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Keeping Localization
In Focus

MICHAEL LEVOT

+

Negotiating Deals in
**THE LOCALIZATION
INDUSTRY**

P.42
12 TRANSLATION
MANAGEMENT SYSTEMS
A Year in Review

LocWorld and TAUS 2023
Award-winning innovations propelling an augmented linguistics era

The language services world shined a spotlight on pioneering advancements across three high-profile events in 2023: the 14th Process Innovation Challenge (PIC) at LocWorld Europe in Malmö, Sweden, the Translation Automation User Society (TAUS) Annual Conference held in Salt Lake City, and the 15th PIC at LocWorld North America in Silicon Valley. The peer-voted first-place honors carry immense prestige and visibility within the language industry.

This year, the victorious innovations from Blackbird.io, Metalinguist, and Bureau Works all incorporated the widely discussed capabilities of generative AI (GenAI) and large language models (LLMs). Their platforms demonstrate how carefully directing new functionalities toward enhancing human workflows can optimize productivity and end results. As we explore the winning products through in-depth interviews over the next pages, we'll hear directly from these companies' founders on what inspired their ideas and where they aim to go next.

Blackbird.io's software, according to founder Bruno Bitter, "leverages analytics and no-code automation for streamlining localization operations. It seamlessly integrates data on consumer interactions with multilingual content to guide real-time decisions and workflows. Machine translation (MT) and expert linguist involvement are automatically adjusted based on metrics like traffic volume and conversion rates for each content asset."

Metalinguist's CADL tool meanwhile, described by co-founder Veronica Hylák, "rapidly assesses potential international expansion ideas using key performance indicators. By quantifying likely campaign success in advance, it enables localization teams to optimize strategies before investing substantial time and money. The engaging interface harnesses GenAI to aid ideation and analysis."

Bureau Works built sophisticated integration with GenAI directly into the translation management workflow. Unlike treating it as a outright replacement for humans, the system facilitates continuous learning exchanges improving output. It acts as an unobtrusive productivity booster by handling lower-level tasks, while proactively flagging potential semantic, grammatical, and stylistic issues. As founder Gabriel Fairman described, "Rather than relying on GenAI as a superior alternative or enhancement to MT, we saw it as the facilitator of a natural dialogue between the translator and the machine."

These advancements actually align neatly with advisory firm Gartner's recently unveiled strategic technology trends for 2024. Specifically, the concepts of "AI trust, risk and security management (AI TRiSM)" to support ethical governance, "intelligent applications" enriched by AI for more adaptive experiences, and "augmented connected workforce" optimizing human-machine collaboration.

Accelleration

AI trust, risk and security management focuses on ensuring models remain fair, unbiased, robust, and transparent even after deployment through continuous monitoring. As these systems dynamically interact with real-world data, maintaining responsible governance is critical. The award winners' emphasis on augmenting linguists rather than replacing them mirrors this human-centric approach.

Intelligent applications utilize AI and connected data to enable more personalized and contextually relevant experiences. Rather than separate analytics tools, insights are seamlessly infused into workflows to guide smarter decisions. Blackbird.io exemplifies this by integrating consumer analytics to automatically customize localization strategies per content item.

> "AI trust, risk and security management focuses on ensuring **models remain fair, unbiased, robust, and transparent.**"

> "The fusion of emerging capabilities with human discernment … *promises to accelerate industry transformation.*"

The augmented connected workforce strategy optimizes human potential by establishing an intelligent team fabric. Advanced technologies like generative AI and analytics are thoughtfully combined to accelerate skills and productivity for complex tasks. Bureau Works built its offering around this principle of AI as a collaborative assistant handling lower-level issues and continuously learning from human feedback and input.

The seamless fusion of emerging capabilities with uniquely human discernment showcased by these award winners promises to accelerate industry transformation. As linguist time is freed to focus on high-level qualitative decisions rather than repetitive tasks, output quality and speed stand to benefit tremendously. Intelligently balancing responsibilities between humans and supportive technologies will likely drive exceptional gains over the coming years.

2023 marked an exceptional high point for creative progress, with still greater potential being uncovered moving forward. The future of global language services will increasingly realize gains from partnerships carefully cultivating the strengths of both people and machines.

Bruno Bitter
Winner of the 14th Process Innovation Challenge
at LocWorld49 Malmö

Congratulations on your win at the 14th PIC. Could you fill in readers on your career background?
Thank you! Being part of LocWorld's Process Innovation Challenge in Malmö was truly an honor. My career began in the early 2000s in research and strategy consulting. Working closely with agencies such as Saatchi & Saatchi and McCann, I was inspired to apply my insights more directly in the creative field. This led me to establish my own digital creative agency and consultancy, Next Wave, in 2008. We had the privilege of working with great brands like KPMG, Nike, and L'Oréal. A highlight of this period was when Next Wave was named "Agency of the Year" in 2012, the same year we first competed at Cannes Lions.

