly simplified the stressful and tedious ground work involved in transferring thousands of data streams. While using this programming language, the student added his own ideas to improve it. We called the program GDL (Geometric Description Language), which, even today, remains the tool used for scripting parametric objects<sup>5</sup> in ArchiCAD, and which is one of the program's unique advantages over its competitors. The young second-year student, Tamás Hajas, joined Graphisoft after graduating and was soon head of the ArchiCAD development team. For many years, he remained one of Graphisoft's leaders and is one of its largest shareholders to the present day.

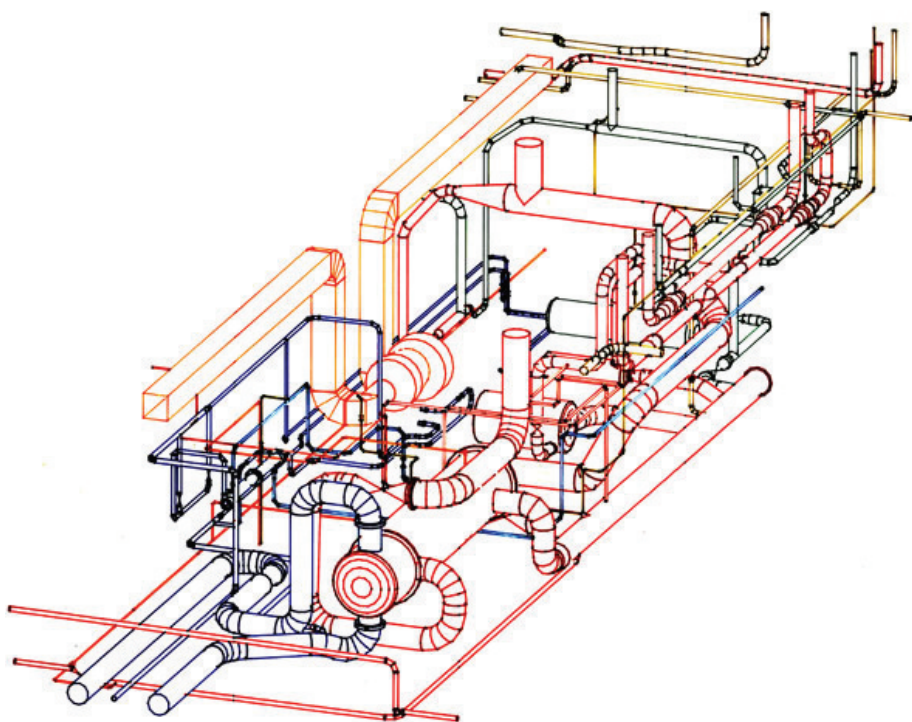
The other technological advance was a function that is crucially important for displaying a 3D model: the ability to distinguish between visible and non-visible elements. In other words, you have to hide the lines that represent hidden elements. At the time, most programmers in this field used one of two known solutions for this problem. One high-speed solution worked on low-resolution monitors, usually for computer games. But this method was not sufficiently accurate or detailed to display the complexities of the piping system. The other solution was used in traditional 3D CAD programs to draw highly accurate plans, but this required high-performance computers, and we didn't have any of those.

We came up with a solution which, in essence, combined the two methods to result in relatively fast, yet sufficiently accurate and detailed drawings.

5. Parametric objects are digital representations of "real world" objects, e.g., chairs. As the name suggests, parameters can be adjusted within the digital definition of the object to change qualities, such as height and color.



The idea was originally mine, and since at that time I was still spending about half my working hours on programming tasks, I worked out the details of the new solution. I enjoyed the programming work immensely; it was tremendously satisfying to see that my idea worked, to watch the impressively complicated power plant ductwork plans slowly, but surely, emerge from the plotter:



*Model of the pipeline network in the Szaoz part of the Paks Atomic Energy Facility*

This must be something like what architects experience when a building they dreamed of is actually built. Later, when the company had grown and I was totally preoccupied with business and management matters, I missed this sense of achievement. Either one of our new technologies (GDL or hidden-line removal) would have served nicely as the subject of a doctoral dissertation. But by that time the fever of building a company had replaced any remaining scientific ambitions I might once have harbored. In hindsight, I must admit that seeing the company I had envisioned becoming a working reality, was no less exhilarating than watching the dreamed-up software solution come to life.



## A Minister behind bars

Having developed technological solutions, as valuable as they were, didn't mean that we would actually get the power plant job. At that time, private companies in Hungary still enjoyed only limited political legitimacy. Perhaps no one would object to hiring a privately employed repairman to fix a broken light switch in a Ministry building, but the idea of hiring a two-man partnership to develop a computer programming system for the Paks Atomic Power Plant raised a lot of eyebrows. This job counted as a technological development task, which would keep a state-owned enterprise employing several hundred people solvent for several years, even without having to produce truly usable results. Quite possibly, state-owned companies viewed us as a threat, making it even more difficult to squeeze our contract through the slow-moving bureaucratic cog wheels.

Luckily, it seemed that the Ministry really did need our drawings, if not for engineering purposes, then for propaganda purposes. When we showed them to Kapolyi (who by then had been appointed Minister), his first question was whether we could produce a series of these drawings with the labels in Russian. We seized this moment to inform Kapolyi that thus far we had been working for free, without any contract whatsoever. Kapolyi had not known this; he had assumed we were being paid. His response was that of a true gentleman:

– It is possible that your next drawing will show a Minister behind bars, but one way or another you are going to get paid.

He kept his word; a few days later the contract was signed and soon thereafter our first payment arrived.

Based on snatches of information and gossip, we concluded that the drawings were needed for some upcoming negotiations with the Soviets on energy delivery, which promised to be difficult. Because of the power plant's delayed completion, the Hungarian Government was preparing for expected power shortages by requesting supplementary energy deliveries from the Soviet Union. Negotiators from the two countries clashed over who was more responsible for the delays in completing the power plant: was the delay due to errors in the original Soviet design or was the Hungarian side at fault for failing to adapt the design correctly? In a clash of this nature, our drawings, which analyzed the original Soviet plans, served as impressive and convincing evidence, since they were unquestionably produced using the most up-to-date 3D computer methods available. In the end, energy shortages were avoided and Hungary received the supplementary power supplies until the power plant was completed. Perhaps our





drawings were not responsible for this happy outcome, but we, at least, believed that they were, and we were very proud of ourselves. In any case, we learned another valuable lesson: computers are at least as useful for visual communication as for solving technical problems.

The Ministry paid us half a million forints (about \$10,000 around that time) for the drawings. Soon, Erőterv and the power plant itself (emboldened by the Ministry's actions) commissioned additional drawings from us. The total income from these projects exceeded one million forints: an enormous sum, which we used to pay off the debt for the computer rental time at the Híradástechnika Co-operative, getting István Erdész off the hook. We had respectable salaries (which we boldly set at 5000 forints per month, about \$100 at that time) to cover the previous six months retroactively. We even had plenty of money left over for further investments.

## Investing in the future

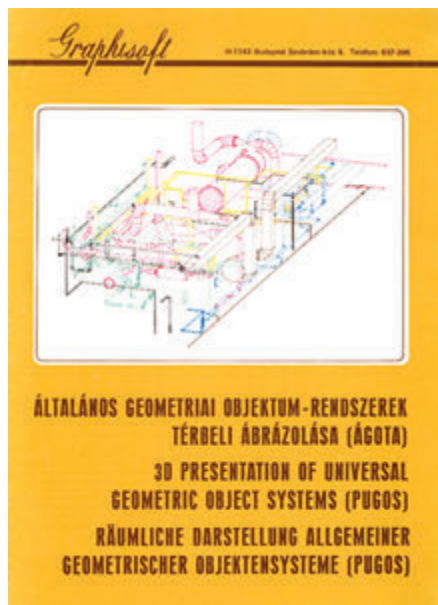
First of all, I hired a secretary, Éva Bisztricsány, the secretary of my former boss at the Institute for Geophysics. Éva's reliable and accurate work made her a much sought-after employee at the Institute. Everything that went through Éva's desk (letters, reports, etc.) was immediately recognizable for its pleasing format. Although she worked for my former boss, everybody at the Institute competed to be in her good books and tried to get her to review their work. She almost never refused, and worked very hard, so I decided that Graphisoft would be just the place for Éva. Before taking her on, I had to invest in a very expensive IBM typewriter (which was quite a luxury at the time), but I figured that the best work required the best available tools, and the secret of our firm's success, I believed, would be to achieve perfect quality in every aspect of our work. (Later, I realized that this belief, thus oversimplified, is not really true, but I will come to that in a while.)

In Éva I had found the perfect secretary: one who remembered things that I forgot, did the tasks that she was better at, and basically tripled the amount of productive time I could devote to programming and business matters.

The other area we invested in was marketing. It was clear that we had gotten the Paks contract through a series of lucky coincidences; the power plant would have gotten built even without our help, although probably at greater expense. (And in our planned economy, it's questionable whether anyone really cared about such extra expenses.) But we were idealists, and we longed for clients who really needed our work in the long term, because we were necessary



to their business. This “true market,” despite any number of brave experiments, was not characteristic of Hungary in the early 1980s. So we tried to sell our know-how in the West.



*Our first prospectus*

The majority of the money we saved from the Paks contract was earmarked for marketing activities. We created our first brand name and produced trilingual pamphlets (in Hungarian, English and German). In Hungarian, we named our software AGOTA, an acronym for the Hungarian expression for “3D Presentation of Universal Geometric Object Systems.” In English, the not-too-elegant acronym was PUGOS, while in German a year later we replaced PUGOS with the much cleverer RADAR (for *Raumliche Darstellung*.)

Our biggest outlay in this first phase of marketing was setting up our own exhibition booth at the Budapest International Fair in the spring of 1983.

Since we were responsible for popularizing HP calculators at many Hungarian firms, we had a good relationship with Jim Grant, an American at HP’s Vienna office, who was responsible for the Hungarian market. We asked him to lend us computers for the Fair, and he readily agreed; this way HP had a presence at the Fair despite the embargo, which severely limited such opportunities. Moreover, the few HP calculators that had entered Hungary did not justify a separate HP booth. A casual observer at the Trade Fair would assume that Graphisoft was HP’s representative in Hungary. Sure enough, a high-ranking Communist party official paid us a visit, declaring that their organization had decided to “become a sponsor of HP in Hungary” and asking that we introduce him to Jim Grant. Since the official spoke neither English nor German, we acted as interpreters, but even this didn’t help. None of us could fathom what an offer of “Party sponsorship” might mean. In any case, it seemed a good omen that even the political elite was trying to find a future in the world of business. Apart from this encouraging insight, our firm’s presence at its first international fair brought few results.



We tried other avenues of market research in the West. I had a friend, Gábor Strausz, who worked at the National Market Research Institute, so I consulted him about our project. We had good connections with this Institute, dating from our college years, when they offered good money in return for getting passers-by to fill out brief written surveys. Naturally, we found it more effective to fill out most of the surveys ourselves. Now, in contracting the Institute to do our market research, we hoped to make amends for our earlier surveying tactics and also to demonstrate our equality with the state sector: not only did state-owned companies contract us to help with their work, but we could also contract them to help with ours. The project consisted of identifying German firms (primarily in West Germany, the traditional target market for Hungarian software exports) that did similar work to ours, and might need our contracted services. The Institute sent out proposals in our name to about a hundred companies. Of these, two replied, and nothing became of those either.

Finally, Jim Grant, impressed by our determined efforts, offered to show our program to an expert at OMV, the Austrian oil company, at the HP office in Vienna. HP had earlier sold computers and software to OMV for the 3D modeling of pipelines.

## **Visiting HP in Vienna: our first lesson in strategic marketing**

The programs which HP had earlier sold to OMV were far more expensive and required far greater hardware capacity than our program. Naively, I thought that in a free market, offering a similar product at a lower price would give us an advantage. Upon arriving in Vienna (and getting there was no easy feat – I'll tell you more about the passport issues later), I gave the demonstration. I soon learned that the free market was not as ideally free as I had imagined. Although I felt that my demonstration had been successful, the OMV expert merely congratulated me condescendingly on the nice toy, and took his leave.

How could I possibly have imagined that the same individual who had been responsible for the purchase of CAD workstations costing hundreds of thousands of dollars would watch my demo, and then hurry right over to his superiors to announce that he shouldn't have spent all that money, because he'd just seen a Hungarian kid demonstrate a system, capable of essentially the same tasks, at less than one-tenth of the price! Even our HP friend, Jim Grant, saw



the light, and henceforth was much less enthusiastic about recommending our product. After all, why would it be in HP's interest to switch from selling computers that cost hundreds of thousands of dollars, to selling table-top calculators costing only tens of thousands, to perform an identical task? The free market, too, is influenced by individual interests, and these interests can be as negative and counterproductive in a free market as they are in a socialist planned economy, except that in the free market, the negative side prevails less often in the long term.

Later, I noticed that my own consumer mentality was affected by such preconceptions. Before any major purchase, you first decide how much you can afford, and only then do you make your choice. This essentially means that you have a preconceived price range, and this affects your decision. If a product is cheaper than this range by a magnitude, then you won't trust it, and you won't buy it any more than if it cost far more than you can afford. Ten years later, when the company was going strong and my wife and I could afford to buy any car we wanted, we decided I would get a true luxury vehicle (worth about \$100,000 at today's prices), while my wife would get a well-appointed compact car (worth about \$25,000 at today's prices). I don't want to engage in advertising, positive or negative, so I won't say which brands we bought, but I will say that my wife ended up better off. I was much happier driving her little car, which had a surprisingly strong motor for its size, than my own luxury vehicle that had cost four times as much. But since I had decided in advance how much I would spend, I could not even consider that excellent little car, just as the CAD expert at OMV would not even consider buying our 3D modeling system that could run on a little HP calculator.

The strategic marketing lesson we learned was this: our competitive advantage – that our program runs on much cheaper, much smaller machines than other available 3D modeling programs – would be appreciated not by those who had already bought such systems at a much higher cost, but rather by those who had not yet bought such a program because they were priced out. This is how we later ended up targeting architects as our most promising, most appreciative customer base.

But we are getting ahead of ourselves again. At the time, I was the proud owner of a Soviet-made Lada!

And here is the promised passport anecdote, a telling slice of life in that era, from the first time I went out to Vienna for a few hours.



When Jim Grant, HP's Vienna representative, invited me to Vienna to give a demonstration, I asked him to provide a letter of invitation on an HP letterhead. With this letter in hand, I visited a whole series of state-owned trading companies that dealt in software exports. By "software exports" I don't mean genuine products, but rather the line of business that earlier had been so attractive at SzKI: the contracting out of software engineers for an hourly wage (we called it the slave trade). I asked these companies to obtain a commercial visa for me, and in exchange, once we had business available, we would give it to that company. Foreign trade at that time was still a state monopoly, so inevitably I had to make a deal with a foreign-trade company. There was some small measure of competition among the state-owned firms, so I had hoped my tit-for-tat offer of a contract would be appealing. But I was wrong. I was universally rejected. They advised me to hand over the software program and they would take it out to Vienna themselves. At the time, a business trip to Vienna complete with a daily expense allowance (sponsored, of course, by a state-owned company) was a real treat. Remember the opportunities that existed to privately import soap or computer parts? No foreign-trade company employee would willingly share such an opportunity with a little private company.

Next, I requested an appointment at the Passport Services Division of the Ministry of Internal Security and pleaded my case. The Comrade Major on duty listened carefully, and replied that there would be no problem. I was to return the next day with two passport photos and pick up a commercial passport good for unlimited entry and exit. I couldn't believe my ears. A passport in this category was an enormous privilege. Even SzKI employees working under contract in the West had to return their passports to the personnel division every time they came home, and pick them up again, complete with the required permits and certifications, the next time they left the country. But I would have a permanent commercial passport that would enable me to hop in my car and travel to Vienna any time I wanted? This was incredible. When I began expressing my gratitude, the major only said: — Comrade Bojár; [I was never a Party member, but the Comrade salutation was a mark of respect] it is we who should be grateful to you if you make good deals and bring in hard currency to the country. Best of luck!

This experience was, for me, one of the milestones that marked the system change in Hungary, and I am sorry I don't recall that Major's name, because I think he must have done far more in the service of a genuine *perestroika* than many of the professional reformers who came after him.

## Our first public appearance with Interag at the Systems Exhibition in Munich

With commercial passport in hand and our marketing lessons learned, we prepared ourselves for the next round. A major international exhibition seemed to be the best way to find potential business partners. But to make it to such an exhibition we had to cooperate with an official foreign trade company, because that was our only avenue for acquiring hard currency. I asked for help from my co-founder and partner Péter Hámor, who had excellent contacts among the foreign trade companies, albeit not in the computer software field. It turned out that an old friend of his, Miklós Horváth, was a major player in the slave trade at the state-owned firm, Interag. Following Péter's phone call, Horváth agreed to see us right away. The course of this meeting was worlds apart from those at the other companies. He not only offered to pay a per diem, but also promised to provide hard currency for renting a space at the exhibition along with the required computers, provided we could pay it back in forints. We made it to the Systems Exhibition in Munich in the fall of 1983.

The booth's real function was to advertise the slave trade in software engineers that was managed by Interag's German partner, a firm called SSG. At first, we only got a little back table for our HP machine, but this was enough, because we were not there to find customers, but rather to buttonhole other vendors, whom we could then invite back to our booth to show them our software, as a reference for the quality of our services.



*Our first trade show exhibit; with SSG at the Systems Exhibition in Munich*

Our primary method of approach was to contact PC manufacturers. Drawing on our Viennese experiences, we targeted companies which did not offer large, expensive CAD workstations among their products, and were, therefore, not threatened by the prospect of a 3D CAD program running on a small, inexpensive PC.



We were successful beyond our wildest expectations. With most firms, we initially managed to convince lower-ranking technicians to come back to our stand. Once they saw our product, they would excitedly call their bosses to come and look. Our timing was lucky. At that time, the first 16-bit PCs had been introduced, and the imminent boom in the PC market was palpable. PC manufacturers were frantically seeking applications that would provide a compelling glimpse of the emerging power of their diminutive PCs, which would counteract the then-prevailing impression that PCs were only good for playing games.

In this way, we made contacts at a dozen PC manufacturing companies. Apart from Apple (where we eventually ended up), I can remember only a few major names, such as Sony, Mitsubishi, Commodore, and some other names that are since forgotten: Apricot and Victor. Our negotiations with these companies were remarkably similar. Their first question was how much it would cost to run the 3D modeling program on their computers. Initially this question caught us off-guard, because we had demonstrated the software as a reference for our own services, and we wanted to be hired on contract at a hefty hourly rate (say, 100 deutschmarks per hour – a top price for Hungarian contract software engineers). We responded that we would install the software on their computers for 100 deutschmarks an hour. They responded that that wasn't the question; they wanted to buy the whole program.

At this point, Miklós Lohonyai, Interag's permanent representative in Munich, took over the negotiations. He knew that we should ask for a much higher hourly rate, because we would be responsible for the success of the whole project. The role of General Project Manager was considered a prime assignment, and Interag only rarely got the chance to play it. Good programmers were plentiful, but good project managers were much harder to come by, so they had few jobs of this sort. Our program, ready to run on the little HP computers, was just such a reference. Interag, with Lohonyai at the helm, believed (as did we) that we'd all struck gold. Our little table with the HP calculator soon assumed prime spot at Interag's booth, and Interag showered us with attention and perks. László Tarnai, the "German" owner of Interag's partner, SSG, invited us to dinner and told us to choose a restaurant: Chinese, Greek, Italian or French, or perhaps an Argentine steakhouse. At the time, these kinds of restaurants were almost unheard of in Hungary. Tari voted for the Argentine steakhouse. He chose well, because, as we later learned, that was the most expensive.



But Interag had good reason to believe we were worth it. By the end of the Exhibition, the proposals submitted to the various PC manufacturers totaled several million deutschmarks; it was dizzying. Our per diems for the whole week remained almost entirely unspent, since we had been Interag's guests at every turn. By now, however, we were no longer intent on buying spare computer parts to be re-sold in Hungary at hefty Forint prices. On the way home we stopped in Vienna, checked into a good hotel, dined at an exorbitantly expensive Japanese restaurant, and in so doing, blew a whole week's per-diem allowance in a single night. The euphoria we felt that night remained unsurpassed, until, that is, maybe 15 years later, when the company was listed on the stock exchange.

The Munich Systems Exhibition in the fall of 1983 was unquestionably the first turning point in our international success, which then seemed just a step away. In reality, however, we had many more years of difficult struggle ahead, involving countless failures and a lot of good luck.





## Chapter 3

# ArchiCAD is born: lessons in PR, marketing and the importance of compatibility

### Contacts with Apple Computer

Of the many proposals submitted to PC firms, only one brought results: the deal with Apple, and this, too, turned out differently than we originally imagined. We had hoped that we would just adapt our program to the Apple computer; and then Apple would act as the program's distributor. We requested a fixed fee for converting the program (200,000 deutschmarks), and also a relatively modest percentage of the revenues from program sales. (We later learned that this is called a royalty.) This was a perfectly reasonable, even modest offer on our part, even though we had never seen a total of 200,000 deutschmarks in all our lives, let alone all at once. Apple did not consider the fee excessive; but they had other concerns. After some consultation with U.S. headquarters, they decided that selling computers was enough for them; the ownership of the program, with the responsibility that went with it, as well as any hoped-for revenue, should remain ours. They were willing to offer considerable support for adapting the software to their machines, but dealing with customers' problems and complaints and upgrade requirements would be our job.

Only later did we realize how right they were. Our software, no matter how impressive, was many years of struggle and anguish away from reaching a level at which a real customer could use it to design a real plan. We did not know how far our so-called prototype was from the real product. A prototype is good enough for demonstrations; we knew how to use it to work on simulated test problems. A real product, on the other hand, has to be good enough for real users to create real projects, unaided. We were still at the prototype stage (and this had proved enough for all of our



jobs so far), and we, in our innocence, thought that all we needed to achieve a finished product were a few final details, a user handbook, that kind of thing. We learned to our cost that in creating the prototype we had done only about 10 percent of the total work required to produce software that was truly a “product.” We had never before created an idiot-proof final product; we did not yet know the software industry’s golden rule: that success requires 10 percent inspiration, 90 percent perspiration. Our inspiration had been enough to create the prototype. We hadn’t even begun to perspire!

Some 15 years later I heard a radio interview with Péter Róna, the founding President of NABI (North American Bus Industries), one of Hungary’s success stories during the 1990s. NABI’s success consisted of developing and manufacturing municipal buses for the North American market, relying on the engineering talent and know-how of former employees at Ikarus (Hungary’s renowned bus manufacturer, which earlier sold buses to the Soviet Union and Eastern Bloc countries). NABI succeeded in achieving a leading market share. The ironic part of this story was that the development tasks and assembly of the major parts that required skilled workers took place in Hungary; the final assembly, requiring a low-cost, low-skilled labor force, took place in the U.S.A. Usually, it’s the other way around. Ikarus stayed in business, too, alongside NABI, and for a while continued exporting buses to countries of the former Soviet bloc. It was in this interview with Péter Róna that I first heard the following idea:

- A good product has two parents: a demanding producer and a demanding consumer.

In the example of NABI vs. Ikarus, the importance of a demanding consumer was paramount, for this was the only difference between the two firms. While NABI, exporting to the highly competitive and demanding North American market, soared to success, the other company, Ikarus, which specialized in exporting to the indiscriminating and corrupt markets of the former Soviet bloc, had far worse results. (After 2002, Hungary’s unfortunate monetary policy, coming on the heels of the already painful effects of the weakening dollar, added to the misery of the export market and sent even NABI to the brink. But that’s another story.)

Róna’s thesis came into play for us, too. The process of making ArchiCAD into a real product was due, in addition to outstanding software engineers and programmers, to our first users: those Italian, French and German architects who did not give up, who wanted to work with our program, and gave us no peace until they were able to do so. If we hadn’t been forced to go down the road of perfecting our product to meet the users’ needs, if we had only fulfilled the predefined specifications of a development contract with Apple, then ArchiCAD would probably never have evolved into the product that it eventually became.



## RADAR runs on the Lisa

But it's still the end of 1983 in our narrative, when we had not even begun to develop ArchiCAD. We were still in Germany, trying to get Apple's support to re-tool our RADAR software for Apple computers. Considering that Apple did not purchase the software and had no legal claims on it, the support they gave was very generous. First, they gave us four complete "Lisa" computers, which in 1983 was Apple's newest model, the immediate predecessor to the Macintosh. At Graphisoft, these machines were the first computers we had ever owned.



*The Apple Lisa - the first computer actually owned by Graphisoft*

These computers were very much under the remit of the CoCom embargo, and we had to sign an agreement that we would never hand them over to any citizen of any country that appeared on an accompanying list. Of course, Hungary was on the list, but we signed the agreement without missing a beat. In addition to the computers, we got 30,000 deutschmarks in cash for marketing support purposes, as well as free participation as vendors at Apple's exhibit at the CeBIT exposition in Hannover. The total value of all this support exceeded 100,000 deutschmarks but even more valuable was that Apple introduced us to their distributors. These contacts later formed the backbone of our international distribution system. Today, as we seek new distribution networks for our products in markets very different to our core architectural market, we can truly appreciate the value of Apple's generosity in 1983/84. To build up such a network on our own (if we had even been capable of doing so) would have cost many millions of dollars.

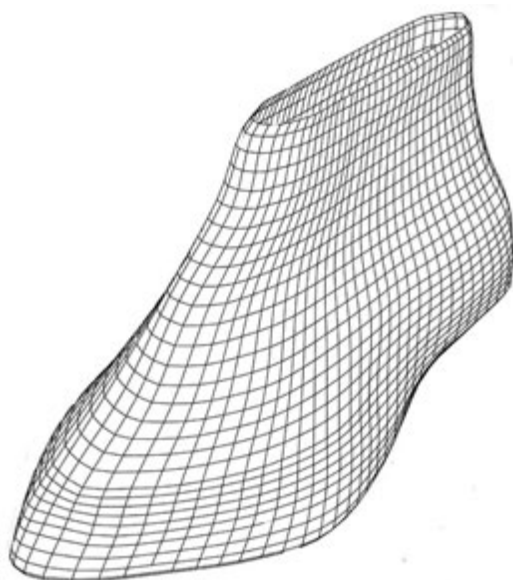


In turn, we promised Apple that by the time the 1984 Hannover exhibition rolled around, we would have RADAR in shape to demonstrate on Lisa machines. The fair would begin April 4; we received our computers in mid-February, so we had six weeks. At the time, we did not dare take the computers home to Hungary, so we rented an apartment in Munich with Interag's help, and did our programming there. We lived where we worked, which saved us time and allowed us to work all day long. We rarely ventured outside and when we did, it was to buy food and cases of beer. By this time, we had two more partners in addition to Tari and me: Péter Hornung (mentioned earlier as a childhood friend and co-worker at the Institute for Geophysics) and Lóránt Szabó (whom I met while in college; he was a relentless poker partner of mine at the University's campus club). Lóránt was an excellent programmer with a good overview of the whole program and many creative ideas. Péter's programming skills were also strong (he and I had alternated in winning math competitions at school), and his native-level German language skills were invaluable to the firm. Later, Hornung became the company's financial director and my all-around back-up; today he is the Administrative Vice President and one of our largest shareholders. Ten years later, in 1994, Lóránt left Graphisoft, started up his own company, Pantomat, a software company serving the field of human face modeling.

## **CeBIT, Hannover, 1984**

We kept our promise to Apple. After 45 days, on April 4, 1984, RADAR was running successfully on the Lisa. That date, incidentally, was then still observed in Hungary as the anniversary of the Soviet "liberation" of Hungary after the Second World War. In our case, however, the date was our deadline for getting our program to the Hannover CeBIT. On our way to Hannover, we packed the trunk of my Lada with a mock-up model of some of the pipelines in the Paks Atomic Energy Plant constructed from wood, plastic and wire. We already sensed that pipelines would not be the primary application for our program on the Apple Lisa, but this pipeline mock-up was the most complex model we could demonstrate. As it turned out, placing the physical model of the pipeline on top of the computer and then displaying and rotating the model's virtual version on screen turned out to be an eye-catching display. We demonstrated several possibilities for 3D modeling: apart from our classic pipeline demo, we also presented city-planning, building-design, kitchen-design and even shoe-design applications in 3D.

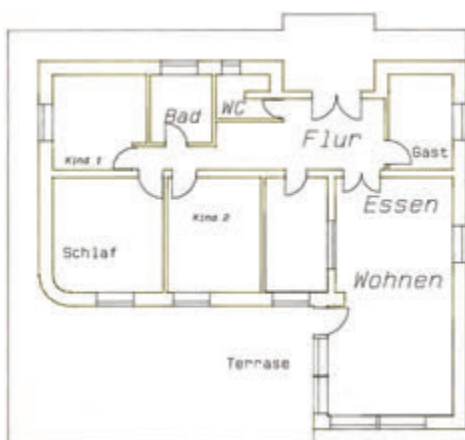




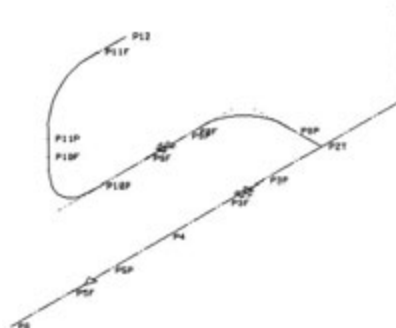
*Designing shoes with RADAR*

The different applications of our generalized RADAR modeling program all had different names. The architectural application was called RadarCH (from the German acronym for “Raumliche Darstellung für Architekten” – 3D presentation for architects), while the pipeline application was called RAPID (from an English-German hybrid, “Raumliche Piping Design”). Still, the same basic program, RADAR, performed the display and processing of the 3D model for each of these applications, as they all ran essentially along the same lines. The goal of these applications was to find a way to present

the model data in an interactive graphical interface. In the pipeline design workflow, for example, drawing a line on screen represented the pipeline’s routing (it also required the pipeline’s diameter as supplementary data). In architectural design, a similar line on the screen represented the floor plan display of a wall (which required the wall’s thickness and height as supplementary parameters).



*The first architectural floor plan on the Lisa.*



*An isometric drawing of a pipeline path*



The first versions of the interactive interface were the work of two new colleagues. RAPID's initial interface was designed by Laci Sparing, who still worked full-time at the Technical University, and that of RadarCH was designed by Miklós Misley.



*Laci Sparing, creative genius*

After the breakthrough at the Systems Exhibition in Munich, we hoped for a similarly proud showing at CeBIT in Hannover. And we were not disappointed. By the time of the fair in 1984, PCs were already dominant, and Apple, in particular, was the center of attraction. This fair represented the European debut of Apple's Macintosh, whose introduction in San Francisco a few months earlier had been accompanied by unprecedented hype. The San Francisco launch was associated with a TV marketing slogan that has since become a textbook classic – This is not that 1984 – with clips from the film version of Orwell's 1984 unmistakably comparing IBM's dominance of the computer industry to the coerced uniformity of a dictatorship. In these clips, a multitude of identical gray people bow and scrape before an enormous screen showing a Stalin-like Big Brother figure delivering a speech. A youthful female athlete challenges this scene by dodging the wall of security officials and throwing a discus at the screen, which shatters into pieces. Stalin's picture disappears, to be replaced by a Macintosh accompanied by the text: "This 1984 is not that 1984." It is a very clever ad, worth seeing even today. Apparently, for the launch of this TV ad, Apple purchased all



the spots on all the major U.S. TV networks during the Super Bowl. I don't know whether any company has ever spent so much money to air a single advertisement.

With the waves of the Macintosh advertising campaign hitting Europe, huge interest awaited Apple at CeBIT, and it is not only my personal bias at work when I say that Graphisoft was the biggest draw within the Apple exhibit. It is true that most visitors came out of curiosity about the Macintosh, but the Mac could only run a few very simple applications. In contrast, our Lisa machine, displaying the revolving 3D image of the cardboard pipeline model sitting on top, was an eye-catcher. In fact, our program was the first 3D modeling software for a PC-category machine. If any of us wandered away from the stand for a little while, to look around the rest of the exhibit, it was easy to find our way back – we just had to follow the crowd.

Even more flattering was the personal visit by Steve Jobs, the legendary founder and Chief Executive of Apple. His visit to CeBIT was a surprise, and only a few of Apple's German employees knew of it in advance. On the afternoon of his arrival, he visited the stand without any pre-hype, almost incognito. Later that evening, he met with the Apple marketing staff to work out the details of his official visit the next day, complete with press coverage. The program included a total of three or four stops, including our stand. Apple's marketing staff spent all night training us to compress our half-hour presentation into a five-minute summary demo, because five minutes with Steve Jobs, they said, was all we could expect. They were wrong. Jobs had so many questions of the substantial technical kind that he spent a whole half-hour with us. Of course we were thrilled, but from a PR and marketing standpoint, his attitude could even be considered a mistake.

## **Lesson in PR and strategic marketing**

Six months later, in Cologne, I had the opportunity to compare the respective marketing styles of John Sculley, Apple's newly appointed Chief Executive, and Steve Jobs. Jobs, who founded Apple while still a student and never studied management or marketing, recognized (or was convinced by his board of directors) that his firm had reached the point at which it needed a "professional" manager. So Jobs sought out John Sculley. Sculley was renowned in management circles as the Pepsi Cola executive who, against the seemingly indomitable Coca Cola monopoly, catapulted Pepsi Cola from its almost hopeless initial position to the very top of



the cola market, at least for a time. Faced with “Big Blue” IBM, Apple’s position was similar to Pepsi’s. So Jobs used his irresistible charisma to woo Sculley into a position as Apple’s Chief Executive. Jobs remained as President. According to legend, Jobs asked him the question:

- You want to spend your life selling sugar water; or do you want to change the world?

At Cologne in the fall, Apple looked very different from how it had looked in Hannover. Here, attractive young women wearing Apple sandwich boards canvassed the fair and invited the visitors to go see the Apple exhibit, where a team of even more attractive dancing girls took center stage. In addition to the girls, a snow-white Porsche adorned with Apple logos wowed the visitors. John Sculley personally announced that the Porsche was a prize for the most successful Apple distributor. The Apple exhibit again allowed room for Apple’s software development partners, including us, and when John Sculley made his way among the partners, accompanied by the press, he, too, stayed a little longer at our table, in front of the TV cameras. But he was not interested in the software. Instead, he posed with a friendly arm draped around the shoulders of Tari, who, with his impressive 300-pound frame, was in sharp contrast to the slightly built Sculley. Sculley knew perfectly well that the nightly news would devote only a few seconds to the events of the fair, and he knew that this eye-catching shot would, more than any technical demonstration, stand a chance at getting the average German viewer to glance up from his excellent German beer and look at the TV screen. This, too, was an interesting lesson in PR.

But John Sculley was a singular talent in strategic marketing, too. Steve Jobs is undoubtedly a genius; he invented the personal computer, and after many others had gotten involved in the PC industry, he made further signal contributions in the areas of graphical interface and the simultaneous handling of text and graphics, which set him apart from the competition. Yet it was not Jobs, but John Sculley who invented the necessary market and created the field of desktop publishing. Jobs put it like this:

- We can handle text and graphics together; no one else can say that. But what is that good for?

Answering this question was John Sculley’s doing; he invented the right kind of consumer for the product. Thanks to this achievement, Apple attained its peak in 1992, and I do not believe that Sculley was responsible for the strategic mistakes which led to the subsequent difficulties at Apple – mistakes which, again, served as valuable lessons for us.





## The importance of compatibility

In hindsight, it is clear that if Apple had recognized in the 1980s that its real rival was not IBM but Microsoft, and if Apple had pursued its strategy in this light, then it would have developed differently. In fact, the whole IT industry would have taken a different turn, and the world might have been better off. Microsoft's dominance is clearly not good for the world, and officials are resorting to legal measures to try to do something about it. But no law can substitute for market forces. In the late 1980s, however, Apple still had a chance to prevent the subsequent course of events, and might have saved the Federal Trade Commission a lot of headaches. At the time, Apple would have had to take two important steps: to implement Apple's graphical operating system on the competition's Intel-based PCs and to achieve compatibility with Microsoft DOS, which already was much more widespread; in other words, to enable MS-DOS programs to run on the Apple operating system. No one disputed that Apple's operating system was much better and more advanced than MS-DOS. Still, MS-DOS emerged victorious because it could run on IBM and all compatible platforms, and so, in effect, lined up all the PC manufacturers on its side.

In the IT world, compatibility is more important than anything else. Not even a whole slew of overwhelming technical advantages – which Apple undeniably possessed at the time – can compensate for lack of compatibility.

Steve Jobs failed to appreciate the crucial nature of compatibility. After personal disputes with John Sculley in the mid-1980s forced Jobs to leave the company he had founded, he sold his Apple shares and founded a new company called NeXT. Again, Jobs's computer, from a technological point of view, was light years ahead of all its competitors, including Apple. But it was not compatible with anything else, and so its fate was sealed. Who today even remembers it?

## My son teaches me a lesson

Maybe the problem was that Steve Jobs, at the time, had no children. My nine-year-old son was the one who enlightened as to the importance of compatibility in 1992. He had his own Apple computer that he loved to play with. One day, out of the blue, he came to me and asked:

– Dad, can you buy me a PC?

To me, this was like asking a deeply religious Muslim to convert to Christianity. But before I had a chance to disown my son, he explained that he needed the PC to trade games with his friends. He could see that the Apple was superior;



but the ability to trade games was more important. In 1993, after much soul-searching and debate, we finally implemented ArchiCAD for Microsoft Windows.

Apologies for this extensive digression on strategic marketing – chronologically speaking, our narrative is still in spring of 1984, at the Hannover CeBIT exhibition, where our future first customer, as yet blissfully unaware, is milling around among the rest of the visitors.

## **Our first sale and the use and abuse of Pálinka**

Of the many 3D applications, architecture proved to be the most promising field. Architects were intuitively receptive to Apple's unique avant-garde style. And our first buyer could not have hailed from any other country than Italy, where the culture of architecture has been refined into a true art form over the course of centuries. As we later learned, this buyer had earlier decided that he would make his fortune by distributing Apple-based architectural design programs in Italy, and he was on his way to the United States to find just the right product. Before leaving for the U.S.A. he stopped by CeBIT to see whether Europe might have anything to offer. He saw our program at the Apple exhibit and immediately fell in love. Since I had studied Italian in high school, I could understand what he was discussing with his colleague. I didn't want to advertise this linguistic advantage, so I discreetly translated the gist of their conversation for Tari. At this, the architect's eyes opened wide and he asked us in surprise:

– You guys are Hungarian?

As it turned out, he was István Tóth, born in Germany to a Hungarian family. He had studied architecture in Venice, where he had then settled down. Tóth was the first buyer of the RadarCH (future ArchiCAD) program, and later became its Italian distributor.

We set the end-user price at 30,000 deutschmarks. István Tóth, our first customer, bargained for a 10 percent discount and ended up paying 27,000 deutschmarks. No one since has ever paid even close to that amount for a single copy of ArchiCAD. In a short time, the end-user price had dropped to 11,000 deutschmarks which was often further reduced by 10 percent or more by the usual special offers. In truth, for a first customer, even a free product is not exactly a bargain if the product is brand-new, and if the customer is committed to actually working with it. Being the first user, the degree of risk involved is very high.





*István Tóth, the Italian distributor*

Of course, during the course of our bargaining, István Tóth did not know that he was the very first buyer; and he was surprised indeed when we produced a bottle of apricot pálinka (Hungarian schnapps) that we had brought along to celebrate just such an occasion. It was not only that he learned that he was the first customer; for Tóth, the celebratory pálinka was a bizarre touch. In Western Europe, after all, it is not customary to drink hard liquor during business hours. But we didn't know that yet, since our Hungarian business culture was heavily influenced by many an official celebration of cooperation agreements with the Soviets.

Another thing we didn't know at the time was how to set conditions and obligations when offering exclusive or non-exclusive distribution rights to a particular country. Our success had gone to our heads, and we started out with unrealistically tough conditions. We set the distributor's fee at 50 percent of the end-user price, and we also demanded guaranteed minimum sales revenue, the amount of which depended on the size of the market in question. For Italy, this amount would have been 300,000 deutschmarks. It took us a few years before we learned that we would have to ease these conditions considerably. Of course, a 50 percent profit margin for the distributor might be considered generous if we could provide complete support: a program localized in the local language with full translated documentation, appropriate packaging, marketing materials and, not least, a globally recognized brand name. At the time, however, we were very far from providing this kind of support, and indeed, the truth is that even today the ArchiCAD brand name is not so strong globally as to allow our distributors to dispense with their own local marketing campaigns. And in 1984, we not only didn't have a global brand name, but we didn't even have

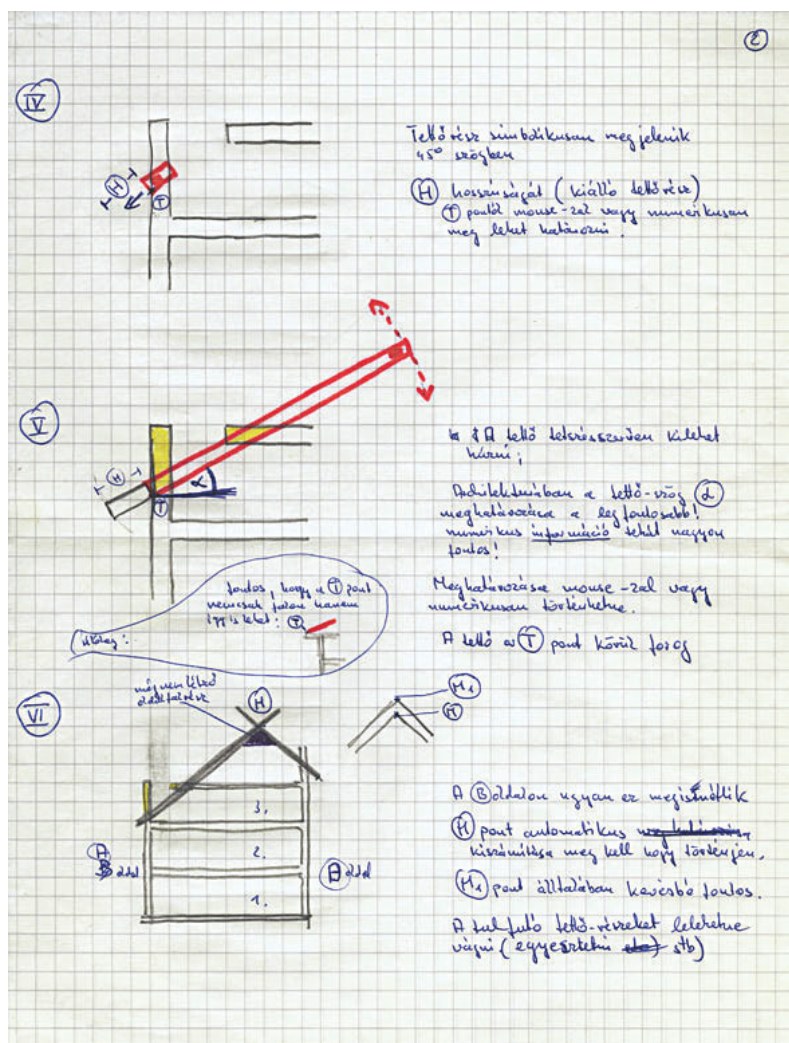


a real user guide, or even instructions on how to use the program, not in Italian, not in any language. The program itself ran only in a kind of Hungarian-accented English. So in addition to building a network of local resellers – the distributor's usual role – the distributor also had to localize the program, write the user manual, and do all the printing, copying, packaging and create all their own marketing materials, starting from scratch. These tasks are not a distributor's job; these are the things a software publisher is supposed to do, and a 50 percent return on the sales price doesn't cover it. But at the time, we didn't know any of this. We didn't know that in exchange for granting exclusive distributor rights to a country, the important thing is to demand not a large initial purchase order, but rather a guaranteed investment in the market. After all, it is in no one's long-term interest for the distributor to purchase a large number of programs, then not be able to resell them because he doesn't have enough money left over to market them.

So, at first, our demands were unrealistically harsh, but our first distributor, István Tóth, was effective enough to make good even under these conditions. He did not ask for exclusive distribution rights, because he knew we wouldn't find anyone better than him. He would be the *de facto* exclusive distributor anyway, even without a contract to that effect. And at first, he didn't seek to increase his 50 percent margin to compensate for all the software publishing activities thrust upon him; he left those negotiations for later. And yet he came out ahead. Even after paying an unsurpassed price for the first ArchiCAD program, he would have plenty of income to compensate for this loss. In the past 20 years, he has sold ArchiCAD licenses in Italy to the value of 50 to 60 million deutschmarks. He further boosted his income with earnings from supplementary applications for ArchiCAD that he developed himself, and which he distributes around the world using our global network. Among all our distributors, I think that István Tóth has made by far the most money from ArchiCAD. He deserves it, not only as our first partner, but by virtue of being so active in providing critical feedback during the program's early stages of development. One of his customers, an architect in Naples, apparently threatened to have Tóth shot down by the Camorra (the local mafia), if he didn't do something quickly about a particularly annoying bug in the program.

I still have a letter from István Tóth in 1984, in which he sent us his ideas for the program's further development. To this day, a good number of these ideas still haven't been implemented – which goes to show that a really good product is never really “done”: the better the product, the more room there is for improvement.





Excerpts from István Tóth's letter of 1984

## Serious cost control in action

When CeBIT was over, we finally had a chance meet with István Tóth at SSG's office in Munich to work out some of the unfinished functions and incomplete user interface of our not-yet-saleable software. I was astounded at Tóth's thrifty habits, which amounted to cost control of the most stringent variety. When I started to sketch ideas onto SSG's monogrammed notepads, Tóth directed me to use regular typing paper instead, which was cheaper. I got a closer look at his economizing ways a few months later when we visited him in Venice for further

consultations and training. According to our contract, he was responsible for covering the local costs of these events; we asked only that our hotel be located in Venice proper. He obligingly selected a one-star hotel along an out-of-the-way canal, where Tari and I shared a room that was about six feet square. The business dinner was even more elegant. He suggested his favorite pizzeria, but as luck would have it, Venice's waiters were all on strike that day, and only the most expensive restaurants remained open for business. After Tóth found reason to reject three strike-breaking luxury restaurants in a row, I was getting so hungry that I offered to pay for dinner myself. Tóth didn't accept my offer, but his silent prayers were answered when we came out along the Canale Grande and found a neon-lit fast-food place next to the Rialto. I don't think downtown Venice has ever before or since had such a restaurant, but that night, there it was. István Tóth happily announced:

– Sorry, boys, this is all we've got because of the strike, but eat and drink all you like!

Somehow he managed to arrange for us to be served wine (unusual in a fast-food establishment) and even beer (which is very expensive in Italy). Of course, Tóth was hoping we'd prefer Italian wine, but, bad luck for him, Tari ordered beer. And Tari was surprised indeed when he was served, Italian-style, a small slim glass with about a thimbleful of beer in it. Incredulous, Tari lifted the glass with two of his fingers:

– What's this?

A waiter pointed to a decorative Bavarian beer stein mounted on the wall:

– You were thinking of something like that?

Tari nodded his head enthusiastically, and with that, destroyed Tóth's budget for the business dinner in one fell swoop.

Of course, after business picked up, István Tóth's company underwent a radical shift in its cost structure. Five or six years later, it was rare to find him staying at anything less than a five-star hotel, or dining at a restaurant that didn't sport at least one Michelin star. When he saw that I was still delighted with my first Western car, a Peugeot 205 I had bought in 1986, he asked in surprise why I didn't buy myself a decent Mercedes. As it happened, every time Mercedes-Benz came out with a new luxury model, Tóth rushed to trade in his existing car for the new one. And he deserved it. He made signal contributions to ArchiCAD's success, since our first users (who had the greatest influence on the program's development) were mostly Italians. We sold 14 copies of the program's



very first version, the one that ran on the Lisa (prior to the Macintosh's debut). Of these, ten went to Italy and four to Germany, even though we had expected the majority to be sold in Germany, traditionally Hungary's main export market for software.

## German market requirements

The four German customers were very important, too. Germany's architectural traditions, and the role of the German architect, are quite different from the Italian, and our ability to perceive these differences early on was a great help in enabling ArchiCAD to develop into a truly global product, and to adapt well to the cultural variations that still characterize the field of architecture. A typical example is the various national standards on how to display dimensions. In Italy or France, it is enough to write in the dimensions to an accuracy of one centimeter; a building that is accurate to one a centimeter is a good building. But for Germans, even millimetric accuracy is not good enough. Okay, we thought, we'll add an additional decimal place to their measurements; on a computer this is easy enough. But it was not so simple! The rigorous, comprehensive German compendium of regulations, called DIN, requires accuracy to a half millimeter on architectural plan drawings. We could not comply with this simply by adding another decimal place to the measurement, since this would imply accuracy to a tenth of a millimeter, which is not the case. According to DIN, the half-millimeter must be displayed like this: you write the value displayed to a whole millimeter; then, if necessary, you add on a tiny superscripted 5 at the upper right of the number, like an exponent. For example, 11<sup>5</sup> would represent 11<sup>1/2</sup> millimeters. Moreover, for dimensions greater than one meter, accuracy must be displayed to three decimal places: a dimension of one meter 20 centimeters looks like this: 1,200. But if the dimension is less than one meter, say 95 centimeters, then the correct display is not 0.950, as you might think using mathematical logic. Instead, without so much as announcing it, you switch from meters to millimeters, and you just write 950 (plus, of course, the superscripted 5, if the dimension is closer to the half-millimeter).

I often wonder if any American software producer would be willing to implement such a system to please the German market. In fact, the Americans are hard pushed to understand why we work in the metric system, when every self-respecting American architect thinks in terms of feet and inches. Okay, they might say, we can understand that Europeans use meters and centimeters, but what are those weird little superscripted fives next to the numbers in the German standard?





## Two kinds of globalization

By then, I could see that there were two kinds of globalization. One is the American kind, which strives to unify the world in the interests of making it easier to conduct business globally. This kind of globalization is symbolized by McDonald's, which offers its customers the security of knowing that they can get the exact same hamburger in any corner of the world, if they so desire. This is what the anti-globalization movements are opposing, with the aim of preserving the world's diversity. I am afraid that their struggle is hopeless, since in the era of the Internet and cheap air travel, our rapidly shrinking world exhibits a genuine market demand for McDonald's restaurants, among other things. I'd like to emphasize the "other things" though: there is at least as much market demand for color and diversity in the world – a demand that can and should be met – as the demand for uniformity that is met by McDonald's. This demand for diversity, too, is a kind of globalization. Firms that recognize and meet this demand can become global successes just as McDonald's has. In this kind of globalization, we Hungarians even enjoy an advantage over other countries. We complain a lot about how much our part of the world was ravaged and conquered over the past 1000 years, and that we had to endure invasions and long occupations by four great powers. We survived the occupiers, and even as we learned to survive them, we also learned how to adapt to and understand them. Larger nations than ours have not learned this kind of cultural openness and diversity. But among the small nations, those who had to live and survive in similarly perilous parts of the world were most inclined to learn these skills. In our rapidly shrinking world, understanding and respecting cultural diversity, if we take advantage of the opportunities, can represent at least as much of a market advantage as the capacity of the universally uniform McDonald's restaurants to expand. We can fear globalization; we can demonstrate against it (which makes about as much sense as demonstrating against the weather); or we can prepare for it and take advantage of the opportunities it presents. Why do we assume that the winners of the globalization trend must necessarily be the United States, where 95 percent of the population does not know that the more than 6 billion people who live outside of their country think differently than they do, often have different value systems, and in many cases don't even like hamburgers? I think this kind of globalization consists of a kind of democratization of geography. The world, which is becoming ever more accessible to everyone, presents opportunities at least as much for the small nations capable of adapting to its diversity, as for the large nations.





Of course, in 1984, our RadarCH (the ArchiCAD that ran on the Lisa) did not yet fear the forces of globalization. But one seed of its future success had already been sown: we learned to respect the special and differing requirements of the German and Italian markets at the same time.

## **ArchiCAD 2.0: the first Macintosh version**

Apple soon condemned the Lisa to an early demise (to this day I don't know why, since it was an excellent machine), and put all its eggs in one Macintosh basket. This wouldn't have been so bad, except that while the Macintosh appeared to be very similar to the Lisa, the two were not compatible: programs written for the Lisa did not run on the Macintosh. In effect, Apple neglected compatibility issues not only with respect to its competition; it also failed to be compatible with its own earlier machines. With this attitude, Apple alienated many software producers, and few agreed to rewrite their Lisa-compatible programs for Macintosh. Instead, they switched teams and went over to the competition, Microsoft DOS. We were happy with these developments, though, since the number of Macintosh developers decreased, and the advantage of having less competition was worth the effort of adapting our program – an even more difficult job than we had expected.

First, we had to get hold of a Macintosh, something we achieved faster than even Apple's German office in Munich. Whereas Apple Germany had only a few, low-performance Macintoshes more suitable for expos than for developing software, we already had a much higher performance model loaded with a complete software development system in Budapest. I used my skills in private imports, honed to perfection during my years at the Institute of Geophysics, and smuggled in a Macintosh from the United States. Naturally, good luck and plenty of help were crucial to this scheme. A Hungarian emigré to the United States, János Rákos, was looking for Macintosh programmers with the help of a friend of his in Hungary, György Makara (the founder of the excellent Relaxa Language School). We soon learned that Rákos was an architect, and liked the idea of introducing RadarCH (the future ArchiCAD) to the U.S. market. He helped us get hold of the Macintosh configuration we needed to start our development work – quite a considerable feat as acquiring the very latest Macintosh model could not be done just by walking into any computer shop, not even in the U.S.A. Luckily, I did not know that I was risking a prison sentence when, with my Hungarian passport and plane ticket to Budapest in hand, I took the Apple computer – a strictly embargoed product for



socialist countries – on board as carry-on luggage. (As it happened, Rákos – very wisely – soon realized that the expense and risk attached to introducing a software product to the U.S. market were much higher than what he could reasonably take on; he also saw clearly that our software was very much at an early stage. Thus, apart from his assistance in getting us the Macintosh, he made no further investment, and so our conquering the American market was delayed for a few years. For his gift of a Macintosh in 1984, we expressed our gratitude a decade later with a few free copies of ArchiCAD.)

So, we had our first Macintosh. Six months later, the software was completed, and to mark the occasion we renamed it ArchiCAD, which sounded better in English than RadarCH. (The name was Miklós Lohonyai's idea.) We gave it a version number of 2.0, since this version was already considerably smarter than the Lisa version. This was the first integrated version, in which editing the 2D floor plans and creating the 3D model both took place within a single program. (In the Lisa version 1.0, these two processes required two different programs.) Version 2.0 is still on display at Graphisoft headquarters today as kind of a museum piece.

ArchiCAD 2.0 was an impressive step forward. It lent itself well to exciting demos which delighted audiences and attracted new distributors. These distributors, naturally, sold the programs to end users, who actually wanted to work with the program, not pass it around. This meant trouble. ArchiCAD 2.0, despite its advances, was not yet capable of bringing a real architectural plan to completion; to do this would require many more details and features, the lack of which was not apparent during the software demonstrations. When the complaints began pouring in, we offered two choices: the user could either be patient while we promised to solve the problem and incorporate the missing feature into the next version (an upgrade which the complainant would naturally receive for free) or else the user could return the program for a full refund. Those users with more patience got free upgrades. The rest returned the program for a full refund. A very long and painful process ensued until we finally reached a turning point in 1986, when an architect from Bordeaux, France, named M. Hulak, gave the following response to our usual offer (even then, the program still had many deficiencies):

– What do you mean, you'll buy it back? If I give it back, what am I going to work with?

At this moment ArchiCAD was born.



## Chapter 4

# The pivotal question: focus or diversify?

### Clients need 2D; we need to stay in business

Despite its impressive showing, ArchiCAD did not turn a profit for several more years. In order to finance its continued development, we had to take on paying work that fitted our profile. One such job was offered by *Videoton*, a large Hungarian state-owned enterprise, which was developing a UNIX-based computer that could run a CAD application. Videoton commissioned a traditional 2D drawing program from us. We were happy to get this contract, not only because the income from it allowed us to finance our ArchiCAD programming activities, but also because, based on our initial market response, we already suspected that a purely 3D application would not be enough. Without the traditional 2D drawing functionality necessary for construction documentation, we would not be able to sell the 3D modeling function either. Thus, the Videoton project promised us valuable experience in honing our own ArchiCAD program.

We named our new 2D drawing program VIDRA (Videoton DRAwing system). We delivered the program in time and got paid, but I don't know whether Videoton's new computer ever came onto the market, and if it did, whether any VIDRA programs were sold. We never received a single user complaint, which is suspicious, because I am afraid the lack of complaints is not attributable to our program's perfection. In any case, we gained some useful experience for our next project, a much larger project from Italy, which also involved traditional 2D CAD software.

One day, when I returned home, my wife told me that someone called Luigi Longo had called from Italy. He had left his number and I was to call him back.



The name was a little suspicious, since Luigi Longo was the legendary leader of the Italian Communist Party, and I doubted that he would want to do business with us, or that he spoke Hungarian, and in any case as far as I knew he was already dead. But after I called the number, everything became clear: the caller was Luigi Marcolungo, who for years had served as *Unita's* Hungarian correspondent (*Unita* was the official newspaper of the Italian Communist Party, so the connection to the Italian Communist Party was not totally off the mark, after all); and he had a Hungarian wife. By now he was living in Verona, but continued to subscribe to *HVG* (a weekly Hungarian political and economics journal) and had read about our company. (We had received some publicity in the wake of our successful performance in Hannover.) Luigi knew of a Padua-based firm named Bieffe, who manufactured and distributed drafting tables; they were adding CAD workstations to their product line. The CAD software was developed by a firm in Bologna, which was not willing to grant exclusive distribution rights to Bieffe. Consequently, Bieffe was looking for a new software producer. As we were later to learn, the Bologna firm was a highly successful software developer; among other products, they developed the mechanical engineering CAD software sold by HP. But to win a good distributor, you need not only to offer high-quality software at a reasonable price, you also to have the right contract conditions. Exclusivity is a valuable commodity, since it gives the distributor the necessary security to invest in the product's market in order to achieve brand recognition (which could well end up costing more than the cost of developing the software) – without worrying that the investment could end up profiting someone else. Many software developers are dogmatic about never giving anyone exclusivity. But a firm can hold this line only if it has sufficient capital and, more importantly, knowledge and experience in building up a brand name and a market. If the firm expects its distributor to fulfill these duties (as is the case at many small software firms), then it can little afford to withhold exclusivity; it must be prepared to extend a measure of secure business prospects to its partner. We learned this at another firm's expense; we became Bieffe's software provider and knocked a strong and successful software firm out of the ring.

But this achievement was still a long way off. Luigi Marcolungo had his work cut out for him in persuading Bieffe to take us on; a whole year passed before they signed a contract with us. During that year, Luigi organized countless demos, encouraged negotiations, handled professional and psychological hang-ups on both sides, and traveled extensively. He spared neither time nor expense to make



this deal happen, and worked hard for his 10 percent commission. We gave him 5 percent and learned later that he earned another 5 percent from Bieffe. This may seem like a conflict of interest, but in this case it wasn't. He wasn't representing either of us, but working legitimately in the interests of both sides to close the deal. I often thought of Luigi whenever others, merely for introducing a potential business partner to us, expected to be paid for bringing in business. These types give matchmaking a bad name, yet Luigi's example shows that it can truly be a valuable undertaking if the matchmaker takes his work seriously. Even then, it doesn't pay very well; Luigi was not a rich man. During our first Bieffe-related visit to Verona, he offered to put me up at his apartment – a modest place in Verona's old town, along the Adige River, but with a magical atmosphere. The apartment boasted very old furniture and many, many cats; a few of them would climb onto my bed even in the middle of the night, which was hard to get used to. But best of all was the little *trattoria* on the corner, where Luigi was evidently a regular. It was more like a diner than a restaurant; Luigi just ordered the usual. I think that meal was the best, most authentic Italian food I've ever eaten. Minestrone to start, followed by unlimited fresh gamberoni (king prawns) and squid as a cold appetizer. By this time I was full (even though, as my friends will attest, I am a man of no small appetite). And the main course was still not in view; the *primo piatto* (warm appetizer) came next, a fantastic risotto amply studded with clams, calamari and gamberetti (small prawns). Then the main course of grilled fish (that day it was freshly caught sea bass). After all this, I still could not resist the *conclusione* of homemade tiramisu, even though I don't have much of a sweet tooth. The house wine, served in a jug, was an excellent accompaniment to the whole meal, as was the amaro, served as the final touch to help us cope with the culinary ordeal. Luigi may not have been a rich man, but, like most Italians, he knew how to live well. In the years to come, as the Graphisoft story unfolded, I would eat at many excellent, expensive and elegant restaurants, but I don't think any of them matched the experience of the little Veronese *trattoria*. We returned there many times, with colleagues, family and friends, until the restaurant was finally sold and the place went downhill under new ownership a few years later.

