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FUTURUM

The Voice of the Digital Era



CYBERNATION: FORMAT OF FREEDOM

ARTIFICIAL INTELLIGENCE & NEURAL NETWORKS

ADVANCED DIGITAL TECHNOLOGIES

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Magazine Media Kit

FUTURUM is the leading international e-magazine for the most advanced class of the digital age. We provide exclusive content including analyses, news, practical advice and interviews with leading experts in the fields of AI, IT, robotics, blockchain and cryptocurrencies.

Weekly News Feeds

FUTURUM offers four weekly news feeds available on a paid subscription basis. These feeds cover key topics such as AI and neural networks, blockchain and cryptocurrencies, robotics, and IoT, providing subscribers with the most up-to-date information and analysis.

Advertising Opportunities

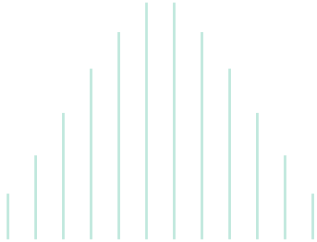
We offer advertisers a unique opportunity to reach this highly qualified audience through a

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FUTURUM prides itself on its engaged audience of professionals and enthusiasts of the digital age. We offer advertisers not only access to this audience in 40 countries in their native languages, but also detailed reach and engagement statistics to prove the effectiveness of our advertising solutions.

Contact Information

For more information about advertising opportunities in FUTURUM, please contact our advertising department at: marketing@futurum.media.



Editor's Letter

Dear Futurum Magazine Reader,

It is with great joy and a sense of responsibility that I address you as the chief editor of our new publication on the occasion of the release of our first issue.

We stand on the brink of exciting changes, and Futurum magazine (Latin: future) is destined to be your reliable compass and even an assistant in the rapidly changing world of digital innovations and technological achievements. In an era when the digital transition defines the future contours of all human civilization, we realize that keeping up with the times is not just a choice, but a necessity.

Artificial intelligence, neural networks, digital democracy – these and many other topics will be the focus of Futurum's pages. We aim not only to inform you about the latest innovations and trends but also to offer a deep analysis and forecast of their impact on our future.

Magazine sections:

Editor's Letter and Editor's Advice will guide you through the world of digital changes, offering a futurist's personal view on current topics.

In the «**In Focus**» section, we will cover the most significant and discussed events in the world of technology.

AI and Technology will allow you to delve deeper into the mechanisms and consequences of technological progress.

Shorts Feed and News will provide a brief overview of the latest news and achievements.

Futurism and Digital Democracy will reveal to you a vision of the future and new forms of social structure.

Futuristic models of the future may sometimes be provocative, but they will make us think and not stay aside.

Blogosphere and Reader Engagement will create a platform for the exchange of opinions and dialogue between authors and the audience.

The Digital Advisor will be your assistant in mastering new technologies and tools.

Advertising, Discussions, and the CYBERNATION platform will offer space for discussing ideas and proposals, as well as getting acquainted with new products and services in the field of high technology.

Our editorial team and the community of the non-profit organization Futurum Platform believe that being informed is equivalent to being prepared. Prepared for the digital transformation of society. In a world where new qualifications open up new jobs and offer new chances to be in demand, knowledge is your most valuable asset. Futurum is not only meant to provide knowledge but also to inspire new achievements in self-realization. Let's explore new horizons together, look into the future with optimism, and strive for progress.

Welcome to a world where every day is an opportunity to learn something new.

With respect and best wishes on your journey to discovery and self-improvement,

Franc Smidt, Chief Editor
31.03.2024

Welcome to the Digital Age

We live in an era that can rightfully be called digital. As users, we don't often think about it, but technology has become so deeply integrated into our daily lives that it has seamlessly become an inseparable part of it, touching almost all spheres of human activity. From ways of communication and information acquisition to business operations and entertainment - all of these have undergone radical changes under the influence of digital transformation. The main driving forces of this process have been revolutionary innovations in the fields of the internet, mobile devices, and artificial intelligence. The World Wide Web has opened unlimited access to knowledge and the possibility of instant communication over distances. The emergence of smartphones and tablets has made these possibilities fully mobile and accessible anywhere and anytime.

Social networks have allowed people to create virtual communities based on interests, exchange content, and stay in touch with loved ones regardless of their geographical location. Simultaneously, the advancement of artificial intelligence and machine learning technologies has enabled the automation of numerous routine tasks and opened new horizons for big data analysis.

Today, digital technologies permeate virtually all spheres of our existence - from professional activities and shopping to healthcare and entertainment. Fundamental shifts in society require a comprehensive examination of both new opportunities and challenges brought by the rapidly developing digital age. FUTURUM magazine will help readers stay informed, track new trends, increase digital literacy, and apply new technologies in everyday life.

Change in Communication Methods and Information Consumption

One of the most noticeable transformations into the digital age has been the fundamental change in communication methods and the consumption of informational content. The advent of the internet and social networks has completely revolutionized how people communicate, share ideas, and interact with each other.

The older generation of people living today still remembers how, a few decades ago, long-distance

communication was mainly through telephone calls and letters. For long-distance negotiations, one had to go to a post office and wait for the operator to connect to the subscriber and call them to a phone booth. Now, instant messaging, video calls, and social media posts have become the norm.

Platforms like Facebook, Instagram, Twitter, and others have created virtual spaces that unite billions of people worldwide. Regardless of geographical boundaries, today you can keep in touch with friends and loved ones, as well as meet and interact with like-minded individuals who share similar interests. Thanks to machine translators, language barriers have been overcome as well. At the same time, a real revolution has taken place in the media and entertainment industry. Digital formats, such as streaming services, online games, and podcasts, are gradually replacing traditional television, cinemas, and print media. New media stars, bloggers, and streamers, whose content is consumed by millions of subscribers, are gaining increasing popularity.

The modern digital environment provides unprecedented access to vast amounts of information and content, expanding educational and entertainment possibilities. At the same time, the increased flow of information brings

«We are in the midst of a cybernetic revolution that is transforming society as radically as the industrial revolution transformed the world of its time.»

**Shoshana Zuboff,
Professor at Harvard Business School**



negative consequences such as internet addiction, deterioration of communication quality, and the emergence of misinformation. Learning to filter digital noise and counter cyberbullying has become an urgent necessity for many Internet users.

Thus, the transition to digital formats of communication and content has brought valuable advantages in terms of global connectivity and information accessibility, as well as serious challenges that require the development of models for responsible and balanced use of new technologies.

Digital Transformation of Business and Work Processes

The digital revolution has had a colossal impact on the corporate world, completely transforming business models, methods of commerce, and the organization of work processes. The emergence of e-commerce has allowed companies to enter global markets and significantly expand their customer base. Major retail giants like Amazon and Alibaba have proven the demand and effectiveness of online trading.

In parallel, the development of cloud technologies and tools for remote work has made it possible to partially or completely eliminate the need for physical offices. During the COVID-19 pandemic, thousands of organizations switched to remote modes of operation, demonstrating the viability of this model. For many companies, hybrid formats with elements of remote employment have become the new norm.

At the same time, big data analytics has opened up unprecedented perspectives for comprehensive analysis of customer information, market trends, and optimization of production processes. Using machine learning algorithms, companies have the opportunity to make more informed business decisions based on factual data.

Automation of routine operations using software robots, artificial intelligence, and the Internet of Things has also become an integral part of digital transformation. Many monotonous tasks are gradually being delegated to smart machines, freeing up human resources for more creative and intellectual work.

However, despite the advantages of digitalization, companies are faced with growing challenges in the field of cybersecurity, ethical issues of data use, and a shortage of qualified IT personnel. The ability to adapt to technological innovations becomes a critically important factor in business competitiveness.

New Opportunities and Challenges in Education and Healthcare

Digital transformation has also touched the fields of education and healthcare, opening new opportunities but also posing serious challenges. In the realm of education, remote and hybrid formats are being actively implemented, utilizing online courses, video lectures, and educational apps. Mobile learning is becoming increasingly widespread and mass-accessible thanks to the growth in computer usage, and the number of users with computers, smartphones, and tablets.

One of the advantages of digital technologies is the ability to personalize the learning process, taking into account the individual characteristics and preferences of each student. Adaptive systems can adjust to different levels of knowledge and skills, ensuring more effective material absorption.

The healthcare sector is also undergoing significant changes thanks to digital solutions. Telemedicine allows for remote consultations with doctors, while wearable devices like fitness trackers open opportunities for constant monitoring of important health indicators. Neural networks with medical applications and innovative equipment with AI tools will fundamentally change the entire healthcare system.

Naturally, such a pace of digitization across all spheres of human activity requires the population to develop corresponding skills. Digital literacy and critical thinking become necessary competencies for effective use of new technologies in education and medicine. Ensuring equal access to them for all segments of society remains a contemporary challenge that needs to be addressed, otherwise, the stratification could become catastrophic and extremely inhumane.

Digital Transformation in Education and Healthcare: New Opportunities and Challenges

The digital transformation has also touched the realms of education and healthcare, presenting new opportunities while posing serious challenges. In education, remote and hybrid learning formats are being actively implemented, utilizing online courses, video lectures, and educational apps. Mobile learning is becoming increasingly widespread and accessible thanks to the growth in computing and the number of users with computers, smartphones, and tablets.

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Naturally, the rapid digitalization of all spheres of human activity requires the formation of corresponding skills among the population. Digital literacy and critical thinking become necessary competencies for the effective use of new technologies in education and medicine. Ensuring equal access to them for all segments of society remains a challenge of modern times, which must be addressed to prevent potentially catastrophic and highly inhumane societal stratification.

Ethical and Social Issues of the Digital Era

Alongside numerous advantages, the rapid development of digital technologies raises a series of ethical and social problems that demand close attention. One of the most acute issues remains the protection of user privacy and the security of personal data.

With the increase in online interactions and enhanced practices of collecting information about people's preferences and behavior, corporations amass vast databases of confidential information. Without proper protective measures, this data can become vulnerable to hacker attacks and leaks, posing a threat to the private lives of citizens.

Another negative consequence of the widespread adoption of digital platforms is the proliferation of unwanted content and destructive practices, such as cyberbullying, hate propaganda, and misinformation. Given the viral nature of information spread online, dangerous ideas can rapidly reach a mass audience, particularly among young people.

The issue of a growing digital divide between different countries and social groups within societies cannot be ignored. While some have the opportunity to enjoy the benefits of technological progress, others are cut off due to economic, infrastructural, or educational barriers. Addressing this inequality poses a complex challenge that requires comprehensive solutions. It's clear that closing the digital divide is possible only through the joint efforts of all interested states, international and public organizations, technology giants, and individuals.

Conclusions

Humanity's entry into the era of digital technologies, like any major transformation, brings both great opportunities and serious challenges. Advances in communications, automation of routine processes, big data analysis, and personalization of various activities open unprecedented prospects for progress. At the same time, issues of privacy, cybersecurity, data use ethics, and digital inequality demand society's close attention.

Responsible and prudent application of innovations, considering their potential risks and negative consequences, must become imperative for corporations, governments, and citizens alike. Cultivating digital literacy, digital democracy, and a culture of information hygiene will allow us to derive the maximum benefit from technological achievements.

The digital era, with the current boom in artificial intelligence development, will continue to present new and emerging challenges. Being prepared to adapt to them and keeping pace with the times will determine our ability to find meaning in life, fulfill our destinies, achieve satisfaction, and even simple human happiness. As society shifts, it's crucial not to be left «overboard.» FUTURUM Magazine and our entire team will strive to help readers make sense of ongoing changes, inform about events, and adapt to the rapidly changing conditions of our lives.

FUTURUM Magazine Editorial Team, 30.03.2024

2023 - The Year of Crossing New Frontiers



Ava, The Sales Rep

Supercharge Your Outbound Sales, At Scale

- Discovers leads with 250 million contacts & 65 data points
- Writes & sends bespoke email sequences to 1000s of prospects
- Replies to prospects' questions
- Books meetings into SDRs' calendars

Meet Ava



Liam, The Marketer

Supercharge Your Growth Without Huge Overheads

- Creates & executes multi-channel marketing campaigns
- Learns from your team & builds a world model of your company
- Uses advanced data analytics to optimize for ROI

Join Waitlist



James, The CS Rep

Support Your Customers With Unparalleled Product Knowledge

- Integrates with your existing CS stack
- Analyzes all past CS cases to improve response reliability
- Optimizes for positive sentiment responses

Join Waitlist

The year 2023 has marked a pivotal moment in the evolution of artificial intelligence, transitioning from a niche technology to an essential tool for maintaining market competitiveness. What began as experimental usage of chatbots has now transformed into widespread implementation of digital workers capable of automating entire business processes.

According to a recent McKinsey survey, already a third of companies actively use generative AI in one or more business functions, and 40% plan to increase their investments in the near future. This indicates not just a trend, but a necessity to adapt to a new reality where the digital workforce becomes the standard.

What Is a Digital Worker?

Digital workers represent an evolution in AI, differing from simple chatbots and assistants by their ability to automate complex work processes. They don't just perform tasks; they occupy specific

job roles, from graphic designers to HR managers, learning and improving based on company feedback and needs.

Benefits of Digital Workers

The immense benefits that companies start to gain from using digital workers are already evident. An MIT survey among more than 6,000 workers showed not only the positive impact of AI on their work but also huge enthusiasm regarding its capabilities. Digital workers promise to democratize access to skilled labor while increasing productivity and efficiency at all levels.

Risks and Challenges

Despite the advantages, there are risks associated with the implementation of digital workers. One of the key concerns is the potential decrease in morale among employees due to fears of obsolescence. Moreover, the possibility of errors and inaccuracies in AI's work requires continuous monitoring and

adaptation. However, these risks can be mitigated with the right approach and implementation, making digital workers a valuable addition to the team rather than a threat.