A campaign we developed for the Nike Budapest Half Marathon in 2013 was pivotal. When Nike asked us to replicate our campaign in other cities worldwide, it marked my first foray into localization and globalization. This campaign expanded our reach and transformed Next Wave from a local boutique to an international agency. Ultimately, this leap enabled me to sell Next Wave in 2015 to a buyer in the digital media space.

Between Next Wave and Blackbird.io, I spent three years at memoQ, enriching my experience in the industry. During the pandemic, I co-founded and invested in a creative GenAI startup, Animatr.ai, which leverages Stable Diffusion's technology to transform a given monolingual text into multilingual animated videos.

Launching Blackbird.io in 2021 has been the most thrilling chapter, and I cherish every minute of this journey. It's a blend of my past experiences and a new vision for the future of digital multilingual content.

Could you briefly summarize how your innovation, "Leveraging Analytics Data in Localization Automation," works?
We designed Blackbird to be a platform that can streamline workflows, integrate systems, and harness AI for the language industry. A key feature of our no-code "Bird Editor" is the ability to connect to analytics systems. This integration allows users to access data reflecting consumer interactions with localized content, enabling the automation of real-time processes based on this data.

We can make informed decisions about our localization strategies by analyzing key performance indicators of content, such as traffic volume, bounce rates, and conversion rates. This approach could allow us to prioritize MT and LLMs when appropriate while determining the need for post-editing or expert involvement based on actual customer engagement metrics and data.

Considering not just the quality but the performance of content can give language service providers (LSPs) new opportunities for growth and diversification. For instance, high-traffic content assets can be automatically identified for additional value-added services, such as search engine keyword optimization or repurposing across various touchpoints. This strategy enhances the content's reach and positions LSPs to offer more comprehensive and impactful solutions.

What inspired you to develop your PIC-winning idea? And what were some of the most important professional lessons earlier in your career that equipped you to pull it off?
In digital marketing, the inflection point happened when Google introduced its web analytics service in the mid-2000s, coinciding with the early days of my digital agency. Before Google Analytics, marketers had this saying, attributed to US retail magnate John Wanamaker: "Half my advertising spend is wasted; the trouble is, I don't know which half." When Analytics was introduced, we suddenly had this wealth of data about our website's traffic, user behavior, and conversion metrics. This empowered us to make more informed decisions based on user data rather than assumptions, gut feelings, or subjective notions of what is "good."

By having access to detailed information on what works and what doesn't, analytics helped us reduce wasted spend. We started to understand that "half is wasted." The logic is deceptively simple: If something yields good outcomes — let's do more of that! We can focus budgets on strategies that deliver results, increasing the overall ROI of our efforts.

My insight was that a very similar logic is also applicable in language operations.

BLACKBIRD.io

Integrate Anything. Automate Everything!

You began your presentation at LocWorld with a story of how, just as blackbirds connect disparate ecosystems through their migratory patterns, Blackbird.io connects technology ecosystems to provide a more unified work experience. It's a clever analogy — is there an origin story for it? How did the original vision for Blackbird.io come to be?

Blackbirds are known for their intelligence and remarkable ability to connect different ecosystems as they migrate across continents. This serves as a fitting metaphor for our company's mission to connect various ecosystems and embodies our aspiration. Additionally, we chose the name "Blackbird" for its broader cultural resonance, including a playful nod to The Beatles. This branding choice also ensures that our company's identity is not limited to the realm of localization, allowing us the flexibility to encompass a wider range of industries.

Let's get back to the PIC. The central idea is to apply performance analytics more easily to professional workflows. How can customers customize this for their systems, and what pain points does it relieve compared to previous technological processes?

With Blackbird, harnessing the power of analytics and reporting is easy — no advanced degree in statistics needed! Our platform offers instant access to robust reporting and analytics tools that can enhance processes with deep customer insights. In Blackbird's visual workflow editor, anyone can easily incorporate an analytics step into a workflow. Using just mouse clicks — no coding needed — Blackbird's workflow editor allows even the addition of advanced conditions like loops, delays, decision branches, and more.