Why is it that such excellent little restaurants eventually falter? When Graphisoft went public and was listed on the stock market, I realized the reason: a restaurant, unlike a software company, cannot really expand to the extent that the value of its quality and brand name can be quantified and sold on



the stock exchange. (A restaurant chain might achieve this, but that requires entirely different expertise than a good restaurant.) A restaurant owner, if he wants to cash in on the business he has built up, cannot turn to the stock market for capital investors; he can only sell it off to someone who will continue the business. But if he sells it at top price, then the buyer can pay for it only by cutting corners, skimping on the costs of producing a quality product. For this reason, the restaurant business is cyclical. Outstanding restaurants are born, they thrive, and then they fail. It is a good thing that the institution of the stock market enables a software firm to remain a quality enterprise in the long term. You don't have to cash out to enable even several generations to get rich on the firm; you just need to keep developing it. The stock market is good for this (among other things), and this is why (among other reasons) we stuck to software.

## The Bieffe deal

Finally we signed a contract with Bieffe, and we began developing the program under Tari's leadership. We called the product BIGRAPH, alluding both to the cooperation between *Bieffe* and *Graphisoft*, and to 2D drawing. We were not developing the program for a PC or any similar smaller machine, but for the high-performance workstations used by traditional CAD systems. We couldn't risk smuggling these workstations into Hungary, so we set up a development center in Vienna. As in Munich, our rented apartment served both as workplace and living quarters, a cost-effective set-up. Our first Viennese apartment was near the city center in Hollandstrasse, but we soon moved to a part of Vienna known for its villas, in Harteckerstrasse, where our rented house was big enough to provide room for visiting family. At that time enjoying a taste of the forbidden fruit of the West after work was still a big deal. We saw films that were banned in Hungary; for example, it was during our Viennese sojourn that I saw Pasolini's *40 Days of Sodom*, a brutal and sadistic porno movie. (Because of this movie, for reasons that are partly understandable, Pasolini was murdered in a similarly brutal fashion.) Not only banned movies, but even Chinese restaurants counted as unusual treats for us.

We took on the development project for one year and set our prices accordingly. Bieffe's representatives visited Vienna every three months to check on our progress. For about nine months, everything seemed to be progressing apace. But when the program's final version began to take shape, only then did we realize how many little details were still missing before we could consider the



product truly finished. Here, too, we learned the lesson that was already evident with ArchiCAD's development: 10 percent inspiration, 90 percent perspiration. Developing eye-catching, major functions in the program actually took a lot less time than taking care of thousands of less enjoyable and seemingly less significant details. We had no hope of meeting our original deadline. We had to renegotiate our contract, but luckily Bieffe had also changed its specifications (because new, more promising computers had come on the market), so we were able to extend the deadline by a year while adjusting our fee; we did not go completely broke.

It also became clear that real-time testing by actual users close at hand would be necessary during the final stages of development, but Bieffe could not provide such testers in Vienna. So we rented our next apartment in Padua, and since my wife, too, is partial to Italy, my family joined me here for some time; it was a good excuse for me to undertake extended visits to Padua and take part in the programming work. This was my last true software development job; after that, business and management matters completely took over my schedule and my energy. I enjoy that, too, but I have missed hands-on programming, the creative experience of resolving a dilemma with an elegant and clever solution that comes to life and actually works.

Even apart from the programming work, living in Padua was a great experience. On weekends, we went on various trips, most often to Venice, where we navigated the canals using the tiny motorboat we had brought out from Hungary. Of course, we enjoyed memorable restaurant meals. It was in Padua I learned that in Italy, fresh fish is sacrosanct; frozen fish is perhaps the ultimate offense. One Sunday evening, we tried to order fish in a restaurant, and they looked at us as if we were barbarians. On Sundays, the fishermen have the day off; how could there be fresh fish on a Sunday night? Whenever we wanted to celebrate (for example, the successful completion of a project phase) we would go out to the more expensive Michelangelo's, where the main attraction was not fish, but rather the Florentine T-bone steak. Having the steak well done was just as inconceivable as frozen fish. The pink steak called for Chianti, but managing the wine was a source of incompatibility for Tari and me. Given my frugal tendencies and fondness for the optimal use of resources, I could not bear the sight of any leftover expensive wine at the bottom of the bottle. For Tari, in contrast, an empty bottle was an unbearable sight, immediately prompting him to order another one. So it was that we got caught in an



endless cycle; in trying to resolve this incompatibility, the two of us consumed five bottles of wine at one sitting. (Actually it was only four and a half, because I had to leave the remainder in the bottle, against my better judgment, in order to break the cycle.)

But my most elegant meal took place not in a restaurant, but during a personal lunch invitation to the castle of Mr Anselmi, the owner and president of Bieffe. I'm not exaggerating: he really did live in a castle, with liveried servants, a personal waiter, and extensive grounds, including a golf course. I did not envy him this, but I very much envied him the fact that he went home for lunch and took an afternoon nap every day.

We didn't just eat and drink; we also worked. After the first few wrong turns, BIGRAPH became a masterpiece: from the point of view of software architecture, I think it was much better designed and more elegant than ArchiCAD, which was constantly being retooled to meet the unforeseen preferences of our customers. And yet no one was buying it elsewhere, even though our contract with Bieffe allowed us to market the product anywhere outside of Italy. As it happened, the market for 2D CAD products was already mature; well-known distributor firms (such as Bieffe in Italy) ruled the market, and these distributors did not, for the most part, look for new products; they were happy with the existing ones. The technical advantages of a superior product cannot compensate for the knowledge capital and especially the brand-name build-up that the distributor has already invested in the existing product. Only rarely does a product (or, as in the Bieffe case, its programming firm) cause such problems that a distributor with a strong market share is induced to switch products. Thus, we were unable to find a distributor for BIGRAPH outside of Italy whose market position was comparable to that enjoyed by Bieffe at home.

Since the programming work was directly supervised by Bieffe in Padua, and financed exclusively by Bieffe's sales in Italy, the question arose as to whether Graphisoft as a company represented any added value. Would they be better off just employing our workers directly? The predictable result was that a few of our newer employees, who had relatively weaker ties to Graphisoft, offered to work directly for Bieffe, and Graphisoft's contract was not renewed.

So we parted ways, and while the rights to BIGRAPH's UNIX (later MS-DOS) version remained the property of Bieffe, we insisted on retaining the rights for the further development of BIGRAPH for Macintosh. The result was our new topCAD product, and because we could rely on Apple's business network, we had high hopes for its successful distribution.





## The topCAD story

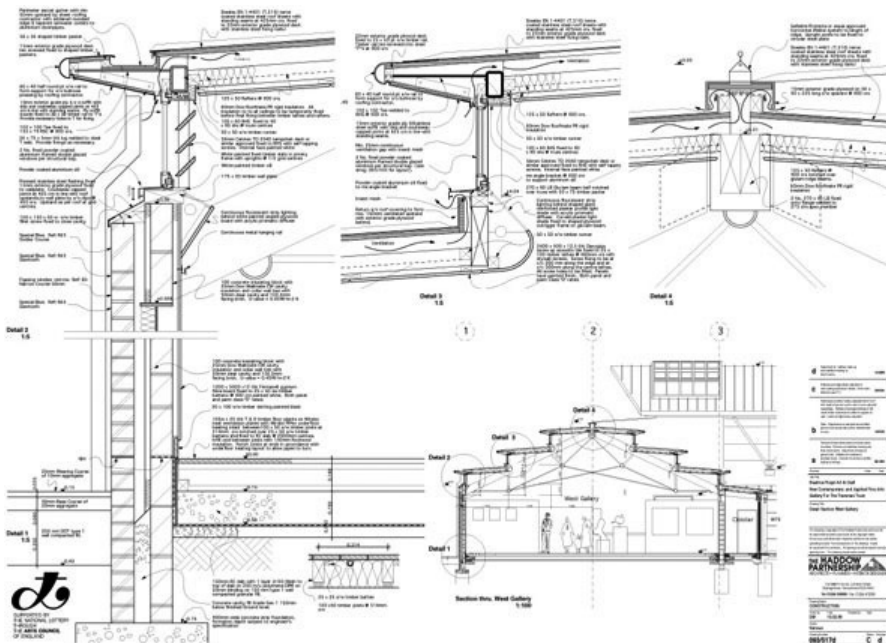
Under Lóránt Szabó's leadership, topCAD became a mature, top-quality product. In many respects (such as its user interface), it was an even more attractive program than the original BIGRAPH. TopCAD was unquestionably a better-built, more complete, and more powerful software than any other Macintosh or PC-based 2D technical drawing program then available on the market.

It appeared that our sales network was also in place, since our ArchiCAD distributors were craving to expand their sales with Apple-based 2D CAD software for the general market. Nevertheless, topCAD did not become a truly global success in the way ArchiCAD did. Most of our resellers were unable to break into the market for traditional 2D CAD systems.



Lóránt Szabó,

head of development for topCAD



Two-dimensional detail drawings



The reason for this is enlightening and echoes the paradoxical situation in which the Apple Macintosh operating system was unable to win out over the clearly inferior MS-DOS (which even the most fanatical Microsoft adherents acknowledged). This phenomenon can be explained if we look at industry standards. These standards did not emerge because they were the best, but because the majority of customers used them. If a standard has already emerged, then the market does not seek a better one; it is happy that a standard exists that everyone uses and that compatibility (crucial in information technology) is assured. There is no need to improve on “good enough.” In fact, among all the systems available on the market, the industry standard is probably the weakest one, because all the rest are able to retain their small market share only because they are better. Of course, if the standard is really poor, it can lose out, but if it is good enough, then it remains the unconquerable market leader, as long as the technological environment or the market structure does not undergo a change radical enough to require that a new standard be developed to conform to the new environment.

On the market for 2D PC-based CAD systems, AutoCAD had already emerged as the standard and it was good enough. No real market demand existed for the better-quality topCAD, just as the market for operating systems showed no real demand for the outstanding NeXT (see Chapter 3). The plan to market topCAD alongside ArchiCAD, as a sort of complementary product for creating 2D construction documentation, also fell through: as we later learned, ArchiCAD's primary strength was that it integrated 2D and 3D information, and it was precisely this advantage that would have been compromised if a separate program (topCAD) was to serve as the preferred application for construction documentation. Our strongest distributors (Tóth in Italy and Bogatzki in Switzerland) achieved heroic sales results that were enough to keep topCAD afloat for a few years (they sold primarily to engineers, not to ArchiCAD clients), but we were unable to break into the market anywhere else. During one confidential conversation, Bogatzki, the hero of topCAD distribution, admitted that he only sold topCAD because selling ArchiCAD was too easy, and he preferred challenging assignments. But he was unique, and you cannot build up a global distributor network based on heroes alone. Living in the shadow of ArchiCAD's success story, topCAD receded and finally expired. We gave Bogatzki the source code for topCAD, so that he could fulfill his warranty obligations. We also gave him additional challenges related to ArchiCAD sales. For a time, he sold more copies of ArchiCAD



in German-speaking Switzerland than all of our German resellers combined. (We will have much more to say about him in Chapter 7, in connection with ArchiCAD's triumph in Switzerland.)

## **The story of RAPID – the pipeline planning program**

As of the mid-1980s, Graphisoft still stood on three legs: in addition to our work on ArchiCAD and BIGRAPH (later topCAD), we still retained our original profile of 3D pipeline design, which stemmed from the Paks project. There were three good reasons why we felt that the pipeline profile was a better long-term bet than the architectural design market:

1. The ability to model in space is much more important in pipeline design than in building design. For buildings, a 3D model is a perk, an eye-catching plus, but for complex pipelines, a 3D model is absolutely vital. Without the ability to design in a 3D view, pipelines would very likely end up colliding. As we later learned, this difference in the two markets has a useful American expression: "nice to have vs. must have."
2. We had gained vast amounts of hands-on experience in pipeline modeling as a result of the Paks power plant project, experience which, at that time, we were not even close to achieving in the architectural field.
3. The pipeline design field is a very specialized, relatively narrow market, where no standard product had yet emerged and the competition would likely be manageable.

Beginning in 1985, Imre Pákozdi, another friend wooed away from the Institute of Geophysics, took over the management of the RAPID business. The actual software development was headed by Tamás Jankó following our first wave of public hirings. (Today, Jankó is one of the leaders and owners of Unitis, a systems integrator company.)

And the business was successful. For a while, RAPID's revenues exceeded ArchiCAD's. At the time, users of pipeline design programs didn't take PCs seriously, especially not Apple computers, which were associated with computer games. These clients insisted on "serious" workstation solutions. So our pipeline program remained faithful to the HP platform, but we transitioned from the



hand-held calculator to a more powerful professional workstation. We received far less marketing assistance from HP for RAPID than we had received from Apple for ArchiCAD, but HP was nonetheless instrumental in enabling us to reach those few clients we did get in the West.

We soon realized that serving pipeline design firms required an entirely different business model than the one we followed for ArchiCAD. For the pipeline clients, CAD was not a novelty. They knew exactly what they wanted. They each had their own special needs. They were willing to pay good money to have them met. Our competitive advantage was not in inventing something that no one had ever produced before (that is, 3D modeling on a low-cost machine), but rather in our willingness to comply with individual requests. The program's source code contained various iterations and branches, depending on the customer's name – “if Nieweg ....” or “if Piesslinger...” In other words, we had as many versions of our program, at its very basic code level, as we had customers. Our bigger competitors in the West were not willing to undertake this level of customization, and were even less willing to sell the source code to their customers, even if the need was there and the price was right. For us, though, selling the code was the best deal we could get.

For example, M. Tarquini from Lyon, France, paid close to one million francs (€ 150,000) for the code (for the firm's own use only!). This was our biggest business deal yet. Moreover, we discovered that the best French cuisine is to be found in Lyon. One lunch, consisting of marrow, eaten at an elegant restaurant in the old section of Lyon, was simply divine. Its distant relative, the fried marrow found in Hungarian restaurants, while noteworthy, is just not the same.

The one-million-franc transaction was no easy feat. The professional commercial experts who were representing us, told us that such a large deal was not usually done as an “open delivery” billing (that is, we deliver, and then the customer pays), since there is no guarantee that once the customer receives the merchandise, he will actually pay for it. We accepted this logic because we had already had an ArchiCAD customer who forgot to pay us after receiving the program. In that case, we figured it didn't matter much: an upgrade was already in the works (ArchiCAD was in its very early stages, and the user wouldn't be able to do much without the upgrade), and we wouldn't give him an upgrade until he paid his bill. (In fact, we were able to extract a check from that English client by holding out on the upgrade, but the check bounced. We thought this was illegal. We later learned that fraud is a part of commercial transactions, even in the Western



world we idealized. This English client later showed up at a trade show, and he had the gall to request an upgrade. You can guess what I told him!)

## **The practical benefit of ethical business practices**

But our experiences were not all negative. Let's return to M. Tarquini, from whom, following our advisers' admonition, we requested payment by letter of credit. The customer pays in advance, through a bank account, but the supplier (that's us) does not get the funds until the customer verifies for the bank that he has received the shipment. This verification process involves a number of documents. In our case, the documents consisted of a certificate of delivery signed by M. Tarquini. Delivery was made in person by Tamás Jankó, who put the source code of the software onto a floppy disk, traveled out to Lyon, installed it on M. Tarquini's computer, generated the working version of the software in the presence of computer experts, and compared the resulting program with the program M. Tarquini had used earlier. This way, Mr Tarquini could be sure he was getting what he ordered, and we could be sure of getting paid.

But this carefully designed scenario didn't work after all. Our bank was not yet equipped to deal with the particularities of transactions involving software products, and it demanded documents that may have been necessary for traditional transactions, but were absurd in connection with software. For example, the bank demanded shipping insurance for the full value of the merchandise, in case the merchandise should be damaged during shipping, or, say, the airplane should crash. We tried to explain, in vain, that software cannot be destroyed in this way, because if the plane crashes, we'll just make another copy on another set of floppy disks; there was no reason to spend money on pointless insurance. But the bank insisted on insurance as a necessary appendage to an accredited transaction. Okay, we finally agreed, just to get it over with. The whole thing became even more absurd when neither the bank nor the insurance company verified the contents of the floppy disks (obviously, they were not capable of doing that); they only checked to see if the neatly labeled and numbered floppy disks were accompanied by the right documentation. As the bank and the insurance company argued over the right format for the shipping documentation, Tamás Jankó just picked up a few floppies containing the source code, took them out to M. Tarquini, installed the code on his machine, and got M. Tarquini's signature on the certificate of delivery. We figured that the pointless insurance was not his problem; all he had to do was sign the certificate. But in the end, the insurance did become his problem,



because the insurance company eventually realized – sooner than the bank did – the nature of computer software, and refused to insure the shipment. It was right. If the floppies really were lost along the way, we could demand the full one million francs in damages from the insurance company, even though we could reproduce the lost software for free. The insurance company could not make such a deal; it could not accept a client who had an interest in losing the merchandise. So we came to a standstill: without insurance, the bank wouldn't release the funds, because rules are rules, even though M. Tarquini had long since received the goods and certified delivery. So much for the flexibility of banks! Finally, the problem was solved when M. Tarquini, once he understood what was happening, submitted a written declaration to the bank in addition to the delivery certificate, stating that the bank should make payment and he would absolve the bank of any additional responsibility. If he hadn't submitted this declaration, we might still be waiting for the money!

But he did submit it, and he did so with impressive speed. He was almost in a panic, lest we believe, even for a moment, that he would take advantage of the situation. And he could have taken advantage, because if the bank, in the absence of the required documentation, refused to release the funds, then he would get his money back. M. Tarquini was our first positive experience with Western-style business ethics; we would encounter many more. Ethical business practices, after all, are a valuable asset with high returns. Upholding unwritten rules is a good idea, not only because it's easier to look yourself in the mirror; but also because it makes practical sense. There is no sure protection against being cheated, as our letter-of-credit example shows, so it is advantageous and more amicable to do business with trustworthy people. News of trustworthy practices (as well as the opposite) spreads quickly in the business world, and if a partner you consider trustworthy tells you that another businessman is also trustworthy (or not), then you believe him, and make your deals accordingly. In later years, I was very proud when people I didn't know would call me up, referring to a common acquaintance, and ask for my confidential opinion about whether a particular person's business practices were above board. These are, of course, sensitive questions; negative opinions are not usually expressed directly, but an embarrassed hemming and hawing gets the message across. I even had one case in which I gained a partner's trust precisely because he learned, from a third party (who had a very bad reputation) that I did not agree to an otherwise advantageous deal with him. OK – the partner probably thought – you think along the same lines as I do, we're in the same club.



Although there are national differences with regard to business practices (in my experience, the Japanese have the highest standards in this respect), Hungary is, despite common misperception, up there somewhere in the middle of the pack. In 2000, we began dealing in facility management software, and in contrast to our earlier business ventures, we decided to start this one in Hungary. A well-known, high-level manager in Hungary, a friend of mine, warned me:

– Here in Hungary, you won't be able to act like the little fairy in the bubble – here you will have to come out into the gutter, among the rats.

He was wrong; we were able to gain nice little market share, even in Hungary, in our bubble.

## The first hiring wave

But let's return to the mid-1980s. In addition to RAPID's successful sales record, which required ever more manpower, ArchiCAD's bright future was becoming evident too. Feedback from clients was piling up, increasing the need for software development. We rapidly increased the number of programmers, and we were long past the stage when we hired everyone from among our own personal circle of friends. Yet even that circle was considerable. My co-workers, inherited from the Institute of Geophysics (Éva Bisztricsány, Péter Hornung and Imre Pákozdi) and Gábor Tari, represented the first wave. Tamás Hajas and László Sparing (who later became a leading programmer, and Head of ArchiCAD Development from 1998) also came onboard through personal contacts. Personal contacts remained an important source of personnel for years to come; many excellent colleagues came from the Institute for Geophysics and the faculty of the Technical University. But by the end of 1984, it was clear that we had to cast a wider net to be able to fill our personnel needs fast enough. So we published our first job advertisement.

Our job offer was very attractive. Not only because of the relatively high salary (don't forget, computer programmers in Hungary at the time were making the equivalent of \$100–\$200 per month), but mostly because our colleagues could work on the most up-to-date computers and travel to the West. A business visa that you could hang onto and use anytime you wanted was still an enormous perk. This gave us a huge competitive advantage on the Hungarian labor market; in subsequent years we could never repeat that level of advantage. In this first round of a public job offer, we hired Tamás Jankó, Robi Kőkuti, Tibor Gáthy and Gyuri Kafka and the first Graphisoft generation was complete. In 1990, when Graphisoft Ltd was formed in the wake of the new, fully capitalist corporate



legislation following the system change in Hungary, this group became the company's first round of co-owners. Each of them excels in his field, and if I had to rank the objective factors that led to the company's later success, I would put our privileged position in the labor market of the 1980s at the top of the list, something for which I can thank this outstandingly talented and hard-working group. Other factors such as lucky timing (the early years of the PC revolution) and wise decisions regarding our target market and choice of partners (architecture and Apple, respectively) are next on the list.

But both RAPID and ArchiCAD demanded more and more manpower for their development. No matter how quickly we hired employees, without compromising on quality, we simply could not hire enough people to keep up with our market. For the first time, we faced the dilemma of "standing on several legs" vs. "focusing."

## **RAPID's triumphant demise and theories of strategic decision-making**

The business plan for the RAPID pipeline design program, based on customized service for individual clients, proved to have fewer growth prospects than the so-called packaged software business, in which every customer gets the same mass-produced product; this already seemed within the realm of possibility for ArchiCAD. RAPID sales were profitable, but since we required a growing number of programmers to meet the needs of a growing number of clients, the limits to growth became ever more obvious. In contrast, the number of software engineers required to develop mass-market packaged software is much less dependent on whether we have a hundred, a thousand, ten thousand, or even a hundred thousand users. (Today, we've reached that mark.) Of course, a growing pool of users does present additional tasks (we learned this about 15 years later at the cost of painful losses), but prospects for growth are incomparably better than in the case of customized development.

I felt that we could not let this possibility pass us by; we had to concentrate all our efforts on the packaged software (ArchiCAD) and, in the interest of freeing up resources, it was worth sacrificing even the indisputably profitable pipeline design business. I was in the minority. The others asked if it was wise to stand only on one leg. My response was yes! Particularly if that leg was as promising as ours, and the real question was: could we afford not to focus all our resources on such an exceptional prospect as ArchiCAD?





According to our company's decision-making policy, strategic decisions of this importance required me to consider the opinions of the others, but responsibility for the final decision remained mine. I rarely exercised this authority, and mostly accepted the majority opinion (especially the opinion of those who would end up doing the work necessary to carry out the decision), even if I didn't agree with it. I did this for two reasons: first, I am not infallible; second, even if it turned out that I was right, you can't have a decision executed well by people who don't agree with it. I can recall only two occasions in the company's history where, as Chief Executive, I exercised my right to prevail in a decision against the majority opinion. One of these decisions was to put an end to the profitable RAPID program in 1986. (The second was in 1992, when we decided, after much debate, to adapt ArchiCAD for Windows. I will write more about this in Chapter 11.) But I could enforce my minority opinion only if I had at least one ally whom I could entrust to carry it out. Luckily I had such an ally in Imre Pákozdi who was in charge of RAPID. Imre liked RAPID and had enjoyed considerable success with it, but he agreed with me about ArchiCAD's exceptionally good prospects. Consequently, he agreed to commit hara-kiri; he took on the honorable job of a triumphant phase-out of the RAPID business line, completing all current contracts and meeting the warranty requirements of the existing clients. Imre did his work well, and he found a legal successor who, for a nominal cost, took over the source code, as well as all remaining warranty obligations toward our existing clients.

## **The validity of long-term strategic decisions**

So I went against majority opinion and halted RAPID's development in the interests of ArchiCAD's future. This decision is particularly notable in view of the fact that just two years earlier, at the Hannover trade fair, pipeline design was by far the most advanced of all the applications we introduced. When Miklós Horváth, Interag's leader, asked me which application I considered to have the brightest future, I unhesitatingly voted for pipeline design. This was where we had the most experience, and in this small, very specialized market niche we could get by with our limited marketing resources. Still, two years later I was just as certain that ending this line of our business was the right thing to do.

I know I have committed some strategic errors during the company's history but these did not include decisions relating to RAPID. I still believe today that I was right to consider pipeline design our most promising strategic direction in 1984; and I still believe that we were right to shut it down in 1986. This illustrates



that so-called “long-term” strategy planning is never set in stone. Based on market feedback, every strategy, even those conjured up by the most exceptional prophets, must be revised continuously. What is important is not the ability to predict the future (it is impossible anyway); it is having the courage to change course if necessary.

I don't mean that long-term strategy is unnecessary. I believe that in the world of software development, you can plan about 3–5 years in advance, but these plans must be revisited each year in the light of changing market realities. If changes are necessary, you have to make them unapologetically.

### **Graphisoft as a single-product company**

With the demise of RAPID, we became a single-product company and would remain so for a long time to come. With the new millennium (an era in the company's history which is beyond the scope of this book), we once again approached new markets with new products, but we did this not because a single-product strategy doesn't represent a good long-term strategy. Even today, I believe that a focused approach based on competitive advantage is a better business strategy than diversification for its own sake. In a growing market, a single good product can remain successful in the long term and provide a solid basis for a growing company.

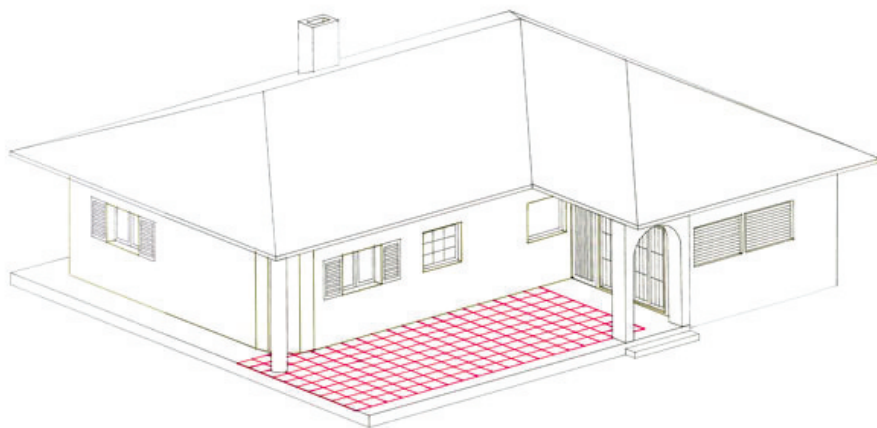


## Chapter 5

# Conquering the world: building a global ArchiCAD distribution network

### After a rocky start, Graphisoft picks up speed

Although the first commercial version of ArchiCAD was released in 1984, we date the real birth of ArchiCAD as 1986, when real practicing architects began using it to design real buildings: they could not live without ArchiCAD anymore. Due to the program's impressively simple and architect-friendly solution for 3D modeling, we had sold a few copies as early as 1984, but those earlier versions were only good for designing small houses for demonstration purposes. We were still a long way from being able to design buildings that would really be worth creating on a computer.



*A model created with the first version of ArchiCAD*



Miklós Misley, for example, came up with a clever way to model roof structures, but our friend István Tóth, from Italy, visiting Budapest in 1985, pointed out some of the buildings along the street:

– Gábor, look at the roofs of these beautiful buildings and show me just one that ArchiCAD's roof modeling function can handle properly, without requiring any further fiddling by hand.

I couldn't show him a single one. Another impressive ArchiCAD function was the "intelligent cursor" as yet unknown in the CAD world. As you moved the cursor across the screen, it would "sense" that it was approaching a building element; if the cursor touched a wall edge or corner, then it would change shape accordingly, thus making it easier for the designer to join elements precisely. This worked well for small, extremely simple houses. Once the building assumed a more normal size, however, the program slowed down to an excruciatingly sluggish speed. Finally, Robi Kőkuti came up with a solution that would work fast even with large building models, but this solution required that almost the entire program be rewritten.

Several changes in programming team leadership exacerbated the program's growing pains. The first version of RadarCH, ArchiCAD's predecessor, was written by Miklós Misley, but since he was working on his doctoral dissertation, he didn't have the time and energy to head the growing development team. ArchiCAD's first full-time lead programmer was Robi Kőkuti, who came up with countless clever ideas that remain part of the program to this day. Unluckily for us, Robi soon fell in love with an English girl. That would not have been so bad, except that he went on to marry her and moved to England. The story of how his successor was chosen is a good illustration of my most serious managerial flaw – but also the very spirit that is responsible, I believe, for much of our success.

ArchiCAD, like every good product, is the joint result of both our programmers' efforts and our customers' demands. In practice, this meant that new programming ideas came partly from our programmers, and partly from our customers and distributors based on actual use. I contributed my own ideas, which usually came to me while I was demonstrating our product at trade fairs. It was during these demos that many of ArchiCAD's shortcomings also came to light – particularly irksome if you considered that these problems were displayed right in front of our potential customers. When this occurred, I rarely concealed my indignation even after returning to Budapest, where I would descend into our office basement– the programmers working there called it "the mine." I would, in my customary modest and restrained fashion, let them know about the glitch. (Legend has it that during the course of one



such “discussion” I broke my brand-new briefcase into pieces, but I don’t remember that.) For a while, the boys bore these tirades stoically. But the day arrived when Tamás Hajas couldn’t take it anymore; he stood up and in a quiet, polite, but firm tone of voice, he told me exactly where to get off. I promoted him the very next day.

Another major change in programming personnel came about when we finally decided to hire a real architect, who actually knew how to use our product for genuine purposes. Gyuri Juhász’s professional expertise and his finely tuned sense for user interfaces and the program’s outside appearance first became evident with the release of version 3.1. (During this release, we had to make do without Tamás Hajas for a while, because he had been drafted into the Army, but he had an excellent replacement in the person of Tibor Gáthy.)



*Tamás Hajas and Gyuri Juhász, ArchiCAD's geniuses*

Version 3.1 was the version which Mr Hulak, the architect from Bordeaux, did not want to return to us despite its bugs, because he was already using it to design real plans. As for Gyuri Juhász, he transformed himself from an architect into a user interface engineer. Under his guidance, ArchiCAD developed an intuitive and self-explanatory user interface, combined with a playful, sexy appeal, which many of our users fell in love with. Gyuri became one of the country’s best user interface designers. Today, he runs his own business, Ergon Design, a consulting firm on ergonomic user interface for software.



## Building a global distribution network

To achieve success, it was not enough to bring the program to maturity; building up a distributor network was at least as great a challenge, even if Apple had helped a great deal in giving us trade show opportunities and personal introductions. Our first distributor was István Tóth in Italy, the hero of Chapter 3, but we achieved our first big sales figures in France, the first result of Gyuri Kafka's commercial activities.

Gyuri first came to Graphisoft in response to our advertisement for programmers. Soon, however, it became clear that his sales abilities were more valuable. He spoke excellent English and French; with his winning demeanor, gift for easy conversation and sharp business sense, he was predestined for a career in sales. We didn't know all this when we hired him. At the time I wasn't expecting to hire anyone else (beyond myself) for a sales position. But in 1985, as we were preparing for a computer trade show in Paris (SICOB), Gyuri surprised me with an offer that was hard to refuse. He was planning to spend his August vacation in Paris, and offered to extend his stay a few weeks and hold ArchiCAD demos at the trade fair. Since he would be living in his sister's Paris apartment, he would not even require travel or housing allowances. I couldn't really refuse such an offer (in particular because I couldn't speak French), and asked only that Gyuri use the two weeks before going on vacation to become more familiar with ArchiCAD, so that he could give really good demonstrations at the fair. At the time, he was working as a programmer on the VIDRA project for Videoton, so he really didn't know ArchiCAD well. When I saw his presentation, following two weeks of ArchiCAD lessons, I didn't find his demo very convincing. He floundered when confronted with a complex technical issue. But since his French was so good, I accepted his offer. It was lucky I did. After seeing a few of his demos, I realized that being an expert on the topic is not the most important part of a successful presentation. Far more important are the speaker's communication skills and personal style. I had to accept the fact that despite his superficial knowledge of ArchiCAD, Gyuri gave better and more successful program demos than I did. By the end of the trade fair, we had French customers and potential French distributors, and Gyuri had embarked on a shining career at Graphisoft.

SICOB was also associated with a more somber story, one whose roots go further back in time. In Paris, we did not set up at the Apple booth as we usually did, but instead we were guests of one of my (short-term) earlier employers, SzKI. That company's director of international trade, Laci Binder, was hoping to



hone SzKI's French connection. I was happy to see my old colleagues again, and of course I was proud to show off my own firm. I was especially looking forward to seeing SzKI's director, Pál Németh, who had given me fatherly warnings against founding a private company when I left in 1981.

– Gábor, you are too reckless. I worry about you and this whole private-enterprise thing.

He based his worry on the fact that I had been responsible for introducing the private import of computers and computer parts to SzKI, which, as we know, was a legally gray-area activity during the waning years of the socialist state. It was not illegal, but it wasn't quite legal either. I had organized the first imports of PCs for SzKI, which used these as a model for its own PC, called "Proper." In his early switch to PCs – his company was perhaps the first in the entire Eastern Bloc to do so – Németh demonstrated that he had a good nose for how the market would develop. The only problem was that he was denied permission to import not only these first prototypes, but also the parts that he needed in large quantities. (The comrades in charge of these import permits did not share Németh's gift for seeing into the future.) So, in the absence of import permits, he was forced to use the private import route, and this process eventually took on industrial proportions. This occurred without my participation, long after I had left the company. It was not until 1985, at the SICOB fair in Paris, that I learned that the growth of the private-import activities at SzKI cost Pál Németh his job and a lot of official harassment; at the time of the trade fair, he was being held in jail under police investigation. Yet everyone knew that he personally gained not a penny from the private-import transactions; he resorted to this legally ambiguous method because it was the only way he could prove that manufacturing and assembling PCs was a tremendous opportunity for the (state-owned!) SzKI. This business did, in fact, turn out to be a tremendous opportunity, but SzKI did not take advantage of it. It was hard for me to understand what had happened; by now, I was living in a different sphere, and it was a shock to realize that in certain walks of life in Hungary, the most obtuse forms of socialist policy continued to rage unabated.

## Culinary adventures in Paris

Naturally, we wasted no time in sampling the delights of French cuisine. During negotiations with Laci Binder on a possible distributor relationship, his main argument for the relatively high commission he was seeking was that in France, business deals are made over white tablecloths, and this costs money. He was



right on that score, but later admitted that SzKI's French office needed more know-how than that in order to distribute ArchiCAD. (It dealt mostly in slave trading, or computer programming on a project basis.) So SzKI gave up on its distributorship plans, but was adamant about introducing us to the world of Parisian restaurants. In Paris, it's not only the French restaurants which are good; due to competitive pressures, non-French restaurants are also exceptional, and we sampled several gems. One of Laci Binder's invaluable feats was that he took us to a fantastic Lebanese restaurant to celebrate our success at the trade show. Both the Lebanese cuisine and the beautiful belly-dancers performing atop the dinner tables provided an unforgettable experience.

Yet that evening had not started off well. When the waiter asked me what I'd like as an aperitif, I ordered a calvados based on the Hungarian notion that one starts off with hard liquor. At this, the waiter, insulted to the core, asked me to leave the restaurant immediately. Calvados is an after-dinner "digestif" and a customer who requests one before dinner is capable of God knows what other barbarous acts. Laci Binder was finally able to placate the waiter, and I got a Pernod, which I hate. I had a number of these experiences before I finally learned that the French are deadly serious about culinary matters.

The last such lesson (after this one, I was on good behavior) took place at a small but elegant restaurant on Ile-Sainte-Louis in Paris. Our hosts were friends from the firm of Matra Datavision. We made our way through a myriad of courses, each accompanied by a separate wine, each wine served in its own, uniquely shaped wine glass. One of these wines was especially delectable, and when the waiter removed my empty plate from the accompanying course, I quickly drank the last of my wine, fearing that he'd take my glass before I'd finished it. Outraged, the waiter gave me a dressing-down:

– Sir, this isn't water. You have to drink it slowly, sip by sip. Such a dinner must not be rushed.

Meanwhile, we were discussing the possibility of selling the topCAD source code to our hosts. Following the excellent meal, I expressed my admiration for the elegance of the restaurant, at which our hosts pointed to a building across the Seine, saying that the top floor of that building housed perhaps the most elegant, most famous restaurant in the world, the Tour d'Argent.

– If our topCAD deal goes through, – he said – we'll celebrate there.

Unfortunately, nothing came of the deal, they didn't buy topCAD, and I didn't experience the Tour d'Argent for quite a while (until Chapter 12 of this book).





## Abvent: our biggest distributor yet

The first French distributor we identified at SICOB didn't work out, but six months later, at the Batimat trade show, we got to know Abvent. (Batimat was not a general IT trade show, but a software show geared specifically toward the construction industry.) Abvent soon became the most successful ArchiCAD distributor in the world. Among all our partners, Abvent provides the highest revenues from ArchiCAD sales. In those early years, when we had no foreign subsidiaries of our own, half of our revenue stemmed from Abvent's activities.



*Xavier Soul, head of Abvent*

Abvent considered itself primarily a software development firm, and does to this day. Our goal, however, was to let its people concentrate their efforts on sales and marketing, and to leave software development to us. Our divergent opinions have much to do with our differing situations, our professional biases and, not least, our vested interests. Abvent had a general-purpose 3D modeling program it had developed for the Mac, called "SpaceEdit." This was later renamed "Focus" and still later "Zoom," which is what it's still called today. SpaceEdit was more useful for modeling simple objects than complex buildings, but Abvent marketed it to architects for schematic, large-scale modeling tasks. Its main competitor was "Architron" (another 3D modeling program for the Mac), developed by another French firm called Gimeor. Architron was specifically developed for architects, and in both its function and its price, was situated somewhere between SpaceEdit and ArchiCAD. Abvent's strategy was to squeeze Architron



out of the market, using SpaceEdit as pressure from below and ArchiCAD as pressure from above. The strategy worked. A few years later Architriton was pushed out of the market: in France, by Abvent and in the United States (Gimeor's main target market) by our own U.S. subsidiary, but that story comes later.

In the beginning, Interag representative Zsuzsa Tóth accompanied us to these trade fairs. We were happy to have her assistance in organizing our trips and taking care of the administrative tasks. We were encumbered by the innumerable and indecipherable bureaucratic regulations that went along with any Hungarian company's foreign trade activities as foreign trade was essentially still a state monopoly. For our foreign partners, however, Zsuzsa's role was a puzzle. A few years later, after Hungary had undergone its economic transformations, *Business Week* published a piece about us, for which they interviewed Abvent's executives, including its president, Xavier Soul. Xavier described Zsuzsa as a "mysterious woman" whom the KGB must have sent out to keep an eye on us. Xavier could not have known what foreign trade entailed in a planned economy, or how much Zsuzsa helped us. When she later left Interag for another foreign trade company, we contracted with her new firm for a while, just to continue our business relationship with her.

## The benefits of competition

We had to face facts: while in 1983/1984 we were the only ones doing 3D modeling on PCs, by 1985 we had two competitors in France alone, and both for the Mac. But this was not a threat; in fact, it was beneficial. It seems paradoxical that we sold the most ArchiCADs in France, where our competition was the greatest. But if you think about it, this is not surprising: competition is a sure sign of a good market. If only one firm is producing a given product, that is more of a hindrance than a help. Clients are reassured if they can choose from several comparable products. If there is only one kind of a certain product, then perhaps there is no real need to buy such a thing (unless it meets some obvious and immediate need). We soon learned that we had it easier in competitive markets (and for the next few years, this competition was Architriton) than in countries where we were on our own. In the latter case, we had to demonstrate not only our product's specific advantages, but also that the customer really needed the kind of product we were selling. It's much easier to demonstrate clear advantages over a competitor (easier to use, faster, better picture, more exact plans, ability to model complex buildings, etc.) than it is to explain why 3D modeling



is useful in architectural design. With respect to Architriion, for example, our clear advantage was that we could produce sufficiently exact drawings in larger-sized outputs. This was simple to prove, and so we won easily.

This line of reasoning only works if the competing firms are in the same category. If we run into a competitor who is much larger than we are, then the modest, easily explicable advantages are no longer adequate. The customer will say: – Right now, maybe your program is better at certain things, but the other company is much larger and more powerful: it will catch up sooner or later, and who knows where you'll be then.

Software customers are not just buying the current version; they are investing in the future. In making a software choice, they are betting on which company will be around in the long term. So with respect to Architriion, produced by a firm not much larger than ours, we could say that we made something similar, only better. With respect to the industry giant, Autodesk's AutoCAD, this wouldn't work. In facing Autodesk, we had to emphasize that we were offering something entirely different; you don't compare apples and oranges. The essence of AutoCAD is an automated 2D drafting table; in contrast, ArchiCAD offers 3D model-based design. And then, of course, we had to explain what model-based design was good for: a much more difficult marketing task.

## **The Latin countries and the rest**

It is interesting to consider why 3D modeling spread fastest in France, not only among architects, but also in the fields of automotive and aeronautical design, where the French company Dassault Systems and its CATIA program were pioneers. When I confronted the French highway system, I found the answer. The French like complex problems. If you have ever tried to travel on the Cote d'Azur highway from Nice to Mougins after taking the Cannes exit, you know what I'm talking about. If you haven't, let me explain. You have to cross the motorway twice, instead of just taking a simple right turn. The French (in contrast to Americans, who are endlessly simplifying everything) like intellectual challenges. And to model while thinking in three dimensions is not easy; it really is an intellectual challenge, even with a program as elegant and as simple as ArchiCAD.

Following Italy and France, the rest of the Latin countries of Europe soon became strong markets for ArchiCAD. We signed a contract with a distributor in far-off Portugal (Araujo Gomes' firm, our partner to this day) much sooner than we were able to find good partners in England and Germany. The best example



of the Latin streak is bilingual Belgium. Thanks to the enthusiastic efforts of Pierre and Jeanine at LIPE, our first Belgian distributors, we sold many more copies of ArchiCAD in French-speaking Belgium than in the larger, Flemish-speaking part of Belgium and the Netherlands combined. One possible explanation for this enthusiasm on the part of Latin Europe is that the most obvious practical value of 3D modeling is visual communication, which has always played a large role in Latin cultures (just think of the way Italians use their hands when speaking).

We soon discovered another surprising principle: we were able to sell more in smaller markets than in bigger ones. Gyuri Kafka had great results with our Greek friends, Aleka and George Georgaras. We also had success in Turkey, another small market, with our Turkish distributor Attila Karaelmas, from whom we learned that “Attila” is not just a Hungarian name. This run of success continued in Scandinavia where Severi was responsible for making Finland one of the few countries in which we are the undisputed market leaders – not just in the world of Apple, but in the whole of the PC universe. After almost 20 years, most of these distributors remain as our loyal partners.

The probable reason that these small markets are advantageous for us is that the big guns among the leading American software companies, if they move beyond the giant U.S. market, first target the other big countries; small countries like ours remain off their radar screen for a long time. We took advantage of this opportunity, and so achieved leading market share in a whole string of small countries within a relatively short time.

## **Subsidiary or partner?**

There was another reason for our success in small countries. Our strategy of guaranteeing exclusive status to our partner in a particular country in exchange for that partner taking responsibility for marketing and brand recognition did not work in the bigger countries. In larger countries, this marketing investment is so major that an independent partner, who does not own the product, will not take such a risk. In the end, we had to establish our own subsidiaries in the larger countries, using our own capital, to take over the distributor tasks in the largest markets. We did this not to retain the really big business opportunities for ourselves rather than give them to independent partners, but rather for the exact opposite reason. Big countries were a tough nut to



crack, a risk which no one else would take on. There were a few who risked a venture into a large market, but each of these eventually foundered. The best example is our first Israeli distributor's attempts to sell in the U.S.A.

## **Instant success in Israel**

One afternoon, someone from Abvent's Paris office called to say they had a potential client from Tel Aviv in the office, and since Abvent didn't have the rights to sell in Israel, they would hand the phone right over so we could talk to the Israeli prospect directly. We usually did not meet with real end users, only those who were interested in distributing and reselling. I assumed that the Israeli was interested in becoming a distributor.

- No, – said Dan Wechsler, the Israeli architect. His firm had sent him on a European and U.S. trip to buy the best available architectural design program for his firm.
- It seems I've just found it, – he said.

Then, after a few moments' silence, he asked:

- Why, can't we resell it, too? What are the conditions?

By this time, we knew from experience that a new distributor in a small market like Israel should be obligated to make an initial order of five copies of ArchiCAD, plus guarantee an additional five sales per quarter. In exchange, the distributor would have exclusivity within his own country and a 50 percent distributor's discount.

- OK, – said Dan, – give me a week to think about it.

A week later, he called back and said we should send the first five copies and asked where he should send the money. It was not hard to figure out that he'd rounded up four more buyers to take advantage of the 50 percent discount, whereas he was probably not that interested in the distributorship business or in building up a local market. So I quickly amended the conditions and said that naturally he should organize a conference event, the prelude to our entry into the Israeli market, and I would give the demo personally. We would cover our own air fares; the Israelis would have to take care of lodging and event fees.

He didn't miss a beat. It is true that originally the 50 percent discount was the real draw, but now that they were into the business, they took the distribution idea seriously. They rented a large conference room at the Tel Aviv Ramada Hotel and invited all of Israel's most important architectural firms to the demo. Since the firm's president was a well-known architect, the community took the invitation seriously, and of the 200 invitees, 120 showed up. The demo went very well,



and 13 firms (in addition to the original 5) ordered their own copies of ArchiCAD there and then.

None of us had counted on such a breakthrough, and the president of Shiluvim (that was the name of the firm) said to me:

- Let's talk business. Do you have a distributor in the United States?
- Why, do you have contacts in the States? – I asked.
- What Jew doesn't? – he replied, and so we began to negotiate.

When discussing a distributor's conditions for a market as large as the United States, the minimum initial order and the minimum number of expected sales were, naturally, proportionately larger than in smaller markets. At the same time, the marketing expenses for a larger market required a larger cut for the distributor (in other words, less revenue for us). After hard bargaining, we agreed on an initial order of 100 ArchiCAD packages, and, following a one-year introductory period, a guaranteed minimum of 100 sales per quarter, with 25 percent of the end-user list price accruing to us. We received a bank guarantee to cover the initial order, and Shiluvim got started on its marketing activities in America. About six months later, it ran out of cash and credit, and the firm went broke, not just in the U.S.A., but also, due to the American misadventure, in Israel. We could have cashed the bank guarantee after a full year had passed, but in the end we decided to get the 100 ArchiCADs back instead (not a single copy had been sold), in case the liquidator tried to sell these to our European partners, causing us even more damage.

Shiluvim had calculated an investment of a few hundred thousand dollars. In 15 years, we have invested about 20 million dollars in the U.S. market, and we still haven't really recouped our investment.

Thus, after a promising start, a poorly conceived American experiment lost us a good distributor in Israel, and for a long time we weren't able to replace him in this small but exciting market. Everyone knows everyone else over there and people didn't easily forget that someone who once dealt in ArchiCAD got burned.

Perhaps the reason our Israeli partners were so audacious is that in Israel, the feeling of being under constant attack has become part of everyday life. Once, sitting on the sunny terrace of an outdoor café in Jerusalem, a nice young man approached and asked me, smiling politely, to move our table a bit to the side, if possible. He then motioned toward an abandoned package



on the plaza, which, he said, was probably a bomb. They were going to deactivate it now, but not to worry, if we just move our table a few feet over, then the corner of the building would provide shelter. Our hosts pushed the table to one side, and we continued our conversation, as if we had just been warned that it might start to rain any minute.

## Opportunities and temptations

Shiluvim was not the only firm which, intoxicated by early success, plunged into unrealistic escapades. The same occurred with the Austrian Mr Riegler, founder of the A-Null company, who used the profits from successfully distributing ArchiCAD to expand his company, employ 30 people, and start developing his own software as a complement to ArchiCAD. He was able to sell his software in Austria, but it didn't sell abroad, and the Austrian market could not sustain his over-extended company. He was in dire straits, but luckily for him, we bailed him out at a critical moment, because it is worth helping out a tried-and-true partner who gets into difficulties. Similarly, István Tóth in Italy ran into trouble in the early 1990s due to overly rapid growth, combined with his own software development venture. And our excellent Swedish partner, LaserCAD, overextended itself after 2000 when it started marketing all of our new products at once.

The secret to sustainable success then, is to find a happy medium between taking advantage of tempting opportunities and resisting these temptations when prudent to do so.

The Israeli story was a great experience, even apart from its business aspects. I was intrigued by Israel, partly because of my own Jewish heritage, but my experience was vastly different from what I expected. I found myself in an interesting and exotic world, one with which I felt no direct connection. I did not have a religious upbringing, and the Wailing Wall did not strike any particular chord in me, as opposed to the landmarks and sites associated with Christianity, which are depicted in every art museum in Europe and the Western world, and which, therefore, affected me much more. My hosts weren't particularly interested in my background either. If I didn't want to move to Israel, work there, live there, pay taxes there and fight there, then I was just a Hungarian to them, too.

Once, when (for a change) I invited Dan Wechsler for dinner at a garden restaurant, located along the highway about halfway between Tel Aviv and Jerusalem, it turned out that the owner was a Hungarian who had fled Hungary in 1956. He had trouble understanding that I was only there on a business trip;



that I did not plan to stay in Israel, and planned to return home to Hungary. When I revealed that I had my own company in Hungary, he really thought I was putting him on. Finally, as proof, I paid for dinner using my Visa card issued by the Hungarian Foreign Trade Bank and emblazoned with pictures of Buda Castle and the Chain Bridge. The restaurant owner gazed at length at the credit card, fighting back tears.

His restaurant wasn't bad, but from a culinary standpoint I had an even better experience. Dan Wechsler and his boss, during a day trip to the Sea of Galilee, took us to a nearby hotel and restaurant which their firm had designed. The hotel owner, it turned out, was a major real estate developer and a good friend of Shiluvim's boss. Here, I ate John Dory fish for the first time in my life; it was unforgettably delicious. But the atmosphere during lunch made an even deeper impression than the fish. Sitting at the head of the table, the hotel boss (the real estate developer) looked uncannily like a Sicilian Mafioso; waiters and other lackeys hovered around him, whispering into his ear, taking commands, giving orders, sometimes placing a wireless phone into his hands (it could not have been a modern-day cell phone). Later, during our drive home, I mentioned to Dan that our host, the hotel boss, looked just like the Godfather. Dan kicked me in the ankle and told me quietly not to say such things. So I was right. If the hotel boss had financed the disastrous American adventure, I would hate to have been in Shiluvim's shoes.

On my flight home, however, I had the opportunity to refresh my memory of oppressive, everyday socialism, which I had begun to forget.

I was flying on Romania's Tarom Airlines. I didn't mind when the legendary Israeli security check proved insufficient for the Romanians, who, following the two-hour security check at the airport, subjected all passengers to a rough pat-down at the door of the aircraft (which counted as Romanian sovereign territory). I accepted the fact that "dinner" aboard the aircraft consisted of a glass of water and a single cookie. Nor was I particularly perturbed that I had to hold the dinner tray and the water in my lap together with the fold-down tray, because the fold-down tray had broken off in my hand. I even found it natural that, during my three-hour, middle-of-the-night layover at Bucharest airport, I had to continue my fast because nothing was open. I was a little upset to find that the international transit waiting room had no heating, and so I had to endure the layover on a cold winter's night both hungry and shivering. But what was really incomprehensible was why the fully armed security





guard waved me away from the window when the sun finally rose, and I wanted to stand by the window to benefit from a few rays of sun. When I tried to ask why I couldn't stand there, he answered by pointing his machine gun at me. I then decided that a little sunshine wasn't that important; and that it really wasn't that cold, after all.

Sometimes it doesn't hurt to remember what we have left behind.

## The rest of the Middle East

We made sure to pay attention to building a market in the Arab countries, too, though initially we had a problem: travelers couldn't enter any Arab country using the same passport with which they had entered Israel. It turned out not to be a problem after all; we simply got two different passports. Our first Arab showing was in Dubai, at the GITEX computer trade fair in 1988, where we were again Apple's guests. Dubai's Western-style glittering elegance, the wondrously stocked jewelry stores, the rafts of Rolls Royces and Bentleys rolling down the streets among the skyscrapers were in sharp contrast to the scene on the far side of the harbor, the Arab world familiar from the movies, a myriad of little white buildings full of commotion and shouting. Nearly every one of these houses functioned as a store; I had no idea how so many of them could stay in business.



*Miklós Szövényi-Lux demonstrating ArchiCAD for a sheik*



We were able to find distributors fairly quickly in most of the Gulf States, from Qatar to Kuwait, as well as in the much less developed countries of Egypt and Jordan.

In addition to signing contracts with distributors, we also met the world's most unique ArchiCAD end user: Mr Annand, a Sikh of Sri Lankan nationality (we could tell he was a Sikh by his characteristic jewel-studded turban). Mr Annand took advantage of Graphisoft's entire line of products at the time: ArchiCAD, topCAD, and PlotMaker (our add-on program optimized for plotters). He used all of them together for one single purpose: to operate a special glass-carving machine that could etch a face into glass based on a photograph. This was his business, and he maintained that, except for our three products, no commercial software in the world was capable of the task.

1. ArchiCAD could digitize photos and transform the bitmapped images into lines that the drawing program could handle. We originally developed this function to scan and display photographs as background images for building designs.
2. topCAD fine-tuned the lines into arc-shaped curves (splines), which do a pretty good approximation of a person's facial lines.
3. Finally, PlotMaker plotted these splines for a relatively unknown type of plotter, the driver of which was compatible with the configuration used by Mr Annand's glass-carving machine.

I can't say that this application opened up a new mass market for us, but it was certainly interesting, and Mr Annand became a loyal customer, requesting our software upgrades for years to come.

In terms of business prospects, our greatest hopes were with Mr Ayman, our Saudi Arabian partner, who was evidently an extremely rich man. He used a solid gold clasp to hold his snow-white silk burnoose (hooded cloak) in place. To celebrate our newly signed contract, he took us to dinner at a Persian restaurant that spun around atop a skyscraper. He said it was one of the most expensive restaurants in the Middle East. At a glance, we could believe it. The main attraction was Beluga caviar from the Caspian Sea. It is sold according to a grading system based on the year of production, like wine. Mr Ayman told us that he once received 10 decagrams of especially rare caviar as a special gift from a business partner, worth about \$5000. He kept it in his refrigerator, waiting for just the right occasion to



serve it. One night, his college-age daughter, home on a visit from the States, woke up hungry, found the caviar, and spread it on toast for a midnight snack in lieu of a hamburger!

In wrapping up the trade fair, Apple organized a large farewell party at an elegant golf club located in a desert oasis. When we emerged from our air-conditioned bus at the club's parking lot, we were overwhelmed by the heat, which was stifling, even after sundown. Once we stepped into the oasis, full of palm trees, fountains and lawns, the climate changed to that of a pleasant summer evening. (I still don't understand how such microclimates work.) Waiters served enormous charbroiled lobsters and crayfish in astonishing quantities. Beautiful belly-dancers moved to the beat of a band playing Eastern-style music on the patio; the atmosphere was straight out of the Arabian Nights. When the party reached its climax, the dancing women invited guests, one by one, onto the patio for a belly-dancing lesson. When it was my turn, the audience began shouting:

– ArchiCAD, ArchiCAD!!!

to the rhythm, and I was inexpressibly proud that our brand name had evidently become so well-known.

The most enthusiastic shouter was István Tóth, who was present at the trade show with his own CumTerra terrain-modeling program (like Abvent, he still insisted – and insists to this day – on selling his own program in addition to ArchiCAD), but he was a bit disappointed that, during his own dancing stint, nobody was shouting:

– CumTerra, CumTerra!!!

Perhaps that brand name didn't go so well with the beat.

Despite all these vivid and promising experiences, the Middle Eastern market did not really produce the volume of business we were hoping for; even though, encouraged by our local distributor partners, we had our own offices in Dubai and Amman for a time.

The Amman office was Apple's idea, and they convinced us by offering to cover half the office expenses. When I went to Amman to visit our office, I saw advertising for ArchiCAD in the streets. We never engaged in this kind of advertising anywhere else, spending our money on marketing targeted exclusively at architects instead. But our Jordanian distributor was not interested in a small-time operation. If he took on a business, then he spared no expense. He was a businessman with close ties to the Jordanian royal family and had made most of his money on phosphate mining. He was also Apple's local distributor:



We used this Apple connection to get him involved in the ArchiCAD business on the side. In his first year as our partner, he came to our annual distributor meeting in Budapest, where the convention culminated in a visit to a cultural event. That year, we took everyone to the Academy of Music for a concert of Budapest's renowned Festival Orchestra. After the program, the wealthy Jordanian businessman turned to me:

- What do these excellent musicians do for a living?
- Well, they are musicians, – I said, somewhat confused. – That's their job. He was surprised.
- A country as poor as Hungary can support such a large orchestra on a professional basis? – he asked.

I replied, with considerable pride, that Budapest had not one, but four professional symphony orchestras of this size, and there were at least that many more professional orchestras in other Hungarian towns. (Maybe this is what it means to be European.)



*King Hussein of Jordan visiting the ArchiCAD exhibit.*

*(In the background, to the left of the King, is Gyuri Váradi, our sales representative in the Middle East)*

But market conditions did not warrant such an intensive presence on our part in the Middle East, and by the mid-1990s, we had closed down both the Amman and Dubai offices. Our lack of success in the region was probably due to the fact that most of the construction design in the wealthy Middle Eastern countries, while significant in quantity and high in quality, was carried out not by local firms, but by Europeans, particularly in London.



## Victories in Africa

In terms of exotic destinations, Africa topped even the Middle East. We didn't open our own African office, but we did find distributors and enjoyed memorable experiences. The center of our operations for black Africa was in Gabarone, Botswana. There, we partnered with Mukesh, an Indian, who owned a far-reaching, impenetrable business conglomeration. Among other lines of business, the firm was Apple's regional distributor. Naturally, the continent's biggest market was South Africa, still governed by apartheid, and Apple could not export to that country due to the strict U.S. embargo. However, from neighboring Botswana, Mukesh did a brisk black-market export.