Looking Forward

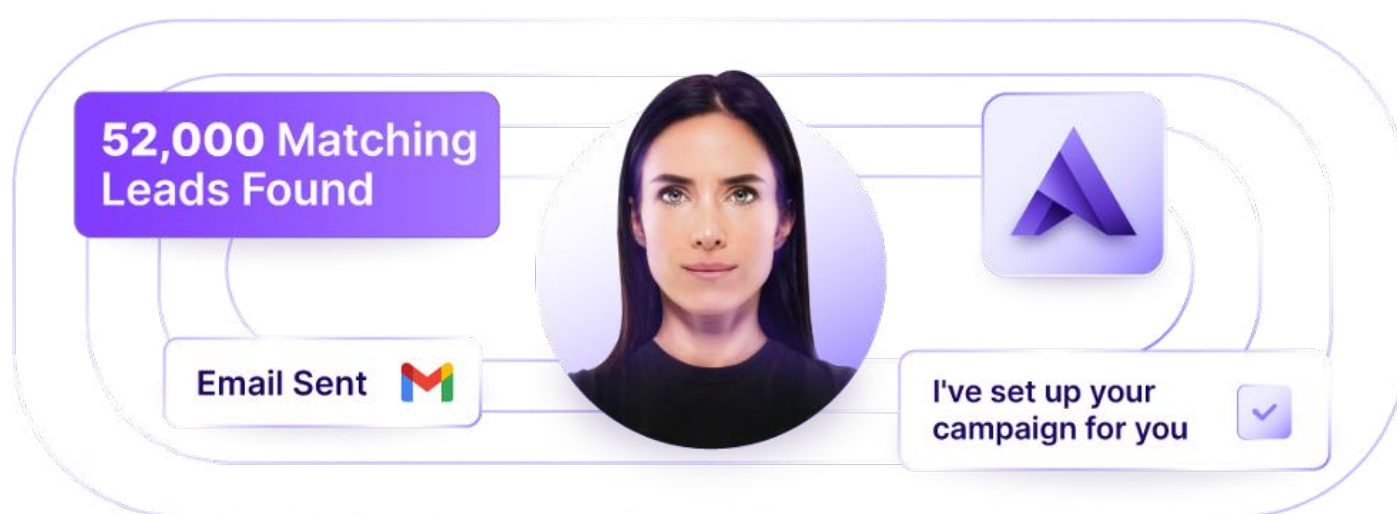
In 2024 and beyond, we can expect digital workers to become an even more integrated part of business processes, bringing a new level of automation and efficiency. The adoption of AI is no longer a question of «if» but «when,» and companies that

take this step ahead of others will gain a significant competitive advantage.

Artificial intelligence opens up new horizons for business, offering not just economic efficiency but also the opportunity to rethink and optimize work processes. In this new era of the digital workforce, the key to success lies in the harmonious combination of human creativity and machine efficiency.

Inspired by artisan.co.

Digital workers - highly recommended!



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Who Is Artisan For?

We primarily built Artisan for B2B SaaS startups with product-market fit. Ava can take your market traction and pour fuel on the fire!

Ava is also great for Marketing Agencies, Recruiters, Consultants/Freelancers, Anyone already generating leads using cold email!

Glean raises over \$200M at \$2.2B valuation to accelerate deployment of generative AI in the enterprise



Arvind Jain, CEO

We have some exciting news to share today. Glean has raised over \$200M at a \$2.2B valuation. Led by Kleiner Perkins and Lightspeed Venture Partners, this latest round also included participation from existing investor Sequoia Capital, new investors Coatue, ICONIQ Growth, and IVP, strategic investors Capital One Ventures, Citi, Databricks Ventures, and Workday Ventures, and support from existing investor General Catalyst.

Our investors join us in our belief that Glean is the right solution, built by the right team, at exactly the right time. Our AI-powered work assistant leverages Glean's state-of-the-art search and RAG technology to retrieve the most relevant, up-to-date information for LLMs to use—enabling Glean to generate highly personalized answers grounded in each organization's unique enterprise knowledge graph. We see a future where Glean is the enterprise AI platform organizations rely on for a ready-to-use AI work assistant, as well as the tools to build custom generative AI experiences grounded in company knowledge.

Making AI work in the enterprise

As business leaders—particularly CIOs—find themselves under mounting pressure to quickly and securely deploy AI in their organizations, bringing responsible AI to the enterprise has become more important than ever. As revealed by a recent survey of CIOs, 78% of respondents believe generative AI will be critical to workplace productivity.

However, many are hesitating due to the uncertainties posed by security risks and shadow IT. Ad hoc adoption of generative AI comes with both heavy risks and costs, two of the greatest concerns for IT leaders and CIOs. So although AI has been identified as mission critical for businesses over the coming years, implementation is a considerable challenge with serious implications down the line if not performed properly.

So what do businesses need to make this work?

The key is being able to connect LLMs with all your enterprise data in a way that's scalable and secure, while reflecting the breadth and depth of your company knowledge. That includes not just all the content within your corpus, but also a deep understanding of how workers are doing their best work, on which projects, and with whom.

Glean is uniquely positioned to deliver a solution that meets the challenging requirements of a truly enterprise-ready AI assistant. Over the past year, Glean has quickly emerged as the industry-leading enterprise generative AI solution thanks to the launch of our conversation AI assistant. Glean always delivers trusted answers grounded in your knowledge graph, scales responsibly and reliably to your enterprise needs, and features turnkey implementation of a complex AI ecosystem through 100+ connectors—no professional services, data training, or manual fine-tuning required. It's precisely what CIOs need to move quickly on AI

without sacrificing budgets or risking enterprise security.

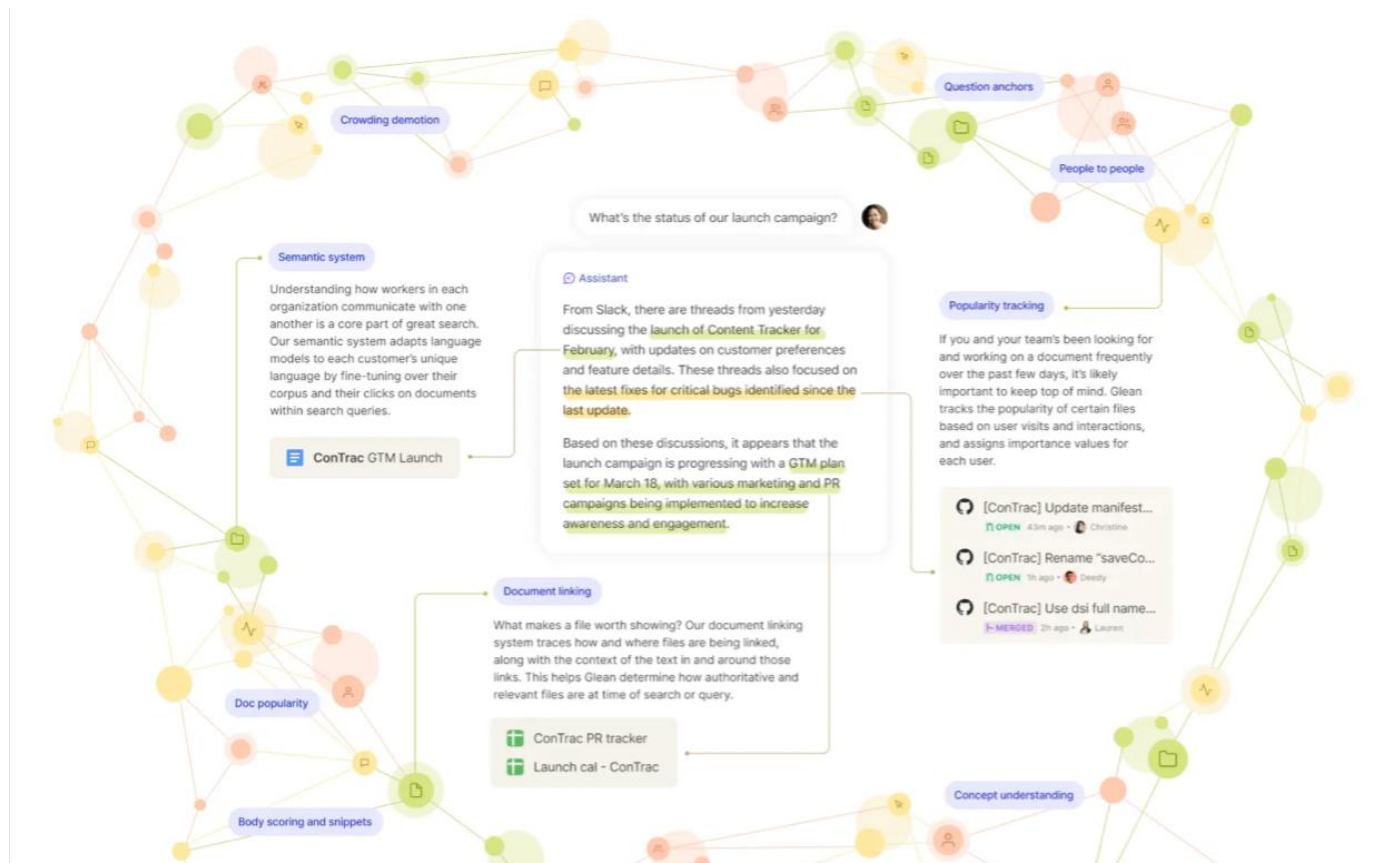
Strong foundations, sustainable growth

Since our \$100M series C in 2022, we've achieved incredible milestones like launching Glean Chat and introducing our low-code/no-code centralized AI

business topics— how the market's shifted with the advent of AI, how needs and expectations have adapted, and where Glean fits in that picture.

Glean's 2023 Executive Customer Advisory Day

One sentiment that stuck with me was how much of a difference Glean makes in our users' lives. One customer



Glean's complete knowledge graph utilizes a web of signals to provide highly personalized and relevant answers

platform for companies to build custom generative AI experiences grounded in their company knowledge, all while witnessing industry-best levels of user engagement with our product. Glean's platform will provide each and every business with the tools they need to build custom generative AI experiences grounded in their unique company knowledge. We've a lot further to explore, and this latest round of funding will enable us to develop the most secure, comprehensive, and intuitive enterprise AI platform of the future that empowers our users to truly elevate their workflows and productivity.

Building Glean has been a gratifying endeavor in large part because of the support and feedback we've received from our incredible customers. At our most recent Executive Customer Advisory Day in January, we had an opportunity to bring together CIOs and IT leaders from across the country that use Glean. We discussed what I think are some of today's most important

noted— «I have been rolling out software for the last 25 years, and never before have I received such amazing feedback about a product.» It's a wonderful reminder of all the incredible work we've achieved over here at Glean.

Since the very beginning, our mission has been straightforward yet ambitious: bring people the knowledge they need to make a difference in the world. Glean Assistant users average 14 queries per day (compared to Google's average of 3-4), and Glean users save an average of 2-3 hours per employee per week! It's humbling to take a step back and see what a difference we've made, and where we can do even better.

FUTURUM MAGAZINE
monthly introduces readers to promising
companies and start-ups in the digital sphere.



The early bird catches the worm

Vasyl Hulyi, Germany,
18.03.2024

Secret, defense, and space developments, the struggle for supremacy

Countries compete with each other in various fields, including economy, technology, defense, and space exploration. This rivalry often manifests in investments in research and development (R&D), creation of new technologies and innovations, as well as strengthening their defense and intelligence capabilities. The danger in this competition lies in the fact that it can lead to the escalation of conflicts, tensions between countries, and an arms race. Moreover, competition in secret, defense, and space developments can lead to inequality in access to resources and technologies, as well as to an increase in espionage and cyber attacks. Secret, defense, and space developments play a crucial role in national security and geopolitical influence of countries. Nations invest significant resources in these areas to ensure their supremacy and protect their interests. Examples of such rivalry include the arms race during the Cold War between the USA and the USSR, as well as the modern race in artificial intelligence and cyber weapons between leading world powers. The struggle for supremacy in these areas can lead to breakthroughs and innovations that, ultimately, can be used for peaceful purposes and improve people's lives. However, it can also create risks and challenges for international security and stability. It is important

for states to cooperate and adhere to international norms and agreements to minimize these risks and ensure that technological progress benefits everyone.

Where is the main battlefield?

The main battlefield between countries in the context of technological rivalry and geopolitics is currently focused around several key areas:

1. **Artificial Intelligence (AI) and machine learning:** Countries compete in the development of advanced AI and machine learning technologies that can revolutionize various sectors, from healthcare and education to defense and cybersecurity.
2. **Cybersecurity and cyber operations:** Protecting digital infrastructures and data becomes increasingly important as countries face a growing threat of cyber attacks and espionage. Developing and implementing effective cybersecurity systems and conducting cyber operations are key points in this area.
3. **Space technologies:** Competition in space technologies and research continues as countries seek to strengthen their presence in space, develop new satellite systems, explore other planets, and develop commercial space enterprises.
4. **Quantum computing:** Quantum computing represents a cutting-edge field that could revolutionize computing and cryptography.

Countries that can develop and implement practical quantum computers may gain a significant advantage in security and the economy.

5. **Biotechnologies and genetic engineering:** Competition in biotechnologies and genetic engineering could lead to breakthroughs in medicine, agriculture, and energy production. Countries leading in this area may gain an advantage in the economy and improving the lives of their citizens.

6. **Energy and clean technologies:** The development and implementation of advanced energy and clean technologies, such as renewable energy sources, carbon capture, and storage, are key factors in combating global warming and ensuring energy security. These areas are the main battlefields where countries compete for supremacy, innovation, and geopolitical influence. Competition in these spheres can lead to both positive outcomes, such as technological breakthroughs and improved human life, and negative consequences, such as the escalation of conflicts and tensions between countries.

The Widening Gap

The lag in development and implementation of cutting-edge technologies can affect countries across various levels of economic development and geopolitical influence. Typically, countries lagging technologically face the following issues:

1. **Economic consequences:** Falling behind in technology can lead to decreased global market competitiveness, low labor productivity, and reduced economic growth. This can also limit a country's ability to attract foreign investments and develop innovative industries.

2. **Social consequences:** Countries behind technologically may struggle to provide access to quality education, healthcare, and other social services. This can lead to increased social inequality and poverty, as well as limit individuals' opportunities to realize their potential.

3. **Political consequences:** Technological lag can weaken a country's geopolitical influence and its ability to participate in international negotiations and agreements. This can also increase the country's dependency on foreign technologies and solutions, potentially threatening national security.

4. **Environmental consequences:** Countries lagging in the development of clean and efficient technologies may face difficulties in combating global warming, environmental pollution, and other ecological problems. This can negatively impact

public health and quality of life. In light of the deepening technological divide between developed and developing countries, it is crucial to actively strive to reduce this imbalance.

There are several key measures and methods that can help narrow the gap and ensure more equal opportunities for all countries in the use and development of technologies:

1. **Investing in education and training:** Strengthening educational infrastructure and implementing programs aimed at developing skills in information technology and engineering, to prepare qualified professionals capable of working in the high-tech sector.

2. **Increasing investments in research and development:** Encouraging domestic and foreign investments in the scientific research and development sector to stimulate innovation and the development of proprietary technological solutions.

3. **Creating technological incubators and innovation hubs:** Establishing specialized centers that provide entrepreneurs with access to resources, knowledge, and networks for developing startups and innovative projects.

4. **Developing and implementing government support programs:** Offering tax incentives, subsidies, and grants to support technological startups and businesses working in the high-tech sector.

5. **Strengthening international cooperation:** Developing international programs and agreements aimed at knowledge exchange, technology transfer, and resource sharing between countries for collaborative development and use of advanced technologies.

6. **Promoting digital inclusion:** Expanding access to the internet and digital technologies for all population segments, especially in remote and underprivileged regions, to increase their participation in the global digital economy.

By following these measures and methods, countries can not only reduce the existing technological divide but also ensure the sustainable development of their economies, social, and political systems. It is important to remember: «He who does not advance, falls behind.» This motto underscores the need for proactive actions and innovation pursuits to ensure prosperity and competitiveness in the future world.