An example I showcased at the PIC involved integrating Salesforce into an analytics-driven workflow. The process begins when source content is published in Salesforce. This triggers the creation of multilingual variations via MT, which are then promptly pushed back to the CMS. Our workflow includes a time delay, after which it connects to analytics to examine traffic data. If the traffic volume is low, we maintain our MT output. Conversely, if the traffic is more substantial, the content is automatically directed for review and post-editing, with the project and order management tasks seamlessly set up in the selected systems (TMS, BMS). Furthermore, for content with high traffic volumes, we can route it to experts for premium language services and value-added post-production services, including SEO and content repurposing.

Better technology and automation mean that human professionals can spend their time on work better suited to

"[Blackbird.io] blends my past experiences and **a new vision for the future.**"

their unique talents. Time is the most valuable resource, after all. What opportunities do you see this opening up for your customers' workforces?
The central idea is not just leveraging analytics insights but delivering on the promises of "citizen automation." In the past, smarter workflows required slow and expensive custom engineering — everything had to be hardcoded. With Blackbird, advanced process automation and workflow orchestration are made accessible and usable by the general workforce in an organization, not just by IT professionals or specialists. This "no code" idea aligns with the broader trend of "citizen development," where non-technical employees are empowered to create or modify digital processes and solutions.

Project managers, for instance, could transition towards more consultative roles, guiding clients on optimizing workflows, processes, content, and data strategies. Similarly, LSPs have the potential to evolve beyond language operations (LangOps) to embrace broader roles in content operations (ContentOps) and AI operations (AIOps). This shift represents a significant expansion of their scope and services, aligning with the dynamic needs of today's digital landscape.

Rather than forcing companies to develop bespoke solutions, this analytics feature is designed to integrate their existing tools into one solution. What are some of the challenges in making those systems play nicely together?
At the time of this conversation, we have about 80 systems available as pre-built apps on Blackbird. To get here, we had to overcome several challenges. Let's start with compatibility issues: APIs come in different shapes and forms, with varying standards, protocols, and data formats. For instance, we had to make SOAP API-based apps "talk" with REST API-based apps. Ensuring compatibility among these diverse systems can

be complex, as it often requires transforming data and adapting protocols for consistent communication. Then, there are security concerns: Each API has its own security mechanisms. When integrating multiple APIs, it's crucial to maintain a high level of security across all interactions. This involves consistently managing authentication, authorization, encryption, and data privacy across different systems. We worked for over 18 months to get to our SOC2 Type2 attestation report. Error handling is also key: Different systems handle errors in various ways. This is not just a technical but also a UX challenge — how to "translate" technical error messages to a language that is meaningful and actionable? Versioning and maintenance are our duties as an iPaaS (integration-platform-as-a-service) vendor, too: APIs are frequently updated or changed by their providers or us. Our key objectives earlier this year were keeping track of these changes and updating the integration accordingly to ensure compatibility and sustained functionality. I could continue, but I mentioned two more challenges: scalability and language code reconciliation. As the number of integrated APIs increases, we need to ensure that Blackbird can scale effectively without performance degradation. Language codes are notorious in our industry (we have standards, but few respect them), so we had to devise a clever solution to reconcile them between many different systems.

As you mentioned, much of the inspiration for this idea originates from your previous career in digital marketing. What unique insights does that background give you, and has it also inspired previous ideas?
We discussed the impact of analytics and "performance marketing" earlier, so let me highlight another angle.

Harvard Business School legend and the father of modern marketing, Theodore Levitt, asked a powerful question that every business leader must answer: "What business are you in?" The answer to this question determines the future of every company. This question must be considered seriously at this critical moment when so much is changing in our industry.

Theodore Levitt wrote that the reality of what we sell and what our customers buy are different — "buyers don't buy products, they buy the outcomes the products deliver."

My answer to the question, "What business am I in?" is shaped by my previous career in marketing. Perhaps even the fact that I'm asking this question is shaped by this past. Long story short, my answer to the question is not, "We're in the translation business." I think we're part of the global content services business. Luckily, I'm not alone with this insight, so I don't have to feel like a complete "Geisterfahrer," as the Germans say.

What is the "global content services business" about?
The global content services industry is vital in managing and delivering content worldwide across various formats, plat-

forms, and languages. This industry offers extensive services, including the creation, management, translation, localization, optimization, repurposing, scaling, and distribution of content to cater to the diverse needs of global audiences. While translation and localization are key aspects, they can also be considered part of the broader content repurposing efforts, adapting content for different geographical and cultural contexts. Integral to the healthy functioning of this industry are workflow automation and data-driven insights and analytics. Blackbird focuses on these latter elements, recognizing their essential role in today's complicated market.

With this idea obviously being well received in the broader professional community, are you excited and inspired to work on other innovations? Can you give us a preview?