My first business trip to the region was connected to a computer trade show in the Namibian capital of Windhoek, perhaps the first ever such trade show in black Africa. This trip came shortly after Hungary's regime change, so acquiring a passport was easy, and my wife planned to travel with me. When planning the trip, we also booked ourselves a safari experience for the week after the trade show, with Mukesh's help. His firm naturally owned a travel agency specializing in safaris. But our African trip did not begin smoothly. Our first stop was to be Johannesburg, South Africa, where Mukesh had organized an ArchiCAD demo opportunity. Accordingly, before our trip, we went to Budapest's South African embassy to get visas. The Embassy informed us that as of the date of our departure, a diplomatic agreement between Hungary and South Africa would take effect, and visas would not be necessary. (It seemed that Hungary's foreign ministry was overtaking U.S. foreign policy on the right politically!) And in fact, we didn't need a visa to enter South Africa, but the Lufthansa's representatives in Budapest had not heard of that then, and wouldn't let us board the plane. It was Friday evening, and our demo in Johannesburg was scheduled for Monday morning. We had to get on a plane by Saturday evening at the latest. What to do? We had to get hold of someone from the South African Embassy who would either give us a visa or certify for Lufthansa's purposes that visas were not required. Only the answering machine kicked in at the Embassy; the home numbers of the ambassador and consul were strictly confidential. So I turned to Imre Pákozdi, who, faced with a similar predicament a few years earlier, had succeeded in reaching the British Ambassador at home on Easter Sunday and in getting the visa he needed; nothing was impossible for Imre. Late Friday night both of us were in the office, and while I was trying to reach Mukesh to tell him not to come to the airport the next morning, Imre was trying to find a live connection to the South African embassy



personnel. Meanwhile, I had recently placed an ad to sell my company car, and that night, we were fielding a few phone calls for that, too. One such inquiry about buying my car turned out to be from Ernő Raffai, Hungary's State Secretary for Defense.

– Mr Raffai, you are the answer to my prayers, – said Imre. – Can you help us get in touch with the South African ambassador?

He could, and did, and by Saturday morning we had the required letter in hand. Lufthansa, to compensate for its mistake, treated us to a marvelous weekend in Capetown.

So we made it to the Johannesburg demo on time, but our real success came about as a result of our trade show appearance in Windhoek, which led to a 100 percent domination of the Namibian market. Namibia has about 30 architects in total, and as part of a mutual cooperation agreement among them, they all insist on using the same software. This ensures that they can work together without compatibility problems, and also gives them leverage in negotiating software prices. Up till then, they had used the American DataCAD program for PCs, but following our trade show demonstration, they all decided, as a group, to switch to Apple's Macintosh and to ArchiCAD. We have never topped that success: to achieve 100 percent market share at one blow! After our Namibian triumph, I felt that our safari was well-deserved.



## Chapter 6

# The British Empire: the bigger the market, the greater the challenge

Naturally, not every country was as easy to conquer as Namibia. The bigger the market, the harder it is to break into. Getting on the map in Germany and the U.K., Europe's two largest markets, was much more difficult than in the smaller countries, and more difficult than in the relatively large, but Latin-speaking Italy and France, which were more open to ArchiCAD's unique style.

## Australia and New Zealand

We began our siege of the British Empire at its furthest outposts. In 1986, we met the Australian Rob Keeping at a trade show in France, and he became our first Australian distributor. His contract terms were similar to those of other small country distributors, because we considered Australia, with its population of 15 million, to be a relatively small market. As it turned out, in terms of the maturity of the CAD market, Australia is not really small at all, and in terms of geographic size, it is comparable to the United States. As for New Zealand, with its population of just 3 million, it appeared (from our European perspective) to be just an appendage to Australia, but in fact the shores of New Zealand are farther from Australia than Hungary is from Spain, and the English spoken in New Zealand is at least as different from Australian English as U.S. English is from British English. But from our point of view, what counted most was that the roots of CAD-based architecture were perhaps deeper in New Zealand than anywhere else in the world: the design program, Sonata, hails from New Zealand. Sonata was created for large-format, expensive CAD workstations, so



it was not our direct competitor, but when we encountered Sonata in England, we recognized it as one of ArchiCAD's closest relatives.

## **Our first user manuals**

With our earlier distributor partners, the usual division of labor assigned the writing and production of user manuals to the partners; we provided the program itself, plus a rather basic, dry and technical description of how to use it. This description was not meant to take the place of a real user manual, it was just meant as a rough guideline to aid the distributor in writing a real user manual locally. In non-English-speaking countries, this system worked: even most of the American firms, who dominated the international software market (and therefore had the most influence on the industry's evolving customs), had initially produced manuals in English only, leaving the translation to local partners. The local partners, in turn, would often rewrite the manual completely to conform to local styles and customs. The original English manual provided by us was merely a rough draft. Our technical documentation, written in the non-native English (Hunglish) of our programmers, was adequate for this purpose. Indeed, it was even better in some respects than a real American user guide, because its rudimentary condition allowed the French or Italian manual editor much greater freedom in creating a final document appropriate for the local market.

But in Australia, we realized that this system would not work in the English-speaking world, where distributors were accustomed to getting complete, ready-to-go manual sets from the mostly American software companies. Rob Keeping in Australia didn't realize that our documentation was in a different category; he just photocopied it, then passed it out to his customers. When I realized this, I hit the roof, but Rob didn't understand why: most of his customers, he said, never really read user manuals, and neither did he. This was undeniably true, but to distribute photocopied instructions written in poor English was unacceptable; too embarrassing. We also realized, of course, that Australia is not the only English-speaking country in the world, so in the long term we would have to come up with real English-language user manuals: introductory tutorials as well as complete reference guides.

It seems that my writing ambitions were already budding, because I decided to write the first ArchiCAD book myself (with the help of a native-language English editor). I soon found that I could not keep up with this task on my





own. I reasoned that the best salespeople must also be the best at written communication, so I made manual writing one of the tasks of the sales force. This system worked for a while, but soon foundered on its obvious limitations: being good at sales doesn't necessarily make you good at writing manuals, any more than high-level technical knowledge of the program makes you a good salesperson.

With the aid of Rob Keeping in Australia, who was our sole Anglo-Saxon distributor at that time, we tried to identify professional software manual writers who were native English speakers. But we couldn't manage this task from a distance of 12,000 miles. We also realized that unless we were willing to accept that the user guide would be completed only six months after the program was done (and we were not willing to do that), then we had no choice but to have the writer work in close collaboration with the programmers in Budapest. So we tried to import manual editors – contract professional manual writers from abroad to spend a few months in Hungary with our development team. This didn't work either, because the “professionals” we tried out were simply not thorough enough. It seems that the really good writers had enough work at home; they didn't need to take assignments in Hungary. We, on the other hand, could not settle for second-rate results. We tried again, this time with Hungarians. One of these was an extremely detail-oriented Hungarian architect who had studied in England, and who was blessed with a highly literary style. In fact, he used such flowery language that I didn't understand it myself. That would not have been so bad, except that our English and American clients didn't always understand it either, and were amused to find our software manuals written in the style of nineteenth-century British novels.

In sum, we made many wrong turns before we finally found the real thing in the person of Antal Bayer, under whose tenure we built up a multilingual, technically adept manual-writing team, which included native-speaking copyeditors. In fact, Graphisoft got the reputation, even in America, as the software company with the best user manuals.

## **The complete publishing process in our hands**

Our publishing activities were not limited to the writing of manuals, because professionally written manuals need a professional design, and this requires a professional graphic artist. So we hired Eszter Pozsgai. The change in our product's



appearance was enormous. In the photos, the first software package hails from the company's earliest days, and its graphic design is quite elementary. The rest of them, however, are Eszter's doing, and reflect her fine-tuned elegant style.



*ArchiCAD packages throughout the years*

But there are pitfalls associated with trying to be unique. For example, since ArchiCAD's selling price warranted relatively expensive packaging, I figured we could afford a truly noble packaging material that our clients, the architects, would certainly appreciate. I was wrong. The third item in the first row of pictures shows a package made of real wood, totally unique among boxed software products; the market did not like it. For one thing, its weight made it impractical; for another thing, the overly expensive material evoked, from most buyers, exactly the opposite reaction than I had expected:

– What's this? The box is made of wood – so that's why this program is so expensive. But I'd rather spend my money on the software than the packaging.

## **A new corporate identity; the multi-colored quill**

As a result of centralizing packaging tasks at Graphisoft headquarters, we had to redesign the company's graphic profile and logo. Naturally, every company has its own graphic corporate identity (CI) and logo right from the start, and these are almost always dreamed up by the company founders, and tend to work fine until the company runs into the many problems associated with adapting the style and logo for countless environments and media. At this point, the company realizes that creating a CI and a logo is an art form in itself, and to get it right, you need the services of a professional graphic artist.

ArchiCAD already had a graphic logo: the pencil-shaped cursor, which appears in three different variations in the program, was adapted by Rossana, István Tóth's wife, into a very clever and fitting logo. She gave us full rights to use the logo worldwide. We used this logo on ArchiCAD's start-up screen, and as part of the



packaging. Later, topCAD got its own logo, a stylized drafting table, and Eszter Pozsgai created a logo for PlotMaker, a service program which accompanies ArchiCAD. This logo, using Apple's colors, takes the form of a goose-feather quill pen.

PlotMaker's symbol was such a hit that we unanimously voted to adopt it as our new company logo. This colorful quill logo served us beautifully for 15 years, and nearly everyone who saw one of our colorful quill-embazoned business cards for the first time would admire them, and would certainly recognize the logo the next time they encountered it. What more can you ask from a logo?

It is a real pity that today, for marketing reasons, we now have to come up with a new logo. The existing company name and logo, when combined, evoke the graphical concept too sharply – yet the essence of our current product line has long since ceased to be primarily graphical.



*ArchiCAD packages throughout the years*



*The ArchiCAD logo*



*The topCAD logo*



*PlotMaker*

GRAPHISOFT®



*Graphisoft logo*



## “Our” house in Genoa

In addition to upgrading our packaging materials, we improved our brochures and other marketing materials. In our ArchiCAD brochures, we naturally had to include reproductions of plans created with ArchiCAD. At first though, all we had were the little Mickey-mouse house drawings we made ourselves. It took a while before we got our hands on real, large-scale plans drawn in ArchiCAD: ones which would impress a real architect, and whose authors were willing to let us use them in our marketing materials. Since our first clients were Italians, the first ArchiCAD drawings for large projects were created in Italy. István Tóth sent us a Piacenza architect's creation; a drawing of a 30-story office building that resembled a medieval bell tower in form. (Others had a different impression; we later



*The Genovese tower, the first office building designed (at least in part) by ArchiCAD*

learned that the local population calls it the “pencil house.”) For a long time, all of our materials featured this pencil house plan: not just brochures, but posters and trade-show installations as well. In 1990, my family and I were on vacation and passing through Genoa. As we exited the highway, which weaved through mountainous valleys, we came upon a beautiful panoramic view of the city stretching before us and I was struck dumb. Right in the middle of the city's commercial center; dominating the skyline, there was our office building in real life. I have always considered this building to be, in some sense, “ours.”

All these marketing improvements added to our expenses, and it would have been easier to remain profitable if we had followed our tried-and-true practice for non-English markets: we do the software development, our partners do the



publishing. But Rob Keeping persuaded us to learn the publishing business, and in hindsight, we didn't do too badly.

## **Sales results in Australia and New Zealand**

Our divergent experiences in Australia and New Zealand again served to underline the principle explained earlier: the difficulty of making it in a particular market is in direct proportion to the size of the market. While our first New Zealand distributor, Murray Pearson, continues to be one of Graphisoft's most successful and loyal partners to this day, we have gone through three distributors in Australia. In New Zealand, population 3 million, we soon achieved a leading market share, and Murray's only problem is that sheep (which outnumber people by two to one in that country) do not design buildings. In Australia, in contrast, we are second (or third) fiddle to the two largest American competitors. Even so, our relative market position in Australia is considerably better than in the much bigger British market, not to mention in the U.S. market, the world's largest.

In Australia, Rob Keeping managed to keep up for about a year, but then realized that the necessary investment was bigger than he'd bargained for, and he gave up. Before that, however, he taught me – at my own expense – that in Australia I had better order my steak well done, otherwise they will serve it so raw that its heat originates not from the oven, but from the freshly slaughtered cow itself. Our next distributor was Rob Keeping's associate in Melbourne, but he did not manage to expand his activities beyond the state of Victoria either. After this, we tried breaking up Australia into sales territories according to the states, and we considered the resellers from Australia's various states as distributors in their own right. This didn't work either: despite its huge size, Australia is a single integrated market requiring an integrated marketing effort. Finally, the most persistent partner proved to be Maurizio Nanetti, a reseller of Italian origin from New South Wales. To reward his persistence, we made him responsible for all of Australia a few years later.

## **Maurizio**

Within a short time, Maurizio became an integral part of our company, an inspiration to all of us, and an important part of the story told in this book. Originally, he worked as the Australian representative of Cigraph, István Tóth's company, and he concentrated on topCAD. At this time, István Tóth was also working hard to



get topCAD widely accepted in Italy. But topCAD's prospects were poorest of all in English-speaking countries, where AutoCAD reigned supreme, having achieved its industry-standard status in the Anglo-Saxon markets. Maurizio's persistence, despite these daunting odds, impressed all of us. He captured a total of two topCAD buyers, giving them a 50 percent discount, and he fulfilled these two clients' every request for two whole years to gain their satisfaction and then to use them as references. I have no idea how Maurizio supported himself during these two years, but his determination was impressive, so we gave him ArchiCAD, too. This turned out to be a good move.

Our market share in Australia is our largest, after New Zealand, among the English-speaking markets. Even more importantly, many of our Australian clients represent large firms. Indeed, by the mid-1990s, five out of Australia's ten largest architectural firms were (and still are) using ArchiCAD. I had often warned Maurizio about the high cost of winning over these big firms but to no avail. During one of my visits, he took me along to an ArchiCAD demonstration scheduled at one of these big firms. Arriving at the reception desk, he announced who we were, and whom we wanted to see, but even though we had an appointment, and the potential client had been informed that the big boss was also here from Budapest, the client just waved us away. He was too busy. By this time I was no longer accustomed to this kind of condescension. I told Maurizio that the struggle required to get these companies on board was just not worth it; it required too much energy and produced paltry results. He didn't listen to me. He is the type who, if turned back at the door, will come in through the window. A few months later, he triumphantly announced that the same company we had fruitlessly visited together had just bought ten copies of ArchiCAD. If he had calculated how



*Maurizio lectures on the secrets  
of building up a brand name*



much time and resources he spent on each client, the bottom line would probably show that the costs outweighed the benefits. But luckily, he didn't calculate. His energy is boundless; in addition to putting in 10–12-hour workdays, he is a diligent student of strategic marketing, and he gave us our first lessons on the importance of building up a brand name.

And after all this, he still has the energy to influence the direction of ArchiCAD development. He is always lobbying our developers to make sure that a particular new feature that he considers to be of key importance makes it into the next version. This can be wearisome for us, because to Maurizio, every new feature is of key importance, and the concept of weighing pros and cons is alien to him. He has a unique style that is sometimes hard to bear. Dealing with him requires patience and empathy, which Ákos Szabó, responsible for the Australian market on our end, demonstrated in great measure.

One time, when one of his clients complained that a function didn't work as expected, Maurizio wrote to us in his customary restrained and polite manner; – I'd like to stick a red-hot iron shaft up the arse of the programmer responsible for the DWG translator. Best regards.

That particular function – the DWG translator – was written by Viktor Várkonyi, one of the stars of our development team. Today, he is head of development at Graphisoft. Viktor faced the threat head-on: he flew out to Australia, met with the client, and solved the client's problems on site, in a highly sophisticated manner, gaining Maurizio's lasting respect and friendship. This respect is mutual. It is likely that none of Maurizio's other business partners can stomach his arrogance and boorish behavior; but the reason for our mutually respectful relationship is rooted in the aspect of Graphisoft's business culture which we value most highly: respect for achievement above all else.

## Canada and the Hungarian diaspora

Canada, the other large country in the British Commonwealth, was the only market in the world where we followed the practice of other Hungarian companies which were trying to expand globally: we tried to partner with émigré Hungarians. Pali Szabó, a Hungarian émigré living in Toronto, looked us up in Budapest and signed a distributor contract for Canada in 1987. His dedication is undeniable; he remains our distributor in Canada, although his results are modest. Yet it would be hard to deny that he deserves the title of "the world's best GDL programmer." For some of his larger clients, he creates tailor-made GDL objects, and we





have to assume that he makes a living at it, because his modest ArchiCAD sales could never support him and his family. But we viewed – and continue to view – a more complete presence in the Canadian market as part of our overall American strategy, which will be covered in a separate chapter.

## **And finally, the United Kingdom, the hub of the Empire**

Our debut in England began with a bit of infidelity on our part. As early as 1983, following our success at the Munich trade show, my legendarily paranoid instincts warned me that Interag, the Hungarian foreign-trade company representing us, was trying to usurp us in some way. Undoubtedly, we owed a great deal to Miklós Horváth, the ambitious and generous Interag director, in allowing us to even get started with exporting to the West. But to give up our new-found independence seemed too great a price to express our gratitude.

We did not agree to its proposed billing methods, which would have allowed Interag (or SSG, its German representative) to enter into contracts with our clients under its own name and at its own risk. Using this approach, we would have been named only as subcontractors. Instead, we insisted that Interag-SSG should act in our name and on our behalf, in return for a commission.

It did not help our relationship when one of Interag's executives, in the course of a brief conversation, tried to convince me that Hungary's political elite had made a huge mistake in giving such leeway to private enterprises.

– Just look at your own situation. If your company were in State hands, we could develop a big export business – a million deutschmarks even. But as it is, as a private enterprise, even 100,000 deutschmarks is a huge sum for you, and so why would you strive for more?

I remembered his wise words about a decade later, when Graphisoft was doing 50 million deutschmarks of business and was valued at 650 million deutschmarks on the Frankfurt Stock Exchange.

My paranoia took over entirely when I accidentally discovered that Miklós Horváth was making inquiries about identifying potential partners in England, and I had not been consulted from the very beginning. I decided I would be unfaithful, and cheated. I turned to Metrimpex, Interag's primary rival, which had a similar level of representation in England as Interag (through SSG) had in Germany. Due to Graphisoft's recent record of success, Metrimpex was delighted to meet with us (unlike years earlier, when they refused to even talk to us), and we soon





made contact with Metrimpex's representative in London, Iván Földvári. Iván began working for us with enormous enthusiasm; this type of work represented a much more interesting challenge than the usual referral of contract workers. He did a market survey to identify potential partners and organized our first appearance in England at the Birmingham CAD show. This event served a similar purpose for us in England as our showing at Munich two years previously except that this time, we had two years' experience under our belt, plenty of Apple contacts, and lots of active distributor references to show for ourselves. We could play the part, at least, of having made the big time. (I did realize that despite my understandable huff, my abandonment of Interag was not entirely fair on my part, and later, when Gábor Győző became its boss, we reverted to Interag. In fact, even after the State monopoly of foreign trade activities ceased to exist, Interag continued to manage our foreign trade activities for a number of years.)

## Visas and worlds of difference

Our trip to England began with a serious visa problem. The British Embassy usually issued business visas within two weeks, and our passports would have been ready on Good Friday, a week before our trip. Our timing, however, was unfortunate: we didn't realize that Good Friday was a holiday at the Embassy, and consular services were not open on Thursday, so we couldn't pick up our visa until after Easter. Since the British trade show opened a week after Easter, we would have had time to get our passports, except that my family had planned to go skiing in Bulgaria for Easter week, yet my passport was stuck at the British Embassy. This was when Imre Pákozdi first showed what he was capable of when it comes to visa problems. On Good Friday evening, he managed to convince the Embassy watchman to give him the Ambassador's home phone number. Imre called the number. A little girl answered, and with a high-pitched

- Daddy, daddy!  
called the ambassador to the telephone. Then Imre handed me the phone.
- Your turn!

I knew that if I tried to make a case based on any official or business basis, I was a lost cause. So I tried a different tack.

- I am sorry to disturb you on Good Friday, at home with your family, but I too have a major family crisis. If you don't help me, and if I don't get my passport back, then we will have to cancel our long-awaited family ski trip to Bulgaria.



And that, really, was the simple truth. It worked; although the ambassador's initial, typically British response was one of tart irony:

– Since when does the Embassy of the United Kingdom issue visas to Bulgaria?

Of course, he understood my predicament. Late on the evening of Good Friday, after dinner, he got in his car, unlocked the pitch-dark British Embassy, found my passport, which was lying there modestly waiting for its visa, stamped and signed the visa into the passport, and wished us a pleasant holiday.

Growing up under socialism, we were accustomed to a different approach: in “official” circumstances, only “official” arguments carried any weight. But by then, we were beginning to understand how the free world was different, and how it can sometimes be more people-friendly. A little while later, I witnessed a similar encounter at the Dutch Embassy. Getting a business visa took one week; a tourist visa took one month. I was standing in the visa line behind a young Hungarian who had won a scholarship to Holland and was applying for a business visa. He was also trying to arrange for his wife to accompany him, but her tourist visa would have taken a month to acquire. So he came up with a convoluted story as to why his wife's visa should be a “business” one: he himself didn't drive, but his wife did, so his wife should be considered his official chauffeur. If she didn't drive him, he would have to travel by plane, which would make his scholarship more expensive for the Dutch Government, but if the embassy gave his wife a business visa, then she could drive him out, and the Dutch Government would save money. The Dutch official could not follow this brilliant example of East European logic, and my friend failed in his quest. I think that if he had not tried to find an official reason for the business visa, and had simply asked that his wife be allowed to travel with him, he would have had a much better chance. But the young man and the Dutch official spoke different languages; they were from different worlds. Living in Communist Hungary taught us that when dealing with officialdom, you had to lie in order to get anything done.

Let me give another example of what the word “official” really meant during those years, when uttered by a government authority. My son's headmaster, Mr Gulyás, took a few years off to work abroad. My son's class was very fond of this teacher and eagerly awaited his return to Hungary. We knew the day on which the substitute homeroom teacher would announce Mr Gulyás' return to the classroom, and expected our son to return home that day from happy about the news. Instead, he came home sadder than usual. We asked him whether there is any news about Mr Gulyás, and to our surprise he said:



- That's just the problem. He's not coming back.
- But didn't the substitute teacher say that he was coming back? – we asked.
- Yes, she said that she can officially confirm the news that he will return.

My son, hearing the term “official”, had assumed that the news was not true. Because in the world in which we grew up, you had to assume that any “official announcement” issued by an authority figure was simply not true.

## **Macintosh II and our first English distributor**

So we made it, on time, to the Birmingham CAD show, and thanks to the thorough preparatory work done by Iván Földvári, we found our first English distributor. Our timing was impeccable, because the latest Macintosh model, the Macintosh II, was first introduced at that time, and its improvements over the classic Mac were precisely those which are important for CAD applications: a high level of precision, fast processing speed, and a large-screen color monitor. These features of the Macintosh II were the reason that Apple had a presence at this CAD-specific trade show. The original little Macintosh was not positioned for professional CAD applications, and targeted the architecture market only with graphic design applications (in which precision is not so important), rather than as a professional CAD environment. We knew, though, that ArchiCAD would not really sell as just an illustrating tool (apart from perhaps, in the flamboyant Latin countries). Until ArchiCAD was capable of creating precise, large-scale construction plans, we could not expect to conquer the more serious German and British markets. But with the arrival of the Macintosh II, the time had come.

Our first British distributor, Desktop Engineering Systems (DES), was a firm specializing in CAD, selling an engineering CAD-CAM application for the Macintosh, the only such application that was compatible with the DES conglomerate's major business: selling numerically controlled (CNC) tool machines. Within the conglomerate, DES was the firm charged with distributing Macintosh-based CAD software, and was managed by the wife of the conglomerate's owner, a woman named Elsa. We soon cultivated a pleasant personal relationship with her and her husband Brian. Perhaps it was the snobbish streak in me, inherited from my mother, which was pleased to win the friendship of the aristocratic-style Scots-British family. They, in turn, were impressed at how Graphisoft was able to break free from Communism.

But by and large, they looked down on anyone who wasn't a Brit. I came to realize this when ArchiCAD's first lead programmer, Robi Kőkuti, married a British



girl and moved to England. I figured he should take the opportunity to work for DES, since no one knew the program better than he, and would be a perfect candidate to provide technical support. But Elsa wouldn't hire him.

– You know, Gábor, Robi is not like you, he's so European.

At first, I was insulted:

– I'm not a European?

But later, I realized that this remark was meant as high praise. I often encountered the Brits' politely veiled yet astounding sense of superiority, which they harbor toward the world in general, and toward continental Europe in particular. I think that the average Englishman still doesn't understand why they are part of the European Union; if they'd joined the United States, now, that would make sense, because then England would be the largest state and they'd elect the President. Most large nations have such a sense of superiority, and I could tell a typical story about each of them, but the English are the most irritating. For example, a Brit won't even be insulted if the insolence comes from a non-Brit. He will merely smile understandingly, because if the offender isn't even British, why then he must be uncouth, and it makes no sense to get angry with such people. It's like your dog: nothing your dog can do will really insult you; the best you can do is to try to teach it to behave.

Yet the achievements of Graphisoft, which grew out of the Communist world, elevated me in the eyes of Elsa and Brian almost to the status of an Englishman, and they invited me to their castle several times. On one such occasion, I was chatting with Elsa in her study, when Brian, who had been watching TV in another room, called out with an excitement not usually shown by the British:

– Gábor, come and see what you've done!

The BBC was showing footage of the Hungarian–Austrian border being opened, East Germans flowing across the border with happy tears streaming down their faces. This event made me the hero of the evening, and was one of those moments when it felt particularly good to be Hungarian.

The U.K. ArchiCAD distributorship started off successfully. Within a few years, England was providing our third-largest stream of revenue, after Italy and France. Even more important than the revenue figures was that England was the first country where we were able to sell not just to our traditional market of small firms, but to large offices employing several dozen, or even several hundred architects.



But in 1989/1990, the British economy underwent a serious crisis, the tool machine business went bankrupt, and dragged DES down along with it.

## **British bankruptcy law and the first free Hungarian elections**

After DES, we tried working with three other small firms in a row, and all three went broke, sunk in a sea of unpaid bills. Our market position deteriorated rapidly. I was surprised at how easy it was for a firm to declare bankruptcy in the U.K., and then start afresh with a clean slate. As one of the losers in this process (because most of the unpaid bills mentioned above were owed to Graphisoft), I became a staunch supporter of stricter bankruptcy laws, which mandate serious consequences for the failed firm. Those who argue in favor of milder bankruptcy laws usually maintain that someone who failed once will know exactly what to do to avoid such a fate the next time around, and so should not be hindered from starting afresh. But in the U.K. it was my experience that the possibility of bankruptcy without stringent consequences made bankruptcy an easy solution. And the price was always paid by the supplier firms who, through hard work, managed to avoid bankruptcy even during tough times.

Despite these bankruptcies, ArchiCAD maintained its reputation as a good product among professional users. However, it was also known as a product distributed by fly-by-night companies, which made an ArchiCAD purchase seem too risky. So we tried a solution at the other end of the spectrum: we convinced Computers Unlimited, the largest English software distributor in the Apple world, to take on ArchiCAD. This didn't work out either, because ArchiCAD – a relatively expensive product serving a niche market requiring specialist knowledge – did not fit well with the mass-market approach of Computers Unlimited.

After the financial difficulties of DES in 1990, we naturally considered opening our own office in England, as we had in Germany (1988) and the U.S.A. (1989). The biggest supporter of opening a U.K. office was our newly hired young titan, Laci Szabó (today the head of our Software Localization team), who was full of energy and initiative, and more than ready to start up the U.K. office. I had my doubts, feeling that the time for a new office in the U.K. was not yet ripe, given that the U.S. office was still not making money. But I could never resist the type of boundless enthusiasm which makes miracles happen, and so Laci Szabó's first trip to England was already being planned. At this point, luckily, we found out that the planned trip (meetings



with lawyers, accountants and resellers) would conflict with the date of Hungary's first free democratic elections, which Laci Szabó refused to miss. So we delayed his trip by a month. But by the end of the month, it was clear as day that the timing was all wrong for a new office in the U.K.: our U.S. office was losing money hand over fist. The opening of our U.K. office was delayed for another five years.

So Laci Szabó's career prospects in the U.K. were sacrificed on the altar of Hungary's young democracy. His story was affecting, and reminded me of an incident from ten years earlier. On a family trip to the United States in 1980, our hosts took us to a jazz club full of young people avidly discussing politics. All of them were card-carrying Democrats, and were complaining bitterly about the Republicans. Just so that the debate would really be a debate, and true to my fond habit of sounding off on subjects that I know nothing about, I remarked that Jimmy Carter's management of the Iranian hostage situation seemed pretty amateur to me, and, what's more, I didn't understand – though I was sympathetic to the Democratic Party – how a politician as professional as Richard Nixon, who was finally able to end the Vietnam War, was defeated. They all looked at me as if I were from outer space.

– We can't elect someone President, no matter what a pro he is, if he lies to us, – they said.

Ashamed, I kept silent, and I was very envious of them: for their golden rule that lying is wrong, and for their proud conviction that they, the citizens, do the electing in this country. At that time, we Hungarians did not even dare hope that such a thing would be possible in our lifetimes, in our country, and so now I believe that I have no right not to vote, for whatever reason, in any of our elections. So I understood Laci Szabó very well.

## The Scottish castle

Our British office had to wait, while our attempts to find workable distributors failed one after the other. Naturally, I had many pleasant experiences, too. One of these was being invited to give a presentation to the Scottish Association of Architects, at their headquarters in Glasgow. The presentation went well, but the day after was even better. Since I had another presentation to give in Antwerp, two days after Glasgow, I had just one day in between, so I asked our British partners to book me some kind of lodgings



among the lakes in the Scottish highlands, where monsters are said to appear in foggy weather. I rented a car, and following my presentation, set off through the gray mist. It was November, and the fog was definitely present; from the look of the lake where my hotel-castle was located, I would not have been the least bit surprised to see a monster emerge. But although no monsters did materialize, the castle fulfilled my every expectation of a truly Scottish experience. The enormous fireplace in the entrance hall was lit, and kilted Scottish hotel staff awaited me inside. My room had its own fireplace, as well as whisky served in leaded crystal decanters. Downstairs, off the entrance hall, I had noticed a library in which cigar-smoking gentlemen sat; I figured I would drink my whisky there. As soon as I plopped down into an enormous, dark green leather sofa, a waiter in a kilt materialized:

- May I help you, Sir?
- Well, a whisky, please.
- What kind of whisky, Sir?
- A Scotch whisky, please.
- We have only Scotch whisky, Sir.
- Well... a single malt, please.
- We have only single malts, Sir.

For a moment I was stymied, but then recovered:

- What are the choices?

At this, he led me to an enormous, antique cabinet and opened it. The shelves contained about 200 different bottles, organized by county and year of origin. But having seen how caviar was categorized by year in Dubai, I was no longer surprised to see this system in effect for whisky. I pointed at random to one of the squat little bottles.

- Excellent choice, Sir, – the waiter said approvingly, and poured.

He probably would have said the same regardless of which bottle I chose, but ever since then, whenever I can, I choose the same whisky (Dalwhinnie), and the scent of the fireplace and leather sofa from the Scottish castle always come flooding back to me.

A few years later, I returned there together with my wife. I was a little apprehensive, because meanwhile I had told this Scottish castle story to many different people, and these stories tend to become more colorful and larger than life with each retelling. I worried about whether a second visit would live up to the colorful tales the first had inspired. It did.



## **Graphisoft U.K. Ltd**

Finally, we gave up experimenting with the various distributors in the U.K., and in 1995, following our German, American and Japanese offices, we incorporated our own firm in London, too. The head of the new office was not Laci Szabó, whose career had taken a different direction, but András Haidekker, the company's newest up-and-coming star. András was originally a programmer, but, as in the case of Gyuri Kafka more than a decade earlier, his agreeable manner and negotiating skills predestined him for a career in sales.

The London office, under our own name, soon erased any doubts as to our commitment to the British market, and we stabilized our market position relatively quickly. Still, our position in Britain cannot be considered an uninterrupted success: to this day, our relative market share in Britain is less than that achieved by Murray in New Zealand and Maurizio in Australia. The task is difficult, since our two biggest American competitors, Autodesk and Bentley Systems, consider Britain a second “domestic” market and, after America, devote most of their attention here. Our results in Britain are possibly a bit better than in America, relatively speaking, but a true breakthrough in both the Old World (England) and the New World (America) would have to wait until the new millennium – a period outside the scope of this book.





## Chapter 7

# From hopeless case to success story: the battle for Germany and German-speaking countries

As explained in Chapter 3, we had a much harder time getting ArchiCAD off the ground in Germany than we expected. Yet in our early days, in 1984, Germany was our natural target for several reasons. First, it is traditionally Hungary's number-one software export market. Second, our foreign trade partner, Interag, had an office in Germany. Finally, Germany is Europe's largest software market. If good fortune had not led us toward selling packaged software, and if we had instead continued creating customized programs tailored to individual client needs (the business plan we followed with RAPID), then we might have had a better chance against our competitors in Germany, since it is easier to find appropriate target clients in a large market than in a small one. But selling packaged software requires aggressive marketing and strong brand-name recognition and these expenses grow exponentially with the size of the market. Thus, in big markets, it is much harder to find partners willing to make such an investment. And in the beginning we had neither the money nor the expertise to take on these tasks ourselves.

So, among the German-speaking countries of Europe, we found distributors much more quickly in Austria and Switzerland than we did in Germany.

### Switzerland: the biggest success story

Switzerland was one of the few countries in which we were able to get several distributors working in competition with each other; and we didn't have to grant exclusivity to any one of them. Exclusive distributor rights are not a reward for



good performance, but rather a question of market position. Naturally, we are in a better market position if we have several distributors in competition with each other; since competition always inspires improved performance, and allows us to negotiate a better deal for ourselves in terms of profit, marketing investments, etc. But there is another side to it: if the market in itself is not particularly attractive, then exclusivity might be just the carrot that lures the distributor to risk a greater investment. It is much easier to sell a global brand name such as AutoCAD than it is to introduce a new one. The difference between the two products cannot be overcome merely by technical advantages. The extra effort a distributor must make with a new product (assuming, of course, that the product is better than its rival; otherwise it doesn't have a prayer) must be compensated by better commercial terms. Thus, in most countries, we gave our partners exclusivity.

But Switzerland was the exception. ArchiCAD's market prospects there were good enough to make investing in its distribution attractive, even without exclusivity. For one thing, Apple quickly achieved a very strong market position in Switzerland, even better than Apple's strong showings in France and Italy; and Apple's position was always a critical factor to our own success. For another, the quality and social status of the architecture profession is very high in Switzerland (again, as they are in France and Italy). But there is another factor that allowed Switzerland to surpass even those other two success stories: the standard of living, the price level, and the average income of architects. In Switzerland, everything was (and is) very expensive, and software products are no exception. Investment in technology was supported by special government incentives, and the government provided considerable subsidies to help cover the IT investments of architects, who were relatively well off to begin with.

These factors combined made dealing in ArchiCAD a good business prospect, even without the advantage of exclusivity. And we at Graphisoft headquarters gave yet another boost to our Swiss distributors' prospects, without even knowing it. We did not know that software prices in Switzerland are even higher than in Germany (where the price level is, for European standards, quite high to begin with); we automatically assigned German prices to Switzerland. Our partners thanked us, and then adjusted their local selling price to conform to the local price levels, pocketing the highest markup of any of our partners worldwide. But we didn't do too badly, despite our ignorance. A true Swiss, if he makes a lot of money, will not spend it; he'll invest it, and invest it well. And since ArchiCAD had proved to be good business, our partners invested in ArchiCAD, and in this way our Swiss distributors achieved one of the highest market shares of any country.



(I am reminded of an original Swiss joke: God creates the first Swiss citizen.

- You can have three wishes, – God tells him.

The Swiss first requests mountains and pastures. God creates the beautiful mountains with pastures.

- What else? – He asks.

- Lots of cows to produce good milk, – says the Swiss.

God creates the cows. The Swiss then milks one of them and hands the first glass of milk to his Creator:

- Thank you, it's delicious, – says God, – and what will your third wish be?
- Two francs for the milk, – replies the Swiss.)

There was another secret to our Swiss success: since I speak neither German nor French, and the Swiss as a rule do not speak much English, I stayed out of this business, and so my colleagues could work undisturbed. In French-speaking Switzerland, Gyuri Kafka found excellent partners in the two Philippes from Lausanne, who were soon selling as many as half the ArchiCAD licenses in the 1.5-million French-speaking Swiss region as Abvent was selling in of the whole of France, with its population of 50 million. Abvent, in Paris, noticed this achievement and soon bought up the little office in Lausanne, which continued under the name of Abvent Helvecad. The acquisition was useful, since it built on synergies in creating French-language materials; the common Francophone know-how was to their mutual advantage, and to ours.

Inspired by the success of this acquisition, Abvent embarked on an attempt to take on Graphisoft's commercial representation throughout the whole world. In fact, as we soon noticed, they were intent on acquiring us, too. We politely steered clear of this latter endeavor, but we were pleased about Abvent's plans for expanding their commercial activities. After Israel's Shiluvim went under, we were happy to entrust Abvent with representing us in the U.S.A. But we could not understand why Abvent, in the wake of its success in the French region, should also take over distribution in German-speaking Switzerland, and therefore make subcontractors out of the distributors we had hired, first through Imre Pakozdi, and later Gabor Kazár. In our view, the German-, French-, and Italian-speaking regions of Switzerland were much more similar to their "mother" countries in their culture and business practices, than they were to each other. Our own German-region distributors, too, saw no advantage in the prospect of buying the product from their non-German-speaking, French-Swiss "compatriots" instead of from us. (How this country has managed to remain intact and stable for so many centuries is a great mystery to me.)



## Mr Bogatzki

Our second German-Swiss distributor, Mr Bogatzki, probably would deserve an entire chapter in this book. Mr Bogatzki was a CAD-software distributor of extraordinary talent. The biggest American and German companies besieged him with offers to distribute their products, but he chose us instead. Beginning in 1989 and for the next eight years, he distributed only Graphisoft products. Perhaps it was his Polish origin which impelled him to achieve his success with products from Eastern Europe. Perhaps he valued the respect, support, and latitude he received from Graphisoft. Perhaps he was inspired by ambition, and the niggling conviction that the practically impossible task just might have been possible, after all. What inner conviction spurred him to persuade global companies such as Sulzer and Asea Brown Boveri to replace dozens of their earlier CAD workstations with the then unknown topCAD, a program that ran on the Apple computer so widely scorned by engineers?

Mr Bogatzki liked challenges, and difficult challenges at that. Originally, he took on the distribution of topCAD because he could see, perfectly clearly, how little chance topCAD had of competing with the industry-standard AutoCAD. At our distributor conferences, he expounded the advantages of topCAD with a sense of mission that was captivating, trying to convince the rest of the distributors to deal in topCAD. Naturally, we would have been happy to achieve global success with topCAD, and Switzerland alone could not provide this success. But we also knew that most of our ArchiCAD distributors were not qualified to sell topCAD, and if we insisted that they distribute a product that exceeded their sphere of knowledge then we would lose some of our successful ArchiCAD partners.

When, finally, we decided to give up on our topCAD ambitions, we had to find an appropriate ArchiCAD-related challenge for Mr Bogatzki's energy and dedication. We found this challenge with the introduction of the Windows version of ArchiCAD in 1993.

As long as ArchiCAD differed from AutoCAD in two important respects, we could maintain that we were not really competitors. First, the basic purposes of the two programs were different (building modeling vs. technical drawing). Second, they ran on two different platforms (Macintosh vs. Windows). But if even one of these basic differences disappeared, then we could not avoid confronting the AutoCAD giant as our competitor. This is what happened to topCAD: yes, it ran on a different platform (Macintosh) than AutoCAD, but its basic function was the same: a technical drawing program. And the same happened with ArchiCAD for Windows,



which, while retaining its uniqueness of purpose, forfeited ArchiCAD's distinctiveness with respect to the platform.

Mr Bogatzki, though, was able to defeat the giant. He was the first, and for a long time the only distributor who was able to prove that you could successfully sell ArchiCAD for a PC environment, even in the face of competition from AutoCAD. His success gave hope and heart to the other distributors. Without Mr Bogatzki, I don't know whether we would have been able to succeed in the harsher world outside of Apple's protective sphere.

Once, at a trade show, I was able to watch Mr Bogatzki in action. When an interested customer humbly asked whether he could see a product demo, Mr Bogatzki answered:

— Sir, I would be happy to show you the program, but only if you are really planning to buy. To prove it, you must promise me that if this program meets your needs, then you will buy it. You know, my time is very valuable, and I only spend it with genuine buyers. You can come to the trade show just to look around, but do it someplace else; I don't have time for that.

This arrogant approach, combined with Mr Bogatzki's magnetic personality, usually worked, and he rarely completed a demonstration without also closing a sale with the "victim." The only problem was that this method could not be duplicated or distributed on a global scale; this method required a Mr Bogatzki, and he was unique.

Mr Bogatzki could talk up a storm, and much of what he said was repetitive, so discussions with him required a great deal of patience. One time I succeeded in offending him deeply. He had been working with us for years, and I decided it was high time I paid him a visit. His office was located in a village near Zurich, next to the local train station. In our honor, he even had a Hungarian flag raised at the train station's flagpole the day we arrived. During the morning, he introduced his colleagues, presented his recent results, and explained the situation of the Swiss market. After lunch we finally sat down as a threesome (Gabor Kazár, Mr Bogatzki and I) for business talks. And Mr Bogatzki started to talk, and talk, and talk. He spoke facing me; Gabor Kazár, meanwhile, sat to one side and smiled to himself, wondering how long I'd last. I lasted for a while, but then, inexorably, I drifted off. When I awoke, he was speaking to Gabor Kazár (a little more softly, lest he wake me), and the only indication that I might be included in the conversation was that he was still speaking in English.

It took me a long time to appease him. But the end of our business relationship, a few years later, was not due to this incident.



Mr Bogatzki was not willing to accept that someone else should profit “for free” from his work. The fact that the Windows version was able to break into the market also helped our Macintosh sales (as we will see, this dynamic was the reason we decided to create a Windows version). Mr Bogatzki undertook the heroic effort necessary to introduce the Windows version, provided that he got exclusive rights to distribute ArchiCAD for Windows in his region. Of course, we agreed. But when he saw that the Macintosh business was also improving, he asked for exclusive rights to sell the Macintosh program, too. But we were in no position to revoke the Macintosh rights from our other Swiss-German distributor, who had gained exclusive status much earlier. Mr Bogatzki found this symmetrical status deeply offensive, and after several threatening pronouncements, he finally quit Graphisoft in the late 1990s. He later found himself another daunting challenge, and began distributing another design program created by another small Hungarian software company.

I still mourn his departure; we shouldn't have let him go. His personal attachment to our company is best illustrated in a photograph from 1997, taken at the ceremonial ground-breaking for Graphisoft Park. The Mayor of Budapest had already placed the foundation stone and given his speech, and the festive crowd was headed for the buffet, when Mr Bogatzki slipped away toward the hollow in the ground, and quietly added his own pebble. This man remains part of Graphisoft to this day.



*Mr Bogatzki at the ground-breaking for Graphisoft Park*



## Telephone lines and other bottlenecks

Let's go back to another signal event: the opening of our first subsidiary office outside of Hungary, in Munich. The original goal in opening this office was not primarily to conquer the German market (by that time, we knew that the German market, due to its size and its characteristics, was not ideal terrain for ArchiCAD). Instead, we considered our German office as our home base for international distribution operations, because it had the requisite infrastructure for phoning and faxing to all parts of the world, and because we could purchase supplies unhindered.

The fact is, in Budapest in the 1980s, we faced limitations that seem ludicrous today. The biggest problem was the lack of telephone lines; people who wanted a phone line added their names to a waiting list, and they waited for decades. As a doctor, my wife was allotted a party line – a phone line used by two subscribers who took turns using the line. We took this half-phone-line and extended it (illegally) to the neighboring house, where we rented a few rooms in a private home; this was our second office. Our first office had been the attic of my own house, and when we outgrew that, we could not, if we wanted to have a phone, move any further than the neighboring house, whose owner luckily was willing to rent us a couple of her rooms.

Even so, we often had to wait until the line was free, as indicated by the dial tone, before we could make a call. (How did the American spy blow his cover in Budapest? He picked up the phone and started dialing, without first listening for



*A secretary waits (and waits)  
for a dial tone*



*Our "headquarters" in Szobránc Street*





the dial tone!) We hired a secretary for the sole purpose of waiting for the line, which sometimes took an hour. Under these circumstances, we managed to do several million marks' worth of export business, and we became Hungary's biggest software export company, surpassing even SzKI, my previous employer. We had long been able to afford to move from my neighbor's rented rooms into a real office, but our family phone line held us back until 1990, when Hungary's wretched telephone conditions improved very quickly. For us, this was the post-Communist transition's most important achievement.

Now, finally, we could purchase a nice big villa in Budapest's Kolumbusz Street, which our architect friend Zoli Horváth redesigned as a remarkably elegant office building. For the next eight years, until Graphisoft Park was completed on the territory of the former Óbuda Gas Works on the banks of the Danube in northern Budapest, the Kolumbusz Street office served as our headquarters.

The transaction involved in buying the villa provides an interesting glimpse of how things worked in that transitional era. We had not developed a relationship of unreserved trust with the seller, so our lawyers engaged in very thorough investigations and contracts to ensure that we could take possession of the building with no remaining risks or doubts as to ownership. The only way



*Our new headquarters in Kolumbusz Street*







*Our new headquarters in Kolumbusz Street*

to ensure this was if the closure of the deal took place at exactly the same time as payment was made, in full, in cash. The largest-denomination bill at the time was 500 forints; the selling price was 47,500,000 forints; so the cash filled three enormous suitcases. The transaction involved counting and handing over nearly 100,000 bills by hand.



*Administration: Kati Vitányi (who later became my assistant), with Péter Hornung*



Before Hungary's regime change, we lacked not only telephones and a modern banking system. We also lacked access to countless other minor items that were available only in hard currency and required import permits we had no hope of obtaining, despite our huge export volume. Through circuitous methods, we were able to import the computers we needed for software development; Interag's German partner, SSG, helped us here, but it was really farcical that in order to get hold of a decent stapler, we had to ask a favor from Interag, from whom we were carefully trying to guard our independence.

## **The founding of Graphisoft GmbH, Munich**

Incorporating a firm abroad would provide a solution to these and many other nonsensical limitations. Of course, we could not incorporate in our own name; at the time, even the state-owned foreign trade companies were hard pressed to get such permission. My friend and co-founder, Péter Hámor, again came to the rescue. He had a close friend in Munich, Manfred Koritowsky, who founded Graphisoft Computer Programme GmbH under his own name, but for our sake. Managing the company was entirely our responsibility; he gave us only his name, until the hard-currency restrictions were lifted, and we could buy the company from him.

The financing of Graphisoft GmbH worked like this: we carried out all of our international business through this company, and the company retained 30 percent of the revenues. With this income, it covered all of our hard-currency expenditure, from computer purchases and business travel expenses to the purchase of staplers. Indeed, when we got to the point where we had enough money, we covered our marketing expenses through the Munich firm; this firm also financed the start-up of our American office.

To head Graphisoft GmbH, I lured Gábor Kazár away from the Metrimpex foreign trade company (I had no qualms about doing so, because earlier Metrimpex had enticed us away from Interag). Gábor was an excellent worker. He was directly responsible for all our distributors in German-speaking Europe; he hired them, negotiated their contracts, and supported them on a daily basis. In addition, with the help of a single assistant, he was responsible for the logistics of all of our international sales: order processing, delivery, billing, and above all the production of the software packages. At the time, these kinds of specialized publishing services were not available in Hungary, and we could not have taken on these publishing tasks had we not had our own office in Germany, and through it, access to Germany's highly sophisticated infrastructure.



## The battle for Germany

But Gábor Kazár had bigger ambitions than just managing a logistics center. When he saw that in Germany (unlike Switzerland and Austria) we were unable to find a distributor willing to make the necessary investments for marketing ArchiCAD, he came up with an unusual suggestion. He proposed that we make Graphisoft GmbH, originally founded only to provide logistical support services, into a fully fledged German distributorship. To tell the truth, at first I didn't like the idea. By that time, we were knee-deep in expenses from our U.S. office, and based on our earlier negative experiences, I judged that our chances in Germany were even slimmer than in the U.S.A., or in Britain, which was starting to show a positive picture. But, as so many times during Graphisoft's history, I could not resist a co-worker's enthusiasm and motivation; I agreed to the scheme.

It was a good thing I did, because Gábor performed miracles. We had all but dismissed Germany as a hopeless market for us and yet, within two years, it was our No. 1!

At the beginning, in 1989, the situation was far from rosy. Our previous German distributor, after 18 months of effort, gave up his rights to distribute ArchiCAD in Germany as a fruitless task.

In the late 1980s, Hungarian products did not have much of a reputation among the supremely self-confident Germans.

— How would you guys, way out east in the middle of nowhere, have the foggiest idea of what a German architect needs? — asked one German architect — and he was one of the friendlier ones.

True, we had no major references; apart from the pencil house in Genoa, we had only small sample drawings, mostly interior design. In Germany, a stronghold of faithful IBM customers, Apple computers were dismissed as mere toys.

But our biggest challenge was the strong marketing presence of our German competitors. The producers of traditional, large, expensive and hard-to-master architectural software products invested what seemed to us astronomical sums to protect their apparently invincible market positions. For example, at the ACS architectural software show in 1990, the leading German companies set up baroque-style, multi-storey stands which took up hundreds of square meters. In contrast, we set up shop with a little 20-square-meter stand off in one corner, and only managed to get a carpet to cover the stone flooring at the last minute. And all this accompanied by the humiliating arrogance of our competitors, who examined our modest little reference designs with mocking smiles.



— Are you guys running a coloring contest? — asked one especially witty visitor from a competing firm.

Gábor recognized that for us, the only marketing tactic that would work was word of mouth: there is a Hungarian program that simply works better than the entrenched, massively marketed German solutions. Our target market was the new generation of architects who were free to choose the best program without any preconceived notions. And the way to reach these architects was through the idealist, fresh-thinking members of Macintosh's distributor network.

Gábor organized two-day training sessions at our little Munich office, demonstrating ArchiCAD's playfully easy interface to architect-oriented Macintosh salespeople, many of whom had hitchhiked to get there. There were about 100 of them, and out of these, a hard core of about 25 sellers became zealots in the cause of ArchiCAD's success. This group became our distributor network in Germany. And as the new generation of young architecture firms grew by leaps and bounds, so did ArchiCAD's market penetration. Our partner in Berlin, Norbert Sawatzki, deserves special mention. He was the only distributor in Berlin to compete successfully with Nemetschek, our strongest local competitor, with its 300 employees overall and a sales staff of 10 in Berlin alone. Norbert is a sensible, quiet individual, the exact opposite of the salesman stereotype. He first targeted the small offices where his former college classmates worked. By the time of the building boom that accompanied the euphoria of German reunification, he had gotten to the point where nine out of Berlin's ten biggest architectural firms were using ArchiCAD; the number of licenses in Berlin alone exceeded 1000. And the prestigious big projects in the newly reunified Germany, such as the well-known "washing machine" building of the Federal Chancellery, were designed with Hungarian software.



*ArchiCAD renderings of Berlin*







*ArchiCAD renderings of Berlin*

Throughout these years, Gábor Kazár kept a close eye on expenses. I never heard him express the favorite argument of typical salespeople, according to whom you have to spend money before you can expect results. He used the opposite approach: his expenditure was in direct proportion to his revenue. These new investments, of course, helped increase revenues further.

Gábor's most valuable talent was his empathy. He had an uncanny knack for understanding our partners' motivations. He understood why they behaved the way they did, and knew that we could do good business only if our partners did good business. He knew which partners were worth dealing with, and he also knew which potential partners would waste our time. In negotiations, he never got the raw end of the deal. When bargaining, he always knew just how far he could go. He made wise use of his seemingly inexhaustible energy: when necessary, he spent plenty of time on a particular issue, but less time on things that could be done quickly just as well. Unlike me, he was not a perfectionist; instead, he tried to find just the right balance between the amount of energy required and the expected results. One example is the case of the user handbooks. At a time when I was writing some of our user guides in English, I never considered them done as long as I felt that they could still be improved, even a little. I expected the same of my colleagues, but Gábor Kazár





*Gábor Kazár, hard at work  
even during conference breaks*

was lucky. Since I don't speak German, I could not keep sending back the German user guides he wrote for the umpteenth revision. He knew as well as I did that the guides, while good enough, could be made even better; but he also knew that our business success did not depend upon it, and that if he could produce user guides that were just slightly less perfect than the ones I wrote – but still perfectly acceptable for meeting our market's requirements – while expending only about one-third of the energy that I used, then we were much better off.

## Best vs. good enough

We faced a similar dilemma in developing our product. The excellent programmers I was able to hire shared my drive to achieve excellence, and always strove to create the very best product, regardless of what it cost. Yet, in the market, we could see that success did not depend on this measure of excellence. For the most part, the best product does not necessarily win (as Apple's example shows); quite often the winner is "good enough," accompanied by a good marketing strategy. Why then do we still insist on creating the "best" product available? Tamás Hajas, then head of ArchiCAD development, thinks we do it for ourselves.

– We feel better about ourselves if we know we have created the world's best product, and this feeling is worth it.

But let's return to Gábor Kazár, who was responsible for the "German miracle" – an expression that came from our American colleagues, when I demanded an explanation for why we were selling nearly twice as many ArchiCAD packages in Germany, population 80 million, as in the U.S.A., population 300 million. At first glance, you wouldn't think that Gábor Kazár was a particularly tough guy; his demeanor at first was not particularly impressive or imposing; he wasn't what you'd call a charismatic type. This often misled his negotiating partner for a while. Gábor Kazár had a quiet but effective style. Once, he was going to be late for the opening of a trade show because the airline had overbooked his flight and wanted to put him on a later flight. In such a situation, I usually read the riot act, demanding to speak to the manager, making threats, etc., in the hope that sooner



or later they would decide to bump another, less belligerent passenger. For the most part, my strategy works, but I would probably never have achieved what Gábor did, with his quiet but stubborn style. He didn't shout; he didn't issue threats; he simply stated, quietly and reasonably, that he had a valid ticket, and he would board the flight. No matter how many times the airline personnel said, "sorry, no space available." Gábor simply would not move from the ticket counter. Finally, they let him travel in the cockpit.

## A real Bavarian manager

Based on his stellar results, I named Gábor Kazár Vice President for Global Sales. Johannes Reischböck took his place as head of distribution in Germany – an excellent successor under whose leadership Germany became an even more significant force in Graphisoft's global expansion. Hannes has a totally different style than Gábor Kazár. He is imposing, energetic and charismatic. His boundless ambition is immediately evident – anyone can see that, for him, nothing is impossible.

Gábor Kazár was the perfect boss for someone like Hannes. Gábor was the type of manager who let his people get their work done, didn't interfere in every detail, and only helped out when asked. But he acknowledged results, and everyone knows that if there are no results, there is no mercy: the employee



*Hannes bags another deal*

who is responsible has to go. This method has its drawbacks, because if a manager doesn't do enough checking and calling to account, then much time will pass before it becomes obvious that a particular employee is not the right person for the job, and meanwhile, many market opportunities are lost. But this method is the best one for eager employees, like Hannes, who like working independently.

Hannes became head of Graphisoft Germany, but this did not happen overnight. Originally, he worked as the ArchiCAD sales specialist for a large Munich-based Apple distributorship. We weren't the only ones who wanted to lure Hannes away. We had



another dealership in Munich, consisting of two partners, who figured they would be better off if they didn't have to worry about a competing sales force in their own city. So they made an offer to Hannes to quit the Apple distributorship and join their company as co-owner. Hannes had already agreed, when Gábor Kazár approached him with our own offer to head Graphisoft Germany. Our offer was more attractive, but he didn't want to break his word. The solution was that he convinced his two future business partners to join him in running Graphisoft Germany. This three-pronged leadership, however, didn't work for long, and after a year Hannes realized that he needed to be explicitly charged with leading the company. As a result, he parted ways with his two partners, but we didn't do badly, because one of those two, Martin Schnitzer, again founded his own ArchiCAD dealership and soon became the first dealer to exceed one million deutschmarks in sales, and later he exceeded two million deutschmarks. He was an inspiring example to ArchiCAD salespeople all over the world, showing them that there was big business to be made. Based on his own earlier experience, Hannes understood the partners' business even better than Gábor Kazár had, and managed them brilliantly. He acceded to their request for exclusivity on their respective territories and gave reseller rights to only one reseller in each of Germany's states. In return, he expected big results. He introduced the "Graphisoft Solution Partner" concept, which allowed partners to use the Graphisoft name and marketing profile in a sort of franchise arrangement, and gave our company a much more impressive look.

As the number of satisfied ArchiCAD users grew, so did our marketing prowess. Soon we, too, had exhibits taking up hundreds of square meters of floor space at the most important trade shows. Sometimes our exhibits even exceeded those of our biggest German or American competitors.

Our marketing message also took on a more self-confident tone, compared to our earlier, more modest efforts. For example, we were the one of only a very few companies in Europe to introduce a 90-day money-back guarantee. For three whole months, customers could return the program and get their money back, no questions asked. This became a convincing marketing tool for our resellers:

- I see my dear customer that you are vacillating between ArchiCAD and the competitor. Why don't you just start using both programs at no risk? Oh? You say the other guys don't offer a money-back guarantee? I wonder why.

Only one of our customers ever demanded their money back: a widow, whose architect husband passed away suddenly.







*Images of Graphisoft at trade shows and conferences*



Hannes, ever the confident executive, kept raising the product price in Germany, and at 14,900 deutschmarks, ArchiCAD was considerably more expensive than the competing programs running on PCs.

– Fair enough, – was the response of the German architects, – You get what you pay for:

ArchiCAD became the Mercedes of architectural software. Our German marketing team packaged our sales pitch with a light touch, using a fresh, youthful and often humorous graphical look. Compared to our German marketing materials, the rest often appeared stodgy and boring.

Occasionally, Hannes would invest in general brand-name promotions in Germany that were so expensive that such endeavors would be prohibitive in any of our other markets. But Hannes could do it, because he was bringing in the revenue. Our German office had the highest wholesale purchase price for ArchiCAD, but despite these expenses (or perhaps because of them), our German office was able to pay Budapest a decent price for our product and still remain profitable.



*Sponsorship*

Among Hannes's clever marketing ideas, my favorite was the "Railroad show" of 1997. He rented an entire train from the German railways, and for two weeks, accompanied by a big advertising campaign, this train traveled through all of Germany's major cities, putting on exhibits at each city's train station, usually a centrally located, high-traffic area. Hannes even got HP and, naturally, Apple Computers, to sponsor the campaign.





*Railroad show:*

*Martin Schnitzer and Hannes as engine drivers*







*Oktoberfest in Munich:  
Abi König, Sabine and Hannes.  
I enjoy some heavenly roast pork leg. (Right)*

Our German miracle was due to hard work by Gábor Kazár, Hannes and the rest of our enthusiastic German team. The fact that I don't speak German also helped: I couldn't really get involved with what they were doing. My involvement was limited to helping celebrate major accomplishments and participating in a number of Oktoberfests.

Another factor in the German success story was that the German economy, and the construction industry in particular, underwent an enormous upswing in the second half



of the 1990s, due to state-funded programs for regenerating the East German region. This upswing was fueled by enormous government expenditure rather than market-driven economic development, and by the end of the decade, the bubble had burst; our German revenues were severely affected by the subsequent German recession.

But in 1996, we were still flying high in Germany. Our revenues exceeded 10 million deutschmarks which amounted to one-quarter of our firm's entire revenues. This German dominance was part of our reason for targeting the Neuer Markt, the Frankfurt Stock Exchange's technology exchange, when we went public in 1998.

Hannes exhibited an extraordinary degree of commitment to Graphisoft, and was willing to take personal risks. Following the Japanese capital raise in 1996 (see Chapter 12 for more about this) a few employees mooted the idea of offering Graphisoft stock to our employees at the same share price paid by our Japanese investors: \$5 a share. I was happy that some employees were evidently committed to our firm, but I also felt that this would be a very risky investment as our Japanese investors had a higher tolerance for this risk than our own colleagues did. So I tried to restrict the employee stock requests to symbolic levels. But with Hannes, this didn't work. He told me:

– I'm building a new house, and thanks to how much I have earned with Graphisoft, I don't have to take out any loans. But home-building loans are available at such favorable rates that it would be foolish not to take any out. I want to use them to buy Graphisoft stocks.