Digital Transition

A Future of Unprecedented Growth and Opportunities in an era marked by rapid technological advancements, the artificial intelligence (AI) market stands at the forefront of innovation, poised to reshape industries, economies, and daily life on a global scale. With a projected market volume reaching a staggering \$407 billion by 2027, the AI sector is experiencing exponential growth, forecasted at an annual rate of 37.3% from 2023 to 2030.

This remarkable expansion signifies a transformative period for businesses, governments, and individuals alike. By 2030, the global AI market revenue is expected to soar to \$1.8 trillion, indicating the vast economic potential of AI technologies. The proliferation of natural language processing (NLP) models, developed by over 1800 companies worldwide for various applications, underscores the widespread adoption and integration of AI across multiple sectors. This technological revolution is not just confined to the tech industry; banking, financial services, insurance, and healthcare are leading the charge, harnessing AI to drive efficiency, innovation, and customer satisfaction. The impact of AI extends far beyond corporate profits and technological advancements.

The global GDP is set to increase by \$15.7 trillion in 2030, thanks in large part to AI's contributions. China, in particular, is expected to witness a 26% GDP growth attributable to the AI sector, capturing 26.1% of the global AI market. This economic powerhouse is setting the stage for a new era of competition and cooperation on the international stage.

The dynamic AI landscape is also creating unprecedented investment opportunities, with at least one AI company projected to go public in 2024. The financial commitment to AI development is evidenced by the anticipated expenditure of over \$1 billion on training a single large language model in 2024 alone. Furthermore, the wearable AI device market is expected to reach \$180 billion by 2025, highlighting the growing consumer demand for smart, personalized technology.

AI Users: Embracing a New Digital Reality The rapid adoption of AI is transforming how we interact with technology, with 314 million people expected to use AI tools in 2024. This digital revolution is set to continue, with AI-generated content predicted to



constitute 90% of all internet content by 2026. Despite concerns over the potential for misinformation spread by AI, over 75% of content consumers remain wary, yet 65% maintain their trust in businesses that utilize AI technologies responsibly. Transparency, trust, and security are becoming increasingly important in AI implementations, with companies that prioritize these values expected to see a 50% improvement in AI model efficiency by 2026. Users believe in the potential of AI to enhance the quality and depth of textual content, such as website material, with 54% affirming this belief. The convenience and utility of AI are further demonstrated by the 97% of mobile users who employ AI-based voice assistants, signaling a shift towards more natural and intuitive user interfaces. The belief that AI will improve lives is shared by 41% of users, reflecting the optimistic outlook many hold towards technology's ability to solve complex problems and enhance daily experiences. Chatbots, in particular, have gained widespread popularity, with 1.5 billion people globally using these AI-powered conversational agents.

The rapid adoption rates of AI innovations, such as ChatGPT, which amassed 1 million users within just five days of its launch, and Adobe Firefly, which generated 1 billion images within three months, illustrate the public's eagerness to engage with and benefit from AI technologies. As the AI market continues to expand and evolve, the possibilities are limitless.

The intersection of innovation, investment, and user engagement is driving the AI industry towards a future filled with potential and promise. The journey ahead is exciting, challenging, and undoubtedly transformative, as we stand on the brink of a new digital dawn powered by artificial intelligence.

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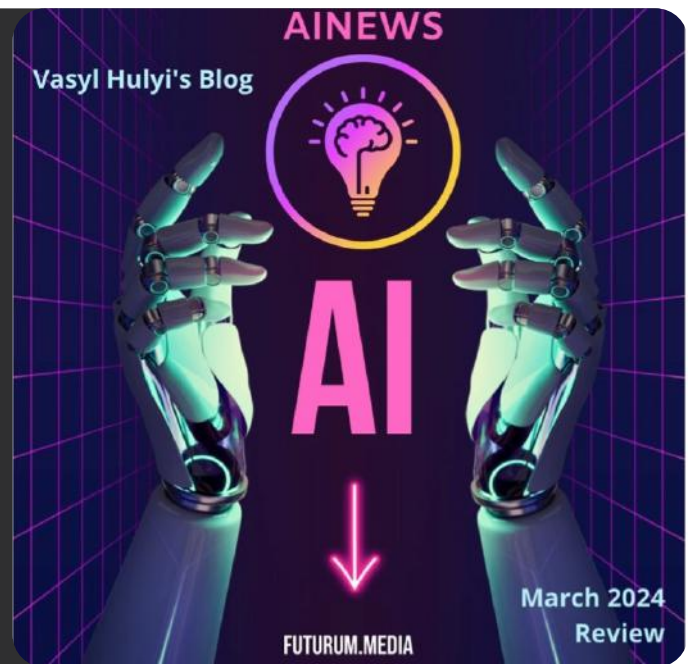


Hello, AI enthusiasts!

In future issues, I will prepare the monthly review taking into account your comments and wishes. Your feedback is important to us! We will strive to provide useful, timely, and valuable information to navigate properly in the stream of events in the AI field.

So, feel free to write to me at ai@futurum.media.

Sincerely, Vasyl Hulyi



Supercomputer

Microsoft and OpenAI have announced the initiative to launch the «Stargate» project worth 100 billion dollars.



Recently, we learned about Amazon's plans to expand its digital infrastructure for cloud computing and allocate 150 billion dollars for this endeavor. The strategic program is planned for 15 years. Amazon's ambitious plans and dedicated investments aim to maintain its leading position in the cloud services sector, significantly ahead of its closest competitor - Microsoft. This was a serious bid for global expansion, as the infrastructure expansion involves not just the USA but also the establishment of data centers in Saudi Arabia and South Asia.

In response, Microsoft has teamed up with OpenAI to create a supercomputer named «Stargate» worth 100 billion dollars. Moreover, the facility is planned to be operational by 2028. The competition is intensifying, but this is driven by the huge need for computational power and the prospects of the AI market.

Like mushrooms after the rain

The UN Advisory Body on AI, the Council of Europe AI Committee, the European AI Bureau, the US AI Security Institute Consortium, the FUTURUM PLATFORM Center for Digital Democracy, the Global Alliance of Digital Creators, and the Digital Sphere ICAC: regulatory, supervisory, and self-regulatory nonprofit organizations have been emerging like mushrooms after the rain. This indicates the growing

pressure from the artificial intelligence boom and the beginning of the formation of a civilized market and rules in this area. Many countries around the world are considering and adopting legislative measures to regulate and ensure the safety of emerging new AI technologies and their capabilities. Due to the pace of AI development and an increasingly complex regulatory framework, it's becoming more challenging to keep track of what's happening, who is responsible for what, and what goals are actually being achieved. We will continue to focus on this topic in each issue of our journal to keep you informed about changes and events

The European Artificial Intelligence Act is the world's first legislative act

Its goal is to create conditions for the development of AI in the EU and a basis for harmonizing the internal legislation of EU member states. The following are prohibited:

- Biometric categorization systems that use sensitive characteristics (e.g., political, religious, philosophical beliefs, sexual orientation, race);
- Non-targeted extraction of facial images from the Internet or video surveillance recordings to create databases for facial recognition;
- Emotion recognition in the workplace and educational institutions;
- Social scoring based on social behavior or personal characteristics;
- Artificial intelligence systems that manipulate people's behavior to bypass their free will;



- AI used to exploit vulnerabilities of people (due to their age, disability, social, or economic status). Some exceptions are provided only for law enforcement agencies.

OpenAI has introduced the AI Voice Engine, which clones your voice from a 15-second sample

OpenAI has unveiled the AI model Voice Engine innovations, capable of realistically voicing entered text based on a 15-second sample, accurately replicating the speaker's voice and speech characteristics. The new tool, Voice Engine, emerged in late 2022 and was used in APIs for text-to-speech transformation, alongside ChatGPT Voice and Read Aloud. The modern version has been tested with the following usage examples:

- Assisting those with reading difficulties and children through natural, emotional, and diverse voices. For instance, the education technology company Age of Learning uses Voice Engine to voice content and, in conjunction with GPT-4, personalized responses to students in real-time.
- Content translation, such as videos and podcasts, allows authors and companies to expand their audience globally, conveying information with their own and their employees' voices. HeyGen, an AI visual storytelling platform for corporate clients aimed at creating human-like avatars for various purposes—from product marketing to trade

offers—is among the pioneers. Voice Engine retains the narrator's native accent, so a French narrator voicing English text will have a French accent.

- Supporting people with speech difficulties, therapeutic applications, educational enhancements. Livox, an AI app for alternative and augmentative communication devices, aids individuals with communication problems. Using Voice Engine, Livox offers unique, non-robotic voices to mute individuals. Users can select the most suitable voice, speaking in multiple languages.
- Assisting in voice restoration for sudden and degenerative speech disorders. The Norman Prince Neuroscience Institute (NPNI) conducts a pilot program to help individuals with cancerous or neurological speech disorders. Utilizing Voice Engine's ability to reproduce speech from a 15-second sample, doctors Fatima Mirza, Rohaid Ali, and Konstantina Svokos used an audio recording from a school project video to restore the voice of a young patient with speech issues due to a vascular brain tumor. OpenAI and partners consistently declare ethical guidelines for using the technology, prohibiting impersonation of another person with it. However, this does not deter potential criminals increasingly using neural network technologies for illicit purposes.

Source openai.com

OpenAI, Hollywood, and the AI video generator Sora

OpenAI is actively engaging with representatives from Hollywood studios, media executives, and creative agencies. The company aims to establish partnerships with entertainment industry stakeholders, communicate mutual benefits, and offer filmmakers the use of its new AI video generation service, Sora, amid concerns about the future of professions in the industry. According to videos presented on OpenAI's resources, this AI tool offers tremendous possibilities and even

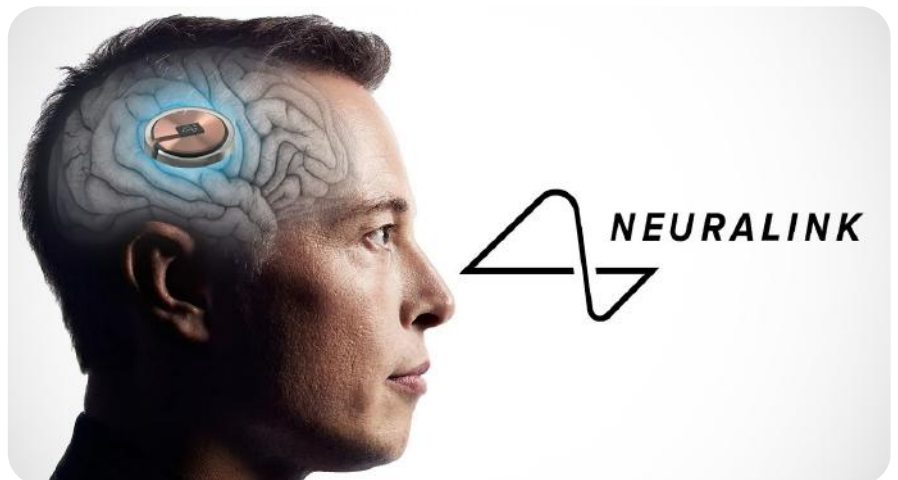
revolutionary changes in video production, impressing with its realism and detail. This was discussed by Sam Altman himself in a recent interview with Lex Fridman. You can watch here: openai.com/sora

«Today, Sora becomes available for expert teams to evaluate critical areas for harm or risks. We are also providing access to a number of artists, designers, and directors to get feedback on how to improve the model to be most useful for creative professionals. We are sharing the results of our research in advance to start working and receiving feedback from people outside of OpenAI, as well as to give the public an idea of what AI possibilities lie on the horizon.» – OpenAI



Neuralink Blog

Elon Musk's Neuralink showcased a video of the first test subject with a brain chip playing chess using thought power. This is a promising achievement! The guy compares the sensation to the Force from «Star Wars» - he simply thinks about moving the cursor, and it moves. Learn more neuralink.com



Cognition AI introduced Devin



Cognition

His net worth is estimated at \$80 billion, and his company is among the top three with a value exceeding \$2 trillion.

«For me, there are no tasks that are beneath my status. I'll remind you that I once worked as a dishwasher... I cleaned toilets. I have cleaned more unusable toilets than all of you combined... I don't know what else to add. Such is life,» said Nvidia's founder Jensen Huang. He is known for his impactful forecasts in the field of information technology development, and during his speech at the World Government Summit in Dubai, he once again stated that in the near future, knowledge of

programming languages will not be necessary for professionals, as artificial intelligence will write code. Believe it!

And here is the confirmation of his words:

Cognition AI introduced Devin, an autonomous AI agent that can independently write entire software projects from scratch based on simple prompts. It's like an AI software engineer. It can plan and execute complex coding tasks consisting of hundreds of steps, while learning, correcting mistakes, and collaborating with users in real-time. During the demonstration, the neural network created entire websites and applications in less than 10 minutes and even performed real tasks on Upwork autonomously. In testing, Devin solved an incredible 13.86% of real issues on GitHub, absolutely shattering the previous modern record of 1.96%.

It turns out that the Nvidia boss was right!
cognition-labs.com

GPT-5, Sora, Elon Musk, AGI

Sam Altman discussed GPT-5, Sora, Elon Musk, AGI, and even aliens in a recent discussion with Lex Fridman, covering a broad range of current and interesting topics for everyone.

Here's a summary:

Sam Altman discussed the evolution and future of AI models, as well as the upcoming release of GPT-5. He expresses concern that AI will become smarter overall, not just in specific abilities.

Altman mentioned that OpenAI will release several significant updates before officially moving on to what could be called GPT-5.

Altman shared his thoughts on Sora, an OpenAI project capable of generating video, which could change the content creation process and hints at broader implications due to AI's ability to create increasingly complex simulations. Altman acknowledges the issues and ethical questions associated with the development of such technologies.

He touched on the difficulties in his relationship with Musk, including Musk's lawsuit against OpenAI. However, Altman expressed respect for Musk's contribution to technology development and hopes

for friendly relations in the future, despite current tension and differences in their approaches to AI development and safety.

Sam also clarified that he didn't tweet about wanting to raise \$7 trillion for a chip project. However, he acknowledged the significant need for increased computational power. He noted that meeting this demand represents a major challenge due to energy requirements, data center expansion, supply chain development, and chip production. Altman predicts that by 2030, or possibly sooner, we will see the development of extremely advanced AI systems.

He believes that the emergence of AGI is not the end but rather the beginning. An AI agent should remember everything about the owner and forget at the first request. «I want a model for myself that would recognize me, becoming more useful,» said the OpenAI head.

«What about GPT remembering all the nightmare you went through in November?» asked the host. «I don't just want it to remember it — I want it to integrate the lessons learned and remind me in the future what to do differently or what to be wary of. We all gain experience throughout life. And I would like my AI agent to gain it too,» Altman confirmed.

This interview is worth watching! youtube.com

Hello, cryptocurrency fans!

In future issues I will prepare a monthly review, taking into account your comments and wishes. Your opinion is very important for us! We will try to provide useful, relevant and valuable information so that you can properly navigate the flow of events in the world of cryptocurrencies.