We are deeply passionate and heavily invested in several ideas. One idea is adopting smart frameworks like multidimensional quality metrics (MQM) for the AI age. We built a custom GPT with OpenAI to perform LQA using this methodology and made it available to everyone to use. Using advanced prompting techniques, we also custom-trained LLMs for LQA from Anthropic and OpenAI. In Blackbird, users can add sophisticated LQA steps as simple actions in an automated workflow. We are trying to do these experiments transparently and collaboratively, consulting with various stakeholders, including some of the original authors of these various quality metrics frameworks.

Another idea we're excited about is that of "prompt chaining." It refers to a technique used in AI, particularly with language models, where the output of one interaction (or "prompt") is used as the input for the next. This iterative process creates a chain of prompts and responses, allowing for more complex and nuanced interactions than would be possible with single, isolated prompts. Blackbird is increasingly fine-tuned and optimized to take advantage of prompt chaining. My colleague, Mathijs Sonnemans, talked about this at the last PIC at LocWorld50 — he won the silver prize!

A third idea we're invested in is building a truly headless system. A headless system in the context of digital content management has meant a setup where the front end (the "head") is decoupled or separated from the back end (the "body"). The excitement around headless systems is primarily due to their greater flexibility, efficiency, and scalability compared to traditional, coupled architectures. With Blackbird, we would like to make all touchpoints "headless" — complete freedom not just for the output of the content (route to or publish anywhere) but for the intake of the content too (initiate a workflow from anywhere). It sounds complicated and mystic, but it's simple and liberating in practice. For instance, end clients can drop a video to Slack and add a flag reaction emoji, triggering their workflow to get enterprise-grade captioning and subtitling in CaptionHub. This is not science fiction or vaporware — it's an actual workflow that can run (or fly!) in Blackbird.

Apart from your PIC win, what were some of the most enjoyable times you experienced during LocWorld49 in Malmö? And, more generally, what do you enjoy doing during your spare time?

As a European living in North America for almost half a decade, visiting a city like Malmö is always a poignant reminder of my deep European roots. I often find myself longing for the magnificent architecture, exceptional design, and inherent beauty characteristic of almost all European cities. The social aspect of these visits is equally important to me. Working remotely means conferences like LocWorld49 are rare opportunities for me to meet my peers in the industry and reconnect with my colleagues. This "reuniting" element of LocWorld was particularly inspiring for me.

My spare time is a bit of a luxury these days. Between managing Blackbird and spending time with my two kids, my wife, and my golden retriever, the concept of "spare time" seems elusive!

Anything else you want to add?

Thank you for providing an amazing platform for this industry!

Veronica Hylák
Winner of the AI Revolutionary Award 2023 at the TAUS Annual Conference Salt Lake City

To start, could you please tell us about your career background? What led to the founding of your company, Metalinguist?

Metalinguist came to life from a necessity in the language technology sector. It started with a small LSP facing the risk of losing clients due to the cumbersome process of handling project submissions via email or portals that everyone refused to use — a challenge that's all too common in our industry. When searching for a client solution to fill this void, they were met with outdated, expensive systems that had painful onboarding processes, and they felt it would have the opposite desired effect on the client's interaction with their company.

My co-founder (Loren Lulushi) and I, drawing on experience in software engineering and product development at Fortune 500 companies, started the Metalinguist project pro bono, inspired by the challenge. Honestly, we just had so much fun building a new system in our spare time to address a real need that could help save someone's business.

As we dove deeper into the project, it became evident that the problem we were tackling was prevalent across the industry. What started as a basic client portal has now rapidly evolved into a much more expansive vision: a comprehensive Translation Business Management System (TBMS) that's highly modern and can be up and running within minutes. Our focus is empowering companies to fully tailor their clients' experience in procuring language services — from freelancers, to internal language divisions, to large LSPs — ultimately reimagining the standard for client interactions.

You won this year's TAUS AI Revolutionary Award for a new localization strategy tool called Catalina Dream Laboratory (CADL). Could you please briefly describe the tool and what makes it groundbreaking?

CADL compresses months — or even years — of localization strategy planning into just minutes, fueled by the power of GenAI. Through an engaging user interface (UI) and an AI sidekick to aid the creative process, localization strategists can explore their most ambitious ideas while benefiting from data-driven algorithms that quantify the likely success of each potential campaign. The platform utilizes key metrics such as LOC score, Translation Complexity Index (TCI), and cultural adaptability in its analysis, and it even generates example advertising images. This useful tool offers localization and marketing teams the chance to evaluate their strategies before investing valuable time and money, opening the black box of localization strategy planning and testing like never before.

What was your inspiration for developing a platform specifically for localization strategy planning?