I could not refuse such a request, and he bought 60,000 shares for \$300,000 (more than half a million deutschmarks). For him, this level of risk was similar to what we had risked when first starting the company. But this was not the end of Hannes's investments in Graphisoft. When he first became head of Graphisoft Germany, together with two of his colleagues, the three of them obtained direct ownership shares of the company. When the time came to list our company on the stock exchange, we had to first eliminate this ownership structure: the parent company became 100 percent owner of the subsidiaries, and we bought out the minority owners of the subsidiaries. As part of this arrangement, Hannes received stocks in the parent company, and he also bought out his earlier partners.

Given the number of his shares, Hannes could have made a bundle after Graphisoft went public, but he did not sell his shares or exercise his stock options:



not when we were listed on the Frankfurt exchange, and not two years later, when we were listed on the Budapest exchange and shares were going for over €20 each. And that's not all. A few months after being listed on the Budapest exchange, Graphisoft shares began to plummet. Some shareholders panicked and sold out. Hannes, in contrast, invested a further €100,000 of his own money and kept on buying Graphisoft shares.

He was unshakably convinced, and is still convinced that this stock will someday be worth far more than it is today. This level of trust is a great responsibility for any current or future leader at Graphisoft, and is a standard for its owners to follow.



## Chapter 8

# The American mirage: country bumpkins in the big city

The saying that “the bigger the market, the harder it is to crack” was true in Germany, but it was even more true in the United States, the world's biggest market. Moreover, the giants of our industry were American companies, and to take them on their home turf was even more difficult than on neutral territory, such as France or even Japan (see Chapter 12), where not being American can sometimes even be an advantage.

Yet I was convinced that we should not ignore the American market, not only because of its size, but because of its international influence. The U.S.A. is the center of the IT industry: whatever happens there, whatever is published there is noticed and read around the world; so we could not really attain global success without a presence in the U.S. market. And, finally, I believed we had the most to learn in that country.

Our first attempt to enter the U.S. market dates back to 1984, the year ArchiCAD was first released, when, for a few months, our friend Gyuri Makara and his friend János Rákos toyed with the idea that we could all get rich together through the distribution of ArchiCAD in the New World. Fortunately, János Rákos soon realized that at its early stage of development, ArchiCAD was not then ready for the U.S. market. The next experiment came in 1986, when our Israeli partners could not resist the temptation, fed by their unexpectedly quick success in Israel, and they spent about \$200,000 before they, too, realized that the U.S.A. was a different proposition altogether.



After this, we enlisted Apple's help in finding a "real" American distributor. We participated in the 1987 Macworld Expo in Boston, where we made some new contacts with potential distributors. Following the Boston expo, Gyuri Kafka, Zsuzsa Tóth and I flew out to the West Coast to visit some of these prospects.

## Country bumpkins in the big city

It was on this flight that I first got a sense of America's huge size. I had already been surprised to learn that the distance from the East Coast to the West Coast is about the same as that from the East Coast to Europe, but when our plane approached Los Angeles, the first stop on our West Coast visit, the view from above took my breath away. It was night, and when I saw the city lights from the left side of the plane, I called to Gyuri excitedly,

- Come and look, what a gigantic city!

Gyuri, who was looking out the right side of the plane, started to laugh.

- It's even bigger on this side!

I had thought we were flying to the north of Los Angeles and that what I saw to my left was the entire city. But in fact, the opposite was true: Los Angeles International Airport is toward the south side of this enormous conglomeration that is as big as an entire country; what I had seen was the smaller bit.

We rented a car, and although we asked for the cheapest one, we got a car bigger than any I'd ever seen at close range. But driving was no problem, because everything worked automatically. We did have some trouble opening the gas tank cover (the switch for this was conveniently hidden in the glove compartment). And once I had engaged the handbrake with my foot, I couldn't figure out how to release it. No matter what we pushed or pulled, the handbrake remained on. But even this difficulty was soon overcome: it turned out that the brake releases automatically if you press the gas pedal. We had some trouble navigating the labyrinth of freeways, so it took us an hour and a half to find our Comfort Inn motel, which was only a 15-minute drive from the airport. This motel was among the cheapest, but it did have a swimming pool, something that was still a real luxury in Europe.

During a later part of this trip, I ran into more serious difficulties that stemmed from the sheer size of the Los Angeles Metropolitan Area. We had already moved on to San Francisco, when one of our potential distributors organized a demo near Los Angeles, for which I would have to fly down again for a day. The potential distributor bought the ticket (such transactions, especially on an ad-hoc, last-minute basis, were still fraught with difficulties for a Hungarian citizen).





On the way to Los Angeles, we traveled together, and he drove from the airport to the hotel. Since I had jet lag, I fell asleep in the car and had no idea how far we had driven. The next day, I was flying back to San Francisco by myself, so I asked the hotel porter to order me a cab to the airport. He asked what time my plane left. I had a so-called “open” ticket back to San Francisco allowing me to board any flight that had space. I didn’t know which flight I would need that would allow me to catch my 2 p.m. San Francisco–Frankfurt flight with Lufthansa. I thought the porter could figure it out. But he could not follow my complicated explanations or my poor English, and the only part he understood was “2 p.m.”, which he took to mean my flight time from Los Angeles. I did not realize the mistake at once, because he promised me a cab for 11 a.m., and that seemed reasonable to me. I figured that the airport would be about a half-hour drive from the hotel, and then I could easily catch a noon flight that would arrive in San Francisco at 1 p.m., just right for catching my 2 p.m. transatlantic flight. I started getting suspicious only after we had already been driving for 45 minutes, and the airport was nowhere in sight. I learned from the taxi driver that Los Angeles International Airport was about a two-hour drive on the motorway from my hotel, yet both are within the same city, or rather metropolis, and not even at its opposite ends!

So I would be at the airport at about 1 p.m., and I had no idea when I would get a flight to San Francisco, but it didn’t matter because there was no way I could catch my 2 p.m. flight to Frankfurt. I fell into a complete panic, because my ticket to Frankfurt was nonrefundable and I had no money to buy another ticket; a credit card was still a distant dream. But the taxi driver felt sorry for me and did everything he could. Using his radio (at this time, there were no mobile phones even in America), he learned that there was a 12:40 flight that would arrive in San Francisco at 1:40 p.m., and 20 minutes might be just enough for me to catch my Frankfurt flight, and if we risked a speeding ticket, I just might catch this 12:40 flight from LA to San Francisco. Two minutes before the plane left I was at the airport, we didn’t get a speeding ticket, and if I had had only carry-on luggage they would have let me onto the plane. But the airline personnel would not check my bag, saying that 20 minutes would not be enough to transfer it to a transatlantic flight. At this point, I vowed to take only carry-on luggage with me from then on.

I did not end up stranded and penniless in Los Angeles. Lufthansa had a flight to Frankfurt leaving from Los Angeles, there was plenty of space, and they accepted my ticket (which was supposed to be non-refundable). They even refunded the cost of the unused portion of my Los Angeles–San Francisco ticket, which covered my cab fare, including the hefty tip.



But this was the only good deal that came out of this business trip. Of the five potential distributors identified through our Apple contacts, not one was willing to risk the investment needed to introduce a product that was not their own into this enormous market. During our negotiations, we didn't even reach the point of discussing distributor's margin and guaranteed revenues; their main concern was how much money we would pay up front in order for them to start marketing ArchiCAD. After our European experience where things happened in the reverse order, we found this request for up-front payment absurd. Today, I know it was not the least bit absurd. But we soon gave up our attempts with our "real American" distributor candidates.

## **Abvent U.S.**

We were left with the tried-and-true "French connection," Abvent, which had founded its own subsidiary in California to distribute its own products, but it was willing to promote ArchiCAD in the U.S.A. Together with Abvent, we exhibited at the San Francisco Macworld fair in January 1988. This exhibit was much bigger than the Boston one; this was Apple's home turf, the event of the year, for which the big new releases are timed. And we sold our first American copy of ArchiCAD to an architect from California, Jack Campbell, who was very helpful both at the expo and in later years. For example, he offered to lend us his super-expensive plotter for creating demonstration plans, and even lent his cabin in Squaw Valley to Gyuri Juhász and Gyuri Kafka for ski vacations on several occasions. As far as I know, he is a loyal ArchiCAD user to this day.

On the next American trip, I traveled alone, with carry-on baggage only. I combined this trip with a visit to our Australian partners, so it became an around-the-world tour. At the time, there was no non-stop flight between Los Angeles and Sydney, so "unfortunately" I had to plan a stopover someplace in the Pacific Islands. After considering visa issues and flight schedules, I decided on Hawaii. I didn't book a hotel; from the airport, in the middle of the night, I took a taxi straight to Waikiki Beach, and took a wonderful snooze beneath a palm tree, propping my head up on the soft carrying bag of a video camera I'd bought in Singapore (on a stopover from Europe to Australia). I didn't even dream that, scarcely a year later, I'd be vacationing with my family in Hawaii's most expensive hotel. Neither did I dream how far we were from really cracking the American market.

With Abvent U.S., everything started off swimmingly. A Macintosh Users Group in the Los Angeles area had invited the local representative of the French Gime-



or company to its next meeting, to hold a demo of the Architrion program (which we had gotten to know well in France). Gimeor had recently opened its own American office to distribute Architrion with great energy and enormous capital investment (\$10 million which, as we later learned, included financial support from the French Government, ever ready to see the triumph of French *gloire*.) So, allied closely with Abvent, we fought a two-front battle with Gimeor, since it was clear that if Gimeor won in America, we'd have a much harder time in France, too. The head of Abvent's U.S. office, Christophe Laval, an emigré from France, adroitly managed to get us invited to the Architrion demo, which was thus augmented by an ArchiCAD demo. Since Chris had little experience with ArchiCAD, I did the demo myself. I was lucky, because the Gimeor representative in Los Angeles had only recently become acquainted with Architrion, and it was easy to nail him with clever questioning. (A year later, he was working for us, and still does today.)

The demo was a roaring success. Just like at our Tel Aviv demo a year earlier, in L.A. we sold two ArchiCAD packages right then and there. This was much fewer than the 13 packages sold in Tel Aviv, or the 30-package sale in Namibia, but given the particularities of the U.S. market, the traditional wariness of U.S. customers toward European high-tech products, and especially ArchiCAD's remarkably high price of \$4000, our two-package starting sale might have been our biggest success thus far. A few industry reporters were also on hand, and published some very favorable reviews. At the time, I had absolutely no sense of the extent of the U.S. media, and I overestimated the impact of these few Apple Macintosh publications, read by a relatively narrow audience.

I wasn't the only one to overestimate our initial success in the U.S.A. Chris Laval did the same, and his enthusiasm was mirrored in his willingness to invest more money. As a result, about six months later he ran out of money and had to give up the business. But in summer of 1988, all we sensed was the promise of a quick victory. Chris and his wife invited me to dinner at their home, which, among the French, is an unusual display of friendship, given the early stage of our personal relationship. Their house was in a beautiful area, outside the L.A. metropolis, in a remote canyon. We had been driving for more than half an hour; I thought we'd reached the end of the earth and couldn't imagine that anyone actually lived here, when suddenly, among the mountains, we came upon Chris's house. I was surprised that such a remote area was hooked up to utilities. And, fresh from the Hungary of the 1980s, I couldn't believe my eyes when I saw that they actually had a phone line, way out here in this remote house.



– Yes, and we have flush toilets, too, – remarked Chris's wife somewhat condescendingly.

But our early Abvent successes were limited to those two sales and the publicity, whose importance we overestimated. I was especially moved when a Hungarian émigré reporter at *MacWeek*, a magazine well known even in Europe, published a full-page article about us, together with a photo taken in Budapest. Private enterprise taking root in Hungary was a sexy topic, and for a long time this was the main source of our PR interest. The *MacWeek* article presented Graphisoft as a modern, competitive, and globally oriented private company, a stark contrast to the stilted and immature market sensibilities of the socialist Hungarian economy of the 1960s and 1970s. It was a good article, but as I mentioned, I overestimated its effect. And when, in December 1988, I got an unexpected phone call from Chris Laval, who sadly informed me that he was closing down his business, I felt that we didn't have a moment to lose: we had to set up our own company in California. Right away.

## The corporate credit card

By this time, Graphisoft Germany was up and running, we were able to move our funds around, and I even had a corporate credit card. I felt the time had come to make our move in the New World. The credit card and the checking account were our most important weapons. In fact, you might say (with some exaggeration) that the credit card and checking account were the main reasons for establishing Graphisoft Germany. I had enough miserable anecdotes stemming from my pre-credit card days. In 1986, when I first rented a car in Belgium and paid in cash, the rental company insisted that the Hungarian Embassy guarantee that I would return the car. (To its credit, the Embassy issued the guarantee.) I had an even more humiliating experience in Australia when first checking into my hotel. I was not yet familiar with the hotel practice (common in America but unknown, even to this day, in Europe) of requiring a credit card slip (rather than a passport) at check-in, as a way of guaranteeing payment. When the hotel found out that I had no credit card, they demanded twice the expected room rate for my entire stay, in cash, in advance. I didn't have that much cash with me, and if I left all my money as a deposit, what would I use for spending money? I was insulted, and let the hotel staff know it. For their part, they were suspicious: what kind of a person had no credit card? Finally, our local partner had to guarantee my payment using his own credit card. Not the best way to start off our business negotiations.



So it is understandable that when I finally got my first gold Visa card and checking account at Munich's Hypo Bank, I felt like a king. No harm could come to me; starting a U.S. company would be a piece of cake.

## **January 1989: a flying start for Graphisoft U.S. in San Francisco**

The start-up took place with astonishing speed; we had little choice. The upcoming Macworld Expo in San Francisco would begin January 11. Abvent U.S. had already reserved a stand and paid a deposit. We paid the balance, so we took over the exhibit, but had very little time to set it up. We learned of the closure of Abvent U.S. just before Christmas; I got my U.S. visa on January 4, so I couldn't travel until January 5. This gave me exactly five days to accomplish (among other things) the following:

- Find a lawyer to explain the different possibilities, conditions and administrative tasks necessary for incorporation.
- Make the necessary decisions and begin the incorporation process.
- Open a bank account.
- Find an office, furnish it and equip it so it could be up and running by the time of the Expo.
- Order a phone line and have a working telephone number in time for the Expo, and have our new number appear on all our marketing and Expo materials, including the trade show stand itself.
- Find a printer and order business cards, letterhead and brochures, all bearing our new address and telephone number
- Design our exhibit and order the necessary equipment.
- Get hold of the necessary computers for our demo and for our ongoing office work.
- Find apartments for me and my colleagues. In contrast to the initial plans, we had to set up for an extended U.S. stay. Gyuri Kafka and Gyuri Juhász, who with me comprised the initial personnel of Graphisoft U.S., arrived just in time for the start of the Expo. Their families, and mine, were expected at the end of January, and they'd need someplace to live.

By the time the two Gyuris arrived, nearly everything on the list was done, thanks to the security provided by our new corporate gold Visa card and checking account.





*Oyster Point Business Park, site of our first U.S. office*

As we found out, and continued to learn through bitter experience for years to come, these two tools were not enough. First of all, except for our newly minted lawyer (who had no other choice), practically no one in the U.S.A. would take a check drawn on a German bank (not even if it was West German). Later, we had real Californian bank accounts; local checking accounts and credit cards, but sometimes even this wasn't good enough. There was a particularly frustrating example from 1990, in Anaheim, a city neighboring Los Angeles.

Anaheim was the site of one of our industry's largest and most important trade shows, and while we worked the show, my family visited Anaheim's most famous attraction: Disneyland. After a tiring day at the park, the family went to McDonald's, hungry children in tow. With the ominous hamburgers and fries already on their trays, my wife learned that credit cards were not accepted. No problem, she thought, we have a California checking account. But no: checks were not accepted either.

- Well, okay, here's the cash, – said my wife, and handed over her \$100 bill.
- We don't take hundreds, – said the cashier (and indeed, there was a sign stating the no-hundreds policy).



– How is it possible that we have all these different ways to pay and still you cannot serve us? – my wife burst out, as the trays were taken away from our crying children.

– Well, it's possible, – replied the cashier, unmoved.

At this, my wife set out to the various gas stations and stores in the area to try to change the \$100 bill. But no one was willing to change it, and the banks were closed. Finally, at a Korean grocery store, she tearfully blurted out that, when she left Hungary to visit the U.S.A., she'd never dreamed that despite credit card, personal checks and cash in her pocket, she still wouldn't be able to buy food for her children.

– You're Hungarian? – asked the Korean grocer, and changed the bill. – Your country has just resumed diplomatic relations with Korea, and so we're friends.

The Hungarian Foreign Minister could not have known that his brave diplomatic act was a godsend for two hungry Hungarian children, in Anaheim, near Disneyland.

But in our early euphoria, these frustrating experiences were eclipsed by our positive impressions: what we saw in America was that everything worked smoothly; getting things done was infinitely simpler than at home. Of course, part of this ease was due to all the help I received from a local relative, Gyuri Fülöp, and from David Marlatt, who was visiting the Macworld Expo from his job at Abvent's Paris office. David would play an important role in the years to come; as for the former head of Abvent U.S., Chris Laval: he seemed to have disappeared for good.

## Why San Francisco?

In hindsight, San Francisco was not an optimal choice. In the long term, we would have been better off on the East Coast, where most European firms set up. (And we, too, moved east, in 2001.) But in 1988/1989, we had many reasons for choosing the West Coast, and San Francisco in particular:

- *Friends and relatives:* The helpfulness of Gyuri Fülöp's family was a big factor in our decision.
- *The Macworld Expo:* Since the Expo was imminent, it played a major part in our decision to pick San Francisco.
- *Costs:* It seemed to us (and locals reaffirmed this belief) that New York (which we were also considering) was much more expensive than the West Coast.



- *The city:* We might have found a much cheaper location someplace in the Midwest, but since we expected to spend a lot of time at our new American company, the amenities and flavor of the new location were not unimportant. The beauty of San Francisco appealed to us immediately; and despite all the liveliness and cultural activity, the city still seemed to be much more down-to-earth in its size than New York. And its pleasant weather, when compared to the East Coast, was a big draw.
- *The Silicon Valley effect:* This was perhaps the main factor in choosing the Bay Area as Graphisoft's American headquarters. Early on, it became clear that our U.S. office was not only important in terms of our American market, but also because Silicon Valley is the capital of the global IT industry. Here, we had our best chance of tapping into these developments and making contacts and allies we could count on in other parts of the world.

It was truly a rewarding experience to meet with industry celebrities in person. One time, I was invited to breakfast with the legendary Guy Kawasaki at the famous *Il Fornaio* restaurant in Palo Alto. Kawasaki proceeded to try to convince me that we should never have attempted to set up shop in America. We also got to know Jim Clark, the founding president of Silicon Graphics, later founder of Netscape. Silicon Graphics was the “classic” hardware platform for use with high-performance 3D software programs, and for a while we toyed with the idea of creating a “high-end” version of ArchiCAD for this platform. In the end, we discarded the idea, seeing that we would not have any specific competitive advantage over the rivals in that platform.

Leaving aside the immediate benefits of making new American contacts, I think that the mere fact that we soon felt at home in the New World added value to our company.

## Apple, again

We had good relationships with Apple representatives in Europe, but we did not yet know Apple people in America. More troubling, they didn't know us, either. Our strong position in Europe meant little to them, and anyway, with respect to our narrow specialty, they had already committed their support to another European firm, the French Gimeor. Apple recognized the importance of the CAD market, and employed more than 20 “CAD evangelists” throughout the country, whose sole task was to recruit resellers and





developers who specialized in CAD. At the same time, they weren't certain that Apple could feasibly take on two small European firms focused narrowly on 3D architectural design, in addition to the large U.S. companies. (They were right to hesitate, because two years later Gimeor went belly-up, but at the time Apple couldn't have known for sure which company to bet on.)

Apple's initial attitude toward ArchiCAD in the U.S.A. is best illustrated by Joe Bayer, their CAD-evangelist in Chicago. Bayer wrote a letter to a co-worker in Los Angeles, in which he listed all those characteristics of ArchiCAD that give it away as a European product, "proving" that we haven't the least idea of how American architects differ from their European counterparts. From this point of view, wrote Bayer, Architrion (Gimeor's product) is not much better, but at least it is ahead of ArchiCAD. Joe estimated that it would take years for us to overcome this disadvantage – if we could overcome it at all.

Six months later, in summer of 1989, we released a new version of ArchiCAD, which, among other improvements, addressed every single one of Joe's criticisms. With this version, ArchiCAD became considerably more "American" than Architrion in the eyes of the industry, including Joe. From then on, Joe became our most fervent devotee within Apple; he wrote a second letter to his Los Angeles co-worker, in which he praised our product to high heaven. Two years later, when Apple dismantled its CAD-evangelist network, Joe became one of our most successful independent resellers.

## The Disney visit

After Joe's second letter, the co-worker in Los Angeles had no qualms about recommending us to Disney Imagineering, one of the companies in the Disney conglomerate that did design work for Disneyland and was looking for a design software. Our demo went well, but Disney had a condition which we could not fulfill, so the deal fell through in the first round. The problem: at the time, ArchiCAD was not yet compatible with designs that were created in AutoCAD (in technical jargon, we were not "DXF compatible"). Next day, I made a phone call to our development team in Budapest. Everyone there knew what it meant to have Disney as a customer; our developers understood the PR potential in such a deal; and within a few months, we were DXF-compatible. We had planned to reach this milestone anyway, but the potential Disney deal sped things up.





*Software engineers' visit to Hollywood. From left to right: Misi Balla, Laci Szabó, Lajos Zaccommer, Viktor Várkonyi, Balázs Gellért, Attila Babits, Gábor Horváth, Miklós Miskey, Attila Mészáros, Miklós Végh*

Our second visit to Disney represented both the most tiring and the happiest day of my American career. I took an early morning flight from San Francisco to Los Angeles, where I had a meeting with John Stebbins, Architrion's reseller in Southern California. He was the Architrion representative whom I had "defeated" in head-to-head demos before the Apple Users Group meeting about a year earlier. This time, I wanted to convince him to come over to our side. He invited a number of potential clients to his office, where I held an ArchiCAD demo. After this, John decided to join us, and asked for an in-depth training session. This session lasted until mid-afternoon. After we had signed a reseller agreement, I headed for Hollywood, the headquarters of Disney Imagineering. My demo there lasted until late in the evening, and when it was over, Disney ordered its first two ArchiCAD packages. Then, bone-tired, I dropped off my rental car at the nearby Burbank Airport and just caught the midnight flight back to San Francisco. I felt we had won.

But victory was a long way off.

I was reminded of this adventure when reading Miklós Vámos' book, *New York-Budapest Metro*. His anecdotes echo our own American experiences. Often, it seems that the breakthrough to success is within reach, but in truth it's still a long way off. Hence the title of this chapter: "The American mirage."



## Building a reseller network

We recruited our first resellers not from among the “traditional” CAD resellers lately being targeted by Apple (that is, AutoCAD resellers), but rather from Gimeor’s partners, who had long been part of the Apple world. The Gimeor partners better understood the conceptual differences that set ArchiCAD apart from AutoCAD, since Architriton also had some of these characteristics. Our goal was to convince these partners that our program was easier to sell than Architriton, and they and their clients would get better service from us. Our most effective selling point was that the original creators of ArchiCAD, who knew the program better than anyone (such as Gyuri Juhász, and later Feri Lázár), were in the U.S.A. to assist in the distribution effort – in contrast to Gimeor, whose high-earning programmers did not travel so much.

This selling point worked. John Stebbins was the second reseller to “defect” to our side; the first was Jacques Couture, whom we won over several months before our Disney success, in San Francisco. Getting Jacques was a significant coup. Since he hailed from francophone Canada, he might well have preferred to stick with the French Gimeor company. Jacques was a fantastic salesman. While initially he did not really learn to either use or demonstrate ArchiCAD very well, he reigned supreme when it came to convincing people to buy. Once he brought a prospective customer into our office, and I had a chance to watch him sell. Feri Lázár did the demo; Jacques just sat behind him, and whenever Feri demonstrated a particularly flashy feature, Jacques would gasp, or cry out:

- Did you see that? That’s amazing!

Or else he would play the director’s role and run the show, urging Feri along:

- Show him how you do this..., – and so forth.

Despite his lack of technical knowledge, Jacques was our top seller for a long time, even though his one-man company obviously had limited growth capacity. Most of our resellers were in the same straits: as long as they did the work themselves, things went well. But most of them were not capable of hiring employees, managing them well, or developing the company.

Among AutoCAD distributors, there were some really big firms. Some of these alone had a bigger sales volume than all of our resellers combined. But neither we nor Apple were successful in luring these companies into representing our product. This is probably one reason that Apple’s business plan played down the CAD market in later years. We did not give up easily, and for a while tried to win over the AutoCAD distributors (especially after we came



out with a Windows version). We argued that we would, in effect, guarantee exclusivity for a particular city or county, so that the reseller would not have to worry about price wars eroding his profit. Indeed, while AutoCAD's "street price" (the price to consumers after bargaining) was often 30 percent lower than the official list price, with ArchiCAD the street price and list price were usually almost the same. This meant that the resellers could count on their 35–40 percent margin when selling ArchiCAD, while with AutoCAD they were often lucky to retain a 10 percent profit. This argument sounded good, and it was true; it was often more effective than just contending that our program was better. A few adventurous AutoCAD resellers did try selling ArchiCAD, but soon gave it up. For although they were making three or four times more profit with ArchiCAD, selling it took a lot more work, too. At the time, selling AutoCAD was easier and a better business decision, for several reasons:

- Maybe AutoCAD was harder to learn to use (since AutoCAD at that time did not adhere to the intuitive graphical interface then unique to Macintosh, but rather to the more exacting command language of MS-DOS). But selling AutoCAD did not require you to engage in philosophical explanations about the difference between model-based design and 2D drafting. We thoroughly enjoyed a good demonstration of ArchiCAD's conceptual advantages, but the owner of an AutoCAD dealership seeing the same demonstration, and using his detached business sense, would undoubtedly conclude that such complex demonstrations require major investments in highly qualified and expensive employees to do them – and all this during the selling phase, where the customer isn't paying a cent. So he wouldn't think it good business.
- Although AutoCAD was harder to learn to use than ArchiCAD (in my opinion), and harder to teach, but this part of the job came after the sale, and you could charge money for it – making the training phase even more profitable than the sale itself.
- Last but not least, Autodesk gave incomparably stronger marketing support than we did, and so customers bought AutoCAD without the benefit of a demo or convincing arguments – they just bought based on the brand name alone.

It was practically impossible for a reseller to make up for all these shortcomings and still make the ArchiCAD business pay. Consequently, most of our resellers sold ArchiCAD out of enthusiasm: they were simply happy to sell



cutting-edge technology, even if they had to work more for less money. Most Apple resellers were in this category, and that's why, even in later years when most of our sales were on the Windows platform, most of our resellers were still those we had gotten to know during the good old Apple days.

## **The Apple “religion”**

As we learned, Apple is not simply a computer; it is more like a religion that people believe in, and to which they are proud to belong. The development of such a community resulted from a conscious marketing policy; it was no accident that at Apple Corporation “Evangelist” was an official job title. Let's take the religious metaphor a step further. Comparing the Apple world with the PC world is like comparing the Jewish and Christian religions. In fact, the most important tenets of Christianity were already present in the Jewish religion thousands of years earlier. The difference was that Christianity took the radical step of discarding the concept of a “chosen people,” and so, you might say, became “compatible” with the world at large, a world religion accessible to all humanity.

It is not my intention to offend anyone's faith, of whatever persuasion, with this metaphor, but I do think there is some basis for drawing this parallel, however imperfect, which can help us understand the world of Apple.

The point is, Apple introduced a great many ideas before these became known in the PC world: not just the legendary graphical user interface, which Windows later copied, but also AppleLink, very similar to the Internet and well known to Apple users (i.e., among the “chosen people”) years before the Internet became widespread. The only trouble was that these worked only among Apple users. Thus, cut off from the majority of the world, Apple could not develop into a world religion – oops, I mean world “standard.”

## **The taste of success and fame**

Although our reseller network was growing slowly, and expected revenues were also slow in coming, we still had much to be proud of. First of all, after two years we defeated Gimeor, our French competitor. This counted as a victory, even if Gimeor's defeat was not solely due to ArchiCAD's superior quality and our own hard work. Gimeor made serious strategic mistakes, spending way too much money, and when the money ran out it was too late to switch gears. Easy money from investors and state funds can be dangerous: you get used to getting money that is unrelated to market opportunity, and



when the money runs out, as it inevitably does, your company is like a fish out of water.

But apart from defeating Gimeor, we had many other inspiring experiences that led us to believe (contrary to reality) that the American mirage – our big break in America, where we would enjoy even bigger success than in Europe – was not far off. One such heartwarming adventure came after a trade show in Los Angeles, where John Sculley, Apple's President and an architect by training, came to see an ArchiCAD demo.

The trade show ran from Wednesday through Friday, so Gyuri Kafka and Imre Pákozdi decided that a weekend visit to the Grand Canyon – about a half-day's drive from Los Angeles – would just fit in. There are many ways to see the Canyon, whether on mule or on foot, but if your time is limited then a half-hour airplane ride over the Canyon is the best bet. This is affordable if you can find enough fellow passengers to fill the little two-engine plane. Gyuri and Imre found a group of French tourists to share the plane. Introductions followed, and when the French learned that Gyuri and Imre were Hungarian, they responded, "Ah, hongrois!" then clucked their tongues appreciatively and exclaimed, "Arshee-cad!" It seemed that our product now topped the list of typical things associated with Hungary, on par with "gulyás" and "puszta." (As we later learned, the French tourists had come from the same trade show, and were in the same business.)

I had a similar encounter:



*Gyuri Kafka demonstrates ArchiCAD for  
John Sculley (center), President of Apple Computers  
(I am on the right.)*

## The Kahala Hilton in Honolulu

One of our first partners was Cliff Jenkins, our ever-cheerful reseller in Hawaii. Cliff worked for Honolulu's biggest Apple distributor and was an ArchiCAD enthusiast. I let Gyuri Kafka take on our first training assignment in Hawaii (it promised to be a nice assignment), since I had already been to Hawaii on a stopover



from Australia. However, in planning a family vacation in Hawaii later in the year, our good business relationships came in handy, and that's how we ended up staying in one of the world's most expensive hotels.

Cliff's boss was an important businessman with interests in several Honolulu businesses – for example, he owned the Honolulu Kahala Hilton. Our travel guide listed relatively affordable three-star hotels, then the more expensive four- and five-star luxury hotels, and finally mentioned that if the tourist wanted to catch a glimpse of celebrities, he should visit the beach at the Kahala Hilton, which was so expensive that it had no stars. So this hotel was owned by our Honolulu partner. In fact, he invited Gyuri Kafka to stay there during the training session. And he offered us, for our family vacation, a very low off-season rate. Gyuri told me that this hotel was a must. And though, as a rule, we did not have such a budget for our family vacations, it was worth paying one-sixth of the ordinary price.

We arrived in Honolulu late at night, and as we approached the hotel, the fences dividing the properties became longer and longer and the entrance gates became bigger and bigger: we were entering a very elegant neighborhood. Finally we drove up to the Kahala Hilton entrance, where four uniformed gentlemen – they appeared to have the rank of general at least – hurried up to our inexpensive, rented four-door Subaru, and opened all the doors. Of the four of us, only my six-year-old son seemed to find this treatment entirely natural: he got out and walked right into the hotel's 200-yard entrance hallway. Our room was more like an apartment, with two bathrooms, one with a tub and one with a shower; with gold-plated faucets; the beds were dressed in silk and decorated with orchids; the enormous terrace naturally had an ocean view, and in the distance it seemed we could see the lights of a far-off city on the shore beyond. This gave me pause, since as far as I knew, the shore beyond was Japan. The next morning, all we saw was ocean, but the sea in front of the hotel was lit by spotlights during the night: the “city lights” we had seen. In the area beneath our room, an artificial lake contained real leaping dolphins.

The beach area was, by law, open to the public, and the hotel could not cordon it off, so anyone could come by to spot celebrities. On the beach, we met another Hungarian family, who were staying at a nearby hotel. They lived in Los Angeles and asked us where we lived. When we replied “Budapest,” they looked at us oddly.



- OK, you fled from Budapest, but don't tell me you're going back there?

And when they learned that we were staying in this Hilton hotel, they really didn't know what to make of us. They asked, cautiously, what business I was in.

- I have a software company, called Graphisoft, and we sell our software here, too.
- Oh! Graphisoft. Now we get it.

This family owned a printing house. The printing business in California is largely in the hands of Hungarian émigrés (similar to the way that most small groceries are owned by Koreans), so they knew our printer friend in San Francisco, Tibor Harsányi, who in turn had told them about Graphisoft.





## Chapter 9

# Americanizing our American business: for here or to go?

We had much to be proud of from our U.S. experience: establishing a presence in the U.S.A., defeating our French competitor, making new contacts, and even, in certain contexts, enjoying a measure of fame. But this did not translate into good results. Business wise, our revenues remained below target. We had based our expectations on our European revenues and the size of the U.S. market. Originally, Graphisoft's board approved an investment of \$200,000 in the U.S.A., and after six months, this money was gone. Then we doubled the amount, and later raised it to one million dollars, but even this was not enough. Apart from the fact that, for many months on end, our U.S. office was unable to pay a cent for the ArchiCAD packages shipped from Budapest, the office still needed regular transfers of funds. Every six months, we revisited the question of how long this could go on, but in the end, the majority of our board of directors (which, at the time, included no independent members, and was composed entirely of the company management) always decided that we could not give up. We supported this investment not just with the aim of breaking into the U.S. market itself. It was my firm opinion (and most of the board agreed with me) that an American presence was crucial for the progress of our company, even if it was not immediately profitable.

## Should we become American?

We had plenty of experience of the disadvantages of not being American in America. It is possible to become a "real" American, as evidenced by many of our



successful countrymen there, but that is not what we wanted. We wanted to remain European and Hungarian; we came to the U.S.A. to capture a piece of the market, and also to learn, but despite all our colorful and enjoyable adventures, we considered our personal stay in the U.S.A. to be temporary. This is best illustrated by Gyuri Kafka's complaint during one of our regular salary negotiations:

- I'm working like a dog, exiled out here in the middle of nowhere, and missing out on everything happening at home!

At home, Hungary was undergoing a regime change; official state socialism was no more, and the first free elections loomed. By the "middle of nowhere," Gyuri meant San Francisco.

Graphisoft's presence in the U.S.A. was indeed considered an oddity. By the time Hungary had its first free elections, we had a full-time secretary at our San Francisco office, and Gyuri Kafka managed operations. Immediately after the elections, I visited the office on a short-term visit. The secretary took a phone call, went pale and announced to Gyuri:

- The FBI is on the line!

Gyuri took the phone, and I heard him reply:

- Yes, he's here in the U.S.A., – then he covered the mouthpiece and whispers to me:
  - They're looking for you.
  - Tell them I'm here.
  - They're already here, waiting downstairs!
  - Well, then, tell them we're expecting them.

A minute later the FBI agent arrived. In broken Hungarian, he offered to have the discussion in Hungarian, since he came from an émigré Hungarian family. We, too, wanted to be polite, so for the time being we continued in English. At his request, I gave him a very detailed description of our company's operations, and then asked him to what we owed the honor of his visit. The agent then explained that both the Soviets and Hungarians often used commercial delegations as "covers" for secret service operations, and it was his job to ensure that our company was not such a "cover." I said I hoped I'd convinced him, and asked how else we might be of help. He responded that since our company was doubtless in contact with other Hungarians in the area, he would be most grateful if we would report anything suspicious about their activities. At this, I took a deep breath: we were in dangerous waters now. I said that I would now take him up on his earlier offer, and would speak in Hungarian. I said something like this:



– When we first came to this country to do business, we believed that this country's hospitality did not hinge upon the kind of cooperation you are proposing. In contrast to you, we are not just 'of Hungarian origin,' we are Hungarian citizens, and will remain so. So the obligations of American citizenship are not binding upon us, especially not if aimed against our own country. We sincerely hope that you will find a way to respect our decision, and will not place any obstacles to our continuing our business here.

– Fine, – he answered, – but if you change your mind, here's my card.

And, somberly, he left.

Gyuri and I looked at each other; then, rather theatrically, tore up the business card. I was afraid that I would be stopped at the border on my next American visit, but what happened was just the opposite. Until then, at every visit, I had been subjected to a very thorough passport and visa check, but after the FBI visit, I was always let into the U.S.A. without a hitch.

But this event just goes to show how unusual our company was: the FBI agent had never encountered such a thing before. We came to the U.S.A. to make our fortune, but we did not want to become Americans. If I didn't understand it before, I did then: we had a lot to learn from America; we could grow to like it, and criticize it, but if we wanted to continue there only as temporary guests, yet still succeed in business, then sooner or later we would have to hand it over to local management.

## **American management**

By this time, we had a wide range of contacts in the U.S.A., but none of them was right for the role of running our American company. Most of our resellers worked well as "mom-and-pop" operations, but none of them sought to manage a 20–30-person company, which we envisioned as our goal. The rest of our contacts were at Apple, but there the problem was just the opposite: most were high-earning managers, and we could not offer comparable salary packages, and most of them did not consider running the American office of a small European company a good career move.

So we turned to a headhunter to help us find the right person. In choosing the headhunter, we took Apple's advice and hired one of the Silicon Valley's best headhunting firms, which had an office in the famous pyramid-shaped Transamerica Building in downtown San Francisco, with spectacular views of the Bay and the Golden Gate Bridge. For our next meeting, the headhunter came



to visit our office, which was nothing to be ashamed of either; located in a nice office park in south San Francisco, at Oyster Point Boulevard, alongside a marina. He apologized for his casual attire of jeans and T-shirt: after visiting us, he explained, he was due at Apple, and “you know how they are.” This is typical of Americans: they are not really “casual” in the sense of wearing whatever’s comfortable. Instead, they adhere rigorously to the dress code, and if the dress code prescribes “casual wear,” then they’ll make sure to wear a T-shirt, just as surely as they’ll wear a tuxedo to a black-tie affair.

## Drawbacks of Silicon Valley

The headhunter turned out to be good at his job; he knew practically everybody in Silicon Valley. He sent us one excellent prospect after another; but the best ones had the same problem as our Apple contacts. They were inundated with good job prospects, they earned high salaries, and running the miniature office of a little Hungarian company such as Graphisoft would not look so good on their résumé. A typical professional American manager chose his jobs based on how they will look on his résumé when next looking for a job. And from this point of view, in Silicon Valley, even a totally new “start-up” would look better on the résumé than the subsidiary office of a European firm like Graphisoft.

At this point, I might have realized – as Tamás Hajas did ten years later – that setting up in Silicon Valley was a mistake, and we should have gone where all the other European companies in the U.S.A. went: the East Coast. European companies traditionally prefer the East Coast, because the time zone difference is smaller and the plane trip shorter. Many people pointed this out early on during our American adventure, but for me, the advantages of San Francisco carried more weight. I was not the least bit concerned (in fact, I was a little bit proud) that in choosing the West Coast, we stuck out from the rest. This was a mistake. In the U.S.A., the one thing you can’t do is stick out. In the U.S.A., every situation has a standard solution, and whoever fails to follow it only creates problems for themselves. In our case, the unforeseen problem was that on the West Coast we had a much harder time finding the right co-workers. Those who seek this kind of position lived on the East Coast, because that’s where these jobs were.

But our headhunter did not give up, and finally found us an experienced and professional American manager, Margaret, whom we liked, and who took the job.



## Our first American manager

Under the circumstances, Margaret was not a bad choice, and she did the task we entrusted to her well – to make our U.S. company more American in style. She introduced standard procedures that were usual in the U.S.A., and soon everything looked more professional than before. These new policies affected not only our U.S. office, but Budapest as well. For example, Margaret was the first to introduce annual, written employee evaluations based on standard criteria. These were much more reliable than my earlier, ad hoc evaluations whose content was highly influenced by what mood I was in, and consisted of casual discussions with colleagues as to what worked and what didn't. In contrast, a written evaluation can be pulled up at any time, and can be compared to a newer one. Another important and reassuring factor was that the written evaluation criteria were pre-determined and rarely changed. We adopted this process in Budapest, and although we quit using it after a while due to my own laziness, a few years later Laci Sparing and Eszter Czéh (our current HR director) revived the evaluation system and honed it to near-perfection.

Another lesson we learned from Margaret was the importance of how we presented our results. An important part of this presentation was to give things the right name, and make them sound good. For example, although the U.S. office continued to require regular infusions of funds from Budapest, we started to receive financial statements from them indicating that our U.S. operations were slowly becoming profitable – or, at least, that a positive trend could be identified. When I tried to point out the inconsistency – why do they always need more funds if their results are increasingly positive, then our U.S. accountant gave me an exhaustive lecture that the funds they required were just “bridge financing.” This sounded much better already. She also explained the difference, in the American accounting system, between a “P/L (profit and loss) statement” and a “cash flow statement,” and that it is completely normal for the first to be positive, even if the second is negative. Once I understood this, I came up with a formula for reconciling these two statements and for ascertaining whether the difference between the two was warranted or not. My formula was a sort of “control sum” equation, using various figures from the accounting system, and if everything was in order, then the sum should equal zero. Since this equation did not correspond to any standard rule of accounting, our accountant – a bit condescendingly – called this “the Gábor equation,” but henceforth added it to her monthly statements. Unfortunately, this still did not change the grim reality that



the real trend was negative. Later, when a large international accounting firm audited our books, and it turned out (much to my accountant's astonishment) that they, too, were essentially interested in the "Gábor equation," this was not enough to cheer me up.

## **The importance of naming and simplifying things**

We had plenty of opportunity to learn that if you don't call something by its proper name, then you've lost. Once, at a McDonald's (my children loved McDonald's, so sometimes I had to eat there, even though I can't stand hamburgers), I wanted to order something that didn't come in one of those terrible American buns. I saw that they had a dish consisting of small pieces of fried chicken, which didn't come with a bun, just French fries. I didn't know what this was called so I tried to describe it. The cashier at first listened with interest, and when I got to the point of saying "chicken," she immediately said "Oh, a chicken sandwich," and placed the order. "No, no, no sandwich, please," I pleaded, "that's the whole point, I don't want the bread, just French fries." But this was more than the cashier was willing to decipher, so she just turned to the next customer, and I went without my lunch. (Later, I learned that what I had wanted – for lack of anything better – is called "Chicken McNuggets.")

I heard an even more extreme example of the importance of using the right term at a different fast-food restaurant. When you reach the head of the line, the first thing that the nice girl behind the counter will ask is:

– For here or to go?

If you want to eat in the restaurant, you say "for here," and the girl reaches for a tray with her left hand. If you want to take your order home, you say "to go," and the girl reaches for a bag with her right hand. A well-trained cashier will have the movements down cold: "For here" – left hand; "to go" – right hand. But if the hapless customer should use different words like, "yes, I want to take it home," then the girl will be totally confused; she isn't prepared for this sort of thing.

After this experience, the expression "for here or to go" became a byword at Graphisoft, which expresses, in a nutshell, how to make yourself understood in America. Any time one of us tried to get too complicated, the rest would retort:

– Get to the point! For here or to go?

These examples illustrate that, in the interests of efficiency, Americans simplify everything to the last degree. I first encountered this when trying to have



a user manual written for topCAD, hiring someone from America's well-developed manual-writing business. The manual was soon completed, but I was disappointed that the book used such simple examples to illustrate topCAD's particularly intelligent functions, and so detracted from topCAD's value, since the illustrated examples could be done using programs much cheaper than ours. When I mentioned this, the manual writer replied:

– I see that you Europeans like things that are very complicated. But we Americans like simple things.

After this, we didn't even try selling topCAD in America.

Another example (I swear this is the last) of Americans' penchant for simplicity involves one of my cousins, who grew up in Italy but had been living in the U.S.A. for decades. One day he was walking by a lake, where a young boy was fishing. The boy asked him to help disentangle his fishing line. My cousin agreed, and then returned the fishing rod. Then a game warden appeared and demanded my cousin's fishing permit. My cousin said he didn't have one, but why should he – he wasn't even fishing.

– The sheriff will decide that, – said the warden and handed him a citation, which he either had to pay on the spot or else appeal at the sheriff's office.

My cousin called the sheriff, with whom he immediately became very friendly, because they recognized each other's Italian accents. After a pleasant conversation, my cousin brought up the issue of the game warden, who was so foolish as to issue a citation for disentangling a fishing line without a permit.

– Wait a second, – said the sheriff. – How far were you from the water when you were untangling the line?

– Well, about a yard, – said my cousin.

– Well, then unfortunately you have to pay, – said the sheriff. – According to law, anyone within six feet of the shoreline with a fishing rod in hand must have a fishing permit.

– Okay, I'll pay, – said my cousin, – but isn't this law a little ridiculous? After all, it's perfectly clear that I wasn't fishing.

– It's not ridiculous at all, – countered the sheriff, – it's a good law, because it leaves no room for argument. If it weren't so clear, then we could argue for days about whether the line was in the water, whether it had bait on it, whether you caught any fish, and if you did, whether you threw it back, etc., etc. But this way it's perfectly simple: we just determine whether you had a rod in your hand and whether you were within six feet of the shoreline.



Although the American market for cheap mass-market goods is much bigger than in Europe, this doesn't mean that we have to compete with them in the cheap mass-market products; they are much better at it than we are. The automobile was not invented in the U.S.A., but the assembly line and the Model-T were. In the world of software, I don't think that we Europeans have a chance when competing with operation systems or office-type applications (not even if some of these American programs happen to have been written by Hungarians). But there is a market opportunity for larger, more complicated systems that meet specialized demands; this is not the Americans strong point. A good example is Germany's SAP and the successful American presence of the French firm, Dassault, which specializes in integrated CAD-CAM engineering applications.

These examples of successful European companies kept our hopes up throughout our series of ups and downs in America. To be successful, we had to learn to understand America and to adapt to Americans; not by trying to do what they did, because they did it better but by identifying where and how they could benefit from what we do better. Most importantly, our product, no matter how complicated the task, had to be as easy to use as possible.

## America and the world

When "learning" about America, we must never allow ourselves to feel superior just because of the irrefutable fact that Americans do not understand us in the same way as we understand them. They don't have to, because their internal market is so huge. As a result, they are at such an enormous advantage that they don't have to adapt to the rest of the world, but can expect the rest of the world to adapt to them.

At around this time, I read a *Business Week* article educating American businessmen about the difficulties of doing business in Europe. Among other things, this article warned them that it could take up to a week to get a check cleared if it is drawn on an American bank. At this point, I recalled that in the U.S.A., no one even accepted my check from the German Hypo Bank, except for my lawyer, and it took him two months to get the funds transferred. (But I paid him quite enough, so it was okay.) But if you were to point out this discrepancy to an American – notably, that they consider something "slow" in Europe which is totally impossible in the U.S.A. – they won't understand what you're talking about.

– Where's the discrepancy? – they'll ask.





Americans accept their own size and the resulting advantages as completely natural. You can't expect them to understand the self-deprecating irony which helps East Central Europeans live with their own relatively minimal clout. In 1999, at a conference in Los Angeles, I participated in a panel discussion with the heads of our two biggest American competitors: Carol Bartz of Autodesk and Keith Bentley of Bentley System. I wanted to start off my presentation with a well-known Hungarian joke: An elephant and a mouse are walking over a bridge. The mouse pipes up:

- Listen, what a great big booming noise we make!

With this joke, I meant to highlight the size difference between the two giant American firms and our own. Fortunately, my American colleagues dissuaded me from telling the joke, and they were right: since then, I've tried out the joke with several Americans, and none of them got it. A mouse will laugh at the joke, but the elephant won't get it.

Let's return to 1993 and Margaret, from whom we learned a lot, and under whose leadership our American operation became much more professional. This was good for increasing our expenses, but not good enough to realize our expected revenues. So, despite all the promises, our American firm continued to require continuous financing, in ever greater amounts, from the parent company. The essence of the problem was probably that Margaret's professional experience did not coincide with our firm's area of expertise: she had never dealt with either CAD or architecture before. At the time we hired her, the headhunter pointed this out to me, but I had considered her Harvard Business School credentials much more important because that sort of "professional management" knowledge was just what Graphisoft had been missing. But it was probably due to her lack of concrete experience in our area that Margaret did not directly deal with any of the office's three tasks: marketing, building a distributor network, and giving technical support to our clients. Instead, she hired a director for each of these tasks. But our revenues were too low for this; we could not sustain an office whose general manager was confined to "full-time" general management without directly taking responsibility for specific business operations.

In addition, tensions developed between our headquarters in Budapest and the American office. They were frustrated that we in Budapest were trying to manage them from afar, without understanding the American standards of business communications and processes. In short, we didn't speak their jargon. We, on the other hand, felt that the resulting condescension from the Americans was



uncalled for. To draw a parallel: just because Hungarian butchers do not cut beef as they do in the U.S.A., and there is no such cut as “prime rib” or “T-bone steak,” does not mean that Hungarians do not also eat these excellent parts of the animal.

Margaret would have been ideal as a second-in-command at the Budapest headquarters, as a deputy in charge of general operations. Once a firm has reached a certain size, then it is essential to have a strong second-in-command, who identifies with the top manager’s goals and ideas, and will execute them with a firm hand. The first in command has to fly high, to inspire and give strength to the others, but in doing so often becomes disconnected from daily realities and doesn’t pay attention to details. That’s why he needs a good deputy, who, however, is not usually the right personality to be in the top position. Margaret was such a person, but for the role that Graphisoft envisioned in its American office, we needed a “top manager” type.

I first realized this after meeting a well-known venture capital investor from New York. I met him at a conference and later invited him to our office in San Francisco. This occurred during Margaret’s first year with us, when I was very proud to have a real professional manager heading the office.

– Yes, she’s good, but she’s not for you, – my investor friend said during lunch, after he had met Margaret.

– Why? – I asked.

– How much do you pay her? ...Wait, let me guess.

And he guessed her salary exactly, right down to the penny.

I was astonished.

– How did you know?

– It’s my business. What you need is someone who makes twice as much.

And, he felt, that was all the info I needed. In the United States, much more so than in the rest of the world, people are assessed almost exclusively according to their value on the job market. And Americans are very good at making such assessments.

So Margaret was only partially a success, but we had little chance of finding someone better if we hired the headhunter for a second round. But, as has so often happened in Graphisoft’s history, luck was with us. Earlier in this chapter, I mentioned David Marlatt, who worked for Abvent in France, and who, in January 1989, helped us during the Macworld Expo in finding an office and starting up our U.S. company. David was American, trained as an architect, and had gone to Paris in 1986 to study French architecture. There he became acquainted with



both Abvent and ArchiCAD, and with Sarah, who soon became his wife. As Abvent's director of marketing, he remained in Paris for several years. Since, among Abvent managers, he spoke the best English, I usually negotiated with him and we developed a good personal relationship. When he finally decided to return to the U.S.A. with his family in the summer of 1993, we offered him the job of taking over our office in San Francisco.

## **A new boss takes charge**

With David, we solved all of our problems in one fell swoop. He not only understood architecture and CAD, but had learned the ropes of marketing ArchiCAD with our most successful distributor; he could offer technical support to our clients himself, if needed. He knew and respected Graphisoft, and we respected him for his achievements in France; the tensions between the U.S. office and Budapest dissolved immediately.



*David Marlatt in the Oyster Point office*

As his first goal, he set out to ensure that the U.S. office actually paid for our product. He understood perfectly the frustration we felt in Budapest; five years after opening the office, all we did was spend money, and saw no light at the end of the tunnel. In contrast to what most managers argued, David did not ask for further investments; instead, he wanted to demonstrate that the revenues of the



U.S. office could help defray our software development expenses. He argued that only then would his office earn the right to influence the software's development, so that it met the needs of American users. In fact, in Budapest we had long considered the U.S. market requirements as a primary consideration; but David was really sending this message to his own co-workers. He wanted to end to the situation in which the U.S. office was tied, as with an umbilical cord, to the central office in Budapest and its seemingly inexhaustible funds. He wanted to motivate his people to prove that Graphisoft U.S. Inc. could stand on its own two feet. He set up the bonus system accordingly. In contrast to usual practice, bonuses were not doled out in proportion to revenues. Instead, on the principle that "we're all in the same boat," everyone from David on down could receive a bonus only in the measure of cash they transferred to Budapest for the products.

This tactic worked. In 1994, the very first full year of David's tenure at Graphisoft, the U.S. company showed a positive cash-flow, and, in Gabor Kazar's words:

— Our very first dollar made its way home to kiss the ground of the dear old motherland.

To this day, however, Graphisoft U.S. Inc. has not yet been able to make a profit after paying for the product. Nevertheless, turning the cash flow around was a big deal.

## **Graphisoft U.S., Inc. celebrates its fifth birthday**

Even during his Abvent days, it was clear that David enjoyed extravagant business events: at the slightest opportunity, he would organize a bash. He would invite the press, important clients and prospects, resellers, industry allies and sometimes even competitors. The point of these events was to demonstrate the company's high profile, not just to the world at large, but internally, for the benefit of his own co-workers. This was particularly important at Graphisoft U.S., and when its fifth anniversary rolled around in January 1994, it was time for a party.

A contingent of 30 Graphisoft employees from Budapest attended this event, but total attendance was around 200. Our marketing consultant, a Hungarian émigré in San Francisco named Laci Bakonyi, had the idea of inviting high-profile Hungarians from the Bay Area as special guests. Edward Teller<sup>6</sup> accepted our invitation, and even honored us by giving a speech.

6. Edward Teller (original Hungarian name Teller Ede) (January 15, 1908 – September 9, 2003) was a Hungarian-born American theoretical physicist, known colloquially as "the father of the hydrogen bomb."



It was a moving sight to see István Gabor Tari rendered speechless for once by the honor of sitting next to the great scientist at dinner. Indeed, when we had used Dr Teller's photograph in our presentations 12 years earlier, in our immodest references to the traditions of Hungarian scientific excellence, we never dreamed that we would meet him in person. The honor was in no way diminished by the fact that in his speech, Dr Teller mixed up Graphisoft with Microsoft several times. The best part of his speech was this remark: "You know, when Johnny invented that machine for you fellows..." (He was referring to János (John) Neumann, the Hungarian inventor of the computer.)



*Viktor Várkonyi greets Edward Teller at Graphisoft U.S.'s fifth birthday party*

## **“Big Doug”**

Among the directors Margaret had hired earlier, David retained only Doug, the director of sales, primarily because of Doug's loyalty to the firm. Doug identified with Graphisoft to a remarkable extent, which was quite moving, and in fact almost cost him his life. To strengthen the ties between the U.S. office and the rest of the Graphisoft community, David would come to our annual distributor meetings in Budapest with a whole contingent of our U.S. management. Doug was very enthusiastic about the upcoming trip and refused to acknowledge that he was ill. David saw this, and tried to dissuade him from coming, but to no avail. Doug insisted on coming and delivering his meticulously prepared speech at the meeting. Unfortunately, he did not have a chance to deliver it, because on the



first day of the conference, he collapsed, and was taken to the hospital by ambulance. They operated on him immediately, but we were told that his chances of survival were very slim, and if his wife wanted to see him alive, she should come immediately. Less than 24 hours later, his wife Sunny, who is of Korean origin, was sitting by his hospital bedside. Everyone was moved by her devotion, and soon Sunny received a nurse's uniform and from then on spent 16 hours a day in the hospital as a volunteer nurse, at Doug's side. And Doug recovered.

Sunny was able to fit into her surroundings beautifully, in a way that I think is a particular talent of women from the Far East. Yet she was unable to communicate verbally with anyone, since few hospital workers spoke English, and even those who did could not understand Sunny's Korean-accented English. But apparently this was no obstacle. Sunny lived at our house, during those short hours when she was not at the hospital. Doug's recovery took several months, and during that time our family went away for a week. Naturally, Sunny remained at our home, and we gave her a Graphisoft phone number, in case she should need anything. And once, she did. One night, returning late from the hospital, she opened our gate, and Samu, our big bobtail, escaped out into the street. Sunny tried to chase him back inside, but this was hopeless. In despair, she called Graphisoft, where Gábor Konecsni, one of our lead programmers working late into the night, picked up the phone. In her heavily accented English, Sunny tried to explain the crisis: The big dog is out on the street! Konecsni misunderstood; he thought she said "Big Doug" (which made sense, considering that Doug was about 250 pounds before his operation); and Konecsni envisioned Doug in a delirious state running about on the street. Konecsni called all his available Graphisoft colleagues to the scene, and prepared them for the worst – they might find Doug unconscious on the street with all sorts of tubes hanging out of him (like in the famous closing scene in the movie *All that Jazz*). Instead, what they found was Sunny trying fruitlessly to coax Samu back into the yard.

## Pay per use

Another way in which David differed from his predecessor was that he was attracted to new, untried solutions and ideas. This was one reason for his immediate, enthusiastic approval of the "Pay Per Use" scheme (PPU) invented by Tamás Hajas and his colleagues. The point of this scheme is that we use the protection key (the protection device provided with each sold ArchiCAD package, which prevents illegal software copying) to keep track of how much time the customer spends using ArchiCAD. This way, the customer doesn't have to pay the entire price of the soft-



ware at once; he pays on a monthly basis, depending on how much he has used the program. The protection key can be set to allow a set number of hours of use, and we don't sell the program on a "once and for all" basis, but rather provide the rights to a certain number of hours, and this can be renewed after the time runs out. This scheme seemed to solve our price problem in America, which had plagued us from the beginning. Our target market of small architectural firms, with only one or two employees, found our \$4,000 selling price very high indeed, but we could not lower it without endangering our European market, where the price was 20–30 percent higher than in America, yet sustainable. We could not reduce the American price any further, because most of our revenues stemmed from Europe, and we dared not risk this revenue by creating an opportunity for "grey imports" from America to Europe.

PPU appeared to be a marvelous solution. Not only did it solve the price problem, it was also adaptable to our client's business cycle: he need only pay more if he has more work – that is, when he has more revenues himself. It's a great marketing slogan: "Let your client pay for the program; good business for you is good business for us."

We figured that PPU would be a good deal for the distributors, too, because it held the promise of an ever-growing, ever more valuable business for them: the more buyers they had, and the more time the buyers spent working with the program, the more revenue the distributor could expect on a steady basis; the client base was easily measurable and so would become an asset that could even be sold. A recurring problem among distributors was that they worried about funding their retirements; their only asset was their distribution rights, which were easily lost and therefore difficult to sell if they wanted to retire. If PPU enabled them to develop a quantifiable client base that provided a steady income, however, then they would feel that their own future was more secure, which in turn would encourage them to sell the program even more enthusiastically than before.

Despite this promising scenario, from a business point of view, PPU was about the worst idea we could have come up with; it nearly brought the whole company down.

What did we fail to consider?

### **Financing for the transition period**

It was possible that the client base would have eventually generated continuous revenues, but in the meantime we still had to make a living. Selling a PPU program required about as much work as selling a traditional full-price package, yet



instead of making a profit of \$1200–1400 per package, the reseller only made \$100–150 on the starter PPU package. Even if the expected revenue in the coming years eventually resulted in a positive ledger, our resellers were not even close to having the capital necessary to finance such a transition over several years. We in Budapest could somehow weather the transition period, only introducing the scheme slowly, on a country-by-country basis, but this scenario would have meant unacceptable losses for our undercapitalized dealerships.

### **Lazy clients**

If a customer invested in relatively expensive technology, the high purchase price would encourage the customer to make good use of the product. Without this incentive, the user would be much less motivated to start training and to switch over to the new technology. With a PPU sale, we had a much smaller chance of winning a real user who would actually use the program, as opposed to the much greater commitment represented by the client who bought the traditional package.