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Sincerely, Vladyslav Kostiuk



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Google has announced that Google Search now allows users to «search for any of your wallet addresses in Bitcoin and five Ethereum virtual networks (EVM).» To do this, enter

the cryptocurrency wallet address in the search bar, and the first result will display its balance in Bitcoin and the date of the last transaction. Supported formats include P2PKH, P2SH, and Bech32. Extended public key addresses are currently not supported. All Bitcoin transactions are public in the distributed ledger (blockchain). Knowing the address does not reveal the owner. Google Search will also show Ethereum balances, covering five Ethereum Virtual Machines: Arbitrum, Avalanche, Fantom, Optimism, and Polygon. This was announced by Google's Vice President of Engineering, Rajan Patel, in his [X social network](#) account.



Rajan Patel
@rajanpatel

As of today, you can now Search for any of your wallet addresses across bitcoin and five new EVM networks - @arbitrum, @avax, @FantomFDN, @Optimism and @0xPolygon! 🚀



FTX co-founder and head Sam Bankman-Fried has been sentenced to 25 years in prison with the confiscation of assets amounting to more than \$11 billion. He was found guilty on seven criminal counts, including fraud and embezzlement of

funds. Bankman-Fried was one of the founders of the cryptocurrency exchange FTX, launched in 2019, which quickly became one of the largest in the world. During the trial, his accomplices confirmed that they manipulated data to make the exchange appear more prosperous and safe than it actually was.



0xScope has raised \$5 million in pre-Series A funding and launches an artificial

intelligence-based chatbot for Web3, Scopechat. The data analytics firm, 0xScope, today announced the release of 0xScope V2, aimed at providing robust data support for Web3 AI applications. It addresses ongoing challenges such as high entry barriers, poor user experience, and the issue of information noise in the Web3 space. 0xscope.com

Crypto hedge fund Multicoin Capital reports a staggering growth of 9,281% since its inception in 2017. The crypto-focused hedge fund has delivered its investors exceptional returns, exceeding 9,000% since its launch in 2017. Thanks to the resurgence of the cryptocurrency market, in 2023, the fund achieved an impressive profit of 537%.

The fund's portfolio can be viewed here: [multicoin.capital](#). Our attention in the portfolio of this fund was drawn to the neural network [alethea.ai](#). MyCharacter.ai is the first external decentralized application (dApp) built on the AI protocol, making CharacterGPT V2 widely available, enabling the creation of realistic, interactive, and emotionally expressive AI characters that can be tokenized on the Polygon blockchain.



Current copyright laws are sufficient for NFTs, according to research initiated by the US Government. Existing intellectual property laws are adequate to combat violations associated with Non-Fungible Tokens (NFTs). Therefore, there is no need for new legislation to address this issue, the study states.

NFT, or Non-Fungible Token, represents a unique digital asset that utilizes blockchain technology to verify authenticity and ownership of digital objects, such as artworks, music, video games, and other digital goods. Unlike traditional cryptocurrencies, each NFT has unique identification data, making them one-of-a-kind and non-interchangeable.



The world of blockchain and artificial intelligence continues to intersect,

especially in 2024. This week, news about the decentralized artificial intelligence platform Fetch.ai, merging with two other projects in the field of artificial intelligence, shook the crypto community, and Algotech (ALGT) made headlines thanks to its record-breaking presale. The merger of Fetch.ai has heated up great expectations in the artificial intelligence market. The artificial intelligence laboratory Fetch.ai, creating an open, permissionless decentralized learning network with a crypto-economy, recently joined forces with two leaders in the decentralized artificial intelligence space, OCEAN Protocol and SingularityNET, aiming to create the Superintelligence Alliance. The Superintelligence Alliance is a unified stance against the control of large companies over technologies. «We are joining forces to change the rules of the game in how AI is created, distributed, and used, relying on the principles of decentralization to create an open and fair form of AI,» stated Fetch.ai.

We await the implementation of artificial intelligence and blockchain technologies as algorithmic trading becomes increasingly influential in financial markets. Algotech is a next-generation algorithmic trading platform powered by artificial intelligence. Its main mission is to democratize access to high-frequency trading (HFT) strategies for retail investors.

fetch.ai agentverse.ai

Predictions

According to analytical company forecasts, the price of Bitcoin could reach \$147,000 by 2025 and \$201,699 by mid-2025. Long-term forecasts suggest that the Bitcoin price will steadily increase from 2026 to 2029, reaching \$365,140 by 2029.

Promising Altcoins Investors also mention a number of altcoins that could show a 100-fold growth in 2025, including coins related to the development of artificial intelligence. Altcoins are expected to show positive dynamics following the Bitcoin halving period.

Development of the DeFi Ecosystem

The decentralized finance (DeFi) ecosystem continues to rapidly develop in 2024. New DeFi protocols and tokens are emerging, attracting investor attention. Leading DeFi platforms, such as Uniswap, are gaining popularity and functionality, offering users convenient tools for trading, lending, and other financial operations without centralized intermediaries.

Promising Cryptocurrencies

Analysts highlight several cryptocurrencies that could show significant growth in 2024, including Worldcoin (WLD), associated with the concept of global digital identity. The development of the DeFi and NFT market is expected to contribute to increased demand for cryptocurrencies in 2024.



Binance CEO Richard Teng discreetly visited South Korea with plans to negotiate with the local financial regulator and address the issue of entering the Korean market. It is known that local regulators do not allow citizens to trade on foreign cryptocurrency exchanges. Accordingly, foreigners do not have the right to conduct any operations on South Korean platforms.

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NewsFeed

⚡ The London Stock Exchange (LSE) will launch a platform for trading Bitcoin and Ethereum Exchange-Traded Notes (ETN) on May 28.

⚡ [According to Bloomberg](#), the USA and the United Kingdom are investigating cryptocurrency transactions worth more than \$20 billion that passed through the Russian cryptocurrency exchange Garantex. Sources claim the investigation is part of efforts by both countries to curb the circumvention of sanctions imposed on Russia. Payments were reportedly made using the stablecoin USDT by Tether.

⚡ The USA has imposed sanctions against Russian operators of digital financial assets (DFA) and blockchain services. The list includes companies like «Atomize,» «Lighthouse,» «Distributed Ledger Systems,» Web3 Tech, B-Crypto, and others. Ethereum co-founder

⚡ Vitalik Buterin highly praised the efforts of the Worldcoin project in working on data privacy, which helps to eliminate concerns from regulators of various countries.

⚡ Best cryptocurrency exchanges: Changelly (registered in Malta) - started operating in 2015. According to BestChange, the platform offers over 300 exchange options, including offers to buy Bitcoin. The German crypto exchange AlfaCashier started operations in 2012. According to BestChange, the platform has over 500 exchange options + fiat currencies. The crypto exchange 365Cash was launched in 2015 in Ukraine, offering almost 400 exchange options.

⚡ BTC exchange Kassa has been operating since 2017. The project is registered in the Netherlands, offering over 2000 exchange options.

⚡ JPMorgan experts believe that Ethereum is likely to outperform both Bitcoin and other cryptocurrencies in terms of growth rate in 2024.

⚡ Attention, SCAM! 95% of cryptocurrency channels are deceiving subscribers, offering to buy cryptocurrency that cannot then be sold!

⚡ NatWest Group, Lloyds Bank, Nationwide Building Society and the property portal Rightmove have jointly invested 10 million British pounds in Coadjute.

⚡ Data Ownership Protocol has announced that it raised \$162 million during the recent token sale ahead of its mainnet launch later this month.

⚡ According to the Central Bank of Russia, the volume of Russian cryptocurrency exchange transactions in 2023 amounted to nearly 52 billion dollars.

⚡ In March, spot Bitcoin ETFs demonstrated a record monthly volume, tripling the figures compared to the previous two months, with the trading volume amounting to 111 billion dollars.

⚡ The AMF issued a circular on the supervision and issuance of virtual assets in the country, with BITGET included in the list of those offering cryptocurrency investments through unauthorized organizations.

⚡ Starting from July 2024, Lithuania will begin the pre-licensing of cryptocurrency companies, with full regulation planned to be introduced by June 2025. Currently, about 580 crypto companies are registered in Lithuania, most of which are nomads from other EU countries.



The NFT market is making a comeback, and innovations are emerging . Step-by-step guide for beginners – creating NFTs.

Creating and selling NFTs can be an exciting journey into the world of digital art and blockchain. Here is a step-by-step guide to help you get started:

Step 1: Choose Your Artwork

- Decide what you want to turn into an NFT. It can be a digital image, a piece of music, a video, or any other type of digital content.
- Ensure the originality of your artwork. To create an NFT, you need to have full rights to the content or permission to use it.

Step 2: Choose a Blockchain

- Select a suitable blockchain platform. The most popular for creating NFTs include Ethereum, Binance Smart Chain, Flow by Dapper Labs, Tezos, and Polkadot.
- Explore each platform's features, including transaction fees, ecosystem, and availability of marketplaces for selling NFTs.

Step 3: Create a Digital Wallet

- Create a digital wallet supported by your chosen blockchain platform to store NFTs and cryptocurrencies.
- Securely record and store your wallet access keys.

Step 4: Prepare Your Artwork

- Prepare your artwork file in a supported format. This could be JPG, PNG, MP3, MP4, etc., depending on the marketplace.
- Add metadata to your artwork, such as title, description, and keywords.

Step 5: Choose an NFT Marketplace

- Select a marketplace to list your NFT. Popular platforms include OpenSea, Rarible, Foundation, and Mintable. While many NFT platforms operate on Ethereum due to its popularity in creating smart contracts and supporting token standards like ERC-721 and ERC-1155, other blockchains also support NFTs, including Solana, Binance Smart Chain, Flow, and Tezos.
- Intellectual Property Rights Purchasing an NFT



may grant various rights, depending on the terms of the smart contract, including but not limited to ownership, exhibition, or even commercial use of the digital asset.

- Review the terms and fees on the chosen marketplace.

Step 6: Minting the NFT

- Upload your artwork to the selected marketplace.
- Fill in the required information and select sales options (e.g., fixed price or auction).
- Complete the minting by paying the necessary fee to create the NFT on the blockchain.

Step 7: Promotion and Sale

- Actively promote your NFT on social media, blogs, and forums related to NFTs and cryptocurrencies.
- Engage potential buyers with interesting stories about the creation of your artwork.

Step 8: Sale and Post-Sale Service

- Monitor offers from buyers and interact with them.
- Ensure the transaction is successfully completed, and the buyer receives their NFT after the sale.

Additional Tips:

- Pay attention to legal aspects. Ensure you are not violating copyright or other legal requirements.
- Be prepared for market fluctuations. NFT prices can vary greatly, so it's important to stay informed about current trends.
- Creating and selling NFTs is not only a way to monetize your creativity but also a unique opportunity to enter the world of digital art and blockchain. Good luck!



Introduction to the topic

Vladyslav Kostiuk, Germany
14.03.2024

Cryptocurrency and Decentralization:

What Are They and How Do They Work?

Cryptocurrency and Decentralization - two terms frequently mentioned in the modern world of finance and technology. But what do they mean, and how are they interconnected? Cryptocurrency is a form of digital currency that uses cryptography to secure transactions and control the creation of new units. Decentralization, on the other hand, refers to the distribution of power and control among various network participants, instead of a single centralized authority. In this article, we will take a closer look at what cryptocurrency and decentralization are, as well as how they work together to create a new financial system.

Key Concepts

Cryptocurrencies represent digital assets that use cryptography to secure and control transactions. They are independent of central banks or governments, making them decentralized.

Decentralization, in turn, means the distribution of power and control among system participants. In the case of cryptocurrencies, decentralization allows users to manage their finances independently, without the need to trust third parties. This ensures greater transparency and security in financial operations.

Advantages of Decentralized Systems

Decentralized systems have several advantages over centralized ones. Firstly, they provide greater

resilience and reliability. In a centralized system, if one central node fails, the entire system can be paralyzed. In a decentralized system, nodes operate independently of each other, making it more resistant to failures.

Secondly, decentralized systems ensure greater transparency and openness. All transactions and operations are recorded in a public blockchain, accessible for viewing by all participants. This prevents manipulations and ensures trust between system participants.

Furthermore, chain participants are not dependent on central banks or governments, giving people more freedom and independence. Therefore, cryptocurrencies are becoming increasingly popular among people who seek independence and control over their finances.

Blockchain Technologies

Blockchain technology is the foundation for decentralized systems and cryptocurrencies. A blockchain is a chain of blocks that store all transactions and operations. Each block contains the hash of the previous block, ensuring the integrity and security of data.

Thanks to blockchain technology, decentralized systems can be built without the need to trust central organizations. Blockchain ensures the transparency and security of transactions, making it an ideal tool for decentralization in various areas, including finance, contracts, and data management.

- Blockchain allows system participants to control their own data and finances.
- Blockchain ensures the transparency and security of transactions.
- Blockchain is the basis for decentralized systems and cryptocurrencies.

Investing in Cryptocurrencies: Risks and Opportunities

Investing in cryptocurrencies presents both risks and opportunities for investors. Cryptocurrencies are a highly volatile asset, meaning their prices can significantly fluctuate in short periods of time. Diversifying the portfolio and prudent risk management can help reduce potential losses.

However, investing in cryptocurrencies can also provide investors with the opportunity to achieve high returns. The growing interest in cryptocurrencies and their potential to revolutionize the financial system make them an attractive asset for investment.

Overall, investing in cryptocurrencies requires a good understanding of the market and a willingness to accept possible risks. However, proper investment can yield significant profits in the long term.

Cryptocurrency Regulation

Regulating cryptocurrencies is a complex task due to their decentralized nature. Cryptocurrencies are not controlled by central banks or governments, which means that traditional methods of regulation are not always applicable.

However, some countries have started to develop legislation that regulates the use and exchange of cryptocurrencies. This helps to create a legal framework for the development of the cryptocurrency market and to protect the interests of users.

Overall, regulating cryptocurrencies requires a balance between decentralization and protecting the interests of users. The development of effective legislation and cooperation between states will help create a stable and secure environment for using cryptocurrencies.

Cryptocurrency Exchanges

Cryptocurrency exchanges play an important role in the trading and exchange of cryptocurrencies. They allow users to buy, sell, and exchange various cryptocurrencies.

Decentralized cryptocurrency exchanges offer a higher degree of security and transparency. They

operate on the basis of smart contracts and do not require trust in a central party.

Some of the largest cryptocurrency exchanges in the world as of 2024 include Binance, Coinbase, Kraken, Crypto.com, Gemini, eToro, Bitget, and KuCoin. Each of these platforms offers a unique set of features, security measures, and a diverse range of cryptocurrencies to cater to their large user bases. They are recognized for their user-friendly interfaces and comprehensive security measures ([CoinMarketCap](#)) ([CoinGecko](#)) ([The Crypto Times](#)).