The inspiration was two-fold: (1) my mother, Bridget Hylák, who is a lifelong industry veteran, and (2) the goal TAUS set for its competition — to strongly push innovation boundaries. Without both of these factors, I certainly would not have come up with CADL.

I had already been accepted to compete in the TAUS competition, and I was going to present an AI assistant called CATalina that was already in development at Metalinguist. But my mother called me one day and said something very simple, "Veronica, know your audience."

The TAUS conference is an elite gathering of many major directors from corporations such as Google, Meta, Microsoft, Amazon, Dell, Uber, and Nimdzi; the conversations that occur there are on another level. I realized my plan to present CATalina as an AI assistant just didn't cut it.

I remember laying on my couch for the next six hours, staring at the ceiling and thinking. I knew I could leverage GenAI in a lot of different ways, but I also knew I did not want to cross into any element of translation performance (so many companies were already doing it, and it is not where my strengths could ever lie).

I started to throw out a few ideas in my head. In that moment, I wished I had not only a brainstorming partner to think through the problem with, but also — and more importantly — a way to *quantify* the potential success of the idea (or "dream") that I came up with before I spent any time or money on development. Then it hit me: "What if this exact problem could apply to the black box of localization strategy?"

Corporations spend an incredible amount of time and money exploring potential international markets or testing out localization campaigns, often calling it a loss after several years. I've had many corporate directors tell me that they feel

like it's all guessing. There is no tool on the market at all that would allow a company to explore those markets before the cost or time risk accrued.

What did it take to make CADL a reality?
The biggest challenge all innovators in the AI/GenAI space face right now is a way to make the output reliable and stable. I worked on my initial minimum viable product for four months before my presentation, and I spent the majority of my time addressing these three problems:

1. What are the data points a person would need in the algorithms to quantify the potential success of a localization campaign?
2. How can I make an interface that is intuitive and fun?
3. How can I harness the power of GenAI in a way that is powerful *and* reliable?

We were unwilling to present anything that couldn't be proven, and I did not want to launch a product for the sake of saying I was leveraging AI. For example, even if I leveraged the LLM as the brain knowledge hub, and even if LLMs are decent at writing the code to perform a calculation, at the end of the day, LLMs cannot actually execute those calculations without a lot of errors.

Leading up to the TAUS conference, I spent the majority of my time proving I could even get that reliable output. It is all a learning process to figure out what works and what doesn't. In the end, I feel that I really pushed LLMs and GenAI in a way that is atypical (at least for now).

CADL's UI has a space exploration theme, including NASA-like font and a robot mascot. Why was it important to present the underlying technology in a playful way?
About eight months ago, I came across one of the original Apple Human Interface Guidelines (HIG) from 1987, and it changed my entire perspective towards building software applications, both with CADL and Metalinguist. I was astounded that a lot of the concepts explaining how humans should feel while interacting with computers (that were embraced at the birth of the personal computer) were completely lost in our current digital age.

When I am dealing with most modern applications, I often feel at the mercy of the software. In addition, all the interfaces are boring and look the same; functionality is always prioritized over the user's experience.

I want to make users feel like they are in the driver seat and that interacting with the system is as easy as breathing. It is something we really have embraced in the Metalinguist platform, as well. With every feature that is added, my energy remains focused on bridging the gap between the technical and creative sides of software applications.

I want the software programs I work on to be different — to make UIs that think like you do so that everyone feels like an

> "It is all a learning process to figure out **what works and what doesn't.**"

expert from the very first click. It's why Apple products are so easy to use. They have not lost this core principle when many others have.

What's next for Metalinguist and CADL?
For Metalinguist, our priorities have been onboarding new users daily, launching our one-minute integration with Trados, and continuing to focus on a mission to make language technology accessible for all. For CADL, my next challenge that I'm currently tackling is scaling up the output for corporations to make it even more precise. I'm also in conversations for seed funding and in discussions to onboard key industry advisors.

Do you see other opportunities for leveraging GenAI in the language industry?
I believe the strongest candidate aside from traditional translation performance will be in the realm of localization SEO and international marketing. LLMs like ChatGPT and Bard will likely change how we interact with content on the web.

Before, we would utilize a search engine, view results, click on a website, and hunt for information. With LLMs, a lot of the information will come straight from the prompt interfaces themselves, summarized for us, which could possibly eradicate the need to navigate to a lot of sites altogether. Localization strategists and SEO experts will need to learn to leverage GenAI to tackle these emerging issues.

Who or what has been your biggest influence over the course of your career in language services?
My mother, Bridget Hylák. I am extremely lucky to have access to such a repository of information from her four decades in this industry, and I was able to absorb so much insight from her. From serving as administrator of the American Translators Association's (ATA) Language Technology Division to consulting on government committees for technology, she has a keen eye on where the industry has been, is now, and might be going. Several years ago, she predicted many of the situations we are currently facing; she is like a crystal ball that has informed a lot of my decisions.