### **Negative incentive**

The problem previously described was exacerbated by the psychology of the PPU system: it may have sounded good that “you only pay if you use it,” but put another way, this scheme meant that you would be “punished” for using the program. When the user started the program, he would always be thinking, “the clock is ticking, I’m going to pay for this.”

### **Price sensitivity**

Our biggest mistake was in thinking that the PPU system was a good solution to the price sensitivity of our less wealthy clients. A person of modest means is always worrying about the future, and so is much more likely to agree to a single, significant investment, which assures some security for the future, rather than a commitment to making payments on the long term, without actually getting to own anything. For example, a person of modest means will sooner buy a car than rent one or take a cab on a regular basis, even if, were he to calculate the costs on the long term, the latter options would be shown as less expensive.

After a few years of struggle and the near-bankruptcy of several resellers, the very scheme from which many of us hoped we would break into the American





market was laid to rest. The real lesson: for the most part, winners in business are not those who discover something new. The world's biggest and most successful software company, if I am not mistaken, was not the first to do anything.

## The lawsuit

The crashing failure of PPU sent a tremor through the company, but this was nothing compared to the shock caused by an internal conflict and the resulting three years of lawsuits.

Earlier I mentioned Laci Bakonyi, our friend of Hungarian extraction, who had an excellent flair for advertising graphics and marketing. On a contract basis, he produced excellent brochures, advertisement and other marketing materials for us. His relationship with Margaret had sometimes been stormy, but he soon won David's confidence, and even got David to hire him as marketing director. Though I liked Laci, I didn't like the idea of hiring him. I felt that such a small company, whose leader, David, had such good marketing sense, did not need a separate director of marketing. But they countered this argument, saying that Laci would be doing the same work for the same money as before, but – as he put it – security was important to him. I couldn't put my finger on why I didn't like the idea, but in the end, against my better judgment, I agreed to let David hire Laci.

Initially, things went well, Laci did good work, and it took a year and a half before I figured out what my instincts had warned me against from the beginning. As long as Laci had worked on a contract basis, the relationships were clear: David was the client, and Laci did the work David asked of him. But when Laci became part of the company management, this situation changed, and Laci felt that as marketing director, he was one of the company leaders, and bore responsibility not only for his own work, but for the success of the company as a whole. In this, he was entirely correct, but this attitude showed me that I had been right, too: this company did not need so many leaders. We had too many cooks. The conflicts between David and Laci, which were professional on the surface, became regular – and they weren't really about concrete business matters; after a while, Laci no longer accepted David as the boss.

At first, I tried to make the peace, explaining to Laci that even if his critical observations may have been warranted (everyone makes mistakes, after all), our possibilities were limited, and David was by far the best manager we could expect to get in the United States. At this, to my great surprise, Laci asked me whether I wouldn't name him as the head of the company. I hadn't expected this.



Laci wasn't the least bit a "boss-type" person; I had never guessed that he had such ambitions. He was an artist blessed with creative marketing instincts, but he could not manage people, and had zero sense for financial matters. Not wanting to offend his vanity or sensitivity, I did not explain all this to him. Instead, I used a different (and equally true) explanation: here in America, one of our biggest disadvantages was that customers didn't trust us immediately, because we were Europeans; so it was vitally important that the head of the company be a native-born American.

I never dreamt that in telling this to Laci, I violated one of the most hallowed principles of the American Constitution, namely that all men are created equal and you cannot discriminate against someone just because of their place of birth, and especially not when it comes to promotions in the workplace. I did sense that if I had been a native-born American, I would not have said such a thing to Laci, but I believed that if one Hungarian says this to another, there is nothing wrong in that. Laci's lawyer, however, believed otherwise and sued us for "discrimination based on national origin."

## **Peculiarities of the American legal system**

I learned about the American legal system at the cost of painful experience. Most of these suits do not progress to the stage at which a judge or jury can weigh the evidence and render judgment. The firm that has been sued will pay up long before that can happen – almost totally irrespective of whether there is any merit to the plaintiff's suit. The way it happens, is that the individual plaintiff's lawyer is working solely on the basis of a contingency fee, so the plaintiff does not have to pay lawyer's fees, in contrast to the defendant, a company, which has to pay the lawyers continuously. This way, it is in the plaintiff's interest to make the suit drag on as long as possible, to make it as expensive as possible for the defendant and the plaintiff's only winning argument is this: If you settle and pay up, it will be cheaper for you. This argument usually works – let me reiterate – practically independent of the merits of the case. The plaintiff need not win; he just has to make sure the process is long and expensive. This is easy enough; sometimes even the opposing side's lawyers support this tactic, because it is also lucrative for them. In fact, the plaintiff need not worry even if the case makes it to court and if the judge rules against him, because even in this case, he is not responsible for the court costs which have been paid by the defendant. The only way he would have



to pay is if the defendant sues him for this money, in an entirely new suit, and is able to prove that the plaintiff did not act in good faith when filing the original suit, because he knew he was wrong from the beginning. This is practically impossible to prove.

In many other countries, contingency-fee arrangements are not allowed, precisely to avoid this kind of unjustifiable suit, which is initiated solely as a means of blackmailing the opponent with mounting costs. But in America, the legal culture is supposed to “protect the little guy,” and so will accept contingency-fee arrangements if the plaintiff is an individual citizen who is up against a corporation. The argument is that without such an arrangement, the individual could not afford to bring suit against a rich corporation, even if he were quite sure that he would win on the merits of his case. There is some logic to this argument, but the result is that firms are vulnerable to scores of baseless “blackmail” suits, supported by a thriving segment of the legal industry. Consequently, most firms simply build this cost item into their budget, just like rent or insurance, and they simply pay up at the drop of a hat.

We had already run into a case like this, at the very beginning of our American experience, in 1989. We commissioned a task from a contractor for \$4000, and the contractor did not fulfill the order even after missing several deadlines. Finally, he delivered a very low quality, unacceptable product. We didn't pay, so he sued us for \$12,000 (that is, three times the price of the job!), declaring that our “failure to pay caused him mental distress requiring medical treatment and loss of revenue,” and so forth. We consulted a lawyer, who also charged us \$4000 for writing a detailed analysis of how much it would cost us to continue the suit, so we would have been much better off if we had just paid the plaintiff. We paid, but – I decided then – for the last time. The next time such a thing occurred, we'd show the plaintiff that we were not so easy to blackmail.

The next time, our tactic really worked. When one of our co-workers whom we had let go filed suit, we immediately filed a counterclaim, detailing the damage to the firm caused by the ex-employee's poor performance. At this, his lawyer dropped the suit and didn't even bother answering ours. Most lawyers who deal with such cases usually represent several cases at a time, and such a lawyer tries to optimize his time: if he meets with unexpected resistance in a particular case, he'll quit, and concentrate his limited energies in the direction of least resistance.

So I hoped with some justification that the “tough tactics” would work against Laci Bakonyi, too. It almost worked. After our initial counter-suit, Laci's lawyer



threw in the towel, but Laci did not give up. He fired that lawyer and got another, more stubborn lawyer, in the person of Mr Stone, who answered our counter-suit with yet another counter-suit. In this, Mr Stone was actually justified, because our attorneys had obeyed my directive to deal with this issue as cheaply as possible, thereby demonstrating that we weren't that vulnerable to blackmail on the cost issue. They gave our case to a brand-new lawyer with a low hourly rate, who made a major legal mistake in filing our counter-suit. So Mr Stone sued not only us, but also our attorneys, who immediately recognized their error and paid up promptly (using insurance money for just this purpose), so Bakonyi's side even got some money to pursue their case against us.

But I didn't give up either, since I was convinced it was a matter of who blinks first. I prepared for our first in-person "reconciliation" negotiations with Laci and Mr Stone, at which I planned to convince both of them that we would not pay up just because it would be cheaper. I asked Mr Stone whether he knew which airline had never been hijacked in recent years. He didn't know.

– It's Israel's El-Al, – I told him. – And that's because they never let themselves be blackmailed. In the beginning they had to sacrifice a few lives, but the terrorists learned from this that it was not worth trying with El-Al, because El-Al would never give in. We hold a similar view. This suit may cost us a lot of money, because, Mr Stone, you are a clever lawyer and you can make it drag on a long time, but in the long run this will be worth our while, because anyone who wants to follow Mr Bakonyi's example in the future will know it's not worth trying with our company.

I was very proud of my statement, which I considered very effective. But not for long, because Mr Stone replied as follows:

– I understand that Graphisoft's reputation is worth a lot to you. But you know I feel the same: my reputation is built on the fact that every one of my clients has gotten their money in the end. You may be a tough guy, Mr Bojár, and I might have a more difficult time than usual, but my reputation cannot allow Mr Bakonyi to lose, because then I won't have clients in the future.

I won't bore you with all the excitement and unexpected twists and turns of this case. Suffice it to say that it lasted three years and, all told, cost us nearly \$1 million. We changed lawyers three times, and on one occasion I had to interrupt my vacation to fly from Budapest to San Francisco for just one day to attend a hearing. I didn't even heed Mr Stone's threat that the suit could hurt our planned introduction on the stock market. I didn't give in. I decided to live with the fact



that the case was listed in our initial public offering (IPO) prospectus as an open legal case. (As it happened, this had no effect on our IPO; according to financial market experts, there wasn't a single significant American company without one or another such case on its hands.)

But despite my resolve, in view of the Bill Clinton-Paula Jones case, in the end I gave up after all, and we paid up. If even the President of the United States cannot cope with the intricacies of the American legal system, then I have nothing to be ashamed of by losing. Our fate was like that of the Hungarian in the joke, who sneaks into the Turkish pasha's harem and gets caught. He can choose his punishment: endure a hundred strokes of the cane, or pay a hundred thousand dollars. The Hungarian doesn't want to pay, so he chooses the hundred strokes, but when they get to 96, he cries out:

– I can't take it any more, I'd rather pay the money.

## Why I like America

Despite all the failures and frustrations, and even after the legal wrangling, I still like America. I even like its sometimes childlike naiveté (Peter Hornung's wife, Ági Czap, compared America to one big Disneyland), but most of all I respect that Americans seem to have freedom in their blood.

In 1989, we had a 90-day ticket on Northwest Airlines, which meant that during that time period, we could fly as many times as we wanted, provided there was space on the flights. We used it for business trips, but also for weekend excursions. We planned a three-day weekend in New York. While in Memphis waiting to change planes, I idly looked through the Northwest schedule to see where else they flew from there, when I noticed that they had a flight to New Orleans leaving a few minutes later. The weather was gorgeous; perhaps New Orleans would be more interesting than New York. Inspired, I stepped to the counter and asked whether we could change our tickets to fly to New Orleans instead.

– Of course, – said the ticket lady with a smile. – New Orleans is much nicer at this time of year, – and handed over the new tickets.

– What about our bags? – I asked.

– They'll arrive by the evening, just call this number to tell them which hotel you want them delivered to, – she replied, handing me a card.

Two hours later we were in New Orleans. We rented a car, found an acceptably priced hotel downtown, and by evening our bags were there, too. We went for



a walk on Bourbon Street, enjoying the street scene and the music. We sat down in a sidewalk café to have a beer, but a few minutes later we realized in a panic that my nine-year-old daughter, who had been with us just a minute ago, was nowhere to be seen; she'd disappeared into the crowd. But soon we found her: an acrobat riding a unicycle, surrounded by a huge crowd, was performing all sorts of tricks and juggling pins. He'd asked for a volunteer to hand him the pins; the volunteer was none other than my little girl Nóra, who was ordinarily so shy that she'd never have spoken a word to a stranger – but on the main square in New Orleans, she pirouetted right out in front of the audience. This is the feeling of freedom that you just breathe in with the air.

America is sometimes plagued by sickness, but its powerful capacity for self-healing will sooner or later defeat the sickness. Not so long ago, the treacherous disease of racism plagued this enormous national and racial melting pot to an even greater extent than in Europe – the very Europe upon which racism inflicted history's biggest holocaust. But America fought bitterly against racism, and defeated it. In a sense, in the lawsuit against Laci, we became innocent victims of this fight against racism. I came to understand this when the case was finally closed and I asked the arbitrator whether he didn't believe that the cost to American companies of the countless such baseless blackmail cases, like ours, was harmful to the U.S. economy. He answered:

– This is still a much smaller cost than if we allowed someone to get off scot-free even once for saying “stinking nigger.”

America is now the leader of the world, and we non-Americans may not like it. But I cannot forget the feeling that came over me in 1993, driving along the highway outside of Budapest, when I passed a long army convoy and caught a glimpse of a black soldier driving one of the trucks (at that time, we had never seen any black soldiers in Hungary), and I realized that these were American peacekeepers on their way to Serbia. My first thought was not “what are they doing here?” Instead, it was a feeling of relief that “finally, the killing will be over, and next year maybe we can vacation on the Dalmatian coast again.” World leaders are unpopular by default, but I'm afraid that any alternative to America in that role would only be worse.

After the shock of September 11, 2001, America was overcome by a sickness once again. Americans accepted severe restrictions on human rights and their most hallowed freedoms, and they even re-elected a President who took



the country to war by telling obvious lies. America's enormous size makes it sometimes ineffective and slow to react, but I know that it will defeat this sickness as well.

Of course, there are many things that are better in Europe. For example, in the U.S.A., the ratio between high-quality and cheap mass-market goods is drastically tilted toward the latter, when compared with Europe. For me, the most painful example of this is Americans' seeming indifference to the quality of their food. I cannot understand how they can eat so much of this awful junk food. Of course there are good restaurants in America, but relatively fewer than in Europe.

I will never forgive Laci Bakonyi for the lawsuit (after all, we had been friends), but he did have two indisputable accomplishments: he showed us where you can get the best prime rib in America, and also told us where to find the best Thai restaurant in America and maybe the world.

Prime rib is the only "real" American food that I really grew to like. As mentioned, our butchers in Hungary cut the meat differently, and in Hungary it is hard to find prime rib, that fantastic cut that is even better than filet mignon. It is a nice thick piece, all meat (with just a little fatty part on the side), and is much more tender than any other steak – it practically trembles on the plate. To request it well done is as heretical as wanting your filet mignon well done. Practically every serious American steak house has prime rib on the menu, but I've never eaten one that competes with the one served at the Hungry Hunter, near South San Francisco. From the airport, you take Highway 101 north, and just a few miles down the road you will see, rather incongruously among the business parks, a hunting lodge-type restaurant with a fireplace which is always full of people and. You can get your prime rib either "small," "medium" or "full size." The pricing policy here, as almost everywhere in America, encourages you to eat more: "The more you buy, the more you save!" The full size is not much more expensive than the medium, which is not much more expensive than the small, but no matter what the incentive, I could never get to the point of eating an entire full-size prime rib at Hungry Hunter at one sitting. And I am not a man of small appetite.

Discovering the Manora Thai restaurant was even more worthwhile than the Hungry Hunter, if such a thing is possible. It is in one of San Francisco's more undesirable neighborhoods, South of Market Street, a cheap little restaurant on a forsaken street corner among the seedier gay bars. No one would



guess that this was the very first Thai restaurant listed in Fodor's gastronomy guidebook to world's best restaurants. You can't make a reservation in advance; you just go in and sign up on the list, then stand at the bar with a bottle of Thai beer (you only get a glass if you ask for one) and wait patiently for your turn, about an hour. But it's worth the wait. Don't miss the shrimp soup made with coconut milk (very spicy!); the large portion is enough for four people. As a main course, I recommend any of the special vegetable, fish or meat delicacies served sizzling hot on an iron plate, whose exotic spices can be smelled from afar. The only other place I have had anything to compare was in Bangkok, at the floating fish market, where dipping the plates into the filthy river water constitutes "dishwashing," but even this could not keep me away from the tantalizing aromas.





## Chapter 10

# Making good at home: our bite of the Hungarian Apple

Let's return from the U.S.A. back to Hungary, and jump back in time to the years when Graphisoft was just getting started – in fact, even further back in time...

### Why Hungarians are good at math

In the late 1970s and early 1980s, Hungary was relatively well endowed with “gray matter” in the realm of software development, particularly when you consider that Hungary's economy was poorly developed overall. The reason lay in our tradition of mathematics education, which has its roots in the early twentieth century (and extending back several centuries earlier), and is the reason for the unusually high number of scientific Nobel Prize winners educated in Hungary. One reason for this highly developed mathematical tradition is the survival instinct developed in Hungarians over the course of centuries of occupation by several different empires and cultures. Under conditions of political oppression, society's interest in and respect for the non-political science of mathematics was far greater than in those politically dependent areas of study, such as law or economics. The other historical reason for Hungary's mathematical emphasis is to be found in the discovery of America; or, more generally, the Age of Exploration, leading to a shift in the world's commercial center, from Central Europe toward the oceans and the seafaring nations. As a result, Hungary's commercial traditions withered, along with the social prestige of the trading occupations. In the Netherlands or England, a child who was good at math would probably be steered toward commercial pursuits



(which require sharp math skills), while in Hungary, a similarly gifted child would be trained either for the priesthood or as a scientist.

Remnants of this Hungarian educational tradition have survived to this day, even despite a lamentable decline over the past 50 years. I have been able to observe this through my own children's experience. I have spent quite a bit of time in the U.S.A. with my family, where I enrolled my children in relatively good schools. At other times during their elementary and high school years, we were able to arrange for them to attend school in England, France and Germany for a few months at a time. This way, we had the opportunity to compare the educational requirements and standards of the different countries. My children learned much which they wouldn't have learned at home, primarily, of course, foreign languages. But we also saw that in mathematics, the standards of learning were still considerably higher in Hungary than in any of these other countries. So, in this realm, Hungary needs to preserve its advantage, instead of having to catch up, like in almost every other field.

Naturally, this slightly one-sided emphasis on scientific knowledge in the educational system also has severe disadvantages. We Hungarians are proud of our Nobel Prize winners, but we often forget to add that nearly every one of them had to emigrate in order to work in their respective fields, thus Hungary did not benefit from their talents. Their emigration was not only due to foreign occupation, or various degrees of political oppression, but also because a strong economy, in which creative genius can thrive, requires a highly developed, respectable commercial and management culture, and these are completely absent from Hungary's educational tradition.

### **Get-rich-quick vs. building a long-term business**

The bases on which Hungary's first private entrepreneurs built their companies during the early 1980s were a tradition of relatively high-level mathematics skills, and a sadly deficient commercial culture. Consequently, the successful entrepreneurs fell into one of two groups. One group attempted to create internationally successful businesses, relying on our well-educated workforce at home. Graphisoft and some others (Recognita, Geometria, and later Kurt and Morphologic) were globally successful in their respective niche markets. In contrast, the second and larger group of this early entrepreneurial generation sought to expand into the void created in the domestic markets due to the lack of a commercial culture.



The second group made its money faster and attracted more attention. The success stories of the 1980s (such as Kontrax, Műszertechnika, Microsystem and Controll amongst others) were able to meet the pent-up demand, primarily in the personal computer market. The early forms of market-based private enterprise were already flourishing. However, Hungary's state monopoly over its foreign trade remained in place for years to come. In this twilight zone between a market and a state-controlled economy, the hunger for PCs was exacerbated by the embargo on technology transfer from West to East (CoCom). You will remember the "private import" I spoke of earlier which evolved to meet this demand. This "private import" industry later spread throughout the country. Initially, only state firms had the right to purchase "privately" imported computers (through Bizományi Árúház, Ofotért, Migért, etc.), but within a short time, a few private companies also gained this right. After a while, the state monopoly on import activities was relaxed, and private companies were able to import computer parts, but not entire computers. The official reason behind this halfway house for computer import was "to encourage domestic production." But wherever the market starts to work, administrative measures will fail. The most astute companies bought complete PCs in Taiwan, then disassembled them in some small factory outside the Hungarian border, imported them as "parts," then reassembled them over the border. This was still much cheaper than having to manufacture your own PC.

This was a great business opportunity, but we didn't go in for it. Primarily because I couldn't see why our company would be better at it than the rest; in other words, I couldn't see our competitive advantage in this kind of business. True, I had participated in a number of similar "private import" transactions during the 1970s and 1980s, and I have a feeling I was a pioneer in this business. But I also knew that if many others got involved in the business, then I would have no reason to believe that I would remain the best at it. In addition, I was bothered by an instinctive worry that such easy money could not last long. The semi-legal status of the business also bothered me, but more important was my conviction that as economic liberalization in Hungary continued foreign trade activities would sooner or later be entirely liberalized. Foreign manufacturers would show up in Hungary with their own representatives, and we would not be able to compete unless we produced significant added value ourselves.

As a rule, I distrust deals that are "too easy." There's always something wrong with them. For a short time, such deals might work out, but it is very dangerous



to base a long-term business on easy money. Sooner or later, others will enter the market and then it will be very difficult to adjust to smaller profit margins. While profits are large, the company will spend and behave accordingly, and these habits are very hard to change later. The majority of the success stories in the hardware business during the mid-1980s went bust for these reasons.

## **Expanding our Apple connections: initiatives and dilemmas**

So, masochists that we were, we didn't get involved in the hardware distribution business until 1990, by which time the sky-high profit margins of earlier years had shrunk to 10 percent, and even less. But by now we were interested in the business, because we had gained a competitive advantage: our good relationship with Apple. As one of its software development partners, we knew Apple products well; we understood the company's unique internal culture and its international trade network; and we had gained a whole host of personal contacts. We noticed that Apple established its own office only in the larger countries. In the smaller countries it would carefully select a dedicated local partner, who would have de facto exclusivity in that country – an advantage that the other big PC manufacturers did not give to their independent distributors. We later adopted Apple's commercial strategy as a model in building up our own international network. In 1989/1990, as Hungary became a democracy, the technology embargo was lifted and we expected that Apple would turn its attention to the East Central European market. Based on our earlier contacts, it was natural that we would be Apple's exclusive distributors in Hungary.

As early as 1988, we had submitted our first proposal for a Hungarian distributorship to Gilles Mouchonnet at Apple's European center in Paris. Gilles was responsible for managing software development partners. He forwarded it to the proper office, but at this first attempt, their response was a stern rejection. More than other companies, Apple took the CoCom embargo seriously, and it was still in effect at the time. But apparently our proposal remained alive somewhere in the company's enormous bureaucratic jungle, because about 18 months later, toward the end of 1989, when the Hungarian political transformation that had followed the economic transformation was deemed irreversible, and we were no longer an embargoed country, a sympathetic



gentleman from Apple's Stockholm office, Kent Edquist, looked us up and asked whether we were still interested in being Apple's distributors in Hungary.

A year earlier, I would have agreed without hesitation, but now, with the albatross of the American adventure around our necks, tying down practically all of our resources, I was not at all sure that we should also jump into this new business. Yet I didn't want to turn it down either, because there were several reasons in its favor:

- As exclusive distributors, we would be sure to do good business.
- We would expand our market for ArchiCAD in Hungary. This was important, not because of the size of the Hungarian market (which was tiny in comparison to the German and American markets, even taking our home-turf advantage into consideration), it was important because we finally wanted to have some Hungarian users, whose experience and feedback we could access much more quickly and directly than feedback from German, French, Italian or American users, which reached us much more circuitously.
- I felt that deepening our relationship with Apple could have several additional advantages. For one, our role as software development partner would carry more weight if we also played the second role of distributor. For another, I hoped we would learn a lot about how to manage a worldwide reseller network. (In this, I was proved right; we learned much that was worth emulating; we also learned what not to do.)

Still, I was unsure about the decision. I called a company meeting to discuss the pros and cons with everyone. At the time, the whole company could fit into the basement of our headquarters (which otherwise functioned as the programmers workplace.). The opinion was almost unanimous: we should go for it. I think one reason for the enthusiasm was that our success was due to our export business, and we were still relatively unknown in Hungary; the superstars of the domestic hardware import business were much better known in Hungary's IT industry than we were. So I didn't need to convince my co-workers that the distributorship was a good idea; instead, I had to warn them of the risks and worries. I explained that I would not allow our top-performing international salespeople (primarily Gábor Kazár, Gyuri Kafka and Imre Pákozdi) to waste their talents in the hardware business. However, I added, if any of the programmers felt that they might have a knack for sales, they should let me know.



The very next day, András Szigeti volunteered. He had been with us only a year (his previous workplace had been – you guessed it – the Institute for Geophysics). He told me he'd like to give the distributor business a shot, and anyway his current programming project was almost complete. It was not easy to accept an offer from this relatively new employee, since some of our more veteran colleagues would have liked the potentially very rewarding position. Indeed, a short time later, a long-time programmer, Tibor Gáthy, also indicated he'd like the job. But now, as with other similar decisions in Graphisoft's history, I was primarily interested in which employee would be inspired to produce the most through this challenge. I chose András precisely because I felt that the distributor position represented a much greater opportunity for him than for one of the company's more senior employees.

It turned out to be a smart decision, because after successfully developing Apple's distributor business in Hungary, András went on to a brilliant career in international sales for Graphisoft. (As for Tibor Gáthy, he did not give up his sales ambitions for good. Thirteen years later, in 2002, he left Graphisoft to found a car dealership.)

## In Apple's labyrinth

By the spring of 1990, András and I had submitted three business plans to Apple, and they finally accepted the third one. It wasn't quite clear whether the person who accepted on behalf of Apple was really authorized to do so, since they kept changing the person within the Apple bureaucracy who was supposed to be in charge of us. Our first partner was Kent Edqvist of Sweden. We became good friends with him, especially after we helped him get hold of a used Trabant car as a relic of Hungary's socialist system, which was in the process of collapsing. Next, he passed the baton to Hermann Schoonemann, a hefty Dutchman from Amsterdam, who was in charge of Eastern Europe for a few months. We developed a good relationship with Hermann, too, but our wanderings within Apple's labyrinthine bureaucracy continued. In the summer of 1990, another gentleman arrived representing Apple, and visited the Budapest-Prague-Warsaw "golden triangle," which at the time was the favorite itinerary of nearly every Western businessman of any consequence. Jim Spillars, the new Apple rep, finally approved the last version of our business plan, and put pen to paper on the long-awaited distribution contract with us.

We organized a big press conference on the occasion of the contract, and we finally got some domestic press coverage. The TV news and every major daily newspaper ran the story in a prominent spot. András's excellent media contacts were





*With András Szigeti (far right), we sign our first Apple distributor contract with Jim Spillars (center)*

put to good use. The success of our own software in Western Europe and North America did not win nearly as much public attention in Hungary as the news item that a big American multinational hired us to represent them. I found this a bit unfair, but accepted it as a fact, and I, too, was happy that we finally counted for something at home. We had missed out on the spotlight in Hungary because we had been exporting since 1984. The regime change, for us, had occurred well before the final collapse of the Communist system in 1989 and in a certain sense we were merely onlookers as the historic events in Hungary during the late 1980s rapidly unfolded. By securing the Apple distributor business in Hungary, we became more directly involved in Hungary's affairs during a very exciting time.

## **The end of communism in Hungary**

All of us, naturally, reacted with euphoria to the political events of 1989/1990 in Hungary. On October 23, 1989, the day on which the Republic of Hungary was declared (also the 33rd anniversary of Hungary's anti-Communist revolt of 1956, until then an officially taboo event), I joined my mother, my wife and my children at the enormous public celebration in front of the Parliament in Budapest, where even distant acquaintances fell joyfully into each others arms.

In developing our Apple contacts, we looked for every opportunity to hob-nob in American business circles. Through Laci Szabó, whose father-in-law worked at the U.S. Embassy, we were able to obtain an invitation to the reception for President George Bush Snr during his memorable 1989 visit to Hungary. At this reception, I met Hungary's Prime Minister, Miklós Németh, for the second time.



My first meeting with Németh had occurred two years earlier on the Greek island of Corfu, on a hotel beach. This hotel was owned by a Greek woman, a Communist, who had been given ownership of the hotel as compensation for her sufferings under the previous right-wing dictatorship in Greece. The woman regularly invited the leaders of the Communist world to vacation at her hotel – paying her party dues, as it were. The mother of a friend of mine once acted as interpreter for the hotel owner during a visit to Hungary, and so these friends were invited to the hotel during the summer of 1987. That's how we came to visit the beach and to meet the future Prime Minister of Hungary. Already then, there were clear signs of the bankruptcy of Hungary's planned economy and of its eventual collapse. It was also clear that Hungary's Communist leaders, while implementing cautious liberalizing measures, were seeking help from the West to avoid economic disaster. The group of Hungarians vacationing in Corfu developed an informal rapport, and I asked Miklós Németh why he thought that the West would provide aid to Hungary's Communist leadership. – We don't really harbor any hopes, but we have to give it a try, – he replied. – If we fail, then anyone who thinks they can do a better job is welcome to try; we'll relinquish power.

I was shocked. A Communist leader does not say such things. Frightened, I glanced about to see who else had heard this statement. Finally, I decided that Németh was provoking me. But a few days later I was in for an even bigger shock. We were staying in private quarters near the hotel, and came to the hotel just for the beach, traveling in our little motorboat. One morning, our Austrian hosts had big news for us at breakfast: according to a mass-circulation Austrian newspaper, then Hungarian Prime Minister Károly Grosz had called on the Soviet Union to withdraw its troops from Hungary. It was 1987, and naturally this news item was a fake. But at first, we fell for it, and were so excited that we shouted the news from our boat to our friends on the beach, forgetting, for the moment, who the rest of the Hungarian guests were. Miklós Németh swam out to our boat with Olympian strokes and clambered up the side:

– What did you say that Károly is up to?

I was mortified, and, stuttering, managed to impart the news.

Németh's reply:

– Oh, that's still a couple of years off...

Two years later, when meeting him at the reception for President Bush, I could see that Németh had earlier spoken honestly. I take this opportunity to acknowledge that, now.





## No fear

As Apple's distributor, I was regularly invited to all kinds of American-related events in Budapest. At one investors' conference in 1991, I was asked to chair a panel consisting of representatives from giant American corporations. The panel also included a Hungarian official, a well-known state secretary for privatization issues. He was not a bad presenter, and his English was good, too, but when he strayed from the topic at hand during the debate, I cut in. Only later did it dawn on me: only two years ago, I would never have dared interrupt such a high ranking government official. The real meaning of democracy came to me: we were no longer afraid of government officials or ministers. We no longer feared our police force. My stomach no longer quaked if the policeman stopped me for a petty violation. I might have to pay the fine, but I didn't have to be afraid. The policeman could not do with me whatever he wanted, like the Romanian soldier at the ice-cold airport in Bucharest, when he pointed his machine gun to send me away from the window.

## A contract too good to be true

Returning from this historical digression to our own little Apple business... The distribution contract we signed in September 1990 with Jim Spillars was very favorable to us – suspiciously favorable, in fact. The distributor's profit margin was the highest I'd ever heard of among our Apple contacts; we were eligible for generous discounts for educational institutions; and we were promised a large number of free computers for demo purposes. In fact, Jim Spillars even supported our big PR idea, which was to offer free Apple computers to Hungary's election commission for use in the local government elections of that fall (the computerized election tallies of the first free democratic elections earlier that year had been spectacularly bungled). After we added up everything we would gain through this contract, András carefully inquired: are you sure this is a real contract with the real Apple Computers? To make sure, I called up our old friends from the Apple network, and everyone reassured me that Jim Spillars, recently hired for his job, was indeed responsible for Apple's Eastern European partners. Spillars had already gained some experience in the region while working for other computer firms, and that's why he'd been hired for that position by Apple.

But András's suspicions were not groundless. When we placed our first order for new computers to the Dutch shipping center named in our contract, the shipping center called back in surprise: where did we get these order prices?



We replied: they're in our contract. Which contract, they asked. We faxed it to them. No answer. Despite a series of faxes and phone calls, no one was available. We tried reaching Jim Spillars, but he had seemingly disappeared. Again, we called up our old Apple contacts, from Paris to Amsterdam to Stockholm, and everyone promised to look into it and call us back, but no one called us back. In fact, when we tried calling them again, they, too, were no longer to be found. What had happened? Were we dealing with some sort of phantom company? Things were getting awkward at our end, since we'd received a number of orders that we were expected to deliver. For a while, we bridged the gap by having our office in Munich order a few computers in their capacity as software developers for Apple, and in this way we could meet our most urgent orders. András then sold a few of our outdated computers that our programmers had worked on, and were due to be replaced. But the number of such computers was very limited – not at all adequate considering that we were “wholesalers.”

## Esther Dyson's conferences

Luckily, a very important Budapest conference was soon to take place, which Jim Spillars would certainly have to attend. The conference, called “East-West High Tech Forum,” was organized by Esther Dyson, who later became a close friend (and also a member of Graphisoft's Board of Directors). Dyson was the creator of the “PC Forum,” one of the IT industry's most prestigious annual events. The PC Forum took place every March in Scottsdale, Arizona, and its regular panelists included such legendary names as Steve Jobs and, of course, Bill Gates. (In fact, in 1993, even I was invited to speak at the PC Forum.) Esther came from a family of scientists: her father was a Nobel Prize-winning physicist, and she had personally known Einstein as a family friend during her childhood. I got to know Esther through Jim Clark, the founder of Silicon Graphics and later Netscape. As soon as Jim learned that we were Hungarians, and moreover, that we were Hungarians who planned to stay in Hungary, he called Esther and told her she had to meet us. Everyone in the industry knew that Esther was a fan of East Central Europe; she passionately believed that the countries of this region, including Russia, would sooner or later, by virtue of their cultural roots, become a driving force in the world's technology industry. So she organized the East-West High Tech Forum in a different East European country each year. The first such Forum was held in 1990 in Budapest. At the time, Hungary was well ahead in the regional race to “catch up” with the West. Esther was able to lure such big names as Philip Kahn, the



founder of Borland. Naturally, some of the presenters were from Eastern Europe, but both our knowledge of English and our presentation skills seemed pathetic compared to those of our counterparts from the West. But Esther's perseverance worked wonders, and five years later she renamed the conference "European High Tech Forum," leaving out the East-West adjective, and indeed, by then it was harder to tell which presenter was from the Eastern half of the continent, and which from the West.

But let's return to 1990, to the first East-West High Tech Forum in Budapest, where Jim Spillars was supposed to speak on behalf of Apple Computers. Attending the conference were Martin Huml, Apple's representative in Prague, and James Guidi, his American partner who had moved to Prague. They, too, had signed a contract with Jim Spillars, and were in the same boat as us: their orders for hardware were not accepted and their earlier Apple contacts had all seemed to disappear. So together, we awaited Jim Spillars and hoped to get an explanation for what was going on. But instead of Jim Spillars, we got yet another Apple representative, this time a Swiss gentleman named Humphry Bruno, whose sole assignment here was to tell us (in person, not in writing, since they never gave us anything in writing) that Jim Spillars was no longer an employee of Apple, and Apple planned to revise the contracts we'd signed with him, since the existing provisions of those contracts "do not represent the usual conditions under which distributors operate." So we had been right: our contract with Jim had been too favorable to us, and he'd been fired as a result. (The moral of the story: it can be dangerous to "win too much" in the course of business negotiations.)

Fine, we said, we'd like to see the revised conditions, but meanwhile it would be nice if Apple would ship us our orders so we could deliver to our customers – the current backlog was bad, not just for us, but for Apple's reputation. Bruno was sorry but he could do nothing until a new contract was signed. Naturally, we had no intention of suing our best partners; we would have signed just about anything, as long as they would finally ship the products. But it was not easy to get them to send us anything to sign. Apparently, such enormous corporations move very slowly. I wrote a letter to the president of Apple's European headquarters, stating unequivocally that at their behest I would consider our previous contract null and void, and expressing our readiness to accept Apple's "usual" contractual conditions for distributors. I really believed that the conditions under which other distributors worked would be acceptable to us, since surely it could not be in Apple's interest to constrain us to work under worse than usual conditions.

## **The “standard” distributor contract, as dictated by a multinational company**

Finally, the new contract reflecting the “usual” conditions arrived, but what we got was something we’d never expected in our worst nightmares. For pages on end, the contract said only that Apple was responsible for nothing, not even if it ever got around to shipping us any product, while we, the distributors, were responsible for everything. As for pricing, all it said was that we could order products using the “current prices and payment conditions established by Apple,” but these prices and conditions were subject to change at any time. As for exclusivity, the most important provision from our point of view, the contract was remarkably explicit, but in the wrong direction. Our status was most definitely NOT exclusive; Apple Computers was permitted, without any previous or subsequent notification, to authorize anyone else in Hungary, at any time, to distribute Apple products, open an office or even to sell Apple products in Hungary from another country, either directly or indirectly through any other partner. I found this last provision to be the most outrageous, since the contract expressly and clearly prohibited us from selling Apple products outside of Hungary. Yet, it appeared, other parties from other countries were allowed to sell to Hungary?

## **Sergio Nanni enters the scene**

I’d never imagined I would ever sign a contract that dictated such humiliating conditions. But I signed it. And to reach this decision, all I needed was a few convincing arguments from Sergio Nanni, President of Apple in Italy, who had become the fifth official from Apple’s global jungle to take charge of the promising and exciting East European market within the course of about a year – the same position had been held, and lost, by the Swedish Kent Edqvist, the Dutch Hermann Schoonemann, the American Jim Spillars and the Swiss Humphry Bruno. I have never met a more outstanding, more convincing businessman than Sergio Nanni. If our experience as distributors of Apple products in Hungary had had no other benefit than our getting to know and to learn from Sergio Nanni, that alone would have made our enormous efforts worthwhile.

His first act was to get Gilles Mouchonnet to help him. Gilles knew us well, since up to then he had only dealt with Apple’s software development partners. To my complaints about the almost ludicrously arrogant contract conditions, Sergio merely asked me:



– Do you ever plan to sue Apple Computers? Because if you don't, then these contract conditions have no importance. Instead, you should place your trust in Apple's corporate record and note that EVERY one of its distribution partners is acting, de facto, on an exclusive basis, EVERY partner is doing good business as a distributor and, apart from a few truly unusual cases, Apple has never revoked any partner's distributor rights.

Sergio convinced me that real-life experience is a much stronger guarantee for us than any well-written contract language.

The contract, he explained, had no other purpose than to guarantee that we could never blackmail Apple with a lawsuit if any of their employees should make a mistake and infringe upon one of the contract conditions by mistake. It was a big company, with lots of employees, not all of them geniuses (this we knew already) and any one of them could make a mistake. And then the partners might threaten a lawsuit based on a contract provision. That possibility would put Apple in a vulnerable position, since a small company might do very well as a result of a lawsuit. It might even make more money by filing a lawsuit than by struggling with the distribution business. But the reverse situation did not hold: Apple had nothing to gain from suing a small, poorly capitalized company like ours if we should make a mistake. The contract was one-sided then, because in a civil case the smaller and poorer party would have the advantage: it would have something to gain from its larger adversary, while the big company had nothing to gain from the small one.

I found this a convincing explanation. At that time, I could not know that a few years later, we would learn how right Sergio was, through our own painful experience, in the American Bakonyi lawsuit, in which we were the big company and Bakonyi the plaintiff.

## Visit to Prague

Before signing the contract, we wanted to touch base with James Guidi and Martin Hummel's office, which was a good excuse to take a trip to Prague. The last time I'd been there was during the dark days of socialism, when visiting Prague counted as a real treat. For one thing, we could gaze in wonder at the consumer goods available at the TUZEX dollar store (we could actually spend our black-market dollars there, whereas in Hungary's dollar stores you had to prove that you'd acquired your dollars legally). For another thing, the only Chinese restaurant in Communist Eastern Europe was to be found in Prague, and to get a table you had to have good contacts and make arrangements months in advance. We remembered our adventures in

Prague fondly and were curious about the Czechoslovakian regime change, the so-called “Velvet Revolution.”

The city was beautiful and full of life, but we soon encountered disappointment. The beer at the famous beerhouse U'Fleku was not the same as in the old days – neither in price nor in quality. We got a table without any trouble, unlike Communist times, when we'd waited for hours in line just to get in. But when they served the beer, we knew why. This watery brown liquid bore not the slightest resemblance to the creamy, firm-textured black nectar that not even the best Guinness could approach, and which had been, perhaps, the most refreshing experience in the entire socialist camp. And instead of the old price of 5 koruna, it now cost 20 koruna for a pitcher. But in the old days you couldn't even get a seat in this restaurant.

In the sphere of private business, Hungary's eight-year head start (since economic reforms in Hungary had begun in 1982) was evident in other respects, too. By this time, the office of a Western company in Budapest would never have looked like James and Martin's office in Prague did. The headquarters of “Czechoslovak Apple” was housed in an apartment in a run-down building looking out onto a dingy courtyard. The toilet, shared with tenants of the other apartments, was at the end of the corridor, and the rusty iron key to the WC hung by a piece of nylon string on a nail by the front door. András even asked whether Jim Spillars had ever visited this office before signing their contract. Of course, he hadn't.

The Czechoslovakian Apple office was far behind ours, not only in appearance, but in sales performance, too. During our first full year as an Apple distributor, we sold more Apple computers in Hungary than all the other distributors in the region (including Russia) combined. Sergio was a demanding boss. Once a month, we all had to go to Paris and report on the previous month's results and our plans for the next month. For a long time, our Hungarian office did much better than the rest, not just in sales performance, but in our monthly presentations: we had already spent a few years among professional businesspeople in the West, and it showed. For example, it never occurred to the other East European distributors to complement their presentations with computer-designed slide shows, but for us this was a given. The other distributors also had Westerners on their staff, but most of these people were gold-diggers, looking to get rich on the fresh opportunities offered in the “Wild East,” rather than real businessmen. For example, a small Austrian company won the distributorship rights for Russia, and these Austrians, in an unguarded moment during a spontaneous conversation, once told us:



— It's hard to make money in Hungary, because you guys have already developed to a certain point, but Russia is still the land of unlimited opportunity.

Indeed, in Hungary, the “Gorenje era” was already past, while in other countries of Eastern Europe it was just beginning.

Gorenje was a popular Slovenian brand of refrigerator; not available in Hungary, which symbolized all the Western forbidden fruit and that could only be brought home from Vienna in the trunks of countless Trabants and Ladas. Three years earlier, I had traveled with my family to Vienna to do some Christmas shopping, and in one of the shopping centers, my children each got a free balloon. I don't like shopping centers, so I went out onto the street, balloons in hand, to wait for my family. Another Hungarian family approached, also on a shopping trip and evidently not very well-off; the woman pointed to the balloons and asked me in broken German how much they cost, and was ready to hand over her hard-earned, black-market Austrian Schillings in exchange for a free balloon.

It is frightening to even consider how much money Austrian businesses profited from the visiting Hungarians mesmerized by the vast supply of consumer goods. Those of my generation can remember the concepts of “customs grandma” and “granny-sitting.” Some Hungarian families would bring their elderly grandmothers along on shopping trips to Austria, just so that they could purchase additional hard currency, which you could buy on a per-person basis, and also to bring home more duty-free items (since the duty-free limits were also set on a per-person basis). The Austrians, seeing another money-spinning opportunity, opened a “granny-sitting” operation just across the border in Nickelsdorf, where Hungarian families could leave their elderly family members while they went shopping, paying 100 schillings per day. The grandma would get a cup of coffee and wait for the family to pick her up in the evening, on their way home. We even heard a horror story that one such grandma, who had perhaps not left her home in years, was overcome by the excitement of the journey and actually died. The family was able to drive home, with the body propped up by the seatbelt, telling the customs officials: “Poor grandma's asleep, let's not wake her” and so were able to take advantage of her allotted hard-currency and duty-free allowances as a kind of posthumous legacy. I am not sure that this actually occurred, but the fact that such legends developed gives you an idea of the atmosphere of those years.

Hungary's leadership would have done better to introduce economic freedoms gradually, and in the right order, to avoid this “decompression sickness” of Hungarian society. For example, they could have liberalized foreign trade before liberalizing the hard-currency limits, instead of the other way around. It is



impossible to calculate the sums of money that might have stayed home instead of lining the pockets of Austrian businesses.

But we got past this era too, and the Austrian gold diggers went further afield to find “good business” east of Hungary.

## **Sergio keeps his word**

Sergio had convinced me not to worry too much about our written contract, and to look instead at Apple’s record of experience, and to trust in that. Indeed, Apple put a lot of effort into trying never to fire a single distributor, and thereby to win and keep the trust of the other partners. For example, our friends in Prague initially looked quite pathetic, and their sales performance was similarly pathetic, but instead of looking for new partners, Sergio got them into shape. Using a headhunter in San Francisco, he hired a good executive, Steve Cottingham, who knew what a distributorship should look like and how to put the place in order. Within a few months Steve had done wonders. They moved into decent office space and built up a smooth running operation with about 50 employees. Every tram in Prague boasted Apple’s logo against a snow-white background; you might almost say that the whole of Prague was dressed in Apple’s colors. Such an ad campaign was still relatively cheap in Prague, but would have been way out of our budget in Budapest. James and Martin remained owners of the firm (after all, they had made the initial investment), and they did what they were best at: they brought in their high-level contacts.

The operation succeeded, and this showed in their sales performance. Between 1991 and 1992, we doubled our sales, but sales from the Prague office increased eight-fold. In other words, in 1991, we sold twice as much as they did, but in 1992, they had sold twice as much as we did. In acknowledgement of these results, the Prague office (called TIS) was entrusted with distribution in Russia as well. As for our Austrian friends who had gone to Russia in the hopes of “cashing out” and making quick money, with no intention of building long-term businesses, Sergio had no qualms about firing them.

So Steve Cottingham moved on to Moscow, and there, he also produced big results. In 1993, he was Apple’s “Man of the Year.” I made him an offer: if he should ever tire of the world of Apple, he would always be welcome at Graphisoft. (In 1996, he took me up on the offer, so we will have more to say about Steve.)

Sergio had fewer hassles in Hungary. We produced the expected revenues, and even if these did not match the levels reached by the Czech partners, Apple left us in peace for quite some time. András and I were happy to attend the monthly meetings in Paris





(always my favorite city), and I was not at all put out that Sergio kept us on such a tight leash, since one of our goals in taking on the Apple distributorship was to learn from them how we could better manage (and tighten the leash of) our own distributors.

One of our more surprising and interesting “Apple lessons” was that the distributor’s discount should not be tied to sales volume. We had assumed, and so far had acted on, the principle that bigger sales volume should be rewarded with a lower wholesale price (that is, a larger discount) for the distributor. But Apple followed a different path. As we had seen ourselves, during the early days of a distributor business, when sales volume is still low, the distributor really needs a larger gross margin to partially offset the early losses. Later on, as the sales volume grows, even a lower gross margin will be enough to bring in the expected profit. With a growing sales volume, it is inventory financing that can cause problems. Consequently, Apple’s policy was to adjust payment conditions (instead of discount) to sales volume. While a new distributorship had to make payment within 30 days (not a problem as long as sales volumes were still low), later the payment deadline was extended, first to 60 and later to 90 days, which can be a very helpful concession when juggling large sales volumes.

Of course, we did not just learn good and useful lessons from Apple. On occasions, we received lessons in what NOT to do. For example, one of Apple’s policies was that every single local advertisement had to be approved by Apple’s central office to make sure it adhered to Apple standards. This policy led to a senseless rejection of one of our best marketing slogans in Hungary. Our marketing personnel had “Hungarianized” one of Apple’s famous worldwide slogans, “The Power to Be Your Best,” into a clever wordplay on the fact that the Hungarian word for apple sounds very similar to the word for power. And every Hungarian we asked liked this translation very much. But the powers-that-be at Apple headquarters (who had the Hungarian slogan translated back into English, thereby missing the whole linguistic point) rejected our slogan on the grounds that their corporate marketing communications guidelines forbade any allusion to the fruit.

From this incident, we learned the importance of leaving reasonable room for our distributors to work in their own areas. It’s not a good idea to consider them mere foot-soldiers charged with carrying out a too-strictly centralized marketing policy. This could undermine their motivation and the intangible, yet crucial, feeling that they are part of a common effort. Of course, a consistent global marketing policy is important, too, but it should leave room for local flavor. As with everything, it’s important to find just the right balance.



In our capacity as Apple distributors, we established a division of labor between András and me that would enable us to put these valuable experiences to optimal use among our own international ArchiCAD distribution network: András received full authority to build up the business in Hungary, while I was in charge of maintaining contact with Apple headquarters and its international network.

We were important to Apple in our capacity as software developers, but as distributors we were a hundred times more important. We understood this from our own experience. We had a network of programming companies who acted as “development partners,” whose products served as useful complements to ArchiCAD. These companies were important, but never got as much of our attention as our distributors, who provided our revenues. At Apple, it was no different. As distributors, we at Graphisoft had access to higher-level contacts at Apple, which we in turn used in developing our own ArchiCAD distributor network.

## **A hectic trip around the world**

Following this distribution of roles, I represented Hungary at Apple's distributor and reseller meetings. The most memorable of these involved a three-week trip around the world. Apple scheduled three separate sales conferences about a week apart for each of the three major regions of their global operations, and the company's high-level executives attended all three events one after the other. The regional divisions at Apple were about the same as at other large U.S. companies. The first and most important region, naturally, was the United States. Next came the so-called EMEA region, consisting of Europe, the Middle East and Africa. (Placing the European and African markets in the same regional grouping is evidence of a finely honed cultural sensitivity; it can only be explained by the fact that they're in the same time zone.) Finally, the third region was the “Pacific Rim,” that is, the Far East, although Apple threw in a little cultural mix here, too, by adding the non-U.S. regions of the Americas (Central and South America and Canada) to the Pacific region. In this, Apple departed from the usual practice of American companies, which named their first region “the Americas” to include all the countries of the American continents.

At Graphisoft, we did not follow the regional conventions either of Apple or the other American companies; we divided the world using different logic. For us, there were the big markets – the U.S.A., Germany and Japan – each of which constituted a separate region. Next came the mid-sized markets (Great Britain,



France, Italy and Spain), and finally the smaller markets, divided into regions depending on the level of development and cultural similarity. I think that our partners appreciated our cultural differentiation, which set us apart from our American competitors.

In the spring of 1993, I organized my upcoming business trips so as to be able to attend all three of the big regional Apple conferences. Our “own” conference, that is, the EMEA conference, took place in Barcelona (where Steve Cottingham was voted Apple’s Man of the Year), but I was able to secure invitations to the U.S. regional conference (Fort Lauderdale, Florida) and the Pacific Rim conference (Hawaii), too. As a software development partner, we’d never have gotten into any of these conferences, but our distributor status made it possible. In the intervals between the three Apple conferences, I was able to take care of other business and PR matters for Graphisoft. After Barcelona, I met with our current partners in the U.K. (at the time, our partners in the U.K. were also – not coincidentally – Apple’s biggest English distributors, Computers Unlimited). After Florida, I took part in Esther Dyson’s PC Forum in Arizona (this was the year that Esther honored me by inviting me to be a panelist). Next, I spent a day at our San Francisco office before flying on to Hawaii.

Hawaii was the most colorful, interesting stop on my tour, and I was able to make new contacts for our Far Eastern Graphisoft distribution network. Once, in a hotel elevator, I had the good luck of encountering John Sculley, then Apple’s Chief Executive, whom I had met twice before: once in Cologne in 1984, and once in Paris, at a developer conference. Both meetings had been brief handshakes, but these were enough for John Sculley to recognize me in the elevator and ask:

– What’s new in Hungary?

As often before, I was amazed at the ability of American top managers to remember names and faces. I don’t know how they do it; maybe it’s a skill they learn at business school.

Apple’s Hawaiian sales conference was followed by yet another big Apple event, the Apple Expo in Hong Kong. The latter event was open to the public (unlike the events described above, which were limited to distributors), but naturally many Apple distributors continued on to Hong Kong from Hawaii. So did I, but since I was in the “neighborhood” I made a little detour to Australia and New Zealand. If you look at the map, it does seem that New Zealand is not too far from Hawaii, but it is. The flight from Honolulu to Auckland is more than ten



hours: about the same as the trip from Europe to California. A flat map is misleading, because it does not reflect the bulge of the Earth at the Equator. In New Zealand, I met up with our locally based sales rep, Ákos Szabó. In three days we did business in three cities: Auckland, Melbourne and Sydney. In Sydney, as my taxi careered past the Opera House on my way from one meeting to the next, it occurred to me that I'd really lost my mind. Here I am at the other end of the world, yet I don't schedule even an hour to visit that marvelous building.

## The Hong Kong fish market

At the Hong Kong Apple Expo, we had our own Graphisoft stand; by this time we had begun concentrating on the Far Eastern region in earnest. I was fascinated by Hong Kong's feverish atmosphere, and first got the idea to open a regional office there – which we did, a few years later.

During this around-the-world trip with all the conferences, I had plenty of unique culinary experiences, but topping the list were the fish restaurants behind the Hong Kong fish market. This discovery, too, was shown to me courtesy of our friends at Apple. The fishmongers lean out over counters facing the crowded streets, and call out their wares, trying to out-shout, out-bargain and out-argue the competition, who are all selling live fish, crabs, squid and innumerable other kinds of unrecognizable seafood. If you push your way through the crowds into the shop, you'll find a small restaurant right at the back, where the customer chooses the fish he wants to eat from the aquarium. Years later, I witnessed an argument between my friend Imre Török and my Italian cousin, both of them world-traveling gourmands. They were arguing over which was the world's best Chinese seafood restaurant. They were discussing world-famous citadels of gastronomy in London, San Francisco and Boston, when I finally interrupted:

- Have you guys ever been to the little restaurants behind the Hong Kong fish market?
- Well, of course, – they answered in unison, nodding their heads vigorously, their eyes lighting up in memory of those heavenly tastes. – We were arguing over which was the best Chinese seafood restaurant AFTER the Hong Kong fish market.

After Hong Kong, I was almost on my way home, with just one more detour to Tokyo to meet with a few partners, potential clients and Imre Pákozdi, who was already laying the groundwork for the opening of our Graphisoft



office in Tokyo. But that is a story that occurred after our Apple distributorship era, and deserves a separate chapter.

## High-level visit from Cupertino

Before the around-the-world tour, we hosted a high-level visit from officials at Apple's worldwide headquarters in Cupertino, California.



*Apple executives at Graphisoft's Kolumbusz Street headquarters: Sergio Nanni and Michael Spindler*

To the outside world, Apple's number-one executive was still John Sculley; the strategic marketing genius who took over the reins from Apple's founding executive Steve Jobs. But inner circles at Apple knew that the company's strongman was not Sculley, but the German, Michael Spindler, who was pushing his way to the top like a locomotive. Spindler took a three-day lightning tour of the Budapest-Prague-Warsaw triangle, accompanied by Soren Olssen, Apple's Chief European Executive, and our friends Sergio Nanni and Gilles Mouchonnet.

We took full advantage of the Spindler visit's public relations potential. We organized press conferences and interviews (journalists had a terrible time deciphering Michael Spindler's German-accented English), but our PR agency's biggest coup was

to organize a motorcycle police escort for Spindler's limousine. In a celebration of the triumph of capitalism, the motorcycles driven by the white-helmeted policemen sported Apple flags, and for the duration of the escort, at least, we out-hyped even the Apple advertising extravaganza organized by our friends in Prague. The American-style stretch limo was not completely free of defects: once it stalled, and the police escort contingent had to push it back into action, much to the amusement of passers-by. (Later, Michael admitted that the police had made him a little nervous.)





*Under police escort*

We also got the Mayor of Budapest, Gábor Demszky, and even Hungarian President Árpád Göncz to meet with the delegation. Our agenda was to convince Apple to create a development center and perhaps a computer factory in Hungary. This turned out to be a hopeless agenda, but President Göncz did his utmost for the cause. He received the delegation in the Hungarian Parliament and gave a mesmerizing account of Hungary's unique historical and geographical characteristics, pointing out that as the crossroads of four cultural regions







*With Apple executives, visiting Gábor Demszky, Mayor of Budapest  
(seated at right: Moussonnet, Nanni, Olsson and Spindler)*



*... and with Árpád Göncz, President of the Republic of Hungary*

(Germanic, Slav, Balkan and Latin), Hungary was the ideal location for a Central European office. At the end of the visit, the President bade farewell by thanking the delegation for Apple's support, 17 years earlier, for Hungarian democracy. He then handed over signed copies of the poster printed in 1986 by Hungarian émigrés in Paris on the 30th anniversary of Hungary's anti-Communist revolution, for which Apple had provided free computers.





*András Szigeti presents Árpád Göncz with the first "Hungarian-speaking" laptop, the Apple PowerBook*

As we left, President Göncz called András and me back for a moment. In such a situation, a President will usually say something like "Keep up the good work, good luck," or some such generality, but President Göncz, with his inimitable humility, asked us:

— I hope I didn't do too badly? I did what I could to help, boys, I hope you get something out of it.

Then I understood what is meant by the saying that a good king is one who serves, not rules. I don't know whether Hungary has ever had another leader to whom this adage applies.

Our guests were also impressed by Árpád Göncz's personality, and after the visit, Sergio remarked:

— It is a fortunate country that has statesmen like him.

But the end result of Michael Spindler's visit was not good. Spindler was not impressed by our sales results, and he was especially bothered by the fact that Apple distribution was not Graphisoft's No. 1 business. He insisted that every connection between the two ventures — software development and hardware distribution — be severed, and as a first step, our "inside man," András, should be replaced by someone new to head the distribution business. He even asked Sergio to find the right person. Clearly, he wanted someone who reported to Apple alone. The Apple delegation wrote me a letter on this subject right away, from Budapest airport.





I was not certain as to whether I would accept this decision and tell András about Spindler's intention to replace him, but in the end this was moot. The letter in which the Apple executives described their plan was addressed in such a way (either by mistake or on purpose – I still don't know which) that András would read it first, and so I had no choice about whether to tell András about Spindler's intentions. This was a major and unfair blow to András, who had done an excellent job.

But he survived the blow, and during the years after giving up our distributor business, András built a successful career in the international distribution of ArchiCAD. Using his contacts, he built up the ArchiCAD distributor network in Hungary and Eastern Europe. He found such excellent partners as Witold Szymanek in Poland, Tomas Lejsek in the Czech Republic and Hungary's Péter Módis, whose impressive professionalism demonstrated that Hungary's market for ArchiCAD is not as small as we had assumed. After these successes, András took over as Director of Worldwide Sales, taking charge of our independent distributor partners around the world.

But we had had enough of Apple pulling our strings, and decided to give up the distributor business. If we couldn't even decide on our own person to head the business, then it was no longer really our business, and we weren't interested in the role of passive investor. Also, it was becoming clear that as sales volumes picked up, our distributor business would be ever more difficult to reconcile with our software development business. The former is a large-volume and extremely capital-intensive activity, which can bring good profit in an absolute sense, but this profit is relatively small compared to the sales volume. With software development, just the opposite is true. Expressed as a percentage of sales revenues, profits on software development are much larger, even if the absolute sales volume is less. If our primary business were as wholesalers of computer hardware, then there would be no problem: a software business on the side would provide a nice little extra profit. The other way around would not work, however. If our primary source of profits was software development, then the entire profit from that activity would be tied down, even stifled by the hardware-wholesale business, which required so much capital.

## **Selling the Apple distributorship**

Sergio continued to keep his word, and instead of keeping to the letter of the contract (which stated that Apple could replace us with anyone at any time), he helped us find a buyer for our business. He even told us the selling price; he had an unerring knack for finding a balance so that we would make a good sale, yet



the buyer would not be paying so much money that he would have nothing left for additional investments.

But even without Sergio's rational limitations, I could never have extracted even one additional penny from the appointed buyer; Nabil Bustros, the best negotiating adversary I ever encountered before or since. My only comfort is that he said the same about me to our mutual friends.

Nabil Bustros is a Lebanese Maronite Christian Arab living in Paris, who owned most of Apple's distributorships in the Middle East, and saw opportunities to expand in Eastern Europe. He first founded companies in Bulgaria and Romania. Later, at Sergio's behest, he started negotiating with us to buy our Apple business.