For more detailed information about each of these exchanges and to explore their websites, you can visit:

Binance: www.binance.com

Coinbase: www.coinbase.com

Kraken: www.kraken.com

Crypto.com: www.crypto.com

Gemini: www.gemini.com

eToro: www.etoro.com

Bitget: www.bitget.com

KuCoin: www.kucoin.com

These platforms have been selected based on factors like trading volume, user experience, security, and regulatory compliance. Each exchange has its strengths and caters to different kinds of traders, from beginners to experienced professionals.



Smart Contracts:

Automation and Decentralization

Smart contracts are pieces of code that perform the functions of conventional contracts but without the need for intermediaries. They are based on blockchain technology, which ensures their automation and decentralization.

The automation of smart contracts eliminates the need to manually verify and execute contract conditions. The code independently carries out all necessary actions, reducing the time and resources spent on concluding and executing contracts.

The decentralization of smart contracts means that they are stored and executed on various computers in the blockchain network. This ensures transparency and security, as no participant can change the contract terms without the consent of others.

Smart contracts represent an innovative solution in the financial sphere, offering the possibility to automate and simplify the processes of contracting.

The Future of Cryptocurrencies and Decentralization

Cryptocurrencies and decentralization have the potential to change the world of finance and economics. They offer new opportunities for improving the efficiency, transparency, and accessibility of financial services.

In the future, cryptocurrencies could become a widely accepted means of payment, replacing traditional currencies. This will facilitate international payments, reduce fees, and ensure fast transactions.

Decentralization could also lead to the development of new business models, where network participants have more freedom and control over their data and finances.

These concepts offer new opportunities for improving efficiency, privacy, and freedom in various areas, including finance, contracts, voting, and more. All that remains is to wish for the effective development of these technologies and to increase our self-education in this field, to keep up with life.

Asset Tokenization Asset tokenization is the process of converting ownership rights of physical or intellectual assets into a digital format, allowing for easier management, transfer, and sale within blockchain systems. This process opens new opportunities for investors and asset owners, making investments more accessible, liquid, and secure. Let's explore the main aspects of asset tokenization, its benefits, and potential risks.

Basics of Asset Tokenization

The fundamental principle of asset tokenization involves creating digital tokens that represent shares in real assets, such as real estate, artworks, or even corporate rights. This opens new opportunities for

investors and asset owners. Asset tokenization offers businesses numerous advantages, including the ability to attract new investments and expand their customer base. Additionally, asset tokenization significantly reduces the expenses of financial operations and simplifies the asset management process. For businesses, this means not only saving resources but also the opportunity to use new tools for growth and development. Benefits include:

- Simplification of financing procedures
- Expansion of investment opportunities
- Increased efficiency in asset management

Thus, tokenization is the process of turning real objects or rights to assets into unique digital tokens used on blockchain platforms. This allows the tokens to function in certain protocols, making them accessible for a wide range of operations, such as trading, investing, or proof of ownership. Tokens can represent physical assets, such as real estate or art, financial assets, such as stocks or bonds, as well as intangible assets, such as intellectual property rights, or even personal data and identification ([McKinsey & Company](#)).

In the blockchain world, tokenization leads to the creation of two main types of tokens: value tokens and utility tokens. Value tokens represent investments, such as a share in a company, voting rights, or a valuable object. Utility tokens provide access to a product or service, usually within a specific blockchain network. These tokens can be used to facilitate the network's consensus mechanism, operate a decentralized marketplace, pay transaction fees, or grant rights to participate and vote in new developments within a Decentralized Autonomous Organization (DAO) or another decentralized network ([Gemini](#)).

How to Start the Tokenization Process?

To initiate the asset tokenization process, the first step is to choose a suitable tokenization platform that provides the necessary level of security and complies with all legal requirements. Next, it's essential to identify the assets for tokenization and conduct an assessment of their value. The asset tokenization process is closely linked with blockchain technology, which allows for the digitization of physical and intangible assets, converting them into tokens. These tokens are entries in the blockchain, ensuring data security, transparency, and immutability. Thus, blockchain serves as the foundation for creating, storing, and transferring digital assets. The legal aspects of asset tokenization play a key role

in this field's development. Cryptocurrency regulation varies by jurisdiction, creating challenges for companies and investors. It's crucial to understand local laws and regulations to ensure the tokenization process's legality and protect participants' rights. Therefore, for successful asset tokenization, companies must thoroughly investigate the legal framework of their country and the countries where the tokens will be used.

How AI Can Predict Cryptocurrency Rates

Artificial Intelligence (AI) is already being used in analyzing and predicting cryptocurrency rates. With its help, analysts can process vast amounts of data, identifying patterns and trends that are not accessible to conventional human analysis. Enthusiasts believe that applying AI in cryptocurrency forecasting not only improves the accuracy of predictions but also significantly reduces the time needed for market analysis. This allows traders to respond more quickly to market changes, which is also dependent on machine learning algorithms that become smarter over time. This enables traders to spend more time on strategy rather than the routine work of data analysis. AI can adapt to changing market conditions, providing traders with up-to-date information for decision-making. This is especially important in such a volatile environment as the cryptocurrency market. The use of AI tools emerging in the market in this area has already shown certain benefits: reducing risks and increasing potential profits through more accurate analysis and forecasting. It can be concluded that for traders in the cryptocurrency market, the use of artificial intelligence opens new opportunities, as AI can help in identifying optimal entry and exit points from trades, significantly increasing the chances of success. AI can analyze data much faster than humans, providing traders with valuable insights. Thanks to machine learning capabilities, AI is constantly improving, making recommendations for traders more accurate and personalized. This means that AI can also adapt to the individual strategies of each trader, considering their preferences and risk tolerance. Moreover, AI can play a key role in developing new financial products based on cryptocurrencies. For example, creating automated trading systems that can independently conduct operations based on forecasted data. In the future, the use of AI in the crypto industry could potentially include:

- Improving the accuracy of cryptocurrency price forecasts
- Developing automated trading systems

- Creating new financial products based on crypto technologies
- Providing personalized financial services
- Using neural networks for time series analysis
- Analyzing social media sentiments to predict trends
- Fundamental analysis of economic indicators
- Machine learning to identify non-obvious patterns in the market

The Future of AI in Crypto Asset Management

The prospects of utilizing artificial intelligence (AI) in managing crypto assets appear particularly promising. As technologies evolve at an ever-accelerating pace, new avenues for automating the investment process are unveiled. In this context, the deployment of AI tools stands as one of the key tasks towards creating efficient investment and asset management systems.

AI is capable of not only analyzing current market trends but also predicting future changes with a high degree of accuracy. This allows for the optimization of investors' portfolios in a way that minimizes risks and maximizes potential profit.

A major challenge in employing AI for asset management is developing sufficiently flexible systems that can adapt to changing market conditions. This requires not only the creation of advanced algorithmic models but also continuous updates to databases for training these models. In this context, the customization of neural networks becomes a central task for developers.

Challenges Cannot Be Overlooked

Blockchain and cryptocurrency technologies face not only vast opportunities but also significant challenges. These challenges range from technical limitations, such as scalability and transaction speed, to environmental impacts and privacy concerns. As the digital currency space grows, attracting new users, it inevitably draws more criticism, particularly regarding the efficiency and security of blockchain technology.

One of the main issues is the limited scalability and transaction processing speed of blockchain networks compared to traditional financial systems. Additionally, concerns arise regarding the energy consumption and ecological impact of mining processes. Another aspect relates to the threat to privacy due to public recording of transactions in the blockchain, which could expose sensitive financial information of users.



The prestige and security of the technology are also undermined by hacking attacks and vulnerabilities in smart contracts. These incidents highlight the risks associated with decentralized systems. The speculative nature of the cryptocurrency market, characterized by high volatility and potential for manipulation, raises further concerns.

The concentration of mining power and decision-making authority in blockchain networks raises concerns about centralization and governance, contradicting the ideals of decentralization. Debates over protocol updates and network management raise questions about the complexities of achieving consensus in decentralized communities.

Overcoming these sufficiently serious issues requires time and effort, as the development of any complex technology demands ongoing refinement and adaptation.

Solutions to Challenges

The development of cryptocurrencies aimed at overcoming existing economic challenges and criticisms related to scalability, environmental impact, privacy, security, market speculations, and governance structure requires an innovative approach. The developers of the new FCU cryptocurrency for the Cybernation ecosystem from Futurum Platform are considering these issues and looking for solutions. Conceptually and for example, these paths and methods can be presented as follows:

1. **Scalability and Transaction Speed** Utilizing an advanced version of sharding technology that allows transactions to be processed in parallel across

different segments of the network, significantly increasing the overall network throughput without compromising security. **Implementation:** Creating a consensus algorithm optimized for sharding, which ensures fast and secure transactions. This allows FCU to efficiently scale, processing hundreds of thousands of transactions per second.

2. **Environmental Impact** Moving away from Proof-of-Work consensus mechanisms in favor of more energy-efficient Proof-of-Stake or even more innovative solutions, such as Proof-of-Space or Proof-of-Elapsed-Time, which require significantly less energy. **Implementation:** Developing a reward system that encourages participants to use renewable energy sources for mining or supporting the network, further reducing its carbon footprint.

3. **Privacy** Integrating privacy technologies at the protocol level, such as zk-SNARKs or zk-STARKs, which allow users to conduct verifiable transactions without disclosing personal information. **Implementation:** Offering optional anonymous transactions in addition to standard ones, allowing users to choose when and how they want to protect their privacy.

4. **Security** Implementing security layers, including multi-tiered transaction verification systems and advanced smart contract protection mechanisms to minimize the risks of hacking attacks and exploits. **Implementation:** Developing tools for automatic verification and auditing of smart contracts to detect and address vulnerabilities before they are deployed on the network.

5. Market Speculations and Governance Structure
Creating a decentralized autonomous organization (DAO) for the governance of FCU, including transparent decision-making mechanisms and incentivizing mechanisms for community participation in the project's development and management. **Implementation:** Developing transparent and democratic voting mechanisms that allow coin holders to make key decisions about the future development of FCU. Additionally, creating a development fund financed from a portion of transaction fees, which will be used to finance projects aimed at improving the network and its ecosystem. **Advantages of this concept:** Innovative Solutions: FCU uses cutting-edge technologies and algorithms to solve key blockchain problems, making it competitive in the cryptocurrency market. **Environmental Sustainability:** Transitioning to more energy-efficient consensus mechanisms and supporting the use of renewable energy sources help reduce environmental impact. **Privacy and Security:** The integration of modern privacy technologies and smart contract protection mechanisms provides users with a high level of privacy and security. **Decentralized Management:** Creating a DAO allows the community to actively participate in the project's management, increasing trust and transparency in the ecosystem.



The concept of the new FCU cryptocurrency will aim to address the mentioned issues and overcome the obstacles hindering widespread blockchain adoption. To achieve this, the following innovative approaches will be utilized:

1. Sharding and Cross-Chain: To overcome scalability and transaction speed limitations, FCU will employ sharding and cross-chain mechanisms. Sharding allows dividing the blockchain into separate parts (shards), processed in parallel, significantly increasing network throughput. Cross-chains ensure interaction between different blockchains, allowing users to easily move assets between them, thereby improving scalability and flexibility.

2. Delegated Proof of Stake (DPoS) Consensus: To minimize energy consumption and improve environmental sustainability, FCU will use the DPoS consensus mechanism. In this mechanism,



token holders delegate their voting rights to elected representatives (validators), responsible for confirming transactions and creating new blocks. This approach significantly reduces energy expenditures, as it does not require the intensive computations typical for Proof of Work (PoW).

3. Confidential Transactions and Address Protection: To ensure user privacy and anonymity, FCU will employ confidential transactions and address protection technologies. Confidential transactions hide transfer amounts, and address protection provides the creation of one-time addresses for each transaction, making it difficult to trace users' financial activities.

4. Enhanced Security and Smart Contract Auditing: To prevent hacking attacks and smart contract exploits, FCU will utilize enhanced security measures, including formal verification and automated audit tools. These measures will help detect and eliminate vulnerabilities in smart contracts before they are deployed on the network.

5. Decentralized Governance and Consensus: To prevent centralization and improve the decision-making process, FCU will use a decentralized governance mechanism based on network participant consensus. This mechanism will ensure equal power distribution among participants and prevent the concentration of influence in the hands of individuals or groups.

6. Education and Enlightenment: To combat market speculation and manipulation, FCU will actively promote educational initiatives aimed at enlightening users about blockchain technologies and cryptocurrency working principles. This will help form a more informed and responsible community capable of making reasoned decisions and contributing to the market's stable development. In the following publications in my blog in the FUTURUM magazine, we will continue our research and observations of the processes.

cybernationverse.com

Andoids. Coming soon...

In the past year of 2023, due to the boom in artificial intelligence, the majority of the digital space was occupied by AI, while equally important events in robotics seemed to have slipped under our radar. In our view, some significant events that will profoundly alter our way of life will occur in the next 2-4 years, when the paths of AI development intersect with advancements in creating humanoid robots. Let's delve into it!

Alex Schmidt,
FUTURUM Platform 23.03.2024

Humanoid robots, or androids as they are often called, are becoming the focus of investment and new business opportunities for both major technology companies and some promising startups in this field. These remarkable machines, created in the image and likeness of humans, can find application in a wide range of areas - from everyday life to industry, space, and even entertainment. We have prepared an informational article about this promising industry and will discuss the possibilities and prospects for the development of this technology.

Humanoid Robots: Tomorrow Is Already Here

Technological advancements in humanoid robots over the past few years have shown significant progress and have made the imminent arrival of various-purpose androids into our lives a tangible reality. These remarkable machines, resembling humans not only in appearance but also in their ability to perform various tasks, not only pique curiosity and interest but also prompt contemplation about the impending new reality.

The applications of androids in the everyday lives of people, in other words, in domestic, industrial, and technological sectors, are so vast that they are awe-inspiring. From simple household helpers to complex industrial robots, humanoid robots promise to become an integral part of our lives.

The history of humanoid robots began several decades ago, but already they are capable of tasks that were once merely the dreams of science fiction writers. For decades, humanoid robots were more the imagination of science fiction writers than reality. But times are changing. Today, we are witnessing the rapid development of robotics that blurs the lines between fiction and reality. Thanks to advancements in artificial intelligence and robotics, these robots are becoming increasingly autonomous and functional. They can learn, adapt to new conditions, and even simulate human emotions.

One of the most impressive achievements of the last two years has been the development of humanoid robots with flexible artificial skin and muscles that



operate similarly to biological ones. This makes their movements smooth and natural. Some models are also equipped with advanced sensors that allow robots to sense touch and temperature. But humanoid robots are not just metal and plastic copies of humans. They are equipped with advanced computer vision, speech recognition, and natural language processing systems, and now even AI capabilities, making them ideal assistants in various fields.

For example, in the field of medicine, assistant robots can perform complex surgical operations with unprecedented precision. In the service industry, they will become companions for the elderly and disabled. And in hazardous industrial conditions, humanoid robots can replace humans.

However, technical progress inevitably raises ethical questions. How will society perceive such human-like robots? Is it appropriate to treat them as sentient beings? And how can we avoid misuse of these technologies?