Gabriel Fairman
Winner of the 15th Process Innovation Challenge at LocWorld50 Silicon Valley

Basically, you're providing a program to smooth out language transitions before sending it to a machine translation engine — or saving text in a translation management system or glossary — to reduce post-editing and fixing fuzzy matches afterward. This improves human time efficiency. Is that how you'd explain it to a layperson?
To an industry outsider, I would say that we are removing 90% of the linguistic legwork so that translators can focus on what matters most. As far as the mechanism we are using, our tech creates a dynamic learning layer between the translator, knowledge bases (MTs, translation memories (TMs), term bases (TBs)), and translations. A few examples of challenges that are solved in practice are:

- Upgrading fuzzy matches into 100% matches
- Resolving discrepancies between TMs and TBs
- Infusing MT with style found in TMs
- Fixing tags
- Detecting semantic errors

But the real beauty is that the engine is consistently getting better over time through the changes made by the translator. It's not meant to replace the translation literary genius, but rather to enhance it.

The innovation itself consists of leveraging GenAI in a deeply interwoven way with the translator experience in BWX, Bureau Works' TMS. Rather than relying on GenAI

> "The real beauty is that the engine is **consistently getting better over time.**"

as a superior alternative or enhancement to MT, we saw it as the facilitator of a natural dialogue exchange between the translator and the machine.

More specifically, this was done by leveraging GPT 3.5 and 4 as a linguistic arbitrator to decide between elements present in the TM, MT, and glossary, while continuously learning from the translator. In another layer, BWX Translation Smells acts as a semantic verifier, picking up on countless potential mistakes including incorrect translations, grammatical errors, wordiness, omissions, inconsistencies, and even gender bias. Last but not least, we also showed how BWX's integration with GenAI can seamlessly fix tags.

While everyone was focused on figuring out whether GenAI was good or bad, better or worse, we were purely focused on what could be immediately salvaged as immensely useful.

Does it also improve quality?
Most people I talk to instinctively associate anything artificial in language as unnatural, decontextualized, and without the appropriate level of linguistic intellectual sensitivity. But our approach leads to immense quality gains because of the framing.

It knows its place and is not trying to compete with the translator. As it takes care of lower-level linguistic grunt work — such as solving subject-verb agreements, implementing a

> "We saw it as ... a natural dialogue exchange **between the translator and the machine.**"

> "We were purely focused on what could be **immediately salvaged as immensely useful.**"

> "I see our tool as fundamentally shifting **the degree of loneliness and isolation translators experience.**"

> "Language service providers have the potential to **evolve beyond language operations.**"

glossary, or comparing differences in a fuzzy match to make sure the meaning is all there — it naturally and dramatically improves translation quality. It shifts the focus instantly to higher-level linguistic tasks such as editing tone and style.

In addition, its pulverized iterative approach drives additional layers of reflection and critical discernment into the translation process. As it flags semantic errors in run time, translators are given a second set of eyes that offer them often-insightful perspectives on things that may have been mistakenly omitted or overlooked. If in doubt, translators can ask BWX for not only another opinion, but also an analysis as to why it prefers something said a given way. Personally, I find it amazing. As the son of a translator, and as someone who has translated and reviewed countless hours in my life, I see our tool as fundamentally shifting the degree of loneliness and isolation translators experience. The feedback we have from

thousands of users is nothing short of amazing, too.

Instead of requiring several workflow steps to arrive at professional-grade translation quality, you can essentially achieve the same level within a single step.

How long have you been working on this?
Eight years. Even though the company was founded in 2005, we only began working on BWX in October 2015. Our software was born out of believing that we could make complex localization become simple and manageable. We didn't know how exactly, but at a gut level, we saw that it was possible. We set out to solve specific problems and in the process built out a comprehensive translation management system that integrates so many different yet pivotal concepts when it comes to translation management such as cost, quality, resource and project management, and high productivity editing environment.

Was there a specific experience that led you to think of this workflow solution for language providers?
I wish we could talk about a eureka moment. But like most real stories, it's based on people having a gut feeling that we could do something better, trying things out, and failing again and again and again.

We had been exploring AI in translation for at least the past five years and built the entire BWX platform around the idea that we would leverage language models. Our challenge until GPT-3.5 resided mostly around the unsatisfactory quality and breadth of the responses we could achieve. With GPT-3.5, our initial tests showed great promise. We had a clear vision of enhancing the translator experience and quickly discarded the idea that we would treat it as an improved alternative to MT. The constraints around computational costs and rate limits were blessings in disguise that led us to focus on the most elegant solution as opposed to brute force.