I had thought that since Sergio had set the price in advance, and both we and Nabil had agreed to it, there would not be much more to talk about. I was totally wrong. First of all, as I soon learned, the price fixed by Sergio covered only the element of the business most difficult to quantify: the so-called "goodwill" value. This was the estimated value of our market position, our client base, and our operational function – how much it would cost to rebuild all of that if we had had to start from zero. The sum did not consider the book value of our business, which included our bank account balances, inventory, office equipment and furniture, and – the most significant item – the (possibly negative) balance between accounts receivable and accounts payable. I hoped that we would not have to argue too much about these items, because they were, after all, relatively easy to quantify. Again, I was wrong. Nabil first tried to devalue our accounts receivable by qualifying them as "bad debt." I fought back by saying that we would take responsibility for collecting them. In the same way, I foiled his attempts to devalue the older-model computers in our inventory by saying we'd take over any computer that he wanted to price at an amount below its book value. But when Nabil started talking about low-cost marketing items like mouse pads, I started to lose patience. Several times, we got in an argument, and each time we'd patch things up. In the end, we both blamed the flare-ups on our respective "Mediterranean" temperaments.

But Nabil was not a cheap person; on the contrary. After we had, with great difficulty, agreed on the value of every little item, he handed over the keys to the company's three-year-old Mercedes, which I had been using, and told me I should keep using it. We had bought the car duty-free when we founded our distributor company, but had to account for it as a company asset for at least two more



years otherwise we would have to pay customs duties. When Nabil understood this, he took on the car together with the company, but was generous enough to let me keep using it anyway. Two years later, we actually purchased the car back as a Graphisoft company car, and as fate would have it, first András Szigeti used it, and today, the 16-year-old car is still a company car driven by one of our young co-workers.

An even more memorable gesture was Nabil's gift during the signing ceremony. At a dinner following one of our negotiating sessions, attended by our respective lawyers, it turned out that all three of them (Nabil and the two lawyers) all appreciated expensive luxury watches. This particular passion is not one of my hobbies, and I did not contribute to their conversation about the various famous brand-names they sported on their wrists. I'd heard of Rolex, but these people were talking about an even more luxurious class of watch brand. Nabil noticed this, and during the signing ceremony he presented me with the same kind of (obscenely expensive) Audemars Piguet watch he wore himself. I wear it, of course, to this very day.

It was not easy to reciprocate this generous gesture, but I am even more grateful to Nabil for teaching me his negotiating tactics. According to my co-workers, there is a noticeable difference between my "pre-Nabil" and "post-Nabil" negotiating techniques. Now – in closing this chapter on the Hungarian Apple era – I will let you in on one of the secrets of Nabil's ingenious bargaining techniques.

The first task is to figure out which of the many aspects of the deal are important and which are less important for the other party. These various, parallel aspects can include the selling price, payment conditions, payment guarantees and other business guarantees. Sometimes it's even an open question as to what, exactly, is included in the deal. So, the initial thing is to decide which parts of the bargaining will be a hard deal, and which are the easier parts. The next thing is to do things in the right order. You must first, and very quickly, assume a favorable position on the adversary's "soft" issues, the ones he will accede to more easily. Only after this do you start talking about issues that are more important to the adversary. If you do it the other way around, it's all wrong: in that case, you would be letting your adversary dig in regarding the issues important to him, and in exchange he would make concessions on the issues that are less important to him. This, too, is one way of doing it, but if you do it the first way, you will, in the end, have gotten a better deal all around.



I learned many such tactics from Nabil, which is only natural, since the Lebanese are the descendents of the Phoenicians; they invented the concept of money, and they apparently acquire a knack for business at a tender age. One of our sales managers lost his job because the Lebanese distributorship he was supposed to manage had gotten him to agree that the wholesale price for ArchiCAD in Lebanon should be just one-quarter of the lowest ArchiCAD price we gave to any of our partners around the world. Imre Pákozdi had a clever metaphor for the skill of the Lebanese: if a Hungarian ten-year-old child is able to take a deposit slip to the bank, then a Lebanese ten-year-old is able to properly secure a reinsured letter of credit.

So our brief three-year adventure as computer hardware wholesalers came to an end. We have remained good friends with Nabil ever since. Among our Apple friends, the bachelor Gilles Mouchonnet moved to Hungary (for the beautiful women, or so he said) and ran the business as Nabil's employee. Sadly, Sergio died a few years later.



## Chapter 11

# The first Golden Age: tasting the capital market

The years 1994 to 1997 were Graphisoft's most successful era so far. This is no coincidence, since these years saw a tremendous boom in the global IT market. As it turned out, the boom was unsustainable in the long run, and the market returned to normal only after the Internet bubble burst. But during those three years, our revenues tripled and our profits quintupled to reach 35 percent of revenues. These results were similar to those of the successful Silicon Valley firms, and they laid the foundations for our eventual decision to go public in 1998.

Four major factors contributed to the surge in our business.

1. Increased capital reserves following the sale of our hardware business.
2. Our decision to become compatible with Microsoft Windows-based PCs.
3. Favorable technological developments at Apple.
4. Increased focus on Far Eastern markets.

But, as is usually the case, our Golden Age was preceded by painful transformations and a whole series of failures, the origins of which stretched back as far as 1989.

## Defining the corporate structure

The most important transformation we went through was defining our company's ownership structure, a process which, for many of us, caused resentment that took a long time to heal. This definition process could not take place until



after Hungary's regime change, and after the new government had passed its seminal corporate legislation. Earlier, under the Party-controlled socialist system, the law had provided some small scope for private enterprises, which were given "socialist-sounding" titles such as "collective partnership" and "cooperative." But the new, post-Communist corporate legislation unblushingly resorted to previously mothballed terms like "limited liability company" and "public companies."

Up until then, Graphisoft had formally operated as two parallel organizations: it was simultaneously a collective partnership and a cooperative. Most Hungarian companies of similar size had opted for this double classification for tax reasons. Indeed, Graphisoft had a third profile, too: our firm incorporated in Munich by our friend Manfred Koritowsky was called "Graphisoft Computer Programme GmbH," which also owned our American office and ensured access to the hard currency we needed to run our operations, which were becoming global in scope. But in 1989/1990, with the new corporate legislation, the partial convertibility of the forint, and the freeing up of capital flows (all these were required for the privatization of the Hungarian economy), we finally got the all-clear to spell out Graphisoft's hazy ownership structure in exact legal detail.

Like almost every other successful Hungarian enterprise at the time, we had a difficult time naming and evaluating our ownership shares. As a collective partnership and a cooperative, our firm had had no legally definable ownership shares; just equal members who chose their leadership by majority vote. Naturally, in such companies, the original founders did not take this seriously. This scenario was indeed absurd for a private enterprise, since new partners theoretically wielded the same ownership and equal decision-making rights as the company's original founders, who had taken far greater risks. However, as long as the Hungarian legal framework failed to allow for any other formula, most such companies, like ours, swept these contradictions under the rug. I had learned something from the fiasco at Cortex, my first company, and I made a point of explaining my primacy in decision-making and ownership to new hires at Graphisoft. But only István Gábor Tari got an exact number as to his share of ownership. Newer partners at Graphisoft were told only that I considered them co-owners, but naturally in smaller proportion than the original co-founders. As to what, exactly, their "smaller proportions" amounted to, that remained undefined.



The moment of truth came on a pleasant fall day in 1989, when we took a deep breath and undertook to define company ownership using actual numbers. This would require consensus, which (we knew) would be difficult, so we resolved to sequester ourselves, stock up on several days worth of non-perishable food, and not go home until we had reached an agreement.

For me, my own selfish material interests clashed from two different directions. On the one hand, I naturally wanted to retain as much of the company ownership in my own hands as possible. On the other hand, it was clear that a significant reason for the company's success thus far was that I had been able to work together with my most important co-workers as co-owners, rather than merely employees. Indeed, I continue to believe to this day that in a company like Graphisoft, employee co-ownership is a key motivational force. So I had to reach a delicate compromise between the selfish desire to retain my own share of the company, and maintaining the motivation of everyone else (an equally selfish motive). My goal was to ensure that Tari and I, as the original co-founders, would retain an absolute majority of 51 percent, and the remaining 49 percent would be divided in a way that would still allow for additional employees to attain ownership status at some point in the future.

Early in the discussions, I committed a major error. Instead of simply stating my intent to retain 51 percent ownership (which was, after all, entirely in line with my stated decision-making powers), I tried to come up with "objective" algorithms that would end up assigning the 51 percent to Tari and me. That was a mistake, because the algorithms were rather contrived and far from being acceptable by consensus. Luckily, Laci Sparing was wiser; and declared:

— If the two co-founders want 51 percent, I think that is acceptable to all of us. Let's put that aside and concentrate on finding algorithms for the remaining 49 percent.

In the end, the proposal was, if I remember correctly, accepted without further debate.

My other proposal was to leave room for additional co-owners in the future, and to set aside a portion of the 49 percent for them. At that time, Graphisoft had about 50 employees, of whom 12 were partners in the cooperative. The rest had been promised that, sooner or later, they could also become partners as a reward for their exceptional professional achievement. I also wanted to reserve an ownership share for current partners, so we could increase their current shares if an additional reward became warranted. So, I proposed the following: Of the 49 percent, we should set aside 14 percent, and using that reserve, we would assign four percent during each of the following three years. Each year, half the allotment would



go to new partners, and half would be distributed as a reward to existing partners. As for the last two percent, it would be distributed in year four (i.e., in 1994). Consequently, we would not have to dilute the currently distributed ownership shares for the next four years in order to take on new partners or reward existing ones.

This proposal encountered more resistance than assigning 51 percent to the co-founders, but we did manage to achieve consensus without too much trouble. At the time, I was not yet familiar with the generous share option programs usual among Silicon Valley firms, but in hindsight I think our scheme reflected the spirit and proportions of the more generous share option programs pretty well.

But dividing up the remaining 35 percent among the other ten current partners was a much harder task. We came up with various algorithms, each of which attempted to objectively reflect professional achievements and seniority (the latter was a measure of risk-taking). For lack of any other measure, we tried to quantify professional achievements according to accumulated personal earnings. And to account for seniority, we assigned greater weight to earnings from earlier years than from more recent years. Everyone was more or less willing to go along with these basic principles, but severe disagreements arose over exactly how much weight to assign to years worked. Naturally, the more senior partners wanted a greater acknowledgement of their greater risk, and they were right, for in the early years of the company, not only their incomes but the very future of private enterprise in Hungary was still in question, and quitting their relatively secure government-sector jobs was a very big risk indeed. But the newer partners argued against giving disproportionate weight to those early years, and none more vehemently than Gyuri Kafka. He felt that Graphisoft's commercial success was due largely to him, and he wanted a full 10 percent share for himself. But since no algorithm produced such a share for Kafka, the increasingly heated arguments extended far into the night, and we made good use of our emergency food supply. Finally, the pressure for consensus won out, and a version of the "Misley algorithm" (which gave less weight to the years in which an employee was moonlighting at another firm) was finally deemed acceptable.

Of course, no one was entirely satisfied with the final solution, and I think the only reason we were able to agree was that most of us did not yet have a true sense of the company's actual worth. Ownership status – the mere fact of being a partner and taking part in strategic decisions – was much more significant than the numerical proportion of that ownership.





## A management failure

Predictably, Gyuri Kafka was the least satisfied with the division of ownership. I had already had a number of earlier conflicts with him regarding recognition of and proper recompense for his achievements; I was inexperienced and dealt with these conflicts improperly. Up to this point, Graphisoft's more or less objective profit-sharing arrangement described in Chapter 2, while not perfect, had worked pretty well, and before Gyuri came along, everyone accepted it. I had been able to convince my partners that it was not in my interests for them to be paid as little as possible, and indeed, I had always been able to offer everyone a little more income than they had counted on. This arrangement reassured everyone that I was doing my level best to evaluate their performance fairly. I could (and often did) make mistakes, but in this system we avoided the arduous, often demeaning ritual of having to negotiate for pay increases.

But I did not know (and how could I have known) that this somewhat paternalistic arrangement would not work with a true salesman like Gyuri Kafka. Negotiating is the very lifeblood of a salesman; he really needs to feel that he has got the best possible deal. Another thing I didn't know was that you can't expect a salesman to give a realistic appraisal of his own strengths; a good salesman will always overestimate his own achievements. This is, after all, perfectly natural: it is this supreme self-confidence that makes him good at sales to begin with. Perhaps I should have known this, for we had other star salesmen in addition to Kafka, and only Gábor Kazár, an excellent yet supremely modest salesman, was the exception who proved the rule. But I felt that Gyuri Kafka was just being insatiable, and so I was angry with him, although I should have been angry at myself for my inexperience and ineptitude.

So, despite my respect for his abilities, our relationship deteriorated and we soon parted ways. Gyuri sold his shares in the company (and valuing those shares was again no easy feat), and founded his own company, Trans-Europe Kft., which is today, among other things, Adobe Systems' representative in Hungary.

Another management mistake could also be chalked up to my inexperience, and my excellent secretary, Éva Bisztricsányi, fell victim to it. Initially, Éva had filled two roles: she was both my personal assistant and the office manager. This is a common arrangement at small companies, but as Graphisoft grew in size, these two roles could no longer be filled by a single person. I did not yet know what type of person was ideal for which role, and I let Éva choose the more impressive title of "office manager." But her personality was far better suited to the role of personal



assistant, and I did not realize then how immeasurably valuable was her ability to read my mind and anticipate my wishes. For Éva, the wrongly chosen role caused her a great deal of frustration, and she soon left the company.

It took a long time before I again finally found the right person in Kati Vitányi, another mind-reading secretary, who heroically endured my volatile and unpredictable personality.

Happily, Éva later returned to the firm, and is today an esteemed technical editor for our software documentation team.

## Valuing the firm

As the storms surrounding the definition of ownership shares calmed down, we again faced the issue of how much the shares allotted to us were really worth – shares which, in theory, could be bought and sold. A few of our partners left the company, went into business on their own and sold their Graphisoft shares, but an outside investor is usually not interested in three- or five-percent ownerships in a privately owned firm closely held by the founding management. Most of the remaining partners lacked the financial wherewithal to buy up the shares for sale, although a few of them (such as Laci Szabó and András Szigeti) took the risky step, considering their personal income, of buying the shares offered by the departing partners. Gyuri Kafka (as one might expect) managed to sell his shares for a higher price than the earlier departing partners had, but even this price was far below the valuation assigned to the shares of similar companies on the international capital markets. This bothered me, since I knew, from my American experiences, that our company really was worth a whole lot more and I did not like my own colleagues to own something whose value was underestimated. After all, I wanted their ownership status to spur them to greater efforts, but if the value of that ownership was not clear, then where was the motivating force?

Faced with this situation, we decided to find a “professional” investor interested in injecting capital into the company. In this effort, it was not really the need for fresh capital that motivated us (after all, we did not lack capital, especially after selling the Apple distributorship). What I was really after was to get an assessment of the company’s true value by way of a bona fide capital market transaction.

## The first efforts to raise capital

We turned to CAIB, an investment company deeply involved in Hungary’s privatization efforts, and charged them with finding investors for Graphisoft. Our



account was assigned to Don Serat, a Texan, who found the Graphisoft account much more interesting and rewarding than his usual projects, which involved evaluating state-owned enterprises; those superannuated, obsolete relics of the planned economy. To be honest, he didn't really like or respect Hungary, but he found Graphisoft to be a refreshing oasis of Western-style business. Together, we created a so-called "Information Memorandum," an introduction to the company and its plans for the future. This was my first experience of writing such a document, and initially I argued a great deal with Don about what it should look like. True to form, I wanted to make a tailor-made, original creation that was specific to Graphisoft, whereas Don stubbornly insisted on retaining the standard structure used for such documents, with its prefabricated chapters, even if the content of some of the chapters had no relevance for Graphisoft. I was especially irritated by the repetition of whole sections of text, which again is standard for this kind of memorandum. Finally, I had to agree that Don was right. Potential investors wanted to scan the document quickly and easily, which required that it be structured exactly the same way as a hundred other such memoranda.

We paid visits to several dozen potential investors, and received them ourselves, but in the end we did no deal.

## Reasons for the failure

I think that our initial failure to find an investor had two main causes. First, our targeted group of potential investors – investor groups who were already active in East Central Europe – was the wrong target at that time. Most companies in East Central Europe were born as a result of the privatization of a state-owned enterprise, and for such companies, the potential for growth hinged on what might become of it after an infusion of Western technology, capital, and management know-how. Consequently, investors specializing in this region were trained to evaluate these companies accordingly. But Graphisoft was an entirely different kind of company:

- We did not import Western technology; on the contrary, we exported our own technology to the West.
- Only a tiny fraction of our revenues stemmed from the East Central European region.
- We did not lack capital.





*Péter Hornung gives a presentation*

The targeted group of investors did not know what to make of a firm like ours.

The other more important cause was our own shortcomings. Regardless of how agreeable and attractive Graphisoft appeared, an unusually modern firm in that part of the world, we were still not sufficiently experienced in terms of financial management. The post of financial director was filled by Péter Hornung, an excellent engineer, but one who had no training or experience in professional accounting. Due to his exceptional sense for financial issues, he did manage our money well; he was a good boss for our bookkeeper and accounting staff; but this was not enough to produce a

professional financial presentation, intelligible to outsiders. Our accountant was not up to the task, either; she was solely responsible for producing the correct accounts and tax returns for the local authorities. For the most part, no financial statements were produced for the management's perusal. Péter and I together had an instinctive feel for what we could afford and what we could not. But this, clearly, was not enough for an outside investor to base a decision on. (To tell the truth, this wasn't enough for our own internal purposes, either; but at the time we didn't admit it.)

It was Laurence Orbach, a potential investor, who pointed all this out to us. Laurence read about us in *The Financial Times*, as part of an article on Hungary's newly emerging capitalism, written by Budapest correspondent Nicolas Denton. Overall, the article was quite critical of developments in Hungary, but very flattering about our firm in particular. This caught Laurence's eye and he came to visit us. Next, he sent Mick, the financial director of his company in London, to make a due diligence of our financial situation. Following Mick's report, Laurence wrote a letter to Don Serat of CAIB. A few excerpts from this letter are eloquent testimony to the conditions at Graphisoft:



- Although very positive about the company, Mick has returned and presented us with some rather discouraging news about the condition of the financial records of Graphisoft.
- Although Mick is in no position to quarrel with your and Gábor's assertion that the accounting records of Graphisoft are unusually good for a Hungarian company, he feels strongly that he should have been made aware in advance of just how poor they are.
- ...there is no real understanding of accounting practices and perhaps, at the end of the day, not enough will to sort it out. I appreciate that Gábor and Péter have a long and close relationship. I accept also, that Gábor wishes to have some serious input on this matter. Harsh it may be, but Mick's view is ...that the matter of financial direction has to be addressed seriously and that it will be a painful one for Gábor to confront.
- ...whilst we remain very impressed with Graphisoft, my inclination at the moment is to say that we should halt. I am not keen on spending more money on investigative work to uncover more skeletons and oddities...

At the time, I was rather offended by these and similar critical remarks, but a few years later, recognizing that such criticism was exactly what we needed, I invited Laurence to join first our supervisory board, and later our Board of Directors.

## **New blood for top management**

Up to this point, all the managers at Graphisoft had been "home-grown." Nearly everyone was initially hired as a software engineer, and some of these became managers as a result of promotions. This was the path followed by Gyuri Kafka in becoming Head of Sales, and this is how Péter Hornung ended up as Finance Director. But Laurence's letter pointed out that this policy of internal promotion would not be sufficient: in some cases, managers with the requisite skills would have to be hired from the outside. The policy of creating managers solely as a result of promotions was not sustainable; we would have to hire people whose role would be managerial right from the start. This was an unusual concept for us. We had been proud that Graphisoft was "different from the rest" and no one should expect to join the company with a high hat and promotions would come only if aptitude had been proven. This practice, deeply engrained in our company culture, was well warranted during the years preceding Hungary's system change, since the skills and experience we sought were not generally cultivated in the state-owned companies of the socialist planned economy surrounding us.



Under the influence of the Laurence letter; however, I finally hired a professional manager in the person of Laci Szabó (best known as Szabó 3, since the firm already had two colleagues named Szabó, one of whom was also a Laci). Hiring an outsider into a managerial position was, for Graphisoft, a culture shock. Graphisoft really was “different” from other Hungarian companies, and Laci had a great deal to learn before he was able to figure us out, but the reverse was also true. We at Graphisoft (and I in particular) had to learn how much we could realistically expect from a new manager and how soon. Yet Laci turned out to be a good choice. He was not the least bit arrogant, he built up a good team and he earned our trust (including mine) within a short time. But I miscalculated how much pressure I could place on him and how much I could expect him to produce in a short period of time. He was a resilient guy, and in the end demonstrated that he could live up to expectations, but due to the extreme pressures we placed on him, he was already looking for other opportunities. At that time, during the first wave of privatization and capital inflows into Hungary, firms were desperate for English-speaking managers who could make good presentations and were knowledgeable about international financial standards. So Laci soon left us.

To lose a co-worker whom I wanted to keep was a real shock. We had had similar such experiences, such as Robi Kőkuti and Tamás Jankó, but Robi left because he married an English girl and moved to England, and Tamás founded his own company – these I could understand. But for someone to leave us for a different Hungarian company...?

So now I had to face another fact: although Graphisoft continued to be counted as a good workplace, after the system change in Hungary we would have competition in the labor market, and we would have to work much harder than before to hire and retain the best employees. A few years later, we actually hired a Director of Human Resources – named Szabó, for a change – that was, Andrea Szabó, the first woman to hold a top managerial position at Graphisoft.

But we have jumped ahead of ourselves: in our narrative we are still in 1994, when the departure of Szabó 3 again left us without a financial director. But luck was with us once again. Some time earlier, during our tenure as Apple distributors, we had hired a professional financial director for the subsidiary responsible for the Apple distributorship. Even during that time, it was clear that Sándor Bihari would be an asset to the parent company, but I realized that, for the time being, his role in the Apple distributorship was more important. In that position,



his task of adeptly managing the large sales volume, enormous accounts receivable and accounts payable required much more finesse than the same tasks at the parent company, not to mention that if the distributorship lost its financial director, then I would have no chance in negotiating or even arguing with Nabil about what we should be selling.

But luckily – precisely due to the sensitivity of these tasks at the distributorship – Nabil brought in his own CFO from Lebanon, and then soon realized that two financial directors amounted to too many chiefs. Nabil was amenable to our taking Sándor over, who, since that time, has been managing the global finances of the Graphisoft family of companies to everyone's satisfaction. So Sándor was the first top-level manager at Graphisoft whom we hired in a managerial position and who actually worked out. This, naturally, was primarily due to his own merits, but I think that earlier letdowns at the company also improved our receptiveness to this category of employee.

## Opening to the world of PCs

As I mentioned earlier, my son, at the age of 9, made me understand the importance of compatibility: he made me change his beloved Macintosh for an awful PC (such sacrilege!), just so that he would be able to trade computer games with his friends. In hindsight, it is perfectly obvious that we had to make ArchiCAD compatible with Microsoft-based PCs, which today dominate more than 90 percent of the personal computer market, but at the time, this was not at all an automatic decision. Very weighty technical and commercial circumstances argued against it.

At the time, Apple's operating system was light years ahead of Windows, which seemed to be just a weak imitation of Apple. Transferring the program would be a daunting task. Although Windows looks similar to Macintosh's operating system, very basic technical differences between the two become evident as you delve into the complexities, and rewriting ArchiCAD for Windows would entail having to develop the program all over again. An even more serious technical problem was that if we planned to continue parallel development of both platforms (Windows and Macintosh), and wanted both platform versions to have the same functionality, then – on the common-denominator principle – we could use only those programming solutions that worked on both platforms. In other words, we would not be able to take full advantage of either operating system's full capabilities, thereby limiting ArchiCAD's potential, and our users would lose out.



The commercial aspects of the switch to Windows were no less daunting. In the PC world, we could not hope for the same level of marketing support as we received from Apple. It was to Apple's advantage to support us as software developers, because a program written for Apple was not compatible with any other type of computer. The reverse was not true: Microsoft-based PC systems competed with each other, and any software written for one system was compatible with any other PC, so – in contrast to the closed Apple world – PC manufacturers were less motivated to provide a high level of support to their software development partners.

Nor was it true that, since the market for Windows-based PCs was bigger than for Macintosh, we would have greater opportunities for growth in the PC market. In 1992, we had about a 15–20 percent share of the global market for Apple-based architectural design programs, leaving us plenty of room for growth. In fact, it was much easier to achieve growth from a starting position of 15–20 percent than it was to grow from the barely discernible 1–2 percent share we had in the total PC market. Furthermore, we expected that as our market share grew, Apple would increase its own market share, if not in the global PC market in general, then certainly in the niche market that serves architects. In sum, for the foreseeable future, Apple's limited global market share did not represent a real constraint on our own growth prospects.

But all of these rational counterarguments were really only trotted out to underpin our primary, purely emotional argument against switching over: we liked Apple, and we disliked Microsoft.

And yet we had to decide otherwise. After my son, the next and final impetus for switching over came from John Sculley himself, Apple's Chief Executive. In the spring of 1992, he called a meeting of Apple software development partners (about 50 of us in all) to inform us of Apple's new strategy. Apple had achieved a relatively good penetration of small and medium-sized firms, but with large firms it had got nowhere. To break into the market of larger-sized firms, Apple had no choice but to abandon its aristocratic aloofness and achieve compatibility with the rest of the PC world. So he thanked us for our record loyalty, but now he was encouraging us to become unfaithful. He believed that if our customers knew that our programs also had a Windows version, we would have a better chance at penetrating the larger firms even with the Apple version.

A few years later, it was clear that John Sculley was entirely correct. It is a real pity that he personally was not able to implement this policy in its entirety within





Apple, but I can understand why. I, too, had a hard time getting this policy accepted within Graphisoft, even though I, as the biggest share owner, had far greater decision-making power than Sculley did at his company. This was the second time in our company's history that I made a strategic decision contrary to the will of the majority. My first minority decision, in 1986, was to halt the development of our money-making RAPID program, and as then, now too I had to win over at least one committed partner who would carry out my decision.

Luckily, I had two such partners. Tibor Gáthy and Miklós Misley agreed to carry out this unpopular assignment. They knew that in order to be successful, they not only had to accept the Windows operating system; they also had to learn to like it. For this, many of us admire them to this day. These two were attracted to the assignment for the very same reasons that everyone else opposed the Windows switch: Windows was, at the time, far behind Macintosh, making the assignment a real challenge for a software developer. They had worked on interesting experimental projects before (we spent a great deal on dead-end experiments, such as programs for Steve Jobs' NeXT system, and pen-operated hand-held computers by the Go company and Apple), but Tibor and Miklós longed for a project that would actually make money for Graphisoft within a foreseeable period of time.



*Miklós Misley and Tibor Gáthy present ArchiCAD for Windows to our distributors*



They created a whole new team for the ArchiCAD for Windows project – it was at this time that we hired Misi Balla and János Maros. This team was a pioneer within Graphisoft in yet another sense: it broke from our traditional phobia for things “NIH” – that is, “not invented here” – we were suspicious of any solution that we did not come up with ourselves. Yet in this case, our Windows team subcontracted a significant part of the work to outside contractors.

With the initial release of ArchiCAD for Windows, the main criterion was not yet to produce an optimal program, but rather to release something quickly, to get the Windows version onto the market as soon as possible. In this, we were successful. After barely more than one year of development, we released the first version of “ArchiCAD for Windows” in the fall of 1993. In functionality, this version resembled an earlier Macintosh version, and lagged behind the latest Mac version in speed and stability, but we reached our main goal: a Windows version of our product was on the market; making Graphisoft among the first of Apple’s dedicated software partners to achieve this milestone.

A little internal rivalry developed between our two development teams (Windows vs. Macintosh), which many considered detrimental. No doubt, many aspects of the work might have been achieved more efficiently if all the developers had taken the technical characteristics of both platforms into account (for example, in choosing their development tools), but I think that the advantages of this creativity-inspiring “we’ll show ‘em” spirit outweighed the disadvantages. The desire to achieve professional respect from the other developers, as a result of genuine achievements, is one of our firm’s most important cultural values.

And ArchiCAD for Windows sold well. Initially, we worried about complaints about its performance, but to our surprise, we received fewer than we expected. One (albeit biased) explanation for this came from David Marlatt, the head of our U.S. office: Windows users are much less spoiled than Apple users; they are much more accustomed to software bugs and are much more tolerant.

Within a few years, we closed the performance gap between the two platform versions of ArchiCAD, and they became identical in every respect. (I leave it to our users to decide whether the Windows version improved or the Macintosh version deteriorated.) A few more years passed before the sales of the Windows version exceeded the Macintosh version, and the ratio stabilized at around 2 to 1 in favor of Windows, a ratio which has remained more or less constant up to the present day.





*Headquarters of Macintosh development in Kolombusz Street*

*On the left: Sárdy Sárdy, in the middle (back view): Attila Babits, facing view: Laci Sparing and Tamás Hajas*

We had one sales strategy expectation that did not materialize. We had hoped that the Windows version would help us in winning over dealers of “traditional” CAD programs (that is, AutoCAD). Earlier, we had believed that the skepticism of big AutoCAD dealers for ArchiCAD was due primarily to our Apple platform, which they dismissed as lacking weight. So, with the advent of ArchiCAD’s PC version, we expected these dealers to embrace us happily as the program of the future. This did not happen; the main reason being that the business model for AutoCAD sales was entirely different than for ArchiCAD. István Tóth’s experience in Italy is illustrative of this difference. When ArchiCAD for Windows was released, Tóth met with the biggest Italian AutoCAD dealer. By then, ArchiCAD had achieved a sizeable reputation in Italy, and the dealers were happy to meet with him. The firm’s boss was floored by the high quality of ArchiCAD: a fantastic program, so easy to use, much better than AutoCAD, etc., etc., and he extended his heartfelt congratulations. But there was no way his company would sell it. How would he make any money? He was making lots of money selling AutoCAD precisely because at that time it was perceived to be a more challenging program to learn, and so he could also sell his lucrative training programs.



With a few exceptions, our distributor network built up during our Apple era remained intact, and we worked with these distributors and dealers to take advantage of the new opportunities presented by our Windows version. John Sculley's prediction also came true: we profited not only from direct sales of our Windows version, but also increased our Macintosh sales due to the program's "platform-independent" nature. Clients felt more secure knowing they could switch to another system any time they want, and still be able to use our program.

## **Positive developments in the Apple universe**

Our revenues for 1994 grew by 70 percent, the biggest increase in our company's history, before or since. This achievement was not only, and perhaps not even primarily, due to the Windows version. Several developments in the Apple world also worked to our particular advantage. Apple released its "PowerPC" processor, allowing it to build much speedier computers. Consequently, Apple's marketing increasingly concentrated on applications that could best take advantage of a speedier processor. CAD, and within that category, ArchiCAD, were just this kind of application.

We got even more publicity as a result of the revolutionary new Apple technology of "QuickTime VR," which added time, the fourth dimension. "VR" is short for "virtual reality," the catchy and popular phrase that refers to "live" animations available with a much more powerful computer. Those computers provided users with helmets to sense head movements, special glasses, gloves and other gadgets for an experience that really did approximate reality. Apple's QuickTime VR could provide a highly simplified version of this experience. There were no helmets or gloves, but by moving the mouse around, you could simulate real-time movement on screen. In ArchiCAD's case, for example, this meant that we could go beyond the static 3D picture to allow the user to "walk around" inside or outside the building, to enter any room and "look around" with the help of the mouse. Tamás Hajas and David Marlatt immediately sensed the marketing potential of such an impressive feature. Within a few short months, an especially intensive effort by Laci Sparing, Attila Babits and the rest of the Macintosh team succeeded in implementing this technology into ArchiCAD, and in doing so, we beat all of our competitors.

I don't know how many of our users actually used this feature in practice, and how often, but it was undeniable that the feature made for very dramatic demo presentations, which in turn significantly boosted our sales. Once more we had





*Celebrating the completion of the latest version of ArchiCAD*

*From left to right (standing): Miklós Misley, Géza Fábry, Viktor Várkonyi, Pista Varga, Gábor Horváth, Laci Sparing, Gábor Konecsni, Attila Babits, András Haidekker*

*In front: Laci Vértési, Tibor Sárdy, Gyuri Juhász, Tamás Hajas, Antal Krepler, Balázs Hegedűs, Misi Balla*

to consider an issue that reared its head again and again: What is more important? To support the efforts of our distributors by developing features for impressive demos, or to support the everyday work of our end users with handy little functions which didn't make much of a splash at trade shows? After all, salespeople might not even know what these features were for, and their significance was really only understood by those who used the program for real projects with deadlines. I think that here, too, the answer was to find the right balance. The secret to good software is the same as the secret to a good building: a finely tuned sense of proportion.

## **The awards pour in**

With ArchiCAD 4.5, it seems that we hit the right balance. In response to user requests, we implemented numerous small but important new functions. At the same time, we bowed to the god of impressive features, with support for the PowerPC and QuickTime VR. And the results came in. In addition to high sales volume and a rapid growth in profits, we enjoyed our first round of professional acclaim. Each January, at Apple's main annual event, the Macworld Expo in





San Francisco would hand out the Eddy Prize to the best software programs of the previous year. The Eddy Prize imitates the Oscar Awards both in form and in the surrounding publicity. In January 1995, the Eddy Prize in the CAD category was awarded to us.

To the best of my knowledge, Graphisoft was the first foreign (i.e., non-U.S.) software company to win such an award.

The boys working on our Windows platform did not remain in prizeless obscurity for long either. Following the Eddy Prize, we won numerous other professional awards in the PC realm, such as the Software Publisher's Association (SPA) "Codie" award, the Computer Graphics World Award, and the Editor's Choice Awards of CADENCE and CADALYST magazines, which were (and are) traditional supporters of our biggest competitors. These awards came for one of our new versions, ArchiCAD for TeamWork. With this version, Tibor Gáthy and his team created a revolutionary new solution to allow multiple designers working on a network to collaborate simultaneously on the same project. At that point, our competitors offered such a network solution only for 2D drawings. (Our Macintosh team also contributed to the development of TeamWork, because by this time, we were developing the two platforms in synch.)



*Gyuri Juhász with the Eddy Prize*

## **Bill Gates visits Budapest**

We could no longer complain of a lack of publicity in Hungary, since the local press by then was devoting plenty of attention to us. When Bill Gates visited Budapest in the fall of 1995 and I was able to meet with him for a brief handshake, some reporters actually believed that Bill Gates came to Hungary for the express purpose of meeting with us to discuss our strategy for introducing ArchiCAD for Windows onto the international market. In fact, during the handshake it was entirely obvious that Bill Gates hadn't the foggiest idea who this bald guy was and why he was being introduced. I had the feeling that he was sleepwalking through the



few hours he spent in Budapest, and woke up only when it was time to give his speech. (But then, I must say, he really did come alive.)



*With Bill Gates in Budapest*

*Behind us, center, is Péter Fáth, President of the Hungarian American Chamber of Commerce,  
to the left: András Szigeti*

Graphisoft's international press also became very favorable.

Part of this media acknowledgement focused on me personally, though naturally this interest was spurred by the achievements of Graphisoft as a whole. Still, I suspect that even our joint achievements did not quite warrant the splashy headlines and breathless paragraphs devoted to us. But such is the media – they like exaggeration; it makes for a bigger readership.

For me, the greatest honor – alongside the invitation to the Davos Global Economic Forum and the *Wall Street Journal's* recognition as one of East Central Europe's outstanding executives – was the 1996 Széchenyi Award, bestowed by the Hungarian Government for outstanding scientific achievement. I suspected that had I continued to earn my living as a physicist, in a real scientific field, I would never have received this honor. Graphisoft's achievements have been much more notable as a successful business than in terms of any scientific breakthrough. No matter. I was happy to accept the award, whose official justification stated that I had earned the Széchenyi Award for "improving the international rank of Hungary's technical and scientific achievements."



But the significant monetary prize which accompanied the Széchenyi Award was disconcerting, for clearly this category of financial award was aimed at recognizing poorly paid scientists, not successful businessmen. In seeking to ensure that these funds reached the truly deserving, we eventually created a foundation to recognize outstanding high school science teachers (who are even more poorly paid than scientists).

November 1993

## Profile: GRAPHISOFT

## Keyed in for designs

DON SERRAT, a young but normally hard-headed US investment banker is enthusiastic about Graphisoft, a little Hungarian software company for which Creditanstalt Securities is trying to raise equity finance.

Gabor Bojar, Graphisoft's president, has gone from underpaid mathematician at Hungary's Institute of Geophysics to head of a world beating producer of architectural design software.

In 1981 he took advantage of Hungary's early liberalisation of private business to set up Graphisoft and began writing programmes for three-dimensional pipir design. "I discovered that liked business," says Mr Bojar. "No-one had ever indicated that business was fun."

Funding initially came from his wife, a doctor, who subsidised him and his partner with \$100 each a month.

Graphisoft's big break came at a trade show in Munich where an Apple Computer of the time liked Graphisoft's 3-D design programme, gave the firm a



## Out of the Attic, onto The Web

WHEN THE HUNGARIAN GOVERNMENT relaxed its grip on the economy in the early 1980s and legalised small private enterprises, Gabor Bojar was ready to take the plunge. He quit his job at the Lendvai Ertis Geophysical Institute in Budapest, where he headed a team of computer programmers, joined his wife's jewelry and the couple's wedding rings and launched Graphisoft (www.graphisoft.com), today one of the world's largest developers of three-dimensional computer-aided design (CAD) software for the architectural and building industries. "There is no way to bring out the best in people in a socialist state," says the 51-year-old entrepreneur, "because the only way to



architects worldwide. Last year his expanded Graphisoft's activities on the Internet and into sectors other than architecture, such as engineering and manufacturing.

Graphisoft is harnessing the joys of the Web through its Object Tools software that allows entire systems of building materials and furniture to be made and electronically publish 3-D models of their products. The models can then be easily imported into CAD environments like AutoCAD. Other new releases include ArchiM 2000, a computer-aided facility management program, and Log Home Solution, software that drives a computer controls manufacturing line building log cabin components. "We will try to use the digital result of a CAD drawing throughout the life cycle of a building," Bojar says of the firm's future direction.

Hungary's highly motivated workforce has been a major advantage in establishing his company, Bojar says. "We are in a situation similar to that of Germany or Japan after World War II," he remarks. "In a sense,

...and now we have to prove that we are good." There were major drawbacks to setting up in Central Europe, too. The country's telephone system was so bad throughout the 1980s that there someone to get by the telephone waiting in a process that often took half an hour. A big in Hungary at the time was "How do you dialling?" He picks up the phone and is asked during this period were deemed unsuitable for export to communist countries, unlike them in from Germany in the bank.

can dreamed big. He originally wanted to realized that he lacked the narrow focus essential in research. His entrepreneurial like the broad view. However, when he Graphisoft from a high-risk proposition from — by Jan Szepietowski

INTERNATIONAL HERALD TRIBUNE, TUESDAY, JANUARY 21, 1992

## East Europe Capitalizes on Brainpower

Software Developers in Hungary Exemplify Value of an Unheralded Asset

By Peter Maass

Washington Post Staff

Nine years ago, a few com-

are the low-cost skills of its researchers, engineers and workers rather than the anticipated facilities they work in. Hungary, whose two-decade-old transition from a communist economy gave it a head start on

work of Siemens AG. "They are sort of magicians sometimes. I have seen computer systems with parts from seven different countries." More than 20 years ago, the German electronics giant began selling computer hardware to Hungary and, instead of receiving cash payment, was "bought" some of the country's best

can dreamed big. He originally wanted to realized that he lacked the narrow focus essential in research. His entrepreneurial like the broad view. However, when he Graphisoft from a high-risk proposition from — by Jan Szepietowski



## Chapter 12

# Japan and the great promise of China: embracing cultural diversity

In terms of market expansion, the most significant episode of Graphisoft's first Golden Age was the establishment of our Japanese subsidiary in 1994. At the time, Graphisoft was well-positioned to make new investments: selling off the Apple distribution business had made us financially stronger; cash-flow at the U.S. office finally appeared to have turned positive under David Marlatt's leadership; and the German office under Hannes's leadership continued to provide ever-growing profits. The most significant new investment, naturally, was the development of ArchiCAD for Windows, but we still had money left over for new marketing ventures.

But our company executives were at odds as to the best place in which to invest. Should we increase our investment in markets where we were already present, and where we had something to build on? Or should we experiment in new, virgin territories such as Japan? All the rational arguments indicated that the former plan was better, but big decisions are not usually made on the basis of objective and rational arguments; emotional and subjective reasons often win out. Rational arguments are only trotted out to justify the subjectively based scheme. In this case, Imre Pákozdi's ambition (which might have even exceeded my own) was the real force behind the decision. He wanted to prove that, given the chance, he could match and even exceed Gabor Kazár's success story in Germany, and could naturally provide a much better return than that which Gyuri Kafka and I had painfully achieved in America. In vain, we pointed out the linguistic and cultural barriers to doing business in Japan, and that he would be hard pressed to



succeed in a country where he would not only be unable to check the business correspondence produced by his secretary; he would also be incapable of deciphering a street sign. But ambition and the longing to achieve outweighed these sobering considerations. As it was not our custom to resist such ambitions, we finally approved the plan for expanding into the Japanese market.

Imre turned in a heroic performance. He was bent on proving not only that he and the Japanese market really deserved our resources, but also that he was capable of doing business on an even more cost-effective basis than the legendary penny-pincher Gábor Kazár. Our Japanese office looked relatively presentable (this was important for business purposes), but Imre himself lived in a dreadfully humble, 12-square-meter hole in the wall (including toilet, shower and kitchen) for more than a year.

But much more important, of course, was that Imre's strategic plan worked. The Japanese market is not only large; it is tailor-made for us. Perhaps more than any other nationality, the Japanese appreciate our ability and willingness to serve the specialized requirements of the local market.

## **Adapting to local requirements**

This ability of ours stands in sharp contrast to the arrogant mentality of the big American firms which dominate the global market. For example, the “Japanese localization” of an American software product usually amounts to nothing more than finding a Japanese-American who translates the program into Japanese. However, localizing software involves far more than just translating it. For example, you need to build the standard local architectural dimensioning into the program, and add new “Japan-specific” library objects – doors, windows and furniture – to the program library. We had naturally performed such localization tasks for other markets, but in Japan we had to create completely different design methods, for example, to recreate the column-beam system of traditional Japanese architecture or to create “sun studies” that conformed to very specific Japanese standards. When submitting construction documentation for official approval, Japanese plans must include calculations and drawings (created with an officially audited methodology) which demonstrate that on the day of the year on which shadows are longest (December 22), the proposed building would cast a shadow onto the surrounding territory no larger than a pre-set maximum. An architectural design program that lacks this capability cannot hope to find buyers in Japan. In fact, not only does the program need special functionality, but the training guide



should also take a uniquely Japanese approach, different from that in the West, as should the brochures and marketing materials. They reflect a taste that seems naive to us, but which we need to accommodate.

Europeans are often so intimidated by the Japanese market that they do not even undertake program translation until they have a guaranteed order. Yet the Japanese will usually not even consider testing an English-language program, so at that time, we had no European competitors in Japan. Our biggest American competitors were naturally present in Japan, since their local partners took care of the localization issues. We had no such local partners, but on a “do-it-yourself” basis we figured out how to do it.

## Unexpected assistance

By this time, Bence Kovács, a college classmate of several architects at Graphisoft, had been living in Tokyo for about five years and was working in the local office of Gyuri Pálffy, another architect of Hungarian descent. On one of his trips home to Hungary, Bence discovered ArchiCAD, and convinced his (Hungarian) boss in Japan to buy the program for patriotic reasons. This was our first “Japanese” sale. Bence then gave us a detailed account of everything we needed to put into ArchiCAD to make it acceptable to the Japanese market – in much the same way that István Tóth, ten years earlier, had urged us to adapt the program to the Italian



*Imre and Bence welcome visitors to our new office in Tokyo*



market. We proceeded to implement many of these features ourselves; for the rest, Bence found us local Japanese subcontractors. In addition to the force of Imre's compelling personality and lobbying, Bence's enthusiasm was a critical factor in our decision to open our office in Tokyo. With the opening of the office, Bence came on board as full-time technical director; and two years later (with Imre's return to Hungary) he took over as head of the Japanese office.

Our strategy in Japan differed from our other markets in several respects: Japan was the first country in which the program's Macintosh and Windows versions became available simultaneously, so our local distribution did not depend solely on the Apple network. Moreover, Japan was the first country in which we took aim not only at our traditional target market; the small and medium-sized firms, but also the big firms. These two strategic firsts were interrelated (Apple's strength is in the small and medium-sized market), but also a result of Imre's personal ambitions. Imre had a special talent and affinity for operating in the large-firm culture, and used his well-honed diplomatic and political skills to build a network in this specialized segment. Of course, luck was also a factor in his success, but those who are active enough and persistent enough are usually the same people who get lucky.

## **Daiwa Securities and SEGA**

Imre was already in Tokyo when a gentleman named Raymond Douse, from the London office of Daiwa Securities, telephoned me and said he wanted very much to meet with me, and was ready to fly to Budapest for dinner. And indeed, he arrived one evening, and by night time he was on his way to his next destination. I was very impressed by this gesture and felt myself to be terribly important. I knew that Gundel was a very good restaurant indeed, but still I felt that Mr Douse really did stop in Budapest for a few hours just to see me. He explained that they had been commissioned by SEGA, the world-renowned computer game company, to find potential partners for developing game software; it was willing to invest in such a company in Hungary. He knew that we produced 3D design software, not games, but modern games are also 3D, they are full of buildings, and anyway the market for computer games is much bigger than for design software. We agreed that as Graphisoft was interested, their local Budapest representative, a Mr Fujisawa, would continue the discussions on behalf of Daiwa.

Naturally, we had no intention of ditching the architectural market in favor of computer games, but the idea was interesting. To have a "game version" of ArchiCAD



seemed to be a good idea. But Daiwa's real potential was in its ability to find us a real investor in Graphisoft. Despite our earlier disappointment in finding an investor with CAIB, I had not given up on finding investors who would provide credible and tangible evidence of the firm's true value.

Mr Fujisawa examined our company thoroughly, then signaled to London and Tokyo that everything seemed okay. A short time later, we were invited to SEGA headquarters in Tokyo (a spectacularly luxurious marble and granite building), where our product was scrutinized. A few days later SEGA informed us that, thank you very much, but our technology was singularly unsuited for developing computer games. (Too bad we didn't take their word for it. Five years later, we again dived into a similar scheme with the U.S.-based Broderbund software company, and only after six months of intensive programming work did we realize that SEGA's people were entirely correct: ArchiCAD's structure is not the right environment for creating a computer game. Even a good car, stripped down, doesn't necessarily make a good motorcycle.)

## The deal with SSC

Although the SEGA idea fell through, it did eventually lead to the biggest deal in Graphisoft's history. Daiwa's Tokyo representative, Casey Shimamoto, soon learned that SEGA's majority investor, CSK Corporation, also had interests in another architectural design software company: potential synergies, potential deals. So Mr Shimamoto set up a meeting between us and this other software company, SuperSoftware Corporation (SSC). After six months of intensive and sensitive negotiations, we sealed our first big Japanese deal. SSC purchased the 3D modeling core of ArchiCAD with the intention of building it into its own software (which was geared toward manufacturers of traditional, Japanese, prefabricated wooden houses). SSC also got distributor rights for the ArchiCAD program itself. In adopting ArchiCAD's 3D modeling core, the SSC program became GDL compatible, and this opened the door to a number of marketing advantages. (Defining ArchiCAD's 3D core, the "GDL engine," and putting it into transferable format was no small feat; this was accomplished by Attila Babits.)

At the time, the Japanese software market was much less mature than the American or European markets. There was plenty of demand for products localized properly to meet Japanese needs, but very little supply. Prices were accordingly much higher in Japan, but the conditions for selling were also much different than in our other markets. In Japan, it was still common for distributors



to guarantee a significant amount of revenue, even if they did not get exclusivity. SSC (and other reseller partners) with guarantees amounting to millions of dollars, made Japan one of Graphisoft's biggest markets in one blow. Naturally, these distributors worked with the big guns; they had clients who ordered several hundred copies of the program. These were numbers unheard of in our other markets.

For a long time, in view of the great demand, we didn't understand why the domestic Japanese software industry remained relatively small. But when the time came to negotiate the amount and structure of the commission we would pay to Daiwa Securities, I finally understood why. The Japanese mathematical culture is very different from that in the West.

## **Daiwa's commission**

Daiwa's primary task, of course, was to find investors for Graphisoft. Any commercial deals that came along (such as our deal with SSC) were only bonuses.

Initially, Daiwa proposed a commission of 5 percent for any deal – whether it involved selling off part of our company or bringing in new business for our products. With regard to the latter type of deal – that is, new business – I could accept 5 percent commission as fair, but found it excessive for deals involving the selling of shares. (By that time, from my earlier negotiations for this type of deal, I had learned that 3 percent was acceptable.) But this wasn't enough for Daiwa: finding new business involved just as much work as selling off shares, yet the size of the deal was much smaller. We might have been able to compromise at 4 percent, but I am not the sort of person to opt for simple solutions. I wanted to increase Daiwa's incentives for finding new business for our software products (a given set of shares can only be sold once, but software can be reproduced again and again), so I wanted to pay a bigger commission for new software deals. But I complicated this still further, saying that if we sold shares to a certain company and also sold our product to the same company, then the double commission would be excessive, and so I finally proposed a commission of 3 percent for selling a share of the company and 5 percent for selling the product, yet if both deals were made with the same client, then we would pay only the larger-sum commission. After much back-and-forth Daiwa finally agreed on this formula, if they also got half of the smaller-sum commission.

This is complicated. Even Daiwa's Japanese lawyers (who were charged with formulating the contract) didn't get it. I gave them a draft contract text, but to no avail. They gave the whole thing to a Bulgarian programmer, who wrote a little



computer program (using the C programming language) to calculate the commission, and this program became an annex to the contract. At first, on hearing about this annexed program, I thought they weren't being serious – they must be making fun of my penchant for complicated formulas. But they were quite serious. I finally came to understand why the Japanese aren't that good at writing software: this type of algorithmic thinking is alien to them.

These negotiations gave me another insight into the Japanese mentality. Once a relationship of trust is established with a Japanese partner, he is extraordinarily fair and honest. When the sale of shares finally came about and it was time to pay up, I remembered only that we were to pay 3 percent on the share sale and 5 percent on the software sale. I failed to read the contract thoroughly, and authorized the transfer of both commissions in full, without halving the smaller sum, as stipulated in the contract. But Daiwa faithfully ran the program that came with the contract and sent us back the overpayment.

It is true that Daiwa was working not primarily for the commission. The enormous amount of effort it expended on Graphisoft far exceeded any commission we paid, even if we had agreed to its first proposal and had paid a full 5 percent for every deal. But its real goal in doing business for us was to get a slice of the deal when we eventually went public. I promised Daiwa such a slice, and kept my promise, though it proved to be costly.

## How “closed” is Japanese culture?

We have often heard that Japanese society is inaccessible to foreigners and closed to foreign cultural influences. My experience has suggested the opposite.

When we were seeking Japanese distributors for ArchiCAD, we set our sights on Matsumoto-san,<sup>8</sup> a very successful reseller for a German software company (not a competitor), and tried to convince him to come on board. We invited him to Budapest for our upcoming distributor meeting, so that he would be impressed by the size of our company and how well we treated our distributors. At all our distributor conferences, we enhanced the official program with impressive cultural events and elegant dinners. That year, we had organized a dinner for 100 attendees at a fancy restaurant featuring excellent gypsy music. The mood was just getting boisterous when Matsumoto-san turned to me and asked me to get the lead musician to lend him a violin so that he might play for us. This, of course, cost me a pretty penny, but it's all in the name of good business, so very soon the

8. “San” is the Japanese term of address for either a gentleman or a lady.





band stopped playing and the head musician, with a barely discernible smirk of condescension, presented his violin to Matsumoto-san. But within moments, all traces of condescension vanished, for Matsumoto-san began playing Brahms' Second Hungarian Dance so beautifully that all of us, including the professional musicians, were transfixed. A Japanese businessman on his very first trip to Hungary, saluting us with his own personal rendition of a Brahms Hungarian Dance – I'd like to see an American or West European businessman match that. And after all this, we still could not convince Matsumoto-san to work for us – a telling example of the loyalty and faithfulness so central to the business ethic of the Japanese.

In demonstrating a sensitivity and openness toward Hungarian culture, Matsumoto-san was not an anomaly among his fellow Japanese. When we closed the investment deal with CSK, we exchanged corporate gifts to mark the occasion, as is customary. We presented the Japanese partners with a Hungarian Herend vase. The CSK representative working on the deal, Maeda-san, reciprocated with a tastefully wrapped picture. The picture, depicting Budapest's Chain Bridge and castle, was one he had drawn himself. During one of his first trips to Budapest, he was up very early due to jet lag and looked out the hotel window; he could not resist the urge to recreate the scene on the letterhead of the Hotel Intercontinental.



*Maeda-san's painting, on the letterhead of Budapest's Hotel Intercontinental*





The picture might not merit a display at the Museum of Fine Arts, but it certainly expresses how much Maeda-san was captivated by the beauty of Budapest. This picture still graces the wall of my office today.

In another illustration of the “closed” Japanese culture, Casey Shimamoto, the banker at Daiwa Securities in Tokyo, used his free time – when not engaged in banking activities – to write a book about Ignaz Semmelweis, the world-famous, Hungarian-born nineteenth-century physician. Shimamoto’s book drew a parallel between Semmelweis’s story and the life of a Japanese doctor with a similar destiny. Casey gave me the task of gathering English-language resources for his research.

I was impressed by the openness of Japanese cultural, but also by the society’s discipline and solidarity. For example, in Japan during a flu epidemic, I noticed many people on the streets wearing face masks – to protect themselves from the disease, I assumed. But I learned that, in fact, the opposite is always the case: the sick ones wear their masks to protect everyone else.

The Japanese are fastidiously polite and sticklers for ceremony to an extent that can seem, to Western eyes, almost comical. Yet all these customs are just signs of respect for their fellow man, and these customs deserve our envy, not our ridicule. For example, the strict sequence of actions that accompanies the exchange of business cards: you must take hold of the presented card with both hands, and then read it over carefully, at length. A business card symbolizes its owner, and so the attention (or lack thereof) paid to the card is a gesture of regard (or disregard) for the owner. A similar rule is that when bidding a visitor farewell, the host must accompany the visitor to the furthest possible exit, and then must continue bowing as long as there is still a theoretical possibility that the departing visitor will turn back again for just one more bow. (And he almost always will turn back, so don’t be caught off guard.)

## Major deals in Japan

In addition to SSC, we signed other contracts with major partners. The biggest of these was the Too Corporation, one of Apple’s biggest resellers in Japan. From our side, Imre made it commit to such a large volume of continuous sales that I worry that it may still have a couple of ArchiCAD packages floating around their warehouse somewhere. An even bigger coup, this one under Bence’s reign and the fruit of several years of effort, was the contract with Otsuka Shokai, the world’s biggest reseller of CAD software. This also means, of course, that it is the world’s biggest reseller of AutoCAD, and so this company is one of the few which sells



both ArchiCAD and AutoCAD. Soon Otsuka Shokai became our biggest reseller, too. In winning this deal, Tanabe-san, our Director of Sales, played a key role. Tanabe-san was introduced to Imre, then head of Graphisoft Japan, by Gábor Fabriciusz, a Hungarian headhunter living in Tokyo.

Hiring Tanabe-san required great courage on our part, because he did not speak a word of any language except Japanese. No American firm would have hired him for this reason, but if he had spoken English we would not have been able to afford him. In the end, Fabriciusz was right in pointing us to Tanabe-san, and the difficulties in communicating with him were worth it. (Fabriciusz also helped us start up our Tokyo office in many other ways. He gave his personal financial guarantee when we tried to rent our first office, at a time when no Japanese bank would even meet with us. For this and other such favors, we were and remain very grateful to him.)



*Colleagues from the Tokyo office at a distributor conference in Budapest*

*Bence and Tanabe-san on either end, with Nakajima-san (one of our first resellers) between them*

In Japan, we netted Graphisoft's biggest client ever, thanks to years of dedicated work by Imre, Bence and Tanabe-san. With the Kajima Corporation, one of the world's construction industry giants, with annual revenues of \$13 billion, we first rolled out our as-yet untried "big company" business model. After a year's



hard work, Kajima finally bought two packages of ArchiCAD at half price, for a total of \$5,000. Naturally, the amount of preparatory work we had put into this sale had cost us many times this amount. During the next year they bought nothing more, even though, as our biggest potential client, I myself paid them at least three visits. (Maybe this was the problem.) But today, eight years later, they have more than 100 ArchiCAD licenses, and through specialized custom contracts to meet Kajima's technical requirements, our U.S. dollar revenues from Kajima hit the seven-digit mark.

## **The story of Kobayashi-san and Fukui Computers**

Of course, our experiences in Japan were mixed; we endured many failures. But such failures were necessary for us to really appreciate the successes. The most memorable failure concerned Fukui Computers, with whom our cooperation agreement, in the end, came to nothing.

The founder of Fukui Computers, Kobayashi-san, started out as a simple carpenter in the countryside, living near the seaside city of Fukui. During the 1970s, he learned computer programming, and, as a hobby, wrote himself a program that would prepare the calculations and drawings needed in his work as a carpenter, building traditional Japanese wooden houses. At first, he used the program himself, but later sold it to others in the trade. Using a viral marketing strategy, the program was soon being sold throughout Japan, and Kobayashi-san, having grown (or reduced himself?) from being a carpenter to software developer, founded Fukui Computers, one of the biggest companies in the Japanese software industry. When we first met him, the company was making \$40 million a year from the carpenter's wooden-house design program and an associated surveyor's program. By that time, Fukui Computers had become Japan's leading design software company, and if the American market research companies had been aware of its existence, then Fukui would also have been among the top five global AEC CAD software companies. Fukui Computers is listed on the Tokyo Stock Exchange and its headquarters is an ultramodern skyscraper at the edge of Fukui's rice paddies. The building itself is a startling sight, since no other building in the area is more than a single story high.

Casey, who brought us together with Fukui, warned us in advance that Kobayashi-san was truly a country gentlemen, a different style altogether than the city businessmen we had come to know in Tokyo. Kobayashi-san's deeply



lined face and proud bearing represented exactly the same contrast to a “citified” Japanese as a Hungarian peasant does to a born-and-bred citizen of Budapest.

We built up a good relationship with Kobayashi-san, who even came to Budapest for a Distributor Meeting. In turn, we were invited to his company's twentieth-anniversary celebration where I had the distinct honor of cracking open a barrel of sake with a hatchet. On the same occasion, we took a side trip to a Buddhist monastery and temple near Fukui, which they say is the most beautiful in all of Japan. The building complex is so well hidden by the forest that as near as 100 meters away you cannot see the slightest sign of it. Thinking of the enormous European cathedrals reaching toward the sky, I felt I had come to understand something about the difference between Japanese and European architecture, perhaps even the difference between the Japanese and European cultures. We try to assert our rule over nature; they adapt to nature. Most likely, their approach is the better one. Kobayashi-san agreed with these ideas, and so, to this day, I don't understand why he built a completely American-style skyscraper towering over the rice paddies. In years to come, I would experience this contradiction in Japan many times: the longing to preserve their traditional culture, yet, at the same time, the desire to imitate a Western style.

The proposed deal with Fukui Computers resembled our deal with SSC. In addition to distributing ArchiCAD to architects designing non-traditional buildings, they would have purchased ArchiCAD's 3D modeling “core” program, the “GDL engine,” for use in their own program. At the time, Fukui Computers' biggest competitor was SSC, with whom we had a very good working relationship, but this relationship was not the problem that killed our deal with Fukui. Kobayashi-san believed that if the company implemented GDL into its program, then GDL would become the uncontested standard in Japan, and this development would be worth so much to Graphisoft that we should be paying a fee to Fukui Computers, not the other way around. I could not agree to this line of reasoning, though in hindsight he might have been right. So, in the end, despite our original fond hopes, SSC remained our sole partner for GDL technology, not only in Japan, but around the world.