One thing is clear - the era of humanoid robots has already arrived. And while their integration into our lives will require time and caution, these remarkable creations promise to transform our world. Tomorrow is already here, and it looks remarkably like ourselves.

The android market - a boom is coming.

Despite ethical concerns, the market for humanoid robots is set to grow very rapidly. According to a recent report by the analytical firm TechXplore, its size could reach \$37 billion by 2030.

One of the leading trends will be the integration of humanoid robots into the service industry

and as companions. Models with advanced communication and social interaction capabilities will be highly sought after for caring for the elderly and people with disabilities. Their human-like appearance and ability to show empathy will allow for a closer emotional bond to be formed.

In the medical field, the greatest demand is expected for humanoid surgical robots. Their ability to replicate precise hand movements of surgeons combined with computer vision makes them indispensable for conducting complex operations. It is expected that such robots will significantly reduce risks for patients.

In manufacturing and hazardous industries, models with increased durability and endurance will be popular for replacing human labor. For example, some mining companies are actively working on implementing humanoids for work in mines. Let's immediately imagine the possibilities of servicing nuclear reactors, chemical hazardous industries, military affairs, and more.

For home use, on the contrary, the most in-demand humanoid robots will be compact and budget-friendly assistants. Capable of performing simple household tasks, they will gradually occupy the niche of next-generation digital assistants.

Thus, with the development of technology, humanoid robots will find application in various industries - from business, medicine, and manufacturing to service and personal needs. And while their integration will require ethical and social discussions, one thing is clear - this revolution is already in full swing. The possibilities for the use of humanoid robots are truly limitless.



How Androids Work?

Androids function thanks to a complex system of sensors, actuators, and artificial intelligence algorithms. Sensors allow the robot to orient itself in space, recognize objects and people, and obtain information about its environment. Actuators are mechanical components that provide the robot's movement, allowing it to move and manipulate objects.

Artificial intelligence plays a key role in the operation of robots. It not only allows the robot to analyze information received from sensors but also to make complex decisions, adapt to changes in the surrounding environment, and learn from previous experience. Thanks to this, humanoid robots are capable of performing increasingly complex tasks with a high degree of autonomy.

Humanoid robots, whose design is constantly improving, are becoming more and more similar to humans not only in appearance but also in their functional capabilities. Innovations apply to both external appearance and internal «filling».

Advancements in materials science allow for the creation of humanoid robots that not only look like humans but also have tactile sensations. The use of new materials makes the robots' skin more sensitive to touch.

The development of efficient algorithms allows them to better understand human commands and adapt to changes in the environment.

The industry is evolving, and from the latest presentations of industry leaders, it is already clear that models will be equipped with smart systems based on AI tools for interactive communication between humans and machines. Innovation directions include:

- Development of «smart» skin to mimic human touch
- Improvement of facial and emotion recognition systems
- Creation of more autonomous and natural dynamic motion systems
- Integration of voice assistants for natural communication with humans

Let's consider a few examples of practical application of humanoid robots:

In education,

humanoid robots will increasingly play a significant role in the learning process. Thanks to their ability to mimic human gestures and

facial expressions, they can create a more effective learning environment, especially for children. Robots can be used for interactive lessons, demonstrating experiments, individual tutoring, and more. The use of humanoid robots in education not only increases students' interest in the subject but also contributes to the development of communication skills and critical thinking. These robots can be tailored to the individual needs of each student, making learning more personalized.

In medicine,

humanoid robots used in healthcare open up new horizons for assisting patients and supporting medical staff. They can perform a wide range of tasks, from simple temperature measurement to assisting in complex surgical operations. These robots can also be used for training medical personnel by simulating various clinical scenarios. The introduction of humanoid robots into the medical field not only improves the quality of treatment but can also significantly reduce the workload on medical personnel.

In space,

humanoid robots can be sent into space either autonomously or as part of a crew of humans, opening up new perspectives for exploring the universe. They can perform tasks in conditions hazardous to humans, such as high radiation or extreme temperatures, spacewalks, or landing on the surface of another planet or asteroid. They will help conduct scientific experiments, build bases on other planets, explore the surface, and possibly prepare for human colonization, for example, of Mars. All these prospects will greatly enhance human capabilities for space exploration.

Robots Among Us

One of the leading trends will be the integration of humanoid robots into the service industry and as assistants/companions. Models with advanced communication and social interaction capabilities will be highly sought after for caring for the elderly and people with disabilities. Their human-like appearance and ability to show empathy will allow for a closer emotional bond to be formed. Conversely, for home use, the most in-demand humanoid robots will be compact and budget-friendly assistant robots. Capable of performing simple household tasks, they will gradually occupy the niche of next-generation digital assistants.

Indeed, one of the promising areas of application for humanoid robots could be childcare as high-tech nannies.

Robotic nannies of anthropomorphic design have several advantages. Their humanoid appearance and ability to mimic human emotions, gestures, and facial expressions will help create a warm, friendly atmosphere for the child. Such robots will not only provide basic care but also play with children, entertain them, and educate them using interactive methods.

Advanced sensor systems of robotic nannies will monitor the child's condition, recognize their needs, and react promptly. They will be able to feed, change diapers, rock children to sleep, and even answer their simple questions, developing social and communication skills.

The main advantage of such nannies will be their round-the-clock readiness to work without breaks for sleep or rest. They will free up parents' time for other tasks and careers.

Safety is also a significant factor. Unlike humans, a robotic nanny will not accidentally harm the child and will be able to provide reliable protection.

Thanks to these advantages, companies are already actively developing humanoid robotic nannies. According to forecasts, in the next 5-10 years, they will become a popular product in the childcare market, changing the traditional perception of nannies.

Business Assistant

Humanoid robots can become universal secretaries or assistants in the office environment, as they can be present in the office 24/7 without breaks and, with the help of AI, process and perform thousands of tasks and functions simultaneously, taking into account that they will be connected to the database and to the entire office infrastructure.

Here are some examples of functions they could perform:

- Scheduling meetings and managing schedules;
- Answering incoming calls and messages;
- Composing letters, reports, and other documents, including dictation;
- Booking trips and organizing events;
- Welcoming visitors to the office or in a virtual environment;
- Escorting guests to the appropriate location;

- Assisting with navigation around the building and providing information;
- Conducting presentations;
- Addressing basic equipment issues;
- Presenting and training staff on the use of new devices;
- Providing step-by-step IT assistance to employees, task monitoring and execution, calculating the coefficient of useful actions, effectiveness analytics;
- Collecting, processing, and visualizing data;
- Preparing analytical reports and presentations;
- Monitoring performance metrics;
- Synchronous translation at business meetings;
- Document and presentation translation;
- Training employees in foreign languages or professional development, etc.

The humanoid appearance of the robots will make them more comfortable in the office environment compared to traditional machines. Their ability to understand natural language and socio-psychological signals will significantly simplify communication and interaction with people.

Overall, such universal secretary robots can take on routine administrative tasks, freeing up employees' time for more productive purposes. Their implementation will not only increase the efficiency of office work but also transform the concept of secretarial services itself.

Military Affairs

The use of humanoid robots in the military sphere and army is indeed being considered and is one of the most controversial and ethically challenging directions for the application of this technology. Here are some possible scenarios for their use:

Reconnaissance and surveillance - anthropomorphic robots can perform dangerous reconnaissance missions, penetrating into inaccessible areas and among civilian populations. Their humanoid appearance can help avoid detection.

Rescue operations - the ability of robots to operate in conditions dangerous for humans (such as destruction, chemical/radiation contamination) makes them valuable for searching and rescuing the wounded on the battlefield.

Combat operations - the most contentious scenario is the use of humanoid robots as combat units. Their potential for conducting autonomous combat actions raises serious ethical concerns.

In military or other dangerous and specialized fields, a robot doesn't necessarily need to have a human face or body form.

Universal models will soon surprise us greatly. A human face will most likely be required for a police robot purely from a psychological standpoint for communication with humans.



However, robotics proponents argue that fully autonomous soldier robots may eventually conduct combat operations with fewer civilian casualties compared to humans.

Psychological operations - humanoid robots can be used for propaganda, spreading information, and influencing the psychological state of military personnel and civilians in conflict zones.

It is important to note that many states advocate for a complete ban or serious restriction on the use of autonomous weapon systems, which may include soldier robots. This technology carries serious risks associated with loss of control and unpredictability of machine actions.

Thus, the military application of humanoid robots remains one of the most delicate and controversial areas. Thorough discussion and the development of norms for the ethical use of such powerful systems within the framework of international law are required.

Ethical Aspects

The integration of humanoid robots into everyday life raises numerous ethical questions. One key aspect is how to ensure safe interaction between humans and robots to avoid potential physical or emotional harm. Additionally, there is a concern about data privacy since robots may collect personal information about users.

Another important aspect concerns the accountability for the actions of humanoid robots. Who will be responsible for errors or damage caused by the robot? This requires the development of new legal frameworks and standards. Moreover, potential impacts on the labor market and social structure must be taken into account.

For more in-depth exploration of the topic and detailed information, you can refer to the following links:

1. **Boston Dynamics:** Founded in 1992, Boston Dynamics has produced some of the most impressive and advanced humanoid robots to date. Their robots, such as Atlas and Spot, feature unique motion mechanics and the ability to perform various tasks, from construction work to assisting in medical research. [Boston Dynamics Website](#)
2. **SoftBank Robotics:** SoftBank manufactures robots like Pepper, a humanoid robot capable of communicating with humans and performing various tasks in customer service and retail. [SoftBank Robotics Website](#)

3. **Hanson Robotics:** Based in Hong Kong, Hanson Robotics specializes in creating robots with emotional intelligence. Their most famous robot, Sophia, gained worldwide attention for her ability to engage in emotional communication and participate in public events. [Hanson Robotics Website](#)

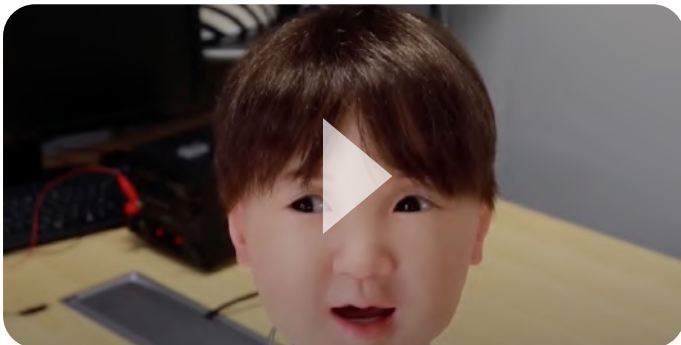
4. **Toyota Research Institute:** Toyota is actively working on developing humanoid robots that could assist humans in various fields, from healthcare to personal assistance. [Toyota Research Institute Website](#)

5. **UBTECH Robotics:** This Chinese company is known for its humanoid robots in the Walker series, designed to assist with household chores and entertainment. [UBTECH Robotics Website](#)

These companies are at the forefront of innovation in the field of humanoid robots and are actively advancing their technologies to enable these robots to find increasingly diverse applications in various aspects of life.

Watch some videos on The Robotics Industry:

Review of Achievements for the Year 2023



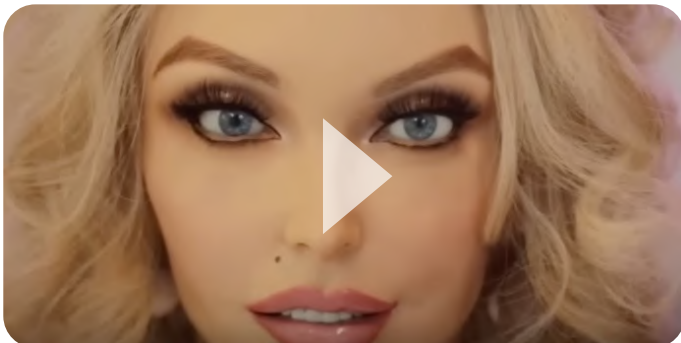
Humanoid Female Robot Shocks Audience in Saudi Arabia



All The Most INCREDIBLE Robots and Technologies That will Cause a SENSATION



All New Generation Humanoid Robots and Technologies That Will Replace People





The AI tools we use

In everyday life and due to the nature of our work, these tools are almost always at hand and come first



ChatGPT 4

chat.openai.com
openai.com/sora



Meet Claude

www.anthropic.com
claude.ai



MistralAI

mistral.ai
chat.mistral.ai/chat



DeepL Translator

www.deepl.com/translator

starryai+

Create Art with AI

starryai.com



Gemini

gemini.google.com

It's worth reading the book by Alex Khang, a professor of information technology from the Global Research Institute of Technology and Engineering, North Carolina, USA:

«**Medical Robotics and AI-Assisted Diagnostics for a High-Tech Healthcare Industry**»

An artificial intelligence-based Internet of Things platform serves as an assistant to the revolution in healthcare based on artificial intelligence, allowing doctors to forever change disease prognoses, whether you are experienced or a novice in AI and IoT technologies.

If you want to learn more about artificial intelligence and Internet of Things technologies and how they can help you make your mark in the world of healthcare, read this book. You will learn everything you need to know about the application of artificial intelligence and the Internet of Things in the precision medicine system.

igi-global.com



Efficient AI Engineering

A software development company founded by former Google engineers and Harvard graduates. They know what it takes to create a successful product. It offers convenient and transparent access to vetted developers within a few days, hassle-free. Their clients range from startups to large enterprises. Comprehensive development and team expansion for clients of all sizes. This company will act as a contractor on several FUTURUM PLATFORM projects. dentoro-lum.com

Expert help for Machine Learning

AWS IQ connects you with certified freelancers and consulting firms with deep AWS expertise. Browse pre-defined listings, or post a custom request and get qualified bids.

iq.aws.amazon.com

User neural networks



Image



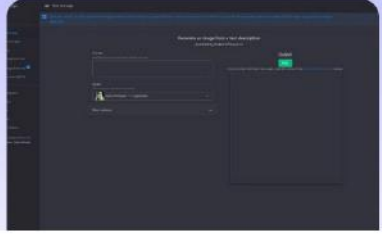
SoulGen
soulgen.net



Merlin AI
getmerlin.in



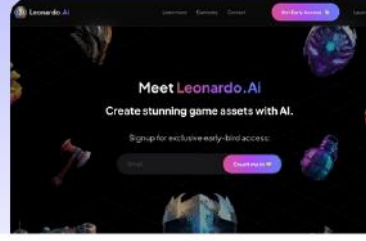
OpenArt
openart.ai



Dezgo
dezgo.com



Stable Diffusion ...
stable-diffusion-online.net



Leonardo.ai
leonardo.ai

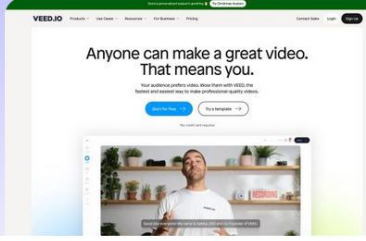
AI Video Generator Tools



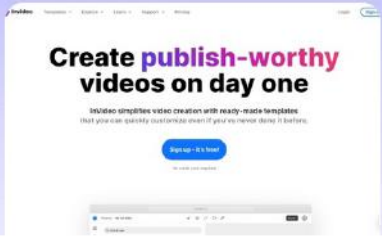
Synthesia
synthesia.io



Wondershare
wondershare.com



VEED.IO
veed.io



InVideo
invideo.io



FlexClip
flexclip.com



CapCut
capcut.com

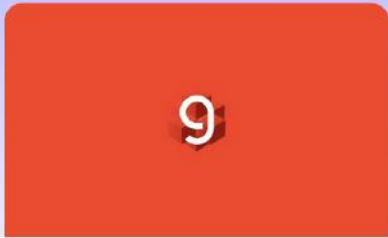
Large Language Models (LLMs)



Introducing GPT-4, OpenAI's most advanced system

OpenAI

openai.com



Groq

groq.com



Write about fa

Driven by AI, NovelAI constructs unique stories, thrilling tales, intricate romances, or just fast-paced, anything goes!