Most importantly, we tried to put ourselves in the shoes of a translator. It's such a hard profession. It's brutal and sophisticated intellectual hard work that is not valued, in my opinion, nearly as much as it should be. We thought about how lonely it gets translating countless hours on end, how hard it is to get feedback on your own work, and how much the concept of authorship is connected to the feeling of intellectual dignity. Whether we are succeeding at tackling this or not, time will tell, but those were definitely the guiding lights for us.

Do you think there are any challenges of using the generative language engine that linguists or project managers will need to educate themselves on?
Definitely. This changes the role of the translator significantly. Edits are no longer limited to a particular segment and its close syntactical deviations. Edits now can carry semantic learning weight across an entire corpus. They become significantly more important, pun intended. On one hand, the work gets a

lot faster; on the other hand, the edits become more relevant and impactful. The tech is meant to augment performance rather than perform the work itself. This requires common sense from the user as far as knowing how much they can rely on the information generated in BWX as opposed to their feelings, judgments, and intuitions.

It opens up several lingering challenging questions such as, "How do you measure translation effort?" Time, edit distance, and quality are all interesting components to look at. However, we still don't have clarity around a model that truly reflects and justly compensates cognitive effort in this new framework.

Has this win given you a boost to keep developing your innovation further?

Absolutely. Winning is a beautiful external recognition of our achievements. We know that we have built an amazing product and, most importantly, an innovation-oriented culture that continues day in and day out to ship great software.

But the most beautiful part about winning the award was not the award itself, but rather the collective joy our team experienced. We have built an unbelievable culture at Bureau Works, with talented people who clearly seem to be driven and united by a purpose that is bigger than ourselves. It makes it so much more worthwhile. In my opinion, it's so challenging to find the right balance for an innovation-oriented culture in a ruthless business environment. Too much focus on embracing failure, and we become a passive, error-tolerant organization, while too little acceptance of failure as a natural part of the
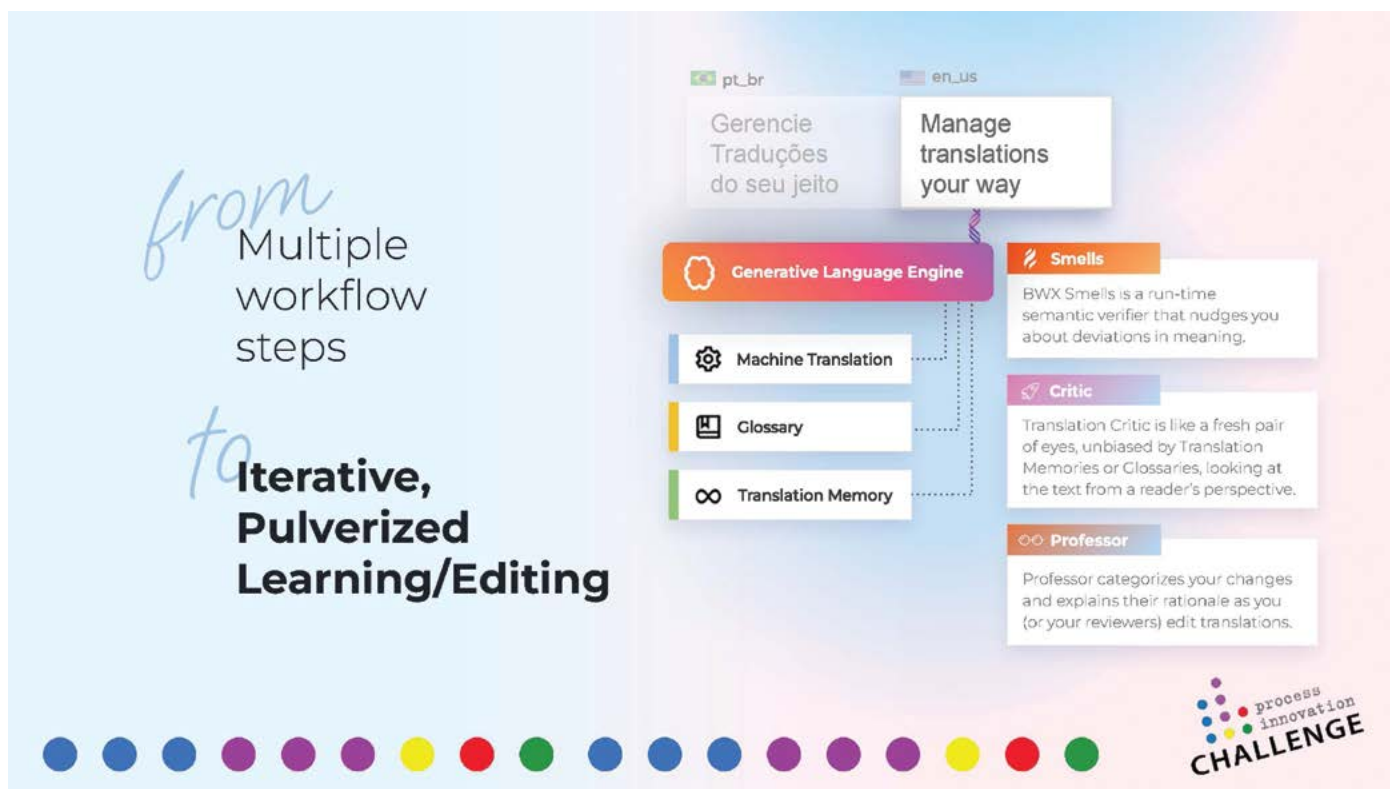
> "Too much focus on embracing failure, and **we become a passive, error-tolerant organization.**"