## **Okawa-san and our first sale of shares**

In the end, the deal with SSC paved the way for what Daiwa Securities had been trying to achieve all along: to convince CSK, the parent company, to invest in Graphisoft. CSK's founding president, Okawa-san, was one of the best-known businessmen in Japan. He regularly represented the Japanese software industry



as a member of official Japanese delegations to meetings of the G8. Naturally, his name was on the list of the world's richest billionaires. He liked to be called the "Japanese Bill Gates," though he was very different from Gates, both in age and in his way of doing business. His company, CSK, was an old-fashioned, traditional software house which specialized in creating banking software for mainframe computers. At this time, Okawa-san was nearly 80. His wealth stemmed not so much from CSK's business successes but from having made wise investments with early profits. He bought a large number of firms, some more successful investments than others, but among the successful ones, SEGA was the hands-down winner. SEGA had been a relatively small American firm on shaky financial footings, when the young manager of SEGA's Tokyo office, Nakayama, met with Okawa-san and asked him to buy SEGA. Okawa-san gazed into Nakayama's eyes, trusted him, and went on to make the deal of a lifetime. When we got to know them, SEGA's annual revenues had just exceeded \$4 billion. It is a real pity that a few years later, when the computer game industry started to sputter and SEGA was losing ground against Nintendo, Okawa-san lost his faith in Nakayama, whose American-style business sense was radically different from his own. Okawa-san took over the management of SEGA himself, but this did not work out well, and the firm's finances continued their downhill slide. At his death in 2002, Okawa-san bequeathed his entire personal wealth to SEGA, believing this would save the company.

But that story is still far ahead; in our narrative it's still 1995, and Okawa-san, active as ever at the age of 80, is looking for his next big investment opportunity, and – luckily for us – finds it, in the little Hungarian firm of Graphisoft.

Daiwa Securities did everything to make the deal happen. To demonstrate its trust in Graphisoft, Daiwa declared it would also take part as investor if Okawa-san decided to invest, too. According to the proposed deal, a total of \$7.5 million would be invested, of which \$5.5 million would come from CSK and the remaining \$2 million from one of Daiwa's specialized investment funds, NIF (Nippon Investment Fund). This \$7.5 million would amount to 16 percent of the company; in other words, in this construction, Graphisoft was valued at \$47.5 million, which was more than three times the amount we were valued at in our unsuccessful attempt to win investors two years earlier. This was the proposal presented to Okawa-san for his nod of approval.

Before giving the nod, Okawa-san naturally wanted to gaze deep into my eyes, too. So I was off to Tokyo once again. As we (Imre, Casey and I) waited in his office reception area, a beautiful painting on the wall caught my eye. From a



distance, it looked like a Chagall. I took a closer look and it did appear to be an original. I asked the secretary, who replied that indeed, it was an original Chagall painting.

- Didn't you know that Okawa-san is one of the world's premiere collectors of Chagall's? Or, rather, he was, – continued the secretary, – because he has donated his entire collection to the Japanese National Museum, and kept only a few for himself, like this one here.

Okawa-san spoke no English, so our conversation involved two interpreters, worthy of the highest levels of political protocol: our remarks in English were translated for him by his interpreter, while Casey translated his responses for us. I gave our standard company presentation, to which Okawa-san responded with a series of rapid nods, then unexpectedly asked how much the total investment would be, and of that, how much the firm's original owners would get, and how much I personally would get. Having learned the exact figures, he turned to me.

- That's a lot of money in Hungary, isn't it?
- Yes.
- And you could, if you liked, just retire, couldn't you?
- Yes.
- There are so many pleasant things to do in life, why keep working? – he asked with a sly smile.

I answered:

- If I know correctly, Okawa-san, you are a very rich man, and although the cost of living is much higher in Japan than in Hungary, you could easily afford to retire. And yet you continue to work. I wonder why?

Okawa-san understood, and at this point, I knew, I had gained his trust.

## Okawa-san's dream

Okawa-san did not approve the deal right away. It was his custom to set a day when he would concentrate on the decision at hand just before falling asleep, and by morning he would know the right decision, depending on his dream. A few weeks later, Casey called to tell me that that night was the night Okawa-san would dream of our deal. The next day, at four in the morning Central European time, Casey woke me up to say that Okawa-san had awakened, and had announced that he had a suggestion to modify the deal, and wanted to know my opinion. I no longer remember exactly what his proposal was, but I do know that it would have meant a slight disadvantage for us. I had the feeling that Okawa-san was just testing my resolve, because the new proposal really wasn't that significant.



So I replied, very politely, that if we had gained Okawa-san's trust, then the original conditions we negotiated during the preparatory phase of the deal were certainly acceptable to him. If we had not gained his trust, then we had to work on it until we did. This worked, and Okawa-san agreed. Now it was up the lawyers to write the contract. We thought this was just a formality, and even set the date for a celebratory contract signing. A perfect opportunity for the signing ceremony was coming up: Gyula Horn, then Prime Minister of Hungary, was planning a visit to Tokyo. We hoped that the Prime Ministers of both countries would be on hand for our contract signing, with all the press coverage that would bring. The planned event did make it onto the official Hungarian schedule, even though the \$7.5 million investment was not that huge, but this was the first Japanese investment in the Hungarian software industry.

## **Another fight with the lawyers**

In the end, this marvelous plan was ruined by the lawyers. At the last minute, the American lawyers working for NIF in Tokyo tried to slip a clause into the contract which would have meant that either of the two new shareholders (that is, either CSK or NIF) would have been able to decide on when and whether Graphisoft should go public, without consulting us, the original owners. All of our potential investors had, from the start, expressed interest in when the company would go public. This is a normal requirement of all financial investors, since at some point they will want to sell out, and for a minority shareholder, a public offering is the most convenient way to do this. We had no problem with this: after all, in the long term, we wanted to do the same. But I never dreamed that a 5-percent and an 11-percent minority shareholder should want to reserve this decision for themselves. The American lawyer who came up with this scenario must have sensed that we might not like the idea, so he buried the clause so deeply in the contract that even our lawyer did not notice it at first. They didn't give us much time to find it, either. Despite my repeated urgings, we did not get the draft contract in hand until the night before I was to fly to Tokyo with the official Hungarian delegation. I read the contract during the flight, and was very proud of my achievement: after several attempts, I was finally able to extract the well-hidden trick from the mire of legalese. (I've always felt I should have been a lawyer.)

The usual American-style contract begins with a definition of terms, which can take several pages. These terms usually mean the same as they do in everyday use, and nobody reads this part unless there is an unusual definition involved.



The contract included a clause saying that the firm's meeting of shareholders could decide on the matter of listing on the stock exchange – this was a totally normal proposition. What surprised me was that the clause continued by stating that a vote by 25 percent of the shareholders was enough to make a decision on this issue. The new investors had just 11 percent and 5 percent of the shares, and I was the only shareholder with more than 25 percent of the total, so this clause entailed an advantage for me only. With my paranoid instincts, I was immediately suspicious, and went back to beginning to read the definition of “shareholder.” In complicated legalese, it said that “shareholder” included only the new shareholders: that is, 25 percent of their 16 percent (which was 4 percent of the total) would be enough to make the decision about going public. In other words, NIF, just a 5 percent owner, could, by itself, make the decision. Meanwhile, the rest of us, with our 84 percent share ownership, did not even count as shareholders in this definition, and would have no say whatsoever in the decision to go public.

I was outraged not only at the proposal, but at how it was carefully concealed to lure us into a disadvantageous position. I got into a big fight with NIF's American lawyers, which almost killed the deal. I've had similar disputes with lawyers since then – apparently I'm allergic to this profession, or perhaps just jealous at not being one of them.

I then informed the Hungarian Minister in charge of the official visit that there would be no contract signing after all. At first, he was displeased that the program and all its associated protocol had been dumped, but when he understood the reason, he acknowledged bitterly that he only wished that government contracts got such careful review.

Over the course of the next few months, we engaged in several rounds of negotiations on what guarantee to give our investors in case I and the other manager-owners should change our minds and decide that we didn't really want to be on the stock market after all preferring to continue our lives as part a private firm. (Today, I know that their fears were not totally unfounded, and our lives would have been a great deal more peaceful if the company had not gone public.) In the end, we agreed that if we had not gone public on a major stock exchange by the end of 1999, then – at the investors' request – we would be obligated to spend half our current profits buying back their shares at the original purchase price plus a fair rate of interest. This agreement, which we made with the Japanese top management





and not their American lawyers, was acceptable to us. However, the Japanese were reassured not primarily by this agreement, but by the fact that Graphisoft (like most Silicon Valley firms) used large share options to motivate our new managers: in other words, we committed ourselves to the stock market not just toward our outside investors, but internally, within the company. Without the IPO, after all, such stock options wouldn't be worth much.

The investment deal was finally sealed in February 1996, and concurrently we set up the corporate structure that essentially remained in place for another decade. We registered Graphisoft's holding company in the Netherlands, as the owner of Graphisoft R&D Rt. Budapest, the company's global headquarters, and of all its international subsidiaries. We, the owner-managers, also became owners in this new holding company together with the Japanese investors. Contrary to popular belief, we did not choose to incorporate in the Netherlands for tax reasons, because we still have to pay our personal income taxes and the burdensome social security contributions in Hungary. From a corporate taxation point of view, on the other hand, Hungary is a more attractive location than Holland. The real reason we chose Amsterdam was that Hungarian corporate law, at the time, was still in its infancy and internationally unknown. This legal uncertainty would have adversely affected our planned listing on a major international stock exchange, because the technology investors we planned to target would have found it too costly to research the legal ramifications of company shares registered in Hungary. In contrast, Dutch corporate law is one of the oldest and best-developed bodies of legislation in the world. Maintaining a holding company in the Netherlands is costly, however, and this is one of those typical contortions that we could, in today's world, have avoided. Since Hungary is now a member of the European Union, our legal system is entirely compatible with EU norms, so international investors know they won't encounter too many unexpected surprises.

According to the agreement with our new Japanese partners, part of the \$7.5 million investment was pocketed by the original owners, and the rest went to the company. The company used the capital to purchase a beautiful piece of real estate along the Danube waterfront in the northern reaches of Budapest. Here we built our marvelous new headquarters and the other imposing buildings that make up Graphisoft Park, designed by architect Ferenc Cságyó and interior designer Zoltán Horváth.





*Aerial view of Graphisoft Park*



*The entrance to Graphisoft headquarters*



Graphisoft Park is a large area, with more than enough room for parking spaces, plentiful landscaping and even a huge replica of Graphisoft's signature logo, the quill, constructed out of multicolored pebbles on the lawn. The idea for the replica of the quill came from Hannes: airplanes approaching Budapest's Ferihegy airport from the West begin their descent right over Graphisoft Park, and Hannes often arrived on such flights with German guests, to whom he would offhandedly remark:

– See the Graphisoft logo down there? That's our headquarters.

I don't know how many times Hannes was actually able to pull this off, but it sounded good, and so we had it done, inspired by the Nazca lines in Peru.

Investors in software companies are not usually enthusiastic if the firm puts its money into real estate. But our Japanese partners were quite happy about it: Okawa-san was a believer in the real estate business, too. One reason that SEGA maintained its relative financial stability even through difficult times was that it purchased its headquarter building at the right place, at the right time.

## Highlights of Japanese cuisine

Naturally, the closing of the deal called for celebration, and celebrate we did – several times over.

By now I had become a real fan of Japanese cuisine. I like fish anyway, but raw fish is the real thing. The Japanese are unsurpassed at choosing which fish is best served uncooked, how to flavor it, and how to present it. The aesthetic appearance of a meal is almost as important as its taste, and the blending of these two sensitivities into an art form is heavenly. In Europe, I had already sampled a kind of Japanese restaurant where the tables are formed into a U shape, and the chef stands in the middle, steaming the finely chopped vegetables, shrimps and pieces of steak (the latter is not raw), while enhancing the cooking spectacle with acrobatic feats. In Tokyo, they take this restaurant experience to new heights: the chef accompanies his acrobatic feats with samurai-bellows, so that our eyes, ears, taste buds and naturally our hearts are all involved in helping us attain the perfect dining experience.

Or rather, I thought that was the perfect experience. Casey showed us that there is even more to be had. On the pretext of celebrating the deal, he took Imre, Bence and me to a restaurant requiring reservations three months in advance. (Evidently, Casey sensed the approximate date the deal would be closed three months in advance.) In this restaurant, the chef was the star among Japan's



master chefs, who merited acclaim akin to that of a rock star or sports hero. Only in France have I experienced such respect for the mealtime ritual. As for the fish, I had always believed that the little restaurant behind the Hong Kong fish market was unsurpassed. And it is, but only among Chinese restaurants. In all things fish, though, the Japanese are unbeatable. The menu entitled “kaiseki,” the best of the best, consisted of 10 or 12 courses. About halfway through, the featured event was the infamous “death fish,” or “fugu,” which – if not prepared correctly – can cause instant death by poisoning. The risk was worth it.

A few months later, the top managers from NIF took the three of us (this time it was Bence, Gábor Kazár and me) to celebrate the deal once again. They told us they were taking us to a good French restaurant. I was not too happy about this, since we were in Tokyo, but – what the heck – things could be worse. We were busy at the office all day, and agreed to meet our hosts at the restaurant in the evening. They wrote the name and address of the restaurant on a piece of paper in Japanese characters, for us to give the taxi driver. Bence spoke impeccable Japanese (when on the phone, and the caller cannot see his European face, the Japanese believe he is a native-born Japanese). However, his written language skills were not quite perfect. When Bence attempted to pronounce aloud the name of the restaurant based on the written note, and said something like “Too-Darjha,” I cried out:

– That’s got to be the Tour d’Argent!

In 1986, representatives of the French Matra Datavision firm took us to a very good French restaurant on the Ile-Saint-Louis, and when I praised the excellent meal, they pointed to a building on the far side of the Seine, saying that was probably the world’s best and most expensive restaurant, the Tour d’Argent. If we reached a deal, our French hosts declared, we’d celebrate there. So I’d been waiting for this moment for 10 years! True, I did not have Tokyo in mind, and maybe even our French hosts at that time did not know that the Tour d’Argent had a sibling in Tokyo.

Within a few hours, I learned from the waiter (at the Tokyo version) that the Japanese Emperor, Hirohito, was taken to the Tour d’Argent during a visit to Paris in the mid-1930s. He liked it so much that he requested and received a license from its owners to recreate the restaurant in Tokyo. So here we sat. We also learned that only the waiters are Japanese; everything and everyone else is French. The chef is, naturally, French, and they fly the ducks in on a daily basis from France, more precisely from a farm in the Perigeaux region, which has been producing



ducks for the Tour d'Argent for centuries, and where the ducks, it is said, still drink the same spring water. The story of the restaurant stretches back to the fourteenth century, when one of the King Henrys (alas, I forget which) went duck hunting on the Ile-St.-Louis. After the hunt, he went to an inn and had the innkeeper prepare the freshly shot duck for dinner. The duck was, naturally, sublime; the king gave the innkeeper a handsome reward, who henceforth served nothing but duck. The ducks they have served there ever since are numbered sequentially, starting from the very first one served to King Henry. The duck consumed by Emperor Hirohito was Duck number 600,000-something, so the ducks served at the Tokyo restaurant are numbered accordingly. Every guest receives a certificate showing the serial number of the duck he or she has eaten. We got a certificate, too (I no longer have it – an irreparable loss, I know), but I remember the duck itself very well. The first course involved primarily duck foie gras, but even the first course itself had an introductory phase, a discussion and a conclusion. Then came the breast, then the leg, and finally the parson's nose, each course prepared a different way, accompanied by just the right wine. (The cheese and dessert courses did not include duck.)

Along with fish, duck (whether French or Peking) is one of my favorite meals, so I believe I am qualified to state that the duck at Tour d'Argent really is good. But the exceeding formality and stifling elegance that surrounded the whole experience was a little too much. After the extravagant dinner, we dropped into a seedy little pub for a beer, just to unwind.

### **The world's nicest toilet**

One other Tokyo restaurant, where one of our larger (and evidently satisfied) customers once took us, deserves a mention. The cuisine was very good, but the toilet was even more memorable. The Japanese do wonderful things not only in the culinary department, but also at the other end of the line. After dinner, I unsuspectingly paid a visit to the toilet, but upon opening the door, found myself in a beautiful Japanese garden instead. Embarrassed, I turned back to reexamine the door, but all it showed was the usual symbol for "Men." The Japanese garden was full of twittering birds and babbling streams, and I was not truly convinced I was in the right place until I finally discovered the barely discernible black granite urinals hidden in the bushes. This way, the guest could feel at one with nature even while answering the call of nature. A few charming little wooden johns also peeked out here and there among the trees. These contained black granite toilets that



also functioned as bidets, and their operating techniques portended twenty-first-century technology. Unhappily, instructions were posted only in Japanese, so I had a few mishaps before I figured out what each gizmo was for.

### **Bence returns home**

As successful as Bence was as manager of the Tokyo office, in 1999 we had to find a replacement. Bence had become homesick and requested a position in Budapest. With Casey's help (who had since left Daiwa Securities and founded his own headhunting company), we found an excellent candidate in Hara-san, who remains the leader of Graphisoft Japan to this day. Hara-san had been one of the top managers at IBM Japan. Later, as head of the local office of a huge American software company, he oversaw 400 employees. Graphisoft had evidently changed a lot since Laurence wrote his letter; if we were attracting managers of this caliber:

Bence has found new challenges at Budapest headquarters as the head of ArchiCAD Product Management.

### **Graphisoft Hong Kong and the great promise of China**

Our Japanese successes whetted our appetite for doing more business in the Far East. In 1996, we opened an office in Hong Kong to take advantage of the endless possibilities promised by the Chinese market.

This was the rational and objective motivation for the Hong Kong office. The real motivation, though, was more subjective, as it was for every single office we had opened thus far: Remember Steve Cottingham? Sergio Nanni hired him for the TIS office in Prague; Steve became Apple's hero, first in Czechoslovakia, then in Russia. At the time, I promised him that he would always be welcome at Graphisoft. In 1996, he took me at my word. Steve was living in San Francisco, so we met at our office there. I wanted him to head up our U.S. sales effort, but Steve felt that the truly great possibilities were in the Far East, specifically China. So be it. I slept on it (like Okawa-san did when faced with momentous decisions), and by the next morning had decided that I would convince our directors to open a new office for Steve in Hong Kong. Given our success in Japan, they didn't need much convincing, and during a subsequent teleconference the directors approved the new office. But I can honestly say that the little restaurant behind the Hong Kong fish market was not the deciding factor behind this decision.



Steve soon found a strong partner for the task. At the next distributor meeting in Budapest, Steve made the acquaintance of Tone, the fetching and ambitious sales associate of our Norwegian reseller. The acquaintance developed into love, and then marriage, so Tone, too, went to Hong Kong. At first, Tone's Norwegian boss protested at having lost his valuable employee, and referred us to a clause in our standard reseller agreement, which prohibits "headhunting" among each others' employees. But Tone reassured her former boss that it was actually "heart-hunting" that transpired, which was not prohibited in the reseller agreement.

The opening of the Hong Kong office was prefaced by lengthy negotiations with Steve regarding his salary and his targeted objectives. After my experience with Gyuri Kafka, I was used to such negotiations and did not object to Steve's tough stance. Steve asked for a very high salary (considerably higher than anyone had ever earned before at Graphisoft). I reacted by stating that an ambitious salary comes with ambitious sales targets. We set a target of doing \$2 million of business in China within two years; this corresponded roughly to the amount of our business in Japan. Deep down, I felt that although China was huge, we would not be able to attain \$2 million in revenues. I did feel that reaching even half this goal would be a good thing, and Steve would still be earning the highest salary at the firm. Today, I know that this was the wrong approach. For a true salesperson, the "target" is of central importance: if he doesn't reach the target, he will be frustrated, which is not good for any of us. What I should have said is this:

– Sorry, Steve, but I can't pay you the salary you are asking for. But I can promise that we will set you a target that is realistic, one which you might even exceed. If you do, your income might even reach the salary level you are seeking. But don't count on it – it will be very difficult.

But I didn't say this, which was a mistake. Not a fatal mistake, though. When Steve realized that China was a harder nut to crack than we'd expected, he took the path of least resistance and increased our business in the other countries in the region (Hong Kong, Korea, Taiwan, Philippines, Indonesia, etc.). Before Steve came on board, this region (excluding Singapore, which Imre kept for himself) had produced about \$200,000 in revenues. Within two years, Steve had tripled this figure. A fine accomplishment, but we realized that, in the long run, we could keep our Hong Kong office open only if we kept our focus on the promise of China. This, it seemed, was not the job for Steve. In 1998, we convinced the Cottinghams to move to San Francisco and head up our sales effort in the U.S.A. (where we continued to have trouble getting good salespeople).





The Cottinghams again produced excellent results: U.S. sales of ArchiCAD at the time approached \$5 million. (We're still waiting to repeat that feat.) In 2000, Steve and Tone returned to the Norwegian fjords for a while, and then worked for us once again at Budapest headquarters from 2002 to 2004.

In 1998, András Szigeti took over the Hong Kong office. We hoped that his experience in the former socialist countries (where his results were especially outstanding) would be more useful in breaking down the Great Wall of China than Steve's American style. András's hard work led to relatively valuable government connections, but even these did not produce the expected results. The promise of China's "unlimited market" would have to await the new millennium.





## Chapter 13

# Going public: the benefits and the pitfalls

With Okawa-san's decision to invest in Graphisoft, our long-term fate was sealed: taking the company public was no longer just an option, but a binding commitment. At the time, I didn't really understand why our investors worried that we might draw back from going public. From what I saw in America, going public is the natural aim of every high-tech company. But at the time, I could see only the advantages of listing on the stock market, not the disadvantages. Don't misunderstand me: I still believe that our decision to go public was indisputably the right one. But anyone who starts down this road should also be aware of the pitfalls, right from the start.

## The downside of being a listed company

### Company mission

A private company has the freedom to set any number of goals for itself: to save the world, for one; or, at least, to make the world a better place; or, at minimum, to make the life of its target market – in our case, architects – easier. We might define more practical goals: to create a pleasant, relaxed workplace for ourselves and our co-workers, while enjoying a good living and a fulfilling career at the same time. In addition, of course, the privately owned company must serve the interests of its owners. In their excellent book, *The Joyful Organization*, Imre Lövey and Manohar Nadkarni state that a company's fate hinges on finding the right *balance* – the perfect harmony – in fulfilling the needs of all three of these groups: clients, employees and owners alike.



But this balancing of three-way interests is much less possible for a public company. In making the decision to go public, we must clearly understand that we are promising our investors that *our overriding goal is to maximize share value*. All other factors – making our clients and employees happy – are subordinate, and can only be pursued as a means of achieving the all-consuming goal: to maximize share price.

### Expenses and risks

The IPO itself costs a lot of money, but maintaining the company on the stock market also entails ongoing expenses. Some of these are direct costs, easy to account for: listing fees, expensive accounting fees, even more expensive fees for directors and members of the supervisory board, the cost of issuing quarterly and annual reports, annual meetings, mandatory public reports, etc. In addition to these considerable and well-defined expenses, you have to consider indirect costs, which are even greater, yet harder to calculate: for example, the time and energy expended on these activities by your company managers. But the biggest “hidden” cost of being on the stock market is the legal risk: as a public company, you drastically increase your chances of getting sued. It is worth suing a public company, because a lawsuit inflicts far greater damage on a public company than a private one. I am sure that the lawsuit against Graphisoft’s U.S. office described in Chapter 9, a very painful experience both personally and financially, could have been avoided if we had not been preparing to go public at the time. (It is only for this reason that Mr Stone, the plaintiff’s lawyer, invested so much effort in the lawsuit.) It is also true, however, that the risk of such lawsuits is, for now, much smaller in Europe than in the U.S.A.

### Short-term pressures vs. long-term goals

The stock market calls the company to account on a continuous basis. This has its positive aspects (see below), but we must also realize that the day-to-day share price fluctuations reflect only short-term considerations. Luckily, we have long-term investors, too, who are interested in our long-term strategy and oblige us to stick to it, but the fact is, these investors are not the ones who have an impact on the company’s day-to-day share-price fluctuations. Short-term speculators are much more influential in this respect. They provide most of the transaction volume, and since banks make their money on these transactions, financial analysts concentrate, for the most part, on the likely effects of



the current quarter's financial report. As a result, many public companies subordinate all else to meeting the next quarter's targeted results, even at the cost of the company's long-term interests. To illustrate, let me share what our very professional and able procurement director was taught at a training course:

- If you are buying supplies from a public company, make sure you time your purchase for the last day of the financial quarter – you'll get a better deal.

## **The benefits of being a public company**

So, faced with these negatives, what is the upside of participating in the stock market? As daunting as the disadvantages are, I remain convinced that the stock market's objective advantages for our company counterbalance the extra time, costs and risks it entails.

### **Employee motivation**

Employee motivation was, for me, the most important benefit. From the beginning, I had envisioned Graphisoft as a company that treated its employees as true partners, involved them in decision-making, and shared the profits with them. From our earliest days as a socialist-era firm, I made it clear that co-workers who produced outstanding results and demonstrated commitment to the firm would sooner or later become partners benefiting financially as the company grew. This policy remained in place throughout our years as a private company operating in the global free market. Since going public, this policy has taken the form of manager stock options. To realize the value of these stock options, and to be able to partially cash them in as needed, requires the company to be listed on the stock exchange.

Employee base salaries must be competitive, and must provide a decent living. But real motivation occurs if employees know that their dream of getting rich is a real possibility in the case of a genuine breakthrough. In the Silicon Valley of the 1990s, stock options became the primary incentive for managers and other high-ranking employees. High-level managers would not even consider working for a company that was not listed on the stock market, or did not promise that such a listing was imminent. In fact, this latter situation – a company at the “pre-IPO” stage – was the most attractive, for such companies offer the biggest prospects for growth, since stock prices often make their biggest jump at the time of the IPO. Several employees came to work for us for the same reason: we promised them that Graphisoft would go public, and so we had to keep our promise.



### **Marketing advantages**

Being listed on the stock market brings extra publicity for the company, which itself brings an extra measure of security to our investors. More importantly, the mere fact of being a public company represents a major guarantee for its clients, since the company's financial records are an open book. The extra publicity that accompanies a publicly listed company is especially valuable for its larger clients, who are themselves publicly listed companies. Executives of such companies regularly follow the financial press and related internet forums (usually more often than they read the professional publications relevant to their own industries), so news about another public company reaches them faster than an ad in an industry journal. Even leaving the publicity issue aside, a public company has a far weightier interest in staying in business than a private company; public companies are much less likely to go bankrupt, so clients can order their products with greater security.

### **Pressure to perform**

The constant, quantitative feedback provided by the daily stock price, and the financial analyses affecting this price, brings about an intensive and continuous pressure to perform. True, this accountability is measured primarily by short-term interests, but even the constant short-term pressure aimed at maintaining a quarterly profit is a positive force if the company is able to maintain the delicate balance between short-term and long-term goals. The mandatory quarterly financial reports oblige the firm to set up a transparent and reliable financial system, which most companies, in the absence of the stock market's mandatory rules, tend to avoid out of sheer laziness, even though such financial systems can be very useful in the long term for any business, even one not publicly listed.

### **Capital injection**

This is supposed to be the main benefit of the stock market, and the only reason I am listing it farther down on my list is that, in our case, the capital injection was less important. The fact is, we didn't really need fresh capital. Until 2002, we had kept our "bad" habit of remaining profitable, and this profit was always enough to finance a healthy rate of growth and the accompanying increase in personnel. To put it in more critical terms: we hadn't yet learned how to use the additional capital to accelerate growth. (This was one reason that, following a successful IPO, our share prices went into decline.)



### **Last but not least: personal income for the founding owners**

Tamás Hajas would often say skeptically:

- My share of the company may be worth a lot on paper, but it doesn't pay for my groceries.

For Imre Pákozdi, a suite of leather furniture symbolized what his shares might mean if given cash value. For me, it was a vacation house on the Mediterranean. (The difference in our dreams reflected not just our respective ownership shares, but also our differing ideas as to what the true value of the company might be.) It is nice to own a profitable company and take home dividends, but a successful listing on the stock exchange provides a very different magnitude of income, especially if high-tech companies turn in soaring stock performances, as in 1997–2000. The Japanese investment already provided us a healthy income, but our listing on the stock exchange at the right time meant a whole lot more money. I and eleven other partners from the company's early days became multimillionaires in dollar terms. And we became rich in a way that we didn't have to hide; we could publicly be proud of ourselves. In fact, such publicity is mandatory: all public companies are obliged to publish the share ownerships of their major owners.

Moreover, I believe that major growth possibilities are still ahead for Graphisoft. For a new generation, capable of creating more and better things than we did, a prosperous future through stock options remains a viable dream.

### **The road to the stock market**

Let's return to 1996, when getting listed had turned into a binding strategic decision, and we began to prepare for the big event. The stock market is like making love: the most flattering part is not so much its consummation, but the road there: the courting phase and the overtures.

For our Japanese partners, we committed ourselves to a three-year deadline: by the end of three years, we would be a public company. This turned out to be a realistic goal, given the favorable external factors and the apparently limitless stock market growth among technology firms of that era. Most public IT firms were listed on the NASDAQ exchange, so that's what we aimed for, too. We wanted to position Graphisoft as a global company, not an Eastern European one. Not so much for reasons of prestige, as because – learning from our 1993 failure to find investors with CAIB's help – we did not intend to target investors who specialized in our region. We were afraid that if we listed on the Budapest stock market, then most potential investors there –



who specialized in Eastern Europe's transition-economy companies – would not have the expertise to evaluate companies like Graphisoft. Companies like ours were an unusual phenomenon in Eastern Europe, but perfectly common in Silicon Valley. So we figured that NASDAQ would be the right exchange for us, and NASDAQ investors would give us a better valuation.

## **The courting phase: choosing partners**

When a company goes public, three players (in addition to the company itself) stand to gain a lot from the transaction. These are:

1. The independent auditor from an accounting firm, who verifies that our financial records reflect the company's true financial condition.
2. Law firms, which ensure that we do not publish anything in our IPO prospectus that might later, if stock prices fare poorly, provide a basis for suing the company, the auditor, the investment bank, or even all three of them.
3. The investment bank which sells our shares.

Choosing these partners constitutes the “courting phase.” These companies are always on the prowl for firms with stock market potential. Such firms, after all, earn them their living.

### **The accounting firm**

We had had an accountant since 1993, when we first started looking for investors, and always had a representative of one of the big international accounting firms review our financial statements. At that time, there were still six such firms (“the Big Six”). Today, only four remain: one was merged, and another had to fold amid a colossal scandal. This firm, Arthur Andersen, happened to be one of our former accountants, but it seems they went under not because of us, but due to the infamous Enron scandal.

I think the problem is not with the accounting firms, but with the system. Technically, the accounting firm is hired by the company's shareholders, since the firm is charged with protecting the shareholders' interests by ensuring that the management is not cooking the books to make them better than they really are. But in practice, the real choice is made not by the shareholders, nor even by the Board of Directors which makes recommendations to the shareholders, but, in many cases, by the very management team whose



books the accounting firm is supposed to examine. The conflict of interest is obvious, since the accounting firm is better off if it has as many clients as possible, and so has an interest in being on good terms with the client's managers. It is true that accounting firms also have a long-term interest in a good reputation, and will, if necessary, challenge the client's managers and so risk losing the client. But, as shown in the Enron debacle, this is not always true. This system is similar to having companies choose their own tax inspector, and having the tax inspectors' bonuses hinge on how many client firms they are chosen by. It would be interesting to see how such a system would affect a country's tax revenues.

One solution would be for companies – at least for public companies – not to choose their own accounting firms, but have them appointed by the stock exchange. It seems, though, that this idea is a lost cause, for it would hurt too many iron-clad interest groups. The world has decided, instead, to give more work to the lawyers.

### **The lawyers**

Although most lawyers specializing in securities are located in New York, we opted for a law firm based in Silicon Valley, because our own company was located here, and it seemed a practical move to hire a new firm that would not only oversee our IPO, but also take care of our other, less attractive legal matters.

For the noble business of taking our company public, we ended up choosing one of Silicon Valley's most prominent law firms specializing in IPOs. I was less interested in the firm's reputation than the lawyer himself, the person who would actually be working for us. At first, we were received by the firm's naming partner and owner, who was associated with some of the Valley's biggest and most successful transactions. He was even featured once on the cover of a major business magazine as one of Silicon Valley's most influential figures. He was a very charismatic individual indeed, and I was very impressed that he received me in person. (As you may have noticed, snobbery is one of my weaknesses.) But after asking him who, personally, would be in charge of our account, I became a little suspicious, for he answered:

– Me, of course.

I then inquired delicately how many IPOs the law firm managed annually, and of those, how many he himself managed personally. His reply: about a



hundred and he did about five or ten himself. So I asked: to what do we owe the honor of being one of these few? My suspicion that he was feeding me a line must have been evident. But he was shrewd enough to have an answer ready: their firm was big and famous in the U.S.A., but not in Europe. Graphisoft would be their first European reference, and this was important to him personally. I was conceited enough to believe him, and signed the contract immediately. In effect, this was the last I saw of him in person. It is true that the lawyer who first took charge of our affairs was also a very good lawyer, but I was irked when that lawyer also took a back seat and assigned our portfolio to a young lawyer still inexperienced in the IPO business. Luckily, no harm came of this. In any event, the investment banks had plenty of lawyers who gave each other lots of work, even without our lawyer.

### **The investment bank**

The most important partner in the IPO, and the one who makes the most money on the transaction, is the investment bank. The bank orchestrates the whole event; selling the shares is the very essence of the IPO transaction. The investment bank is in charge of conducting a thorough investigation of products, markets, operations and management, and – most importantly – assigning a value to the company. If the bank commits to carrying out the IPO, this commitment represents a guarantee to its clients (i.e., the investors) that the bank deems the company a serious one, whose shares really are worth their sale price.

This system contains some contradictions and conflicts of interest too, (as with the process of appointing an accounting firm), since the more clients an investment bank brings to market, and the higher the share price it asks, the more money the bank will make. Therefore, their direct financial interests do not encourage the banks to weed out the weaker companies and make realistic valuations; they will pursue such goals only to protect their long-term interest in keeping their good reputation intact. It would be better if the banks' short-term interests also induced them to weed out the bad and correctly value the good, but what can we do? This is how the system works. (The system does not work perfectly, as shown by the dot.com bubble.) Figuring out an optimal incentive system is one of my favorite pastimes, and naturally I have ideas for solving this problem, too, but I won't go into that here.





During this courting phase, we made contact with several dozen investment banks, which can be categorized into two main groups. The first group consisted of the big guns, such as Merrill Lynch, Morgan Stanley, and J.P. Morgan. The second group was made up of smaller, so-called “boutique” firms – such as Alex Brown and Hambrecht & Quist – which specialize in high-tech firms and NASDAQ. We soon realized that Graphisoft was too small for the biggest investment banks; they preferred companies worth at least a billion dollars, and whose IPO was expected to sell at least \$100 million worth of shares. We did not fall into that category; we were targeting a share sale in an amount of about \$20–30 million, and a total company valuation of around \$100–150 million. Apart from this, though, I thought that the smaller banks that specialized in firms like ours would be a better bet for us.

At our Budapest headquarters in Kolumbusz Street, experts from the various investment banks came and went in a constant stream. I, too, was invited to countless bankers’ conferences, where I got plenty of practice in presenting Graphisoft’s past, present and ambitious future plans. The most memorable of these was a conference organized by Cowen & Co., in Monte Carlo. This was shaping up to be just one more of many such invitations, and since it conflicted with a long-planned family ski vacation, I was not too happy at having to attend. But then I figured I could squeeze in the conference and still only miss one day of skiing. That year, we planned to ski with friends in Sölden, Austria, where we were renting a spacious cabin not far from the Brenner Pass. In a good car (we had a Jaguar by then), the trip to Monte Carlo was only five hours, so if I left in the afternoon after the day’s skiing, I could make it to Monte Carlo in time for the evening reception. The next day I’d give the presentation and be back at the cabin in time for dinner with family and friends. I convinced my wife of this plan, and even convinced her to accompany me on the Monte Carlo jaunt. The last time we had been in Monte Carlo was on our honeymoon, 23 years earlier.

### **A story from 23 years ago**

That first sojourn to Monte Carlo was much more modest, to put it mildly. We drove in our ancient Zastava, a heap which we’d bought secondhand, and which barely passed the inspection required for temporary registration. We slept in the car or in sleeping bags on the roadside, living on salami brought from home. We had just enough money to buy gas, bread, and some



cheap French wine. And we had just enough left over for two entrance fees to a Monte Carlo casino, plus a total of four gambling chips – we couldn't possibly have passed up the casino experience. Once we'd worked out that we had enough to get into the casino and even gamble a little (luckily tuxedos were not required), we began to dream about what we'd buy if we won. Next to the casino was an elegant car dealership selling Rolls Royces, Bentleys, Jaguars and Ferraris. If we won a lot, we said, we'd buy one of those. But if we didn't win enough to buy such a car, then maybe we could spend a night at the fancy hotel adjoining the casino. But if we didn't win even that much, then maybe we could have a nice dinner at the hotel restaurant. And we won! For our 20 francs worth of chips, we won 100 francs. If we subtracted the entrance fee (32 francs) and our initial starting capital in chips (20 francs), we were still 48 francs in the black (about \$10 at the time). This wasn't enough to buy a car or a night in the hotel, nor would it buy much at the hotel restaurant. But it was enough for two sandwiches made with real French baguettes and a small bottle of wine on a seaside terrace café. And this made us just as happy.

I recalled this story when arriving at the bankers' conference and the bell-boy showed us the spacious terrace of our hotel room overlooking the sea. This was THE SAME HOTEL, next to the casino and car dealer; and the bell-boy had just taken the keys to our Jaguar to park it in the hotel lot, and the dinner was in the Rothschild castle at the top of Cape Ferrat, a place we hadn't even heard about 23 years earlier. But best of all: we also knew, by then, that all this didn't mean very much. Next day at noon, after a successful presentation, we hurried back to the wooden cabin, where our friends awaited us, the fireplace was lit, and we cooked our own dinner. That was at least as good – if not even better.

## **The dream team is ready to roll**

Some of the investment bank candidates we didn't like; others didn't like us (they thought our growth rate of 30 percent a year was insufficient). In the end, we reached agreement with the San Francisco-based Hambrecht & Quist. We were in good company. Hambrecht & Quist was in the midst of managing the IPO for Netscape, which I believe was an unparalleled success in the history of IPOs. During the Netscape road-show, the bank revised its planned share sales from 3.5 million to 5 million shares; the initial share price



estimate of \$12–\$14 shot up to \$28. After the IPO, the share price skyrocketed to \$75.

So we had assembled a strong team; now it was time to get to work. The first step was to set out an exact schedule. We had to plan backwards: first set the target date, the first day on which shares would be sold. It was very important that this date be timed to coincide with a bull market. If this failed, the IPO might have had to be canceled at the last minute, because new and therefore risky companies are always in poor demand during a bear market. In other words, our first step was to predict the future: the investment bank would try to predict how the market would be behaving six months in advance. An impossible task, but they tried it anyway.

In the end, though, it was not the investment bank but my wife who picked the date. When we realized that the six months prior to the IPO would be so busy that a vacation was out of the question, my wife then announced a strong hunch that spring of 1998 would see an enormously strong bull market. (And our summer vacation would therefore be safe.) Since the bankers' predictions were not based on a scientific basis any sounder than my wife's intuition, they accepted my wife's proposed date, for the time being, but only temporarily. At the end of 1997, when we had almost finished with our IPO prospectus, our banker friends at Hambrecht & Quist unexpectedly canceled the IPO. Probably their fortune tellers had decided that the stock market surge that was still going strong would not make it till the spring. As we will see, they were wrong, and my wife was right, because the bull market continued for a good long time – longer than anyone had expected, right up until the millennium.

Of course, this is not what Hambrecht & Quist told us. Instead, they pointed to our 1997 financial results as insufficient. True, our sales figures were growing at a somewhat slower rate than in the period 1994–1996, when we enjoyed the combined positive effects of the new Windows version, the Apple's PowerMac, QuickTime VR and early positive returns in Japan. But our sales figures in 1997 were not as bad as Hambrecht & Quist saw them. As it happens, Hambrecht & Quist's analysts could think only in dollar terms. Since the dollar was gaining in value, much more than expected, our revenues in non-dollar currencies (that is, the bulk of our revenues) decreased in dollar value. In vain, we explained that our performance was not weakening – it just looked that way when expressed in dollars. Neither Hambrecht & Quist's



analysts nor the American investors they had lined up understood this. They could only think in terms of dollars; the dollar is “real money,” and if we were making less in dollar terms, then we must be making less, period. And if we were making more in deutschmarks, but that was currently worth less in dollar terms? That was our problem – we should have been selling more in America.

## **American blinders**

I had come up against this America-centric bias several times during our early presentations to potential investors. Time and again, they would ask why “only” 15 percent of our revenues stemmed from the U.S.A. In their experience, any decent software company earned at least half its revenues on the U.S. market. The fact that more than 90 percent of European software companies sold absolutely nothing on the U.S. market (and still did quite well, thank you) did not faze them. And as for the fact that the number of architects in the U.S.A. barely exceeded the number in Germany, and that German architects earned more than their American counterparts – well, they just refused to believe it. Unfortunately, I could not back any of this up with “objective” market research data, because the market research companies they trusted were all American firms, and these firms were also unaware of these facts.

The best example of the short-sightedness of these firms was their analysis of the Japanese market. Take the report issued by one of the world’s largest IT market research companies (I won’t give their name lest they sue me for discrediting their reputation). This report listed the top companies selling architectural design software for every major market. The section devoted to Japan did not even mention Fukui Computers, Japan’s undisputed market leader in this industry. Yet the existence of Fukui Computers was no secret, since it was a publicly traded company on the Tokyo Stock Market, and its software sales revenues, which exceeded \$40 million, were a matter of public record. When I wrote a polite letter to the market research company calling attention to this omission, it replied that it only dealt with companies whose revenues exceeded \$1 million. I didn’t reply again, not wanting to point out that, according to my modest mathematical skills, \$40 million exceeded \$1 million. Instead, I read the report for similar omissions, and finally figured it out: the “global” list of top-ranked companies only included “foreigners”



which were also active on the American market. As for the rest, regardless of their domestic importance, the market research firm had no idea that they even existed.

## Back to Europe

I recognized that our world was highly America-centric, and this was what we had to adjust to. Hambrecht & Quist informed me of the upsetting decision to delay the IPO during one of our meetings in San Francisco. Downcast, I boarded a British Airways flight from San Francisco to London and had just taken my seat when I noticed a familiar person making his way toward first class. It was Marc Odendall, head of the European branch of Deutsche Morgan Grenfell, an investment bank that is (despite its name) based in the U.S.A. A year earlier, this bank had pushed hard to get our IPO business, but in the end they came in second to Hambrecht & Quist. He invited me for a drink at his seat in first class. (The first-class section on the BA flight was top-notch! Not only could you recline the seat into a horizontal position to serve as a relatively private bed, where you could really sleep, in pajamas if you liked; you could also set up a guest seat and coffee table for a business meeting.) So, over a drink somewhere over the state of Utah, I related to Mark the story of how the currently unfavorable (to us) strength of the dollar caused our IPO to be delayed. To this, Marc asked why do we had to issue our financial reports in dollar terms and list on the NASDAQ, if most of our sales were in Europe and accounted for in deutschmarks? The “Neuer Markt,” the section of the Frankfurt exchange devoted to high-tech companies, had just gotten started; its valuations exceeded even the sky-high figures on NASDAQ, and so Germany was really the place for Graphisoft. Marc assured me that Deutsche Morgan Grenfell stood ready to take on the job.

A year earlier, I had found Marc and his bank very agreeable. I had attended their conference, and the only reason we didn't choose them was their name. Morgan Grenfell is one of the renowned successors to the once-legendary Morgan bank, which was segmented into several entities following the 1929 stock market crash (others include J.P. Morgan and Morgan Stanley), but Morgan Grenfell was acquired by Deutsche Bank, so they added “Deutsche” to their name. (Soon thereafter, they became simply “Deutsche Bank Securities.”) But it was this “Deutsche” that bothered me, because I always got the feeling, while in the United States, that our “European stigma” was a disadvantage. One



reason for this phobia of mine was our lawsuit, in which we ended up the losers; therefore I would have preferred a “real” American bank instead of “Deutsche” Bank. But then, if we were going to list in Frankfurt, they were the best choice.

We came to an agreement with Deutsche Bank relatively quickly. The only remaining question was: which other banks, in addition to Deutsche Bank, would participate in the transaction? In an IPO, there are almost always one or two other banks taking part, in addition to the lead investment bank, primarily so that the listed company would get the benefit of multiple financial analyses in the future, and so that multiple banks would have an interest in keeping transaction volumes high. Marc recommended that we include a second German bank, but I wanted to be fair toward our previous partners, and insisted that both the Japanese Daiwa Securities (whom I'd promised this participation at the time of Okawa-san's investment) and Hambrecht & Quist, who had already completed the lion's share of the work associated with the IPO, remained on board. Four banks would be too many, so there was no room for a second German bank. Marc and his colleagues tried to point out that this was a bad decision, because my preferred partners would offer no support in Germany down the line. But they argued in vain, for I insisted on remaining loyal to our original partners. As it turned out, this loyalty was costly, and we could really have used another German bank's support later on.

So the team was complete once more. We kept the lawyers we'd picked for the NASDAQ IPO, and Deutsche Bank hired the lawyers from Hambrecht & Quist who'd worked on our IPO, since they knew all the background – why start again from scratch with somebody new? We reworked the prospectus only as necessary, to reflect the difference in revenues when calculated in deutschmarks. This was no small difference, because in dollar terms our growth rate showed a slowing trend, dropping below 20 percent, while in deutschmarks, the figures displayed an expanding growth rate that reached 35 percent. This discrepancy had to be thoroughly explained, since American-style prospectuses are written in such a way as to almost argue against the company interests, rather than market its strong points. This “negative” style, of course, stems mainly from the concern that someone might sue the company for having omitted a salient fact from the prospectus. So, in at least eight places, the prospectus called attention to

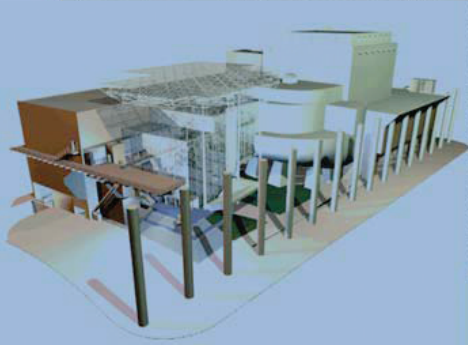
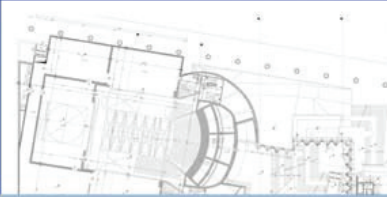


the strengthening dollar and its positive effect on our (deutschmark-denominated) revenues, and that this dollar trend might not continue in the future, and might even be reversed, adversely affecting our financial results. (In fact, this did happen a few years later.) We had no reason for a guilty conscience, since our actual performance really was more accurately reflected when expressed in deutschmarks than in U.S. dollars.

So, thanks to our American lawyers, our IPO prospectus for the Neuer Markt ended up being rather more American in style than the Germans were used to, with its primary focus not on Graphisoft's strengths, but on the potential risks to the investor. But the PowerPoint presentation we created to accompany the prospectus, to be presented during the road show, was a true masterpiece. With the help of David Marlatt, Tamás Hajas and – not least – the boys from Deutsche Bank, we succeeded in creating what I believe was the best marketing material so far in Graphisoft's history. From the start, it was clear that this presentation was not just intended for the IPO, but would be used in future to present Graphisoft and its products to major clients and investors. We did use it for years to come, and the strategy first articulated in this presentation can be considered the foundation of the Graphisoft strategy that remains in place today.



# We do Architectural CAD



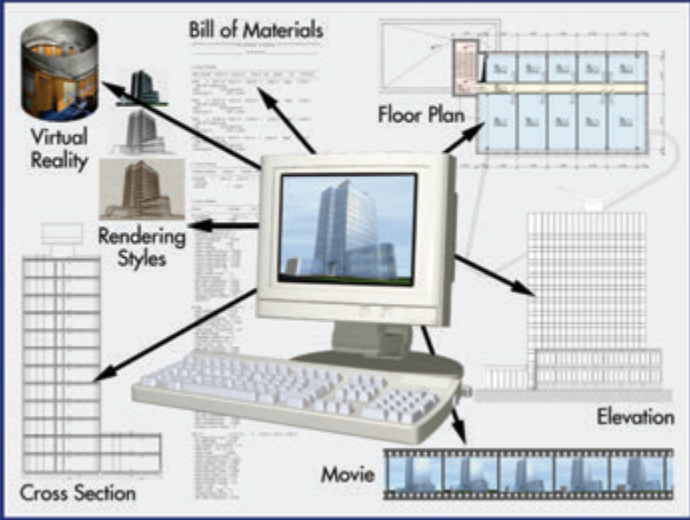
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Item	Quantity	Unit	Description
1	1.00	m <sup>2</sup>	Wall
2	1.00	m <sup>2</sup>	Floor
3	1.00	m <sup>2</sup>	Roof
4	1.00	m <sup>2</sup>	Window
5	1.00	m <sup>2</sup>	Door
6	1.00	m <sup>2</sup>	Stair
7	1.00	m <sup>2</sup>	Basement
8	1.00	m <sup>2</sup>	Attic
9	1.00	m <sup>2</sup>	Garage
10	1.00	m <sup>2</sup>	Pool
11	1.00	m <sup>2</sup>	Deck
12	1.00	m <sup>2</sup>	Patio
13	1.00	m <sup>2</sup>	Driveway
14	1.00	m <sup>2</sup>	Landscaping
15	1.00	m <sup>2</sup>	Site
16	1.00	m <sup>2</sup>	Foundation
17	1.00	m <sup>2</sup>	Structure
18	1.00	m <sup>2</sup>	Interior
19	1.00	m <sup>2</sup>	Exterior
20	1.00	m <sup>2</sup>	Roofing
21	1.00	m <sup>2</sup>	Cladding
22	1.00	m <sup>2</sup>	Painting
23	1.00	m <sup>2</sup>	Lighting
24	1.00	m <sup>2</sup>	Heating
25	1.00	m <sup>2</sup>	Cooling
26	1.00	m <sup>2</sup>	Plumbing
27	1.00	m <sup>2</sup>	Electrical
28	1.00	m <sup>2</sup>	Telecom
29	1.00	m <sup>2</sup>	Security
30	1.00	m <sup>2</sup>	Accessibility

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# The Graphisoft Virtual Building™ Concept



Virtual Reality

Rendering Styles

Cross Section

Bill of Materials

Floor Plan

Elevation

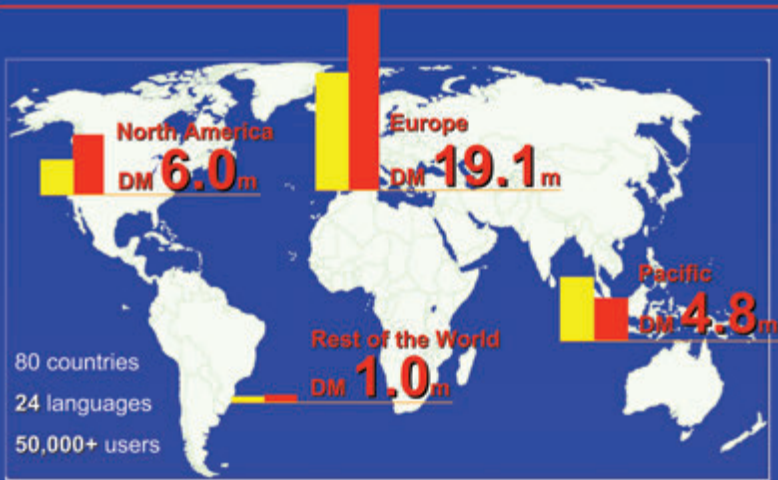
Movie

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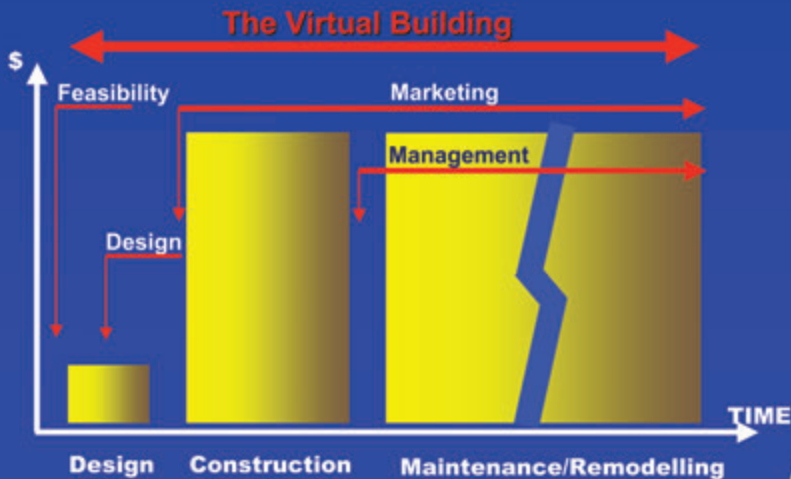
## Global sales in Q1-Q3 1998



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## The Virtual Building concept addresses the entire building value-chain



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## Prelude to the big moment

The last phase of the pre-IPO preparations consisted of the road show: the final prelude to consummating the deal. By the time the road show began, we had to agree on the exact number of shares to be offered, and on an approximate initial price – that is, a price range defined by a high and a low limit. The true initial share price would be set only after the road show and at the close of the concurrent subscription period, based on the number of shares subscribed and the price indicated by subscribers. Another item to be decided before the road show: how many of the offered shares would be newly issued shares used to raise capital, and how many would consist of previously owned shares that the company's original owners could sell off for cash? The investment bank and investors preferred that their money stayed in the company as a capital injection, while the existing owners would have liked, on this momentous occasion, to pocket some real money (for leather furniture and so forth). The result of these negotiations depended on market conditions and on which side wielded more power. The usual result is something like 1/3 to 2/3 in favor of the capital injection.

In our case, every figure exceeded our expectations. Originally, we had hoped for a share price of \$10–12 for our NASDAQ IPO. In the end, the original price range set at the time of our European road show was 35–40 deutschmarks, which amounted to \$20–25: double our original target. In terms of the proportion of shares ending up as cash in the owners' pockets, versus a capital injection, we again achieved double our original target: the original owners could pocket the revenues from 2/3 of the total share sale, instead of the 1/3 we'd expected. As a result, even before the show hit the road, we could see that we would be making four times more money than we'd expected for "leather furniture" purposes.

And the best part of the prelude was still ahead: the road show itself.

We started off with a press conference in Frankfurt, then continued to Cannes for Deutsche Bank's annual conference at the Carlton Hotel. A year earlier, I had attended the annual conference here, and made a presentation, as one among dozens of other private firms, also potential candidates for future IPOs. I did not know then that just a year later we would be the darlings of the conference. (But even then, the first year, I had an inkling, since they booked me in the hotel's presidential suite and took me to extravagantly elegant restaurants for dinner.) That year, Hannes got the presidential suite, but I and the others representing Graphisoft – Péter Hornung and Sándor Bihari – had no complaints about our royal treatment.



The enormous posters announcing the bank's meeting featured Graphisoft's quill-pen logo; I gave the plenary address for the conference. After that, it was time for the one-on-one meetings with the most important investors, for whom we held individual presentations in separate meeting rooms. Originally, we'd planned to alternate giving these presentations among the three of us, but I got so caught up in the swing of things that in the end, the other two only took part in the post-presentation Q&A sessions, answering financial and other detailed questions. But I did all the strategy presentations myself, not letting anyone else do it. (They didn't really insist.) So I ended up giving 10 or 12 presentations a day, breaking only to take an occasional refreshing shower. It was terribly exhausting, but I thoroughly enjoyed it all. After Cannes came Geneva, then Milan, Amsterdam and finally London, where the road show came to an end. The dream of a private jet was also realized – though it did not yet have our company logo on the tail, they did rent it just for us between Cannes and Geneva.



*A chartered jet for our flight from Cannes to Geneva*

Everywhere, limousines awaited us, and we stayed in the most expensive, most famous hotels available. This extravagance was especially meaningless in Amsterdam, where our plane landed around midnight, and by 8 a.m. the next day we were already starting our presentation to a major bank at a location near the airport. It would have been much more practical to sleep in a hotel next to the airport, but since we had it coming... The limousine awaited us patiently at





*This picture was taken when we were still in Cannes*

the airport, took us into downtown Amsterdam, where we stayed at the graceful Hotel Europa in rooms with a view of the canal. Sándor even had the energy to take a nighttime stroll along the canal, although we only had a few hours to sleep.

Our fanciest hotel experience was at London's "The Lansborough." Even at first glance, this hotel looked more like a lord's castle. In the entrance hall, there was no sign of the usual hotel reception desk. Instead, the front room, furnished in mahogany and leather, resembled a private study, where the hotel executive waited to discuss our accommodations, in much the same way as you might discuss tonight's dinner menu with the chef at a good

Italian restaurant. My room, or rather my suite, was beyond my wildest dreams, with its dark green drapes, mahogany paneling and massive leather sofas in dark green hues in the entrance (there was no fire burning in the fireplace, but only because it was June), an enormous mahogany desk in the work area, and (naturally) an enormous canopied bed in the bedroom. Paintings of marquis – or perhaps they were kings – gazed down at me from their oily heights on the walls.

The "rational" business reason behind this often unnecessary and wasteful luxury must have been that such treatment would increase our sense of self-importance, which in turn we would radiate, to good effect, during our presentations. I don't know about the others, but I felt myself quite important enough even without the luxury treatment, but I did enjoy it. (Especially since we didn't pay for it ourselves – the bank paid for it out of their commission.)



## The consummation

The consummation – that is, the IPO itself – was worthy of the state of ecstasy induced by the road show. Nearly every investor subscribed at the 40 deutschmark (ca.US\$23) share price, the top of the price range; the IPO was oversubscribed by a factor of 35. At the time of the initial offering, the price reached 65 deutschmarks (US\$37), so Graphisoft's full value exceeded 650 million deutschmarks (US\$370 million), which put our value on a par with that of blue-chip companies on the Budapest stock exchange. Graphisoft's name and share value could be seen continuously on the ticker at the bottom of the CNBC screen and of the German N-TV station. *The Financial Times*, the *German Handelsblatt*, and the rest of the major European financial press published our share price every day.



On the floor of the Frankfurt Stock Exchange:

Gábor Kazár, Laci Sparing, me, Sándor Bihari, and Péter Homung





Frankfurter Wertpapierbörse - Bekanntmachungen vom 08.06.98

08:44	GPH	913585	GRAPHISOFT N.V.	- ERSTER PREIS: 65,00
08:40	GPH	913585	GRAPHISOFT N.V.	- ERSTE TAXE: (60,00 / 70,00)
08:32	BAH	517590	BAUSCH AG	- AB HEUTE AMTLICHER HANDEL
08:31	NEUER MARKT:			
08:30	GPH	913585	GRAPHISOFT N.V.	- ERSTER HANDELSTAG

---

Notierungsaufnahme Neuer Markt:

GPH	913585	Graphisoft N.V.	Erste Taxe: ( 60,00 / 70,00 )
			Erster Preis: 65,00

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Für Abzeichnungen: Tel: 2101-1310 Handelsüberwachungsstelle FWB  
 Bei Störungen der Handels- und Anzeigesysteme:  
 Tel: 2101-1050 Market Supervision Floor

*Our initial share price*



*In front of the Stock Exchange*



## Taking stock

Taking the company public was a turning point in Graphisoft's history, and it's a good place to close this narrative, take stock of what we have achieved so far, and ponder what we might have done differently.