NovelAI - The AI ...

novelai.net



Create **stunning** original art in seconds with the power of AI.

Magical AI tools. Create endless original images, modify existing ones, and more.

Stable Diffusion

dreamlike.art



Google Gemini: a largest and most capable AI model

What is Google Gemini?

Google Gemini ...

chat.googlegemini.co



Mistral 7B

Mistral 7B

mistral-7b.com

You can create your collection of useful AI tools on the website: www.toolify.ai

Build with MultiOn



Use our API to build and embed AI agents in your own devices and applications

New | Get started



Education and Self-learning

Neural networks and artificial intelligence (AI) have numerous applications benefiting humans across various life aspects. Here are some specific examples and links for further study:

1. **Healthcare:** AI is used to enhance diagnostics, personalized medicine, and drug development. For instance, DeepMind developed the AlphaFold system to predict protein structures, potentially speeding up new drug development.

Link: deepmind.com/research/case-studies/alphafold

2. **Education:** AI can personalize learning by adapting educational materials and assignments to individual students' needs and abilities. For example, the Carnegie Learning Mathia platform uses AI for personalized math learning.

Link: www.carnegielearning.com/mathia

3. **Road Safety:** AI is used in autonomous vehicles to improve road safety and efficiency. For instance, Waymo develops autonomous driving technologies for cars. Link: waymo.com

4. **Ecology and Climate Change:** AI can assist in environmental monitoring, climate change forecasting, and the development of green technologies. For instance, the Rainforest Connection project uses AI to detect illegal logging. Link: rfcx.org

5. **Accessibility:** AI can aid people with disabilities by providing automatic captioning services or voice-controlled devices. For example, Google developed the Live Transcribe app for real-time speech captioning. Link: www.google.com/accessibility/live-transcribe

These examples illustrate just a few areas where neural networks and AI benefit people. There are many other applications in fields such as finance, agriculture, energy, and more.

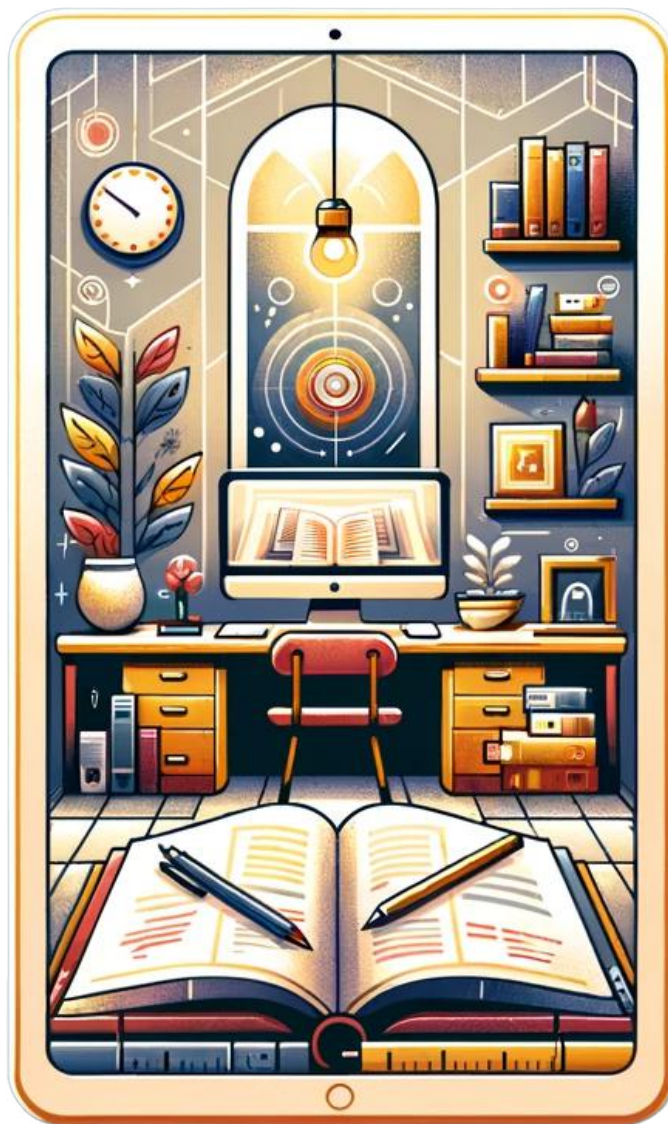
For further exploration, you can visit the following resources:

1. AIforGood: aiforgood.itu.int

2. AIforSocialImpact: ai.google/social-impact

3. AI100: ai100.stanford.edu

These resources provide information on the latest achievements and trends in AI, as well as how AI is used to address global problems and improve human lives.



Here are some additional links to **useful neural networks and bots** that might interest and benefit users:

1. Keras: A powerful deep learning library that allows creating and training neural networks. Link: keras.io

2. TensorFlow: An open machine learning platform developed by Google. TensorFlow is used for creating and training neural network models.

Link: www.tensorflow.org

3. PyTorch: A popular deep learning library with dynamic computation graphs, developed by Facebook.

Link: pytorch.org

4. HuggingFace: A library and platform for creating and training natural language processing (NLP) models.

Link: huggingface.co

5. Dialogflow: A conversational bots development platform provided by Google. Link: dialogflow.com

6. Rasa: An open platform for building conversational bots based on machine learning. Link: rasa.com
7. Botpress: A free and open platform for creating and deploying conversational bots. Link: botpress.com
8. Wit.ai: A machine learning-based bots creation platform offered by Facebook. Link: wit.ai

These resources can help users learn about and experiment with neural networks and bots, as well as create their own AI-based applications.

Here are some additional resource links that may be helpful for those interested in **creating neural networks and artificial intelligence**, as well as wanting to learn where, with which tools, and on which platforms this can be achieved:

1. Coursera: Deep Learning Specialization by Andrew Ng. This course is a comprehensive deep learning training program taught by AI and machine learning expert Andrew Ng. Link: www.coursera.org/specializations/deep-learning
2. fast.ai: A library and deep learning course focused on practical application. Fast.ai offers an approach based on best practices for creating and training neural networks. Link: fast.ai
3. Kaggle: A platform for machine learning competitions and data where users can participate in contests, develop and test their models, and interact with other AI enthusiasts. Link: www.kaggle.com
4. DeepLearning.AI: A company founded by Andrew Ng, offering courses and training programs in deep learning and artificial intelligence. Link: www.deeplearning.ai
5. AICrowd: A platform for collaboration and competitions in artificial intelligence that allows users to participate in projects, develop and test their models, and share knowledge and experience with other AI enthusiasts. Link: www.aicrowd.com
6. DataCamp: An interactive platform for learning data, data analysis, and machine learning. DataCamp offers courses on Python, R, SQL, and other tools used in the field of data and AI. Link: www.datacamp.com
7. IBM Watson: A platform and toolkit for creating applications using artificial intelligence, provided by IBM. Link: www.ibm.com/watson
8. Microsoft Azure AI: A cloud platform and toolkit for creating applications using artificial intelligence, provided by Microsoft. Link: azure.microsoft.com/en-us/overview/ai-platform/

NVIDIA is one of the leading manufacturers of graphics processing units (GPUs) and other computing solutions widely used in the field of artificial intelligence, deep learning, and neural networks. The company offers various hardware and software solutions for scientists, developers, and researchers working in these areas.

1. NVIDIA GPU Cloud (NGC): A cloud platform that provides access to optimized software for deep learning, machine learning, and data analysis, as well as virtual machines supported by GPUs. Link: ngc.nvidia.com
2. NVIDIA Deep Learning SDK: A toolkit and libraries for developing deep learning applications, including TensorRT, cuDNN, DALI, and others. Link: developer.nvidia.com/deep-learning-sdk
3. NVIDIA DGX Systems: A series of computing systems specially designed for artificial intelligence and deep learning. Link: nvidia.com/en-us/data-center/dgx-systems
4. NVIDIA Jetson: A series of embedded computing platforms based on NVIDIA architecture, intended for creating robots, unmanned aerial vehicles, and other artificial intelligence devices. Link: developer.nvidia.com/embedded/jetson-agx-xavier-developer-kit
5. NVIDIA Triton Inference Server: Software for deploying artificial intelligence models, optimized for use on NVIDIA GPUs and other devices. Link: developer.nvidia.com/nvidia-triton-inference-server

These solutions and products from NVIDIA can be useful for those interested in creating neural networks and artificial intelligence, as well as wanting to use high-performance computing solutions for these purposes. OpenAI hosts some of its research and source code in open access to foster collaboration and progress in AI. Link: <https://openai.com/> OpenAI is a non-profit research organization founded by Elon Musk, Sam Altman, and others in 2015 with the goal of developing and promoting friendly artificial intelligence that is safe for humanity. During its existence, OpenAI has achieved significant results in various areas of artificial intelligence. Here are some of their key achievements:

6. Dota2bot: In 2018, OpenAI created a bot that managed to defeat a professional player in the computer game Dota 2 in solo mode. Later, in 2019, they developed a bot capable of beating professional players in team mode.
7. GPT-3: This is one of the most advanced language models created to date. GPT-3 can generate text, answer

questions, and perform other tasks related to natural language processing.

8. MuseNet: This is a neural network capable of generating music in various styles and genres, mimicking the work of famous composers.

9. DALL-E: This is a neural network capable of generating images based on natural language descriptions.

10. GPT-4: A significant achievement and progress for the company, thanks to this AI tool.

11. Expecting GPT-5, AGI (general intelligence), and Sora (video generator) In the field of artificial intelligence (AI), there are many major open-source platforms used for developing, training, and deploying models. Here are some of them:

12. TensorFlow: Developed by Google, TensorFlow is one of the most popular platforms for machine learning and deep learning. It provides a set of tools, libraries, and resources for creating and training neural network models.

Link: github.com/tensorflow/tensorflow

13. PyTorch: Developed by Facebook, PyTorch is another popular platform for deep learning. It is known for its flexibility and ease of use, as well as close integration with Python.

Link: github.com/pytorch/pytorch

14. Keras: Keras is a high-level deep learning library that operates on top of TensorFlow, Theano, or CNTK. It was developed for rapid experimentation with deep neural networks and allows for easy creation and testing of models.

Link: github.com/keras-team/keras

15. Scikit-learn: Scikit-learn is a popular Python machine learning library that offers a wide range of algorithms for classification, regression, and clustering. It is built on NumPy, SciPy, and matplotlib.

Link: github.com/scikit-learn/scikit-learn

16. Apache MXNet: Jointly developed by Amazon and Microsoft, MXNet is a high-performance and flexible platform for deep learning. It supports several programming languages, including Python, R, Scala, and Julia. Link: github.com/apache/incubator-mxnet

17. Caffe: Caffe is a deep learning framework focused on speed and modularity. Developed at Berkeley, it is widely used in academic and industrial research.

Link: github.com/BVLC/caffe

18. Theano: Theano is a Python library for defining, optimizing, and efficiently computing mathematical expressions involving multidimensional arrays.

Developed at the University of Montreal, it is closely integrated with NumPy and supports operation on GPUs. Link: github.com/Theano/Theano

There are numerous companies that offer services for creating custom «turnkey» **neural networks**. These companies assist clients in developing, training, and deploying neural networks specialized for specific tasks and industries. Here are some of them:

1. Alphabet's Google Cloud AI: Google Cloud AI provides a suite of tools and services for creating and deploying machine learning models and neural networks. The company also offers services for developing customized solutions based on artificial intelligence.

Link: cloud.google.com/ai

2. Amazon Web Services (AWS) Machine Learning: AWS Machine Learning offers cloud services for creating, training, and deploying machine learning models. The company also provides services for developing customized AI-based solutions.

Link: aws.amazon.com/machine-learning

3. Microsoft Azure AI: Microsoft Azure AI offers a suite of tools and services for creating and deploying machine learning models and neural networks. The company also provides services for developing customized AI-based solutions.

Link: azure.microsoft.com/en-us/overview/ai-platform

4. IBM Watson: IBM Watson offers a suite of tools and services for creating and deploying artificial intelligence models, including neural networks. The company also provides services for developing customized AI-based solutions. Link: www.ibm.com/watson

5. NVIDIA Deep Learning Services: NVIDIA offers services for developing and optimizing neural networks using its GPUs and software. The company also provides services for creating customized AI-based solutions.

Link: www.nvidia.com/en-us/deep-learning-ai

6. Intel AI: Intel AI offers a suite of tools and services for creating and deploying artificial intelligence models, including neural networks. The company also provides services for developing customized AI-based solutions.

Link: www.intel.com/content/www/us/en/artificial-intelligence/overview.html

7. DataRobot: DataRobot is an automated machine learning platform that helps companies create, train, and deploy artificial intelligence models. They also offer services for developing customized AI-based solutions. Link: <https://www.datarobot.com/> These

companies typically have extensive experience in developing and implementing artificial intelligence solutions and can help you create a customized neural network that will efficiently work for your specific needs and goals.

In the field of **artificial intelligence (AI) and robotics**, there are numerous mass media that provide news, analysis, and insights. Here are some of the most well-known and popular resources:

1. **AITrends**: An online magazine dedicated to artificial intelligence, providing news, analysis, and expert opinions on the latest trends and developments in AI. Link: www.aitrends.com
2. **RoboticsBusinessReview**: An authoritative resource dedicated to robotics and artificial intelligence. It provides news, articles, research, and analysis concerning robotics, automation, and AI. Link: www.roboticsbusinessreview.com
3. **TechCrunch**: One of the most popular technology news websites, which also covers events in the field of artificial intelligence and robotics. Here you can find news, articles, reviews, and analytics related to AI and robotics. Link: techcrunch.com
4. **Wired**: A popular technology magazine that also covers topics related to artificial intelligence and robotics.