R&D process sees people stop taking calculated risks. It requires a special kind of team that both challenges themselves to succeed and also supports themselves when they don't to create an environment that fosters innovation. Much more than the award, I feel it's the pinnacle of this great organization we are collectively working on.

We care for each other, fight for each other, and take care of each other. We didn't create this innovation-oriented culture out of thin air. It's nearly 20 years of blood, sweat, and tears, as well as infinite layers of mistakes that allow us to learn and build from a place of grounded experience. We believe in doing great things, not just because of the upside they bring, but because it feels really good to achieve cool things together.

Which other candidate or which innovation on stage did you see as your strongest competitor?
I think it's so hard to compare innovation of such different natures. But I would naturally say that Mathijs and Catarina were very strong runners-up with Blackbird and Unbabel, respectively. In my opinion, their storytelling and presentation was so tight and well put together. I loved their visuals and how they guided viewers through a clear journey towards understanding the value of what they were presenting. Everyone did an amazing job, though. I was very impressed with the quality of all the presentations. Emily did an incredible job

"It's the pinnacle of this great organization **we are collectively working on.**"

"It feels really good *to achieve cool things together.*"

with Quill. I could clearly identify the immediate business impact she demonstrated. Agatha presented a clear process-based vision for AGT, and Sheriff showed something of incredible social relevance with African Languages Lab. It was an incredibly challenging process, and I think they were all exceptionally prepared and showed great things.

How do you envision your tool contributing to the broader development of language technology?

We believe that BWX can augment the translator experience, navigating the razor's edge between the intellectual refinement that resides in literary authorship and the brutal demands of productivity driven by technocapitalism. Our goal is to redefine what it means to post-edit and turn it into a fun and dynamic back-and-forth dialogue — as our head of software engineering calls it, an "iterative pulverized learning experience."

We have built an extraordinarily mature product over the past eight years, and we are in no rush. Our goal is not only to build market share, but also to do so through relentless commitment to product excellence and user satisfaction.

Who has served as an inspiration for you in the course of your career in language technology, and why?

I have had so many inspirations in my career in language technology. I have always kept my mother close to my heart when it comes to everything we've developed. She was a die hard perfectionist professional translator and so I grew up watching her translate, transitioning from typewriter to word processor, and her struggles and challenges were all very visceral for me.

Henrique Cabral, our CTO, is a great inspiration as well, because I knew nothing of software development before knowing him and the little I know is all due to him. Vanilson Burégio, our head of software engineering, is another great inspiration. Both of them are innovators at heart, naturally out-of-the-box, abstract-first thinkers who challenge conventional structures as their bread and butter. Jamil Raide, our head of product, has also been a great inspiration in his relentless quest for bridging the gap between things that matter in theory and in practice. My wife, Luciana, is another incredible inspiration. Her love and devotion to our family, company, and children — and doing what feels instinctive above social conventions — is a bright beam that lights our way. But I must mention every single member of Bureau Works. They are all my inspiration and the reason I get up every single day, ready to fight the good fight with a true smile on my face.

What's next for Gabriel Fairman?

Tech-wise, we just released BWX Learning Terms. Now BWX learns terms on the fly and adds them to a learning glossary, which further facilitates the translation experience. More exciting BWX AI actions are on the semantic pipeline, and we are running at full speed.

As for me personally, I want to focus more on my own intuition and an ever-greater sense of freedom, love, and forgiveness. ✳

This is an edited version of the magazine. To see it in its entirety, please check multilingual.com