Let's start with our successes, financial success aside.

### Strategy

One basic reason behind our success was that we followed the right strategy. We never tried to concentrate on what might be the most lucrative market; instead, we focused on what we were best at. Our goal was to ensure that, no matter what we did, it would be, in its own category, the best in the world. Or, at least, that we would have good reason to believe it was the best. Similar to how I believed, as a child, that my father was the best photojournalist in the world and my mother the best typist. In 1982, thanks to the U.S. technology embargo against the socialist countries and Hungary's own import barriers, we were the only ones in the world who could create 3D modeling programs that ran on low-performance computers. And we did this at the same time that PCs entered the scene and subsequently conquered the world, so that our unique abilities suddenly became even more valuable. We found a strategic ally whose interests coincided with ours (Apple), and we found the target market (architects) who best appreciated our competitive advantage.



## Architecture and buildings

Most of the world's architects are familiar with ArchiCAD. In fact, most of them believe it's the best program of its kind. We think so, too. It was a wonderful feeling to see that office building in Genoa – the building itself, not just the design – and today it's an even better feeling to have a measure of personal pride in thousands, even tens of thousands of well-designed buildings in cities from Berlin to Budapest, Tokyo to Melbourne, Beijing to Moscow, and from London to San Francisco. All designed using ArchiCAD.

I remember striking up a casual conversation with a fellow passenger on an internal U.S. flight. She mentioned she was an architect. I told her that my company also worked for architects and had a software product called ArchiCAD. – Ah, – she exclaimed, – that's what I use!

## Making it big – based in Hungary

We Hungarians take pride in the many famous Hungarian contributors to the world of science and culture – many Nobel Prize winners among them. But we often fail to note that most of them did not achieve these innovations here at home. As a college student preparing to be a physicist, everyone acknowledged as fact that no physicist could do anything really great in Hungary. For that, everyone assumed, you had to go abroad. This assumption was based primarily on geographical, political and technological factors. Five hundred years ago, as a consequence of the discovery of America and the spread of the Ottoman Empire, the world's trade routes shifted to the high seas. Hungary ended up on the sidelines, and its commercial strength and related traditions declined. Hungary's peripheral position was exacerbated by a series of foreign occupations, and the fact that we are not rich in the raw materials and energy resources that were so important during the Industrial Revolution.

But in the twenty-first century, the priorities of global commerce have shifted again, and so have Hungary's prospects. Our occupiers have departed, the high seas are declining in importance for international trade, and the exploding popularity of PCs and the Internet has broken down the barriers to technology access. Capital moves freely, and in fact there is more capital available on a global scale than can be put to good use. So Hungary's disadvantages no longer count as disadvantages. In fact, our cultural roots and traditions (such as the high caliber of mathematics education that had emerged by the early twentieth century) are becoming more valuable than ever.





I'm not saying that Hungary is poised to become the headquarters of the world's biggest global companies. Hungary's deficit of a commercial and management culture, a result of centuries of neglect, cannot be rectified in just a few years. For some company positions, Graphisoft, too, brings in experienced managers from abroad. But I am very pleased that Graphisoft has nevertheless managed to remain a Hungarian company, even while we have to behave and operate like a multinational. I hope that, in the near future, Graphisoft will be merely the first of many such Hungarian companies, instead of being the only one.

## Ambitions and motivations

Twenty-five years ago, the main reason I wanted to found my own company was the belief that the impulse toward professional jealousy and the resulting "contraselection" in the workplace – the impulse, rooted in human nature, to prefer mediocre workers over high achievers – could be combated more easily in a private firm than in a state-owned company. The latter, after all, has no real owner, just a boss, and the boss does not own any part of the company; the only thing he has is his position in the hierarchy, which he has a better chance of keeping if his underlings do not outperform him. But private ownership can curb this natural jealousy, since it is in the interests of the owner-boss to have employees who are even better than he. In fact, he will be downright proud of such employees. This is the kind of workplace where ambitious and talented people find it worthwhile to work; they can expect their boss to appreciate their achievements. And the appreciation of peers can be worth even more.

Tibor Dessewffy, in an article entitled "What kind of country do we want?" (January 15, 2005, *Népszabadság*, Hungary's largest-circulation daily paper) describes three cultural deficits of Hungarian society.

– The first is the lack of a meritocracy: that is, respect for achievement. The widespread Hungarian habit of constant complaining is a perfect manifestation of what socio-psychologists term a 'fundamental attribution error.' This habit tends to ascribe other people's success to factors totally unrelated to the individual's actual achievements, such as luck, family contacts, advantages from the 'favor bank,' etc. When it comes to their own achievements, however, people ascribe them to their own personal qualities: talent, hard work, willingness to make sacrifices. If public life is defined through this basic failure of attribution,



the resulting atmosphere and the constant negative feedback will act as a brake on creative processes. The second deficit is the lack of risk-taking behavior. After decades of artificially enforced conformity in the public sphere during the Kádár years<sup>9</sup>, this phenomenon is not surprising. But today, the vestiges of this tradition inhibit creativity, which by definition must tread on uncharted paths. And finally, the third cultural deficit is the lack of a well-defined roadmap that shows how to develop a good idea into an economically successful product.

I hope that Tibor Dessewffy is wrong in this generalization, but if he should be right, then we can consider ourselves the lucky exception to the rule (and perhaps this is thanks to our fortunate good timing when getting started). In any case, I believe that if Graphisoft has done something really worthwhile, it is this: we have been able to avoid the three typically Hungarian ailments described above, or, at least, we've reduced them to a minimum. We have had many talented people work to the best of their abilities, because they felt it was worth their while. I know I have not been a perfect employer, but if my colleagues have been able to create more and better things at Graphisoft than they would have elsewhere, then I have done what I set out to do.

The following little anecdote dates back to the very earliest days of our forays into the American market. One weekend, my family and I took a trip to Yosemite National Park, taking Imre Pákozdi along, who was also in the U.S.A. at the time. Among our activities was a mule riding excursion for our children in the beautiful Yosemite Valley. I went ahead, accompanying my son, Ábel, on his mule, while, a bit further back, my wife and Imre helped my daughter, Nóra, along with her mule. After a while they had really fallen behind, so I went back to see what was going on. I found a comical sight: my daughter sitting on the mule, with Imre in front trying to pull the mule forward, while my wife, behind, is trying to push, but the mule is digging in with all four of his legs, and won't budge an inch. During college, I had gone horseback riding and learned that if the horse is being temperamental, you need only show him the riding crop, and in most cases the horse will behave. I thought this tactic might work here, too, so I broke off a tree branch and brandished it before the mule. As if by magic, the mule trotted off dutifully, with my delighted daughter on its back.

9. Between 1956 and 1988, Kádár was head of Hungary's Communist party (the de facto head of the country).



– Now I know why you are in charge at Graphisoft, – clucked Imre. – All you do is raise a stick, and that mule is off and running!

I chose to consider this a compliment, not a criticism.

## **Taking wing and inspiring others to fly**

Many people credit me with having defined the strategy that led to Graphisoft's success. Yet I am not the firm's best strategic planner/analyst; I only listened to them. The title of best strategist rightly belongs jointly to Tamás Hajas and David Marlatt. For a long time, I believed that a leader's most important skill is the ability for profound analysis. But then I realized that such a philosophical bent is not really a good thing in the company's top executive, for sometimes such philosophizing gets in the way of decisive action (as in Hamlet's case). A good analyst is happy if he can understand the world; a strong leader is only happy if he can change the world.

Yet the strong leader does have a real need for an intelligent and realistically minded strategic analyst. The leader who likes to just forge ahead tends to confuse his will with reality, because he doesn't see the world as it really is, but rather as he wants it to be. But this is perhaps not a flaw; it's part and parcel of a personality which believes, sometimes blindly, that nothing is impossible. Tamás Hajas, with some irony, put it this way:

– You are a good leader because you don't let the facts obscure your vision.

For me, this attitude is best captured by the Hungarian actor Károly Eperjes in Géza Bereményi's movie *Eldorado*. When the character played by Eperjes learns from the doctor that his son has died in the typhoid epidemic, he grabs the doctor by the lapels and intones, right into his face:

– HE DID NOT DIE. DO YOU UNDERSTAND? YOU ARE COMING WITH ME INTO THE MORGUE AND YOU WILL BRING HIM BACK OUT.

And they go down into the morgue and bring the boy back up, and the doctor really does bring him back to life. The force of suggestion displayed by Eperjes is a true strength, and this is how a true leader operates. It is not primarily he himself who is capable of miraculous works, but he can make other people perform miracles.

I don't want to resort to false modesty; I am proud of what we have achieved, and to tell the truth, twenty-some years ago, despite my unlimited self-confidence, I would not have believed we would have got this far. But I also know that I have many personal weaknesses that are perhaps common among "successful entrepreneurs." If I had been able to reign in these weaknesses, we might have gotten even farther.



## **Distaste for formal education and a lack of patience**

The majority of successful entrepreneurs did not learn entrepreneurship by taking a class. Most did not get management training or take other job-related courses. Instead, they followed a strategy of “learning by doing.” But even so, this doesn’t mean you should necessarily scorn formal training. I think most successful entrepreneurs tend to be impatient types, and the only reason they don’t get this training is that they (like me) don’t have the patience. Yet impatience can be controlled, and sometimes that is the wiser course. I would have been well-served by a few good courses, or at least by reading a few good books relevant to my work. Entrepreneurship is a profession that not only depends on an innate knack, it also has many aspects that can be learned from others. Entrepreneurship involves a great many routine techniques that are much more easily learned from books or classes than through trial and error.

## **Don’t reinvent the wheel**

This lesson is related to the previous one, regarding the common disdain for formal education among entrepreneurs, but in more concrete form. We at Graphisoft were always inventing our own solutions to everything, and so everything at our firm worked somewhat differently than anywhere else. Possibly these “non-standard” techniques were sometimes better than the standard ones, but the real problem with our unique solutions was that newcomers had a much harder time learning how the company worked. This was probably one reason that for a long time we were unable to bring in fresh blood to top management positions, which in turn hindered our growth. And even though the more tenacious job candidates acknowledged this steeper-than-usual learning curve, this process took up energies that would have been used elsewhere.

My preference for “in-house inventions,” as opposed to standard solutions, can cause uncertainty, even for veteran Graphisoft employees. In 2002, I had handed over operational control of Graphisoft to a new (American!) CEO, and I now wore the hat of the “non-executive” Chairman of the Board of Directors, following the Anglo-Saxon corporate management disciplines. A few months after relinquishing operational control I went to a meeting of company managers, where the CFO was delivering his financial analysis in a slideshow presentation. To my surprise, I saw that he had produced exactly the kind of breakdown of our financial results that I had long asked of him, to no avail. I then turned to the new CEO:



– How did you manage to get Sándor to give you one of those reports after only a couple of months on the job? I hounded him to do that for years!

His answer:

– How did you manage to run the company for years without that kind of data?

Indeed, running the company like that had been harder than it needed to be. And I also understood why Sándor had not given me the same presentation as he did to the new CEO: I hadn't known the standard name for this report; I only described what I needed. Sándor understood what I wanted, but he also saw that I was making it up as I went along, and knew, from bitter experience, that as soon as he produced something, I would keep refining my idea of what was needed. Not wanting to duplicate, even triplicate his work, he instead came up with a good excuse as to why he couldn't give me what I wanted. But the new CEO, by asking for the report by its exact, internationally recognized name, gave Sándor the security of knowing that what he produced would be exactly what was needed.

## Boundless ambition and vanity

Boundless ambition and vanity probably characterize most entrepreneurs, and perhaps to the good. They are much more lasting and effective motivating forces than the desire for wealth. We can be satisfied with a certain level of wealth; in contrast, vanity will make us strive continuously for the world's admiration, which has no upper limit. Again, I cite Imre Pákozdi:

– At Graphisoft, we don't work to get rich; we work to be successful. But we measure our success in terms of money.

But in my case, I am afraid, there was too much vanity. In striving for recognition, you have to know when to moderate your approach. I often made the mistake of taking my arguments with co-workers too far. I was dead set on getting them not only to admit I was right, but also to appreciate how very right I was. Even against co-workers, I wanted to win big, and so I humiliated them without meaning to. I trampled their self-esteem, reduced their creative energies and deflated their ambitions. In doing so, I lost employees who still had a lot to offer to the company. Without naming names, I quote what one of them said when resigning his position:

– You know Gábor, it was hard to endure when you argued so aggressively. If you hadn't been right, I might have been able to take it, bosses are often wrong



and we still have to do what they want, that's life. But the problem was that you were mostly right. And you shouldn't have been so aggressive then, because I felt stupid, and I hated that.

This thought is reflected in the fatherly admonitions of István Szabó's beautiful film, *Sunshine*. This quote is from a letter written by Manó Sonnenschein, founder of the family business, to his son Ignác, who is embarking on a career as a judge. This excerpt is a fitting conclusion to this book, a word of advice to impatient, talented, would-be entrepreneurs who long to win the world's admiration:

— My dear son: Now that you are leaving the family home to fulfill your ambitions ... your father asks only that you never forget who you are and where you came from ... If you ever feel that the power is in your hands, you are wrong. If you ever feel that you have the right to push ahead of others because you are more talented than they, you are wrong. Don't let the weak who surround you lead you into the sin of pride! Pride is the greatest sin, and the source of all other sins...



# Index

## A

A-Null 89  
 Abvent 81, 83-84, 86, 93, 115, 138-141, 143, 162-164  
 Aleka 86  
 Annand 91-93  
 Anselmi 65  
 Apple 7, 39, 41-44, 46-50, 57-58, 66-69, 73, 78-79, 86, 91, 93-94, 98, 105, 107, 109, 114, 116-117, 123, 126-128, 130, 136, 138-139, 144-147, 149-150, 155-156, 177, 180-183, 185-190, 192-204  
 Architrion 83-85, 139, 145-147  
 Arthur Andersen 254  
 Ayman 93

## B

Babits, Attila 146, 219-221, 229  
 Bakonyi, Laci 164, 169, 171, 175  
 Balla, Misi 146, 218, 221  
 Bayer, Antal 97

Bayer, Joe 145  
 Bence (Kovács) 227-228, 233-234, 243-244, 246  
 Bieffe 61-66  
 BIGRAPH 63, 65-66, 68  
 Bihari, Sándor see Sándor 214, 266, 269  
 Binder, Laci 79-81  
 Bisztricsány, Éva 33, 72, 209  
 Bizományi Áruház 15-16, 179  
 Bogatzki 67, 116-118  
 Brian 107-108  
 Broderbund 229  
 Bruno, Humphry 187-188  
 Bush, George (the first President) 183  
 Business Week 84, 160  
 Bustros, Nabil see Nabil 202

## C

CADALYST 222  
 CADENCE 222  
 CAIB 210, 212, 229, 253



Camorra 52  
 Campbell, Jack 138  
 Casey (Shimamoto) 229, 233, 235,  
 237-238, 243, 246  
 CATIA 85  
 Central Mining Development Institute  
 23  
 Clark, Jim 144, 186  
 Clinton, Bill 173  
 CNBC 269  
 COCOM 16, 20, 25, 43, 179-180  
 Codie 222  
 collective partnership 206  
 Commodore 39  
 Computer Graphics World 222  
 Computers Unlimited 109, 195  
 controll 179  
 Cortex 22, 25, 27-28, 206  
 Cottingham, Steve 192, 195, 246  
 Couture, Jacques 147  
 Cságoly, Ferenc 241  
 CSK 229, 232, 236-237, 239  
 CumTerra 93  
 Czap, Ági 173  
 Czéh, Eszter 157

## D

Daiwa 228-231, 233, 236-237, 246, 262  
 Dalwhinnie 111  
 Dassault 85, 160  
 DataCAD 94  
 David (Marlatt) 143, 162-166, 169,  
 218, 220, 225, 263, 275  
 Demszky, Gábor 198-199  
 Denton, Nicolas 212  
 Dessewffy, Tibor 273-274

Deutsche Bank 261-263, 266  
 Deutsche Morgan Grenfell 261  
 DIN 55  
 Disney 145-147  
 Disneyland 142-143, 145, 173  
 Doug 165-166  
 Douse, Raymond 228  
 Dyson, Esther 186, 195

## E

East-West High Tech Forum 186-187  
 Eastern Bloc 16, 42, 80  
 Eddy Prize 222  
 Elsa 107-108  
 Erdész, István 29, 33  
 Ergon Design 78  
 Erőterv 29, 33

## F

Fabriciusz, Gábor 234  
 Fábry, Géza 221  
 Fáth, Péter 223  
 FBI 154-155  
 Federal Chancellery 124  
 Federal Trade Commission 49  
 Festival Orchestra 94  
 Financial Times 212, 269  
 Földvári, Iván 105, 107  
 fugu 244  
 Fujisawa 228-229  
 Fukui 235-236, 260  
 Fülöp, Gyuri 143

## G

Gáthy, Tibor 72, 78, 182, 217, 222  
 GDL 30-31, 103, 229, 236





Gellért, Balázs 146  
 Genovese tower 100  
 Geometria 178  
 Georgaras, George 86  
 Gimeor 83, 138-139, 144-145, 147, 149-150  
 GITEX 91  
 Gomes, Araujo 85  
 Göncz, Árpád 198-200  
 Gosztanyi, Laci 21  
 Grant, Jim 34-35, 37  
 Graphisoft GmbH 122-123  
 Graphisoft Ltd 73  
 Graphisoft Park 118, 120, 241-243  
 Graphisoft R&D Rt. 241  
 Graphisoft U.K. Ltd 112  
 Graphisoft U.S. 141, 164  
 Guidi, James 187, 189  
 Győző, Gábor 105

## H

Haidekker, András 112, 221  
 Hajas, Tamás 6, 30, 72, 77-78, 126, 156, 166, 219-221, 253, 263, 275  
 Hambrecht&Quist 257, 259  
 Hámor, Péter 28, 38, 122  
 Handelsblatt 269  
 Hannes (Reischböck) 127-128, 130-134, 225, 243, 266  
 Hara-san 246  
 Harsányi, Tibor 152  
 Hegedűs, Balázs 221  
 Híradástechnika 29, 33  
 Hornung, Péter 13, 44, 72, 121, 212-213, 266, 269  
 Horváth, Gábor 146, 221

Horváth, Miklós 38, 74, 104  
 Horváth, Zoli 120  
 Horváth, Zoltán 241  
 HP 14, 16, 20, 23, 34-39, 61, 69, 130  
 Hulak 58, 78  
 Huml, Martin 187  
 Hungry Hunter 175  
 HVG 4, 61

## I

IBM 21, 33, 46, 48-49, 123, 246  
 Ikarus 42  
 Institute of Forestry 23  
 Institute of Geophysics 14, 17-18, 21, 23, 25, 57, 68, 72  
 Interag 38-40, 44, 74, 83-84, 104-105, 113, 122  
 IPO 173, 241, 250-251, 253-259, 261-263, 266, 269

## J

J.P. Morgan 257, 261  
 Jankó, Tamás 68, 70, 72, 214  
 Jeanine 85  
 Jenkins, Cliff 150  
 Jobs, Steve 47-49, 186, 197, 217  
 Juhász, Gyuri 77-78, 138, 141, 147, 221-222

## K

Kafka, Gyuri 73, 78, 86, 112, 115, 136, 138, 141, 150-151, 154, 181, 208-210, 213, 225, 247  
 Kahala Hilton 150-151  
 Kahn, Philip 186  
 kaiseiki 244



Kajima 234-235  
 Kálmán, János 22  
 Kapolyi, László 25  
 Karaelmas, Attila 86  
 Kaszás, Ferenc 17  
 Kawasaki, Guy 144  
 Kazár, Gábor 122-123, 125-128, 132, 181, 209, 226, 244, 269  
 King Hussein 92  
 Kobayashi 235-236  
 Kőkuti, Robi 72, 76-77, 107, 214  
 Konecsni, Gábor 166, 221  
 Kontrax 179  
 Koritowsky, Manfred 122, 206  
 Kovács, Bence 227  
 Krepler, Antal 221  
 Kurt 178

## L

LaserCAD 89  
 Laurence (Orbach) 212-214, 246  
 Laval, Christophe 139  
 Lázár, Feri 147  
 Lejsek, Tomas 201  
 LIPE 85  
 Lisa 43-45, 47, 55, 57-58  
 Lohonyai, Miklós 39, 58  
 Luigi (Marcolungo) 60-62

## M

MacWeek 140  
 Macworld Expo 136, 141, 143, 162, 221  
 Maeda-san 232-233  
 Makara, György 57  
 Manora Thai 175  
 Marcolungo, Luigi see Luigi 61

Margaret 156-157, 161-162, 165, 169  
 Marlatt, David see David 143, 162-163, 218, 220, 225, 263, 275  
 Maros, János 218  
 Matra Datavision 81, 244  
 Matsumoto-san 231-232  
 Maurizio (Nanetti) 101-103, 112  
 Merrill Lynch 257  
 Mészáros, Attila 146  
 Metrimpex 104-105, 122  
 Microsoft 49-50, 57, 67, 165, 205, 215-216  
 Microsystem 179  
 Migért 16, 179  
 MINSZK 14-15  
 Misléy, Miklós 46, 76-77, 146, 217, 221  
 Mitsubishi 39  
 Módis, Péter 201  
 Morgan Stanley 257, 261  
 Morphologic 178  
 Mouchonnet, Gilles 180, 188, 197, 204  
 MS-DOS 49, 66-67, 148  
 Mukesh †94  
 Müller, Pál 18  
 Murray (Pearson) 101, 112  
 Műszertechnika 179

## N

N-TV 269  
 NABI 42  
 Nabil (Bustros) 202-204, 215  
 Nakajima-san 234  
 Nanetti, Maurizio 101  
 Nanni, Sergio see Sergio 188, 197, 246



NASDAQ 253-254, 257, 261-262, 266  
 National Market Research Institute 35  
 Németh, Miklós 183-184  
 Németh, Pali 80  
 Nemetschek 124  
 Netscape 144, 186, 258-259  
 Neuer Market 263  
 Neuer Markt 133, 261  
 Neumann 165  
 NeXT 19, 32, 37-38, 47, 49, 54, 56, 58, 60, 62, 64, 67, 73, 78, 84, 94, 98, 101, 103, 109, 116-117, 120, 135, 137-139, 145, 151, 155-156, 158, 165, 171, 174, 182, 190, 194-196, 203, 208, 212, 216-217, 228, 235, 237-238, 240, 246-247, 251, 257-258, 267  
 Nieweg 69  
 NIF 237, 239-240, 244  
 Nintendo 237

## O

Odendall, Marc 261  
 Ofotért 16, 179  
 Okawa-san 236-239, 243, 246, 249, 262  
 Olsson 199  
 OMV 35-36  
 Orbach, Laurence see Laurence 212  
 Oyster Point 142, 156, 163

## P

Pákozdi, Imre 68, 72, 74, †94, 105, 150, 181, 196, 204, 225, 253, 274, 277

Paks Atomic Reactor 25-26  
 Pálffy, Gyuri 227  
 Pantomat 44  
 Pearson, Murray see Murray 101  
 Piesslinger 69  
 PowerPC 220-221  
 Pozsgai, Eszter 4, 97-98  
 PPU 166-169  
 Proper 54, 79, 158, 180, 209

## Q

QuickTime VR 220-221, 259

## R

RADAR 34, 43-45, 86  
 RadarCH 45-46, 50, 57-58, 77  
 Raffai, Ernő †94  
 Rákos, János 57, 135  
 RAPID 45-46, 68-69, 72-75, 89, 113, 217, 221, 238  
 Recognita 178  
 Reischböck, Johannes see Hannes 127  
 Rialto 54  
 Riegler 89  
 Róna, Péter 42  
 Rossana 98

## S

Sándor (Bihari) 214-215, 266, 268-269, 277  
 Sárdy, Tibor 221  
 Sawatzki, Norbert 124  
 Schnitzer, Martin 128, 131  
 Schoonemann, Hermann 182, 188  
 Sculley, John 47-49, 150, 195, 197, 216, 220



SEGA 228-229, 237, 243  
 Semmelweis, Ignaz 233  
 Serat, Don 211-212  
 Sergio (Nanni) 188-190, 192, 197,  
 200-202, 204, 246  
 Severi 86  
 Shiluvim 87-90, 115  
 Shimamoto, Casey 229, 233  
 Shokai, Otsuka 233-234  
 Silicon Graphics 144, 186  
 Sonata 95-96  
 Sony 39  
 Soul, Xavier 81, 84  
 SPA 222  
 SpaceEdit 83  
 Sparing, Laci 46, 157, 207, 219-221, 269  
 Spillars, Jim 182-183, 185-188, 190  
 Spindler, Michael 197, 200  
 SSC 229-230, 233, 236  
 SSG 38-39, 53-54, 104, 122  
 Stebbins, John 146-147  
 Stone 75, 118, 123, 172, 250  
 Strausz, Gábor 35  
 Sunshine 91, 278  
 SuperSoftware 229  
 Szabadváry, László 13  
 Szabó 3, Laci see Szabó, Laci 214  
 Szabó, Ákos 103, 196  
 Szabó, Andrea 214  
 Szabó, István 278  
 Szabó, Laci 109-110, 112, 146, 183,  
 210, 214  
 Szabó, Lóránt 44, 65-66  
 Szabó, Pali 103  
 Szigeti, András 182-183, 200, 203,  
 210, 223, 248

SzKI 18-19, 21, 37, 79-80, 120  
 Szymanek, Witold 201

## T

Tanabe-san 234  
 Tari, István Gábor 23-24, 26-30, 39,  
 44, 48, 50, 54, 63-64, 72, 165, 206-  
 207  
 Tarnai, László 39  
 Tarom Airlines 90  
 Tarquini, M 69-71  
 Teller, Edward 164-165  
 TIS 192, 246  
 Tokyo Stock Exchange 235  
 Tokyo Stock Market 260  
 Tone 78, 119-120, 128, 247-248  
 Too Corporation 233  
 topCAD 65-68, 81, 83, 91-92, 98-99,  
 101-102, 116, 159  
 Török, Imre 196  
 Tóth, Zsuzsa 83, 136  
 Tóth, István 50-54, 76, 78, 89, 93, 98,  
 100-101, 219, 227  
 Tour d'Argent 83, 244-245  
 Trans-Europe Kft. 209  
 Transamerica Building 155  
 TUZEX 189

## U

U'Fleku 190  
 Unitis 68  
 UNIX 60, 66

## V

Váradi, Gyuri 92  
 Varga, Pista 221



Várkonyi, Viktor 103, 146, 165, 221

Végh, Miklós 146

Vértesi, Laci 221

Videoton 60, 79

VIDRA 60, 79

Vitányi, Kati 121, 210

## **W**

Wall Street Journal 223

Wechsler, Dan 87, 90

## **X**

Xavier, Soul see Soul 81, 84

## **Y**

Yosemite National Park 274

## **Z**

Zaccommer, Lajos 146

Zoom 83





*Architectural Illusion Series by Ginny Herzog © 1994*

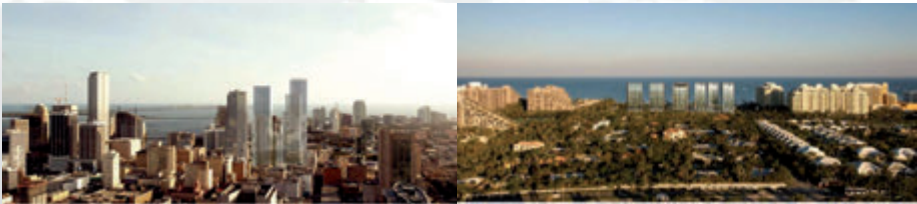
## Appendix: Sample collection of buildings designed using ArchiCAD

### Graphisoft's footprint in the world

#### Collection of designs made with Graphisoft's ArchiCAD

Special thanks to our distinguished users who provided access to their designs, in support of our initiative to make ArchiCAD freely available to architectural schools and students around the world.

#### USA



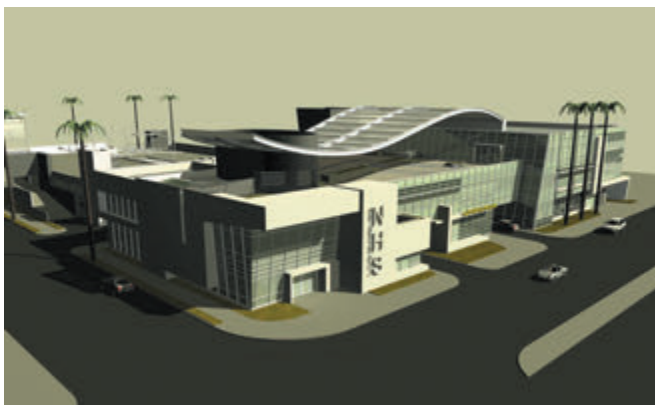
*Oppenheim Architecture Design*



*Phillip Johnson, Ritchie & Fiore Architects*







*PAA Studio*



*PAA Studio*



*Media Five, A Design Corporation, Rendering by Daniel V. Kunschik*



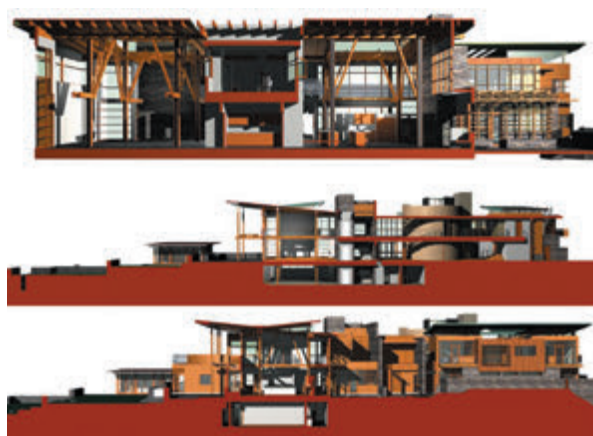




*Jim Jennings Architect*



*Ziegler Cooper Architects*

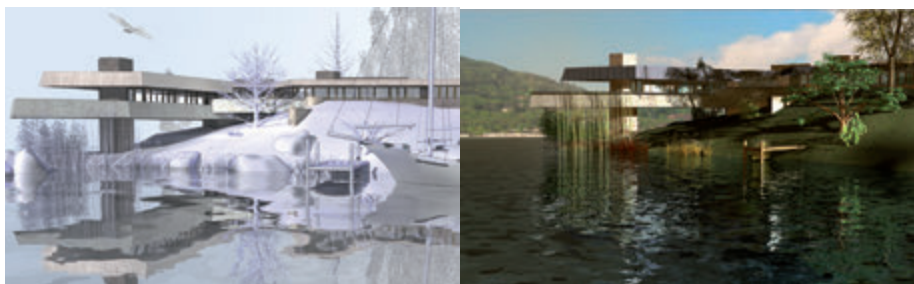


*Rockefeller Hricak Architects*



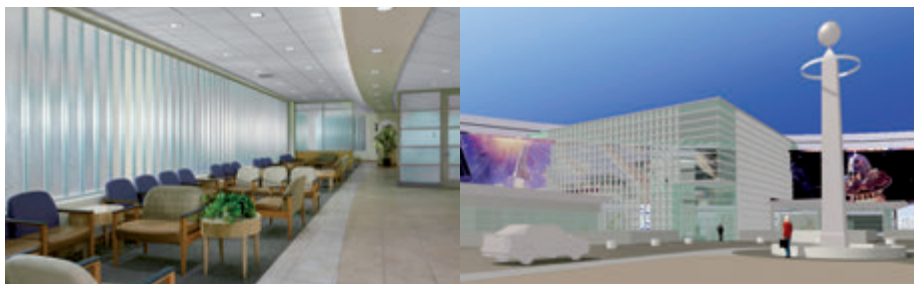
*Kirksey*





*The Massaro House on Petre Island, Lake Mahopac, New York, Design by Frank Lloyd Wright*

*Architect of Record: Thomas A. Heinz, AIA, Chicago, USA, Model by Graphisoft ArchiCAD, Rednered by Artlantis*



*John C. Lincoln Hospital Deer Valley, Phoenix, Architect: The Orcutt Winslow Partnership*



*Phoenix Union High School District Bioscience High School, Phoenix, Architect: The Orcutt Winslow Partnership*



*Oppenheim Architecture Design*

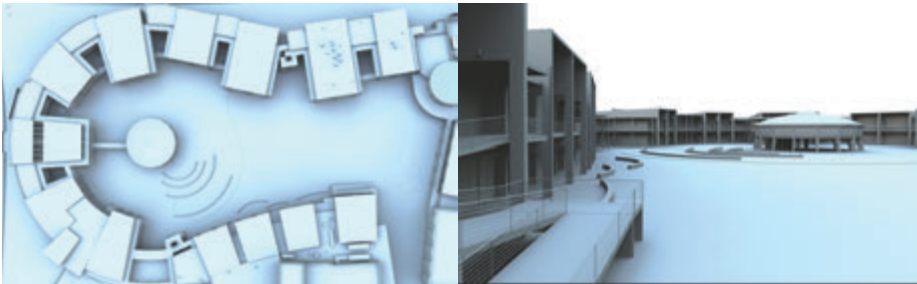




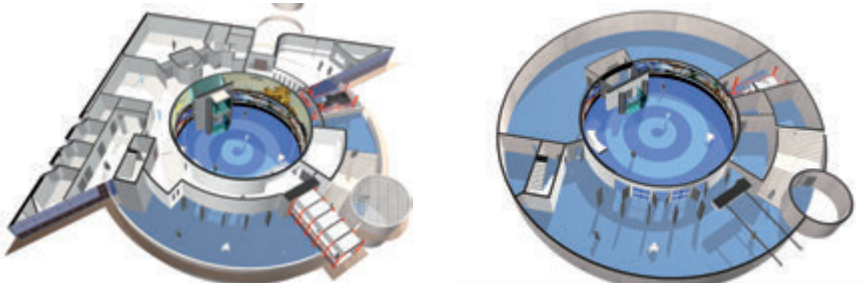
*Oppenheim Architecture Design*



*Webb Medical Plaza, Sun City West, Architect: The Orcutt Winslow Partnership*



*Scottsdale Unified School District Arcadia High School, Scottsdale, Architect: The Orcutt Winslow Partnership*

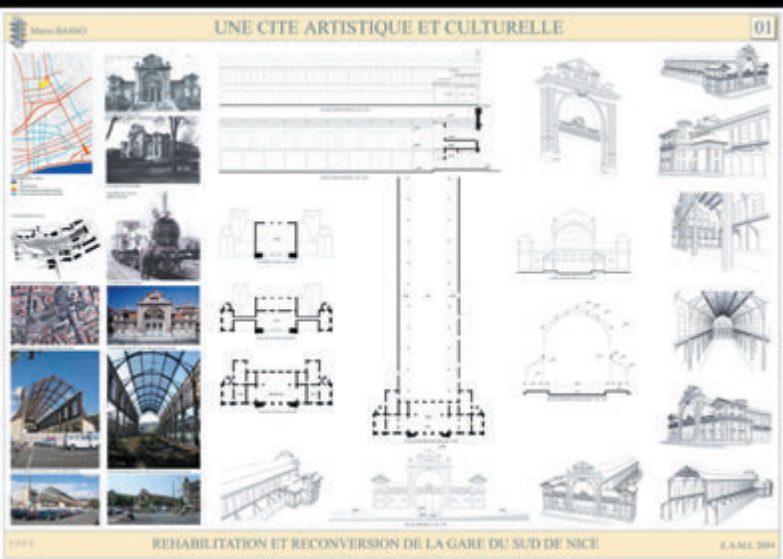


*Challenger Space Center, Peoria, Architect: The Orcutt Winslow Partnership*



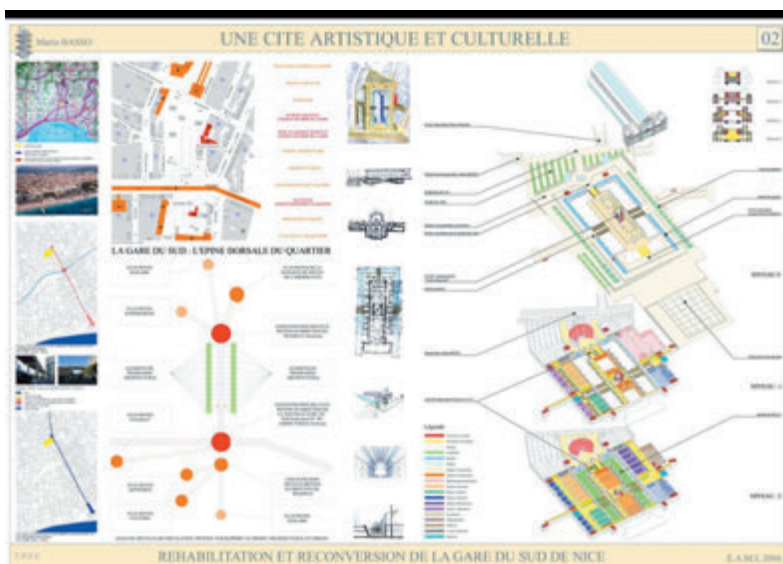
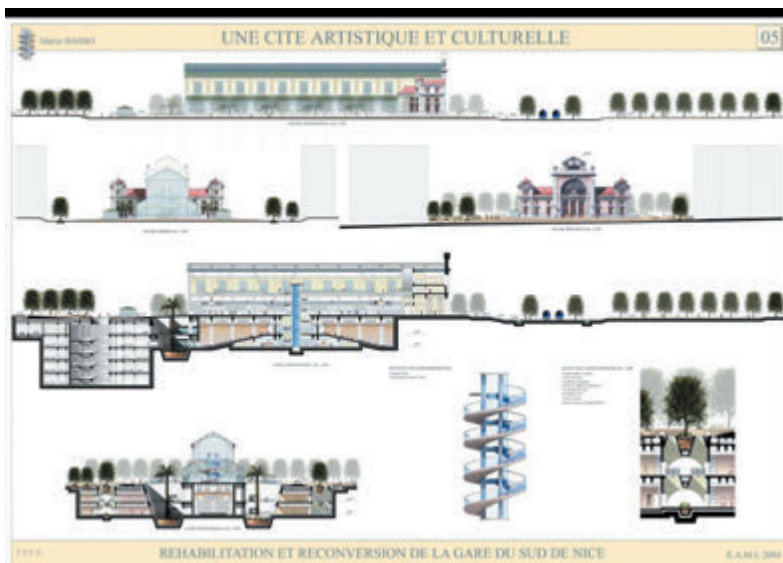


France



Mario Basso Architects – Garde de Nice





Mario Basso Architects – Garde de Nice



Japan



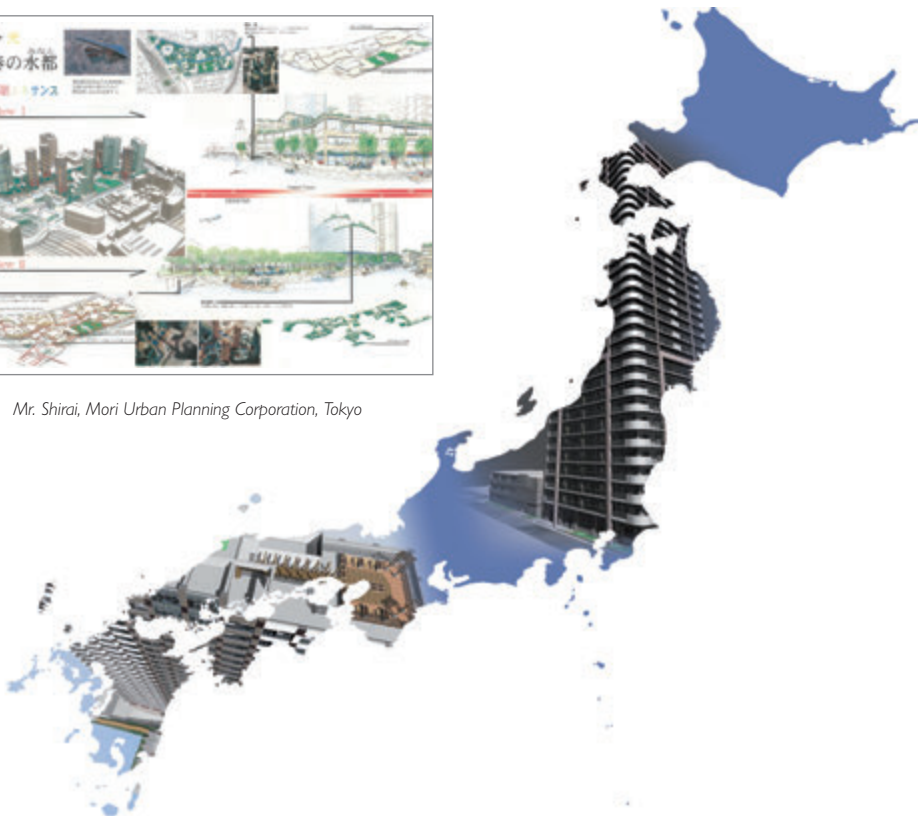
MAEDA Corporation – Gallery Grande, Tokyo



MAEDA Corporation – Gallery Grande, Tokyo



Mr. Shirai, Mori Urban Planning Corporation, Tokyo



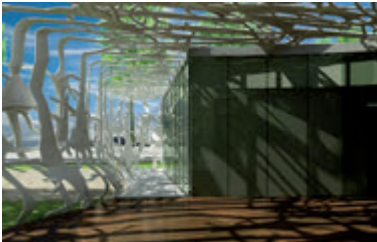
## Mexico



*Michael Rojkind, Rojkind Architects*



*Michael Rojkind, Rojkind Architects*



*Michael Rojkind, Rojkind Architects*

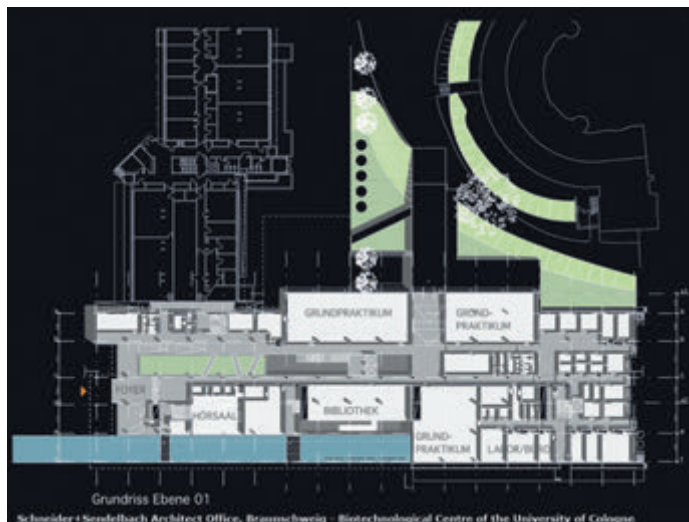


*Michael Rojkind Architect – DoS House*





## Germany



Schneider Sendelbach Architect Office,  
Braunschweig – Biotechnological Centre of the University of Cologne



Dömgies Partner Architects –  
New building of the  
Natural Science Faculty (FAN)

Dömgies Partner Architects – Saving Bank in Regensburg







*LAI Lanz Architects & Masterplanners, Mathäser – Cinema-Complex in Munich*

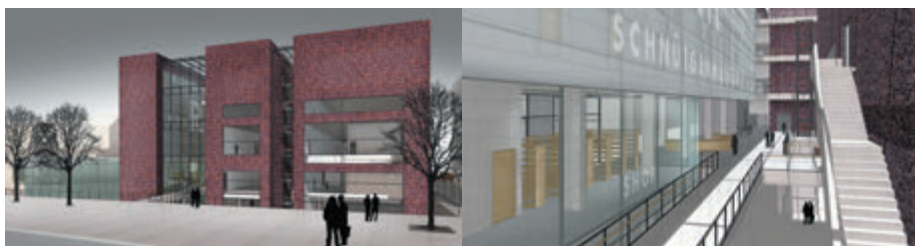


*Dörnges Partner Architects – New building of the Natural Science Faculty (FAN)*

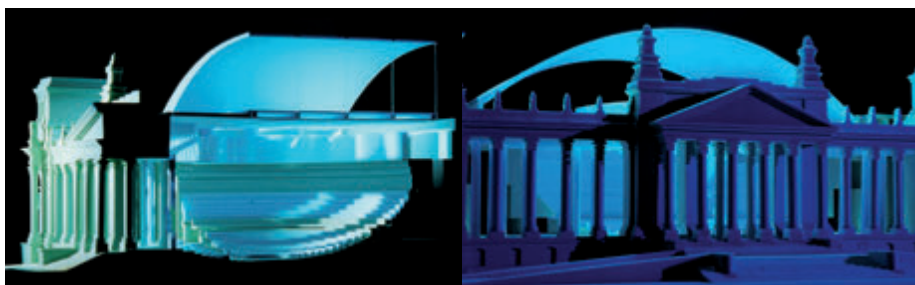




*Dönges Partner Architects – Saving Bank in Regensburg*



*Schneider Sendelbach Architect Office, Braunschweig – Biotechnological Centre of the University of Cologne*



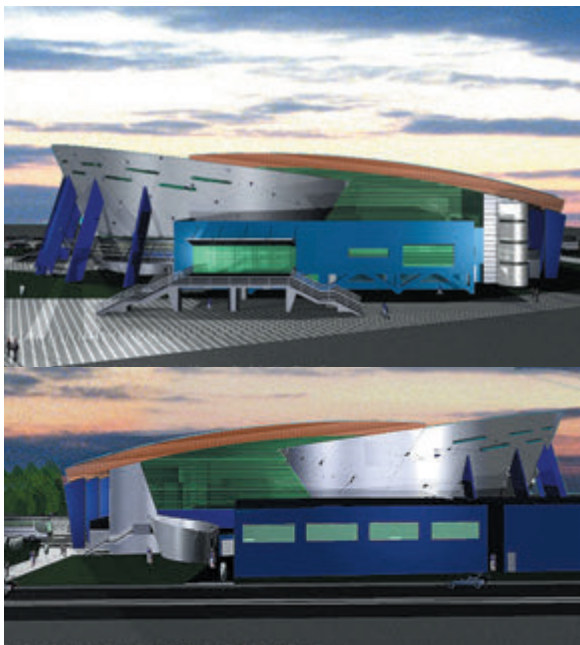
*Reichstag competition, Berlin 1992, Architect: Axel Schultes, Charlotte Frank*



*Chancellery, Berlin, Architect: Axel Schultes, Charlotte Frank*



## Greece



*Theofanis Bobotis and Associates Architects – Stadium Karditsa*



*Theofanis Bobotis  
and Associates Architects –  
Würth Office Building*



*Theofanis Bobotis and Associates Architects – Würth Office Building*





Great Britain



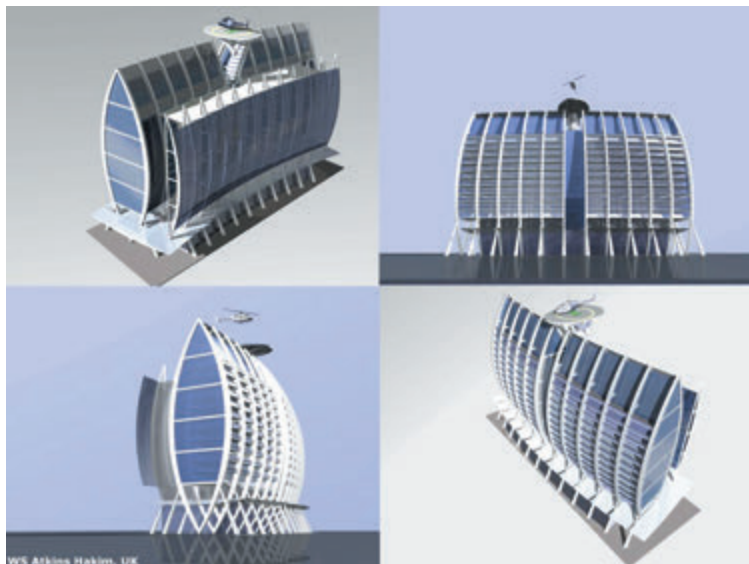
Applecore Designs



Bite Design Ltd.

Bruce Nichol, Ian Darby Partnership,  
Proposed Housing Development at Jesmond Rd.  
for Barratt (New Castle)

Design Services,  
Nottingham City Council



WS Atkins Hakim, UK

WS Atkins Hakim



IDPartnership



Bite Design Ltd



Bruce Nichol, Ian Darby Partnership – Proposed Housing, Development at Jesmond Road for Barratt (Newcastle)



## Australia



*Aurora Tower Brisbane –  
Cottee Parker Architects*



*Darling Harbour 3D Digital Model,  
Sydney Harbour Bridges, Arterra Interactive*



*Word Tower Sydney,  
Bob Nation Architects*

*Eureka Tower, Melbourne,  
Fender Katsalidis Architects, designed by David Sutherland*





## United Arab Emirates



*Designed by: Arch. Ghassan Jamil Attar, Modeled & Rendered by: Arch. Ehab Al-Tamini*



*Designed by: Faisal Al-Mahdi Architect Office*

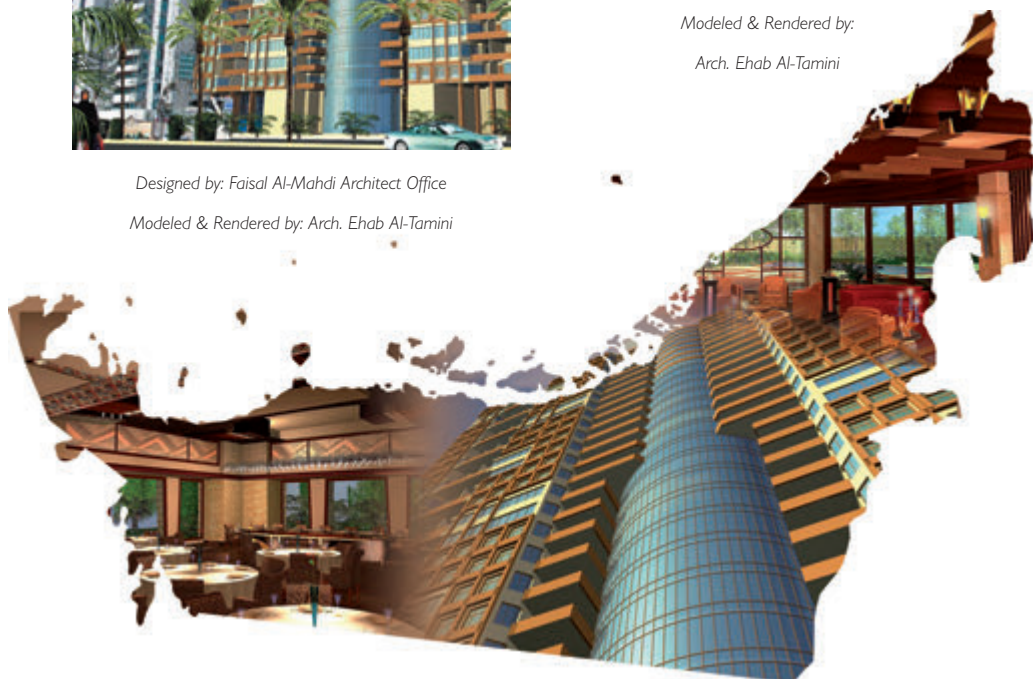
*Modeled & Rendered by: Arch. Ehab Al-Tamini*



*Designed by: Arch. Ghassan Jamil Attar*

*Modeled & Rendered by:*

*Arch. Ehab Al-Tamini*





## Spain



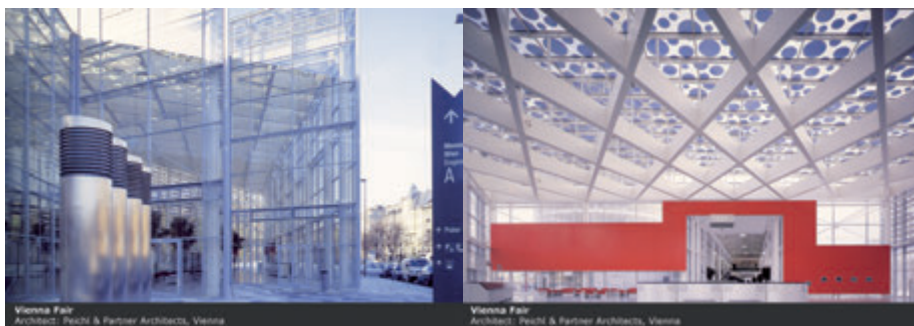
*Capella-Garcia Architects, Barcelona, Spain*



*Capella-Garcia Architects, Barcelona, Spain*



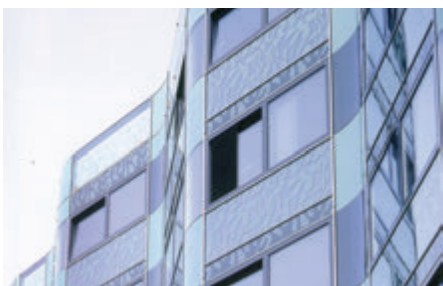
## Austria



*Vienna Fair, Architect: Peichl & Partner Architects*



*Towers for Arabia, Architect: Peichl & Partner Architects*



*Toschanahof, Vienna*

*Architect: Peichl & Partner Architects*



## Finland



*Helin & Co. Architects*



*Helin & Co. Architects*



*Helin & Co. Architects*







*Helin & Co. Architects, Parliamentary Annexe, Helsinki*



*Helin & Co. Architects, Nokia Headquarters, Helsinki*



*Helin & Co. Architects,*



## China



*Mr Zhang Yi Xun – Lecture Theatre 2A, An-Shan University of Science and Technology*

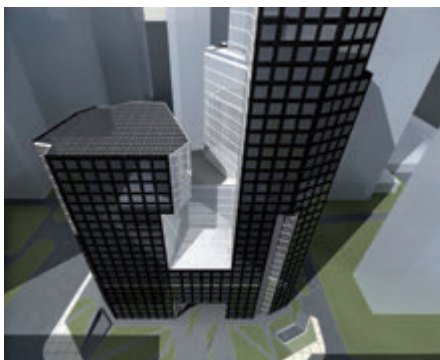


*Mr Peng Yi Gang and Mr Zhang Yi Xun –  
Hi-Tech Start-up Park in the City of Zhen Zhou*



*Mr Peng Yi Gang and Mr Zhang Yi Xun – Hi-Tech Start-up Park in the City of Zhen Zhou*

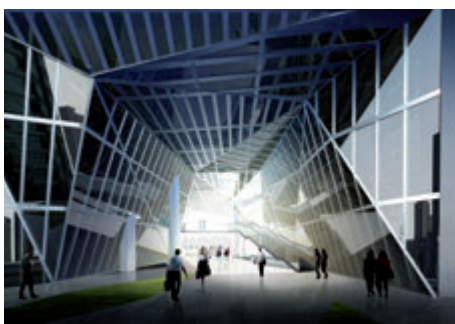




*China Architecture Design & Research Group*  
*Architect: Zhang Xiaolei, Beijing, China*



*Mr Zhang Yi Xun – A Residential and Office*  
*Building in the City of Shi-jia-Zhuang*



*China Architecture Design & Research Group, Architect: Zhang Xiaolei, Beijing, China*



*Mr Peng Yi Gang and Mr Zhang Yi Xun – Hi-Tech Start-up Park in the City of Zhen Zhou*





## Russia



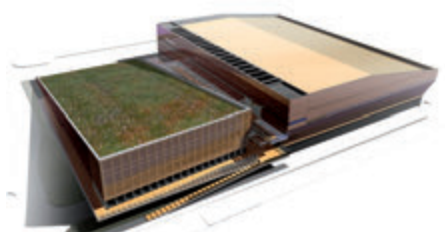
*Aerobus Residential Complex, Moscow*

*Architect: Vladimir Plotkin, TPO Reserve*



*Arbitrage Court, Moscow*

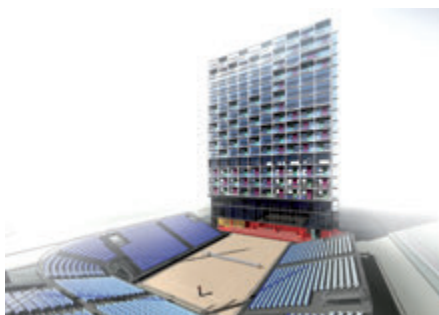
*Architect: Vladimir Plotkin, TPO Reserve*



*Tennis Center, Moscow*  
*Architect: Vladimir Plotkin, TPO Reserve, Moscow*

*Tennis Center*

*Architect: Vladimir Plotkin, TPO Reserve*



*Tennis Court and Hotel, Moscow*

*Architect: Vladimir Plotkin, TPO Reserve*



*Aerobus Residential Complex, Moscow*

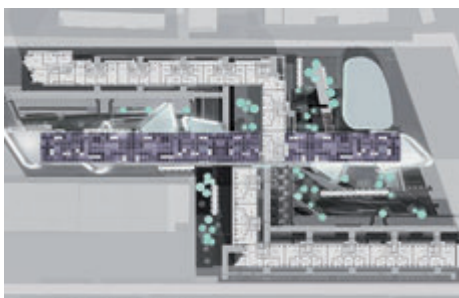
*Architect: Vladimir Plotkin, TPO Reserve*

*Aeroflot Office, Sheremetyevo Airport, Moscow*

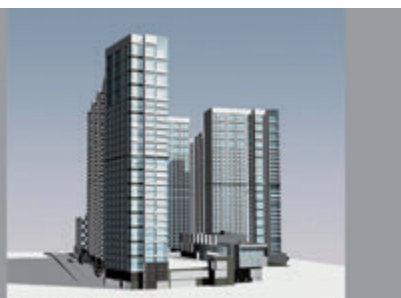
*Architect: Vladimir Plotkin, TPO Reserve*







Multipurpose dwelling complex "Air bus"  
Architect: Vladimir Plotkin, TPO Reserve, Moscow



Multipurpose dwelling complex "Air bus"  
Architect: Vladimir Plotkin, TPO Reserve, Moscow

*Multipurpose Dwelling Complex "Air bus", Architect: Vladimir Plotkin, TPO Reserve*



Inhabited complex in Proezd Zagorskiy  
Architect: Vladimir Plotkin, TPO Reserve, Moscow

*Inhabited Complex in Proezd Zagorskiy*

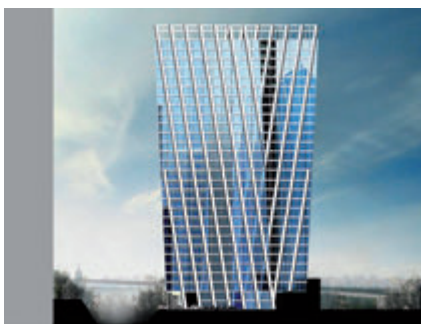
*Architect: Vladimir Plotkin, TPO Reserve*



Nine-floor apartment house  
Architect: Vladimir Plotkin, TPO Reserve, Moscow

*Nine-floor Apartment House*

*Architect: Vladimir Plotkin, TPO Reserve*



*Office Complex in Bumashznom Proезде, Architect: Vladimir Plotkin, TPO Reserve*



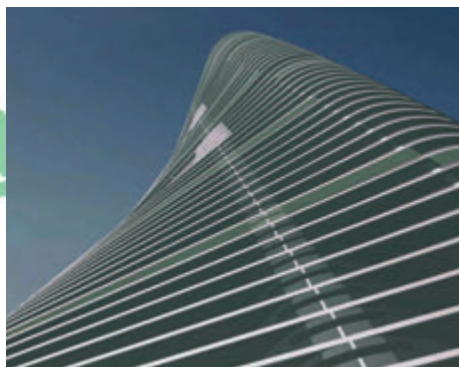
## Sweden



*Liljewall Arkitekter ab*



*Pontus-Möller Architects*



*Erik von Matern, Matern Arkitektkontor & Bertil Molin*

*Project for Residential Tower, Stockholm*