Here you will find articles, news, and analysis dedicated to the latest achievements and trends in AI and robotics. Link: www.wired.com

5. **TheVerge**: A technology news site that also covers seven in the field of artificial intelligence and robotics. Here you can find news, articles, reviews, and analytics related to AI and robotics. Link: www.theverge.com

6. **MIT Technology Review**: A magazine by the Massachusetts Institute of Technology focused on cutting-edge technologies, including artificial intelligence and robotics. Here you will find in-depth analysis and research dedicated to the latest achievements and trends in AI and robotics. Link: www.technologyreview.com

7. **IEEE Spectrum**: A magazine published by the Institute of Electrical and Electronics Engineers (IEEE) that also covers topics related to artificial intelligence and robotics. Here you can find news, articles, reviews, and analytics dedicated to the latest achievements and trends in AI and robotics. Link: pectrum.ieee.org

These mass media provide valuable information and insights in the field of artificial intelligence and robotics, helping readers keep up with the latest trends and developments in these dynamically evolving sectors.





Create your own AI agent!



Deploying your own Artificial Intelligence (AI) agent depends on your specific goals, level of programming expertise, and available resources. Here are some tips for selecting a platform and deploying an AI agent.

Choosing a Platform

1. **Google Cloud AI Platform:** Ideal for those wanting to integrate AI into their products and services. The platform offers various tools and APIs for machine learning, data analysis, and more.
2. **Amazon AWS SageMaker:** This platform facilitates the process of creating, training, and deploying machine learning models at scale. SageMaker offers a broad range of tools and ready-to-use solutions.
3. **Microsoft Azure AI:** The platform offers extensive services for creating and deploying AI, including machine learning, bots, and cognitive services.
4. **IBM Watson:** Watson offers powerful tools for creating AI solutions, including natural language processing and machine learning.
5. **OpenAI API:** If your focus is on creating and deploying models based on GPT-3 or other OpenAI algorithms, their API provides easy access to powerful language models.

Deploying an AI Agent

1. **Define the Task:** Clearly define the problem your AI agent should solve. This could be task automation, data analysis, user interaction through chatbots, etc.
2. **Data Collection and Processing:** To train your AI agent, you will need to collect and prepare relevant data. This could be texts, images, audio files, or other data types relevant to your task.
3. **Model Selection and Training:** Choose a suitable machine learning or deep learning model depending on the task. Use the platform to train the model on your prepared dataset.
4. **Testing and Optimization:** After training, test the model to evaluate its effectiveness. Optimize the model by adjusting parameters or adding more training data.
5. **Deployment:** After achieving satisfactory results, deploy your AI agent. Many platforms offer tools for integrating AI into your applications, web services, or IoT devices.
6. **Monitoring and Updating:** Continuously monitor your AI agent's performance and collect user feedback. This will help you timely update and improve the agent.

Important Tips

- **Understand Limitations:** Be aware of the technical and ethical limitations of the chosen platform.
- **Security and Privacy:** Pay attention to data protection and compliance with regulatory requirements.
- **Learning and Support:** Use the platform's resources and documentation for a better understanding of the processes of creating and deploying AI.

Choosing a platform and subsequently deploying your AI agent depends on the specifics of the task, available resources, and the desired level of control over the process.

For deploying an AI agent without deep programming knowledge, platforms that offer «drag-and-drop» tools or have intuitive graphical interfaces are best suited. Here are some platforms that can be useful:

1. **Google Dialogflow:** Allows creating complex conversational interfaces for websites, mobile

applications, popular messaging platforms, and IoT devices using a convenient visual editor.

2. **Microsoft Power Virtual Agents:** Part of the Microsoft Power Platform, allows users to easily create and deploy bots using a graphical interface, without requiring programming.
3. **IBM Watson Assistant:** Provides tools for creating conversational AI interfaces, such as chatbots and virtual assistants, without needing to code.
4. **ManyChat:** Focuses on creating chatbots for Facebook Messenger using a simple-to-use visual editor. While it might not be as advanced in AI capabilities as the previous platforms, ManyChat allows for easy interactive bot creation for marketing and customer service.
5. **Chatfuel:** Another platform focused on creating chatbots for Facebook Messenger and Telegram without coding. It provides a wide range of tools for integration with various services and automating interactions with users.

Choosing a platform will depend on your specific requirements, such as the preferred messaging platform, the need for integration with other services, and the desired complexity of AI. Most of these platforms offer extensive documentation and educational resources to help you get started without prior programming experience.

OpenAI offers an API that allows developers to integrate advanced artificial intelligence models, such as GPT-3 (and its subsequent versions), into their applications without needing deep knowledge in machine learning or programming. This makes OpenAI one of the accessible platforms for creating AI agents, especially for developing conversational interfaces, automating content generation, and other tasks related to natural language processing.

How to Use OpenAI to Create an AI Agent:

1. **Registration and API Access:** To start, you need to register on the OpenAI platform and gain access to the API. OpenAI provides documentation and guides to help you get started quickly.
2. **API Integration:** Using the OpenAI SDK or direct HTTP requests to the API, you can integrate AI capabilities into your application. OpenAI supports various programming languages, including Python, Java, JavaScript, and others.
3. **Application Development:** With the OpenAI API, you can create chatbots, automate content generation, analyze texts, and much more. The

API allows you to customize requests and receive formatted responses from AI, which can be used in various applications.

4. **Testing and Optimization:** It's important to thoroughly test your application to ensure the AI agent operates as expected and provides relevant responses. OpenAI offers tools and logs to help you optimize AI requests.
5. **Deployment and Monitoring:** After testing and tuning, you can deploy your application. It's important to continue monitoring the API usage and the quality of AI responses to ensure a high-quality service for your users.

OpenAI provides powerful tools for creating AI agents that can be used by developers of all skill levels. Thanks to the ease of API integration and the extensive capabilities related to natural language processing, OpenAI is an excellent choice for those looking to implement AI in their projects without deep programming knowledge.

Paths to monetization

Monetizing an AI agent can be realized in various ways, depending on its functionality, target audience, and business model. Here are some monetization paths for AI agents, along with examples.

1. **Providing as SaaS (Software as a Service)**
 - **Model:** Offering access to the AI agent as a cloud service with subscription payment.
 - **Example:** Salesforce Einstein - an AI platform integrated into Salesforce's cloud services to enhance sales, customer service, and marketing.
2. **Developing Customized Solutions**
 - **Model:** Creating tailored AI solutions for specific business tasks of the customer.
 - **Example:** IBM Watson offers customized AI solutions for various industries, including healthcare, finance, and education.
3. **Integration with Products and Services**
 - **Model:** Integrating the AI agent into existing products or services to enhance their value and functionality.
 - **Example:** Slack uses AI to improve work process productivity, including suggesting relevant files and messages, automatically categorizing content.
4. **Transactional Fees**
 - **Model:** Charging a fee for each transaction or operation performed using the AI agent.

- Example: Stripe uses machine learning to combat payment fraud, charging a fee for processing secure transactions.

5. Paid Features or Extensions

- Model: The base version of the AI agent is provided for free, with additional features available for an extra charge.
- Example: Duolingo uses AI to personalize the language learning process. The app offers a paid subscription for extended functionality.

6. Technology Licensing

- Model: Allowing other companies to use your AI technology through licensing.
- Example: OpenAI offers GPT-3 as a commercial product, licensing it to developers and companies.

7. Advertising and Sponsorship

- Model: Placing ads or sponsored content within interactions with the AI agent.
- Example: Pandora uses AI algorithms for music recommendations and includes advertising in the free version of its service.

When choosing a monetization path, it's important to consider both the target audience and the unique capabilities of your AI agent. Developing a clear monetization strategy from the beginning can significantly increase the chances of success for your project.

Practice: agentverse.ai

With assistance from schmidtfuturist.com



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Get started

Schmidt Futures supports projects at the intersection of talent and technology

From the editors: In each issue, we will publish materials about charity and people who contribute in the public interest, for the common good, to overcome the difficulties and threats to our civilization, for the development of science and technology, so that we can all coexist peacefully and develop.

In this issue of our magazine, we introduce the non-profit charitable network Schmidt Futures.

Schmidt Futures supports projects at the intersection of talent and technology, centered on specific, finite challenges that are connected to other efforts in the Schmidt philanthropic network.

Eric Schmidt, Founder

Eric Schmidt is an accomplished technologist, entrepreneur, and philanthropist. He served as Google's Chief Executive Officer and Chairman from 2001-2011 where he pioneered the company's transformation from a Silicon Valley startup to a global leader in technology. Eric oversaw the company's technical and business strategies alongside founders Sergey Brin and Larry Page. Under his leadership, Google dramatically scaled its infrastructure and diversified its product offerings while maintaining a strong culture of innovation.

From 2018-2020, Eric served as the Technical Advisor to Alphabet, the holding company of Google, advising its leaders on technology, business, and policy issues. He was also the Executive Chairman of Alphabet from 2015-2018 and remained as the Chairman of Google until 2015.



Prior to joining Google, Eric was Chairman and CEO of Novell, a software as a service company. He previously spent 14 years at Sun Microsystems, Inc., starting his career as a manager and rising to become their Chief Technology Officer. He also held technical positions at Xerox Palo Alto Research Center (PARC), Bell Laboratories, and Zilog.

Eric has been honored with numerous accolades and supports a variety of esteemed organizations. He was elected to the National Academy of Engineering in 2006 and inducted into the American Academy of Arts and Sciences as a fellow in 2007. He was on the Board of Trustees at Carnegie Mellon University from 2004 to 2006, and at Princeton University from 2007 to 2010. Additionally, since 2008, he has served as a trustee of the Institute for Advanced Study in Princeton, New Jersey, and after a 12-year tenure was named an emeritus board member in 2020. Eric was

also a member of the President's Council of Advisors on Science from 2009 to 2017. He currently serves as Chair of the Board of Trustees of The Broad Institute and is on the board of The Mayo Clinic, as well as Director of Science for America. Since 2022, Eric has served as the Chairman of the Board of Directors for Sandbox AQ.

Eric became the Chairman of the Department of Defense's Innovation Board in 2016 and held the position for four years, during which he was awarded the Department of Defense Medal for Distinguished Public Service in January 2017 by Secretary of Defense Ashton Carter. He was also a member of NASA's National Space Council User Advisory Group for two years which was chaired by the Vice President. He served as the Chairman of the US National Security Commission for Artificial Intelligence for three years. In 2021,

he launched, and currently Chairs, the Special Competitive Studies Project, an initiative that makes recommendations to strengthen America's long-term global competitiveness for a future where artificial intelligence (AI) and other emerging technologies reshape our national security, economy, and society. Eric is also a commissioner on the National Security Commission on Emerging Biotechnology (NSCEB), which was tasked to review how advancements in emerging biotechnology and related technologies will shape current and future activities of the Department of Defense.

Eric contributes much of his time to various programs at MIT. He is an MIT Visiting Innovation Fellow, a member of the Advisory Board for MIT IQ, a member of the MIT Commission on the Work of the Future, a member of the MIT CEO Advisory Board, and a member of the MIT Schwarzman College of Computing Advisory Council.

An accomplished author, Eric and Jared Cohen co-wrote The New York Times bestselling book, *The New Digital Age: Transforming Nations, Businesses, and Our Lives* in 2013. In 2014, Eric published his second New York Times bestseller, *How Google Works*, which he and Jonathan Rosenberg co-authored with Alan Eagle. In 2019, Eric published his third New York Times bestseller, *Trillion Dollar Coach: The Leadership Playbook of Silicon Valley's Bill Campbell*, co-authored with Jonathan Rosenberg and Alan Eagle. In 2021, Eric wrote the WSJ-best selling book *The Age of AI: And Our Human Future* with Dr. Henry Kissinger and Professor Daniel Huttenlocher.

Inspired to continue their legacy of giving back, Eric and his wife Wendy have founded several philanthropic initiatives under the umbrella of the Schmidt Family Foundations including the Schmidt Ocean Institute, Eric and Wendy Schmidt Fund for Strategic Innovation, and the Marine Science and Technology Foundation. In 2017, they co-founded Schmidt Futures, which supports projects at the intersection of talent and technology, centered on specific, finite challenges that are connected to other efforts in the Schmidt philanthropic network. Most recently in 2024, they co-founded Schmidt Sciences, a philanthropic venture to fund unconventional areas of exploration in science and tech.

Eric holds a bachelor's degree in electrical engineering from Princeton University and a master's degree and Ph.D. in computer science from the University of California, Berkeley.



Wendy Schmidt, Founder

Wendy Schmidt is a philanthropist and investor who has spent the past 17 years creating innovative non-profit organizations to work with communities around the world for clean, renewable energy, healthy food systems, healthy oceans and the protection of human rights. The critical interconnections between human activity, the land we live on and the ocean we depend upon are the central drivers of Wendy's philanthropic work.

Wendy is president of the Schmidt Family Foundation, which she founded with her husband Eric in 2006. She leads the foundation's grant-making and investment programs—the 11th Hour Project, which works to create a just world where all people have access to renewable energy, clean air and water and healthy food, and Schmidt Marine Technology Partners, which supports scientists, engineers and entrepreneurs in developing technologies that restore ocean health.

Wendy also serves as president of Schmidt Ocean Institute, which she and Eric founded in 2009 to advance oceanographic research by offering scientists access to the world's first year-round philanthropic research vessel in exchange for making their findings publicly available. After operating the ship *Falkor* for a decade, hosting more than 1,000 scientists, discovering scores of new marine species and underwater formations and mapping more than half a million square miles of the seafloor, Wendy and Eric began developing a larger research vessel, *Falkor*

(too), in late 2021. The new ship, equipped with the latest technology and robotics that will broaden the capacity and capability of conducting science at sea, began expeditions in March 2023.

A competitive sailor, Wendy has extended her oceans-focused work to the sporting world through 11th Hour Racing, an organization she co-founded in 2010 to work with the sailing community and maritime industry to advance solutions and sustainability practices that protect and restore ocean health. Wendy also founded ReMain Nantucket to strengthen the economic, social and environmental vitality of downtown Nantucket and to encourage innovation and resilience across the island. Its Envision Resilience Challenge calls on professionals and students to develop innovative, interdisciplinary solutions for coastal communities facing sea level rise.

In 2017, Wendy and Eric founded Schmidt Futures, a philanthropic initiative that invests in exceptional people making the world better and brings them together in interdisciplinary networks to solve problems in science and society. They established the Eric and Wendy Schmidt Center at The Broad Institute in 2021 to bridge the gap between data and life sciences.

In the fall of 2019, Wendy and Eric announced a \$1 billion philanthropic commitment for their

organizations and initiatives to identify and support talent across disciplines and around the world to serve others and work to solve the world's most pressing problems.

A journalist early in her career, Wendy developed a deep appreciation for clear, concise communication that has extended into her philanthropy, as she works to strengthen community-based, environmental, science and investigative journalism. She has provided startup funding for media organization Climate Central, and her grantmaking has supported fellowships at UC Berkeley Graduate School of Journalism and the Missouri School of Journalism. Recognizing the power of effective storytelling, Wendy has supported a number of documentaries and served as executive producer of the award-winning films *Gather* and *The Human Element*.

Wendy has a master's degree in journalism from the University of California at Berkeley, and she graduated magna cum laude from Smith College with a bachelor's degree in sociology and anthropology. After working briefly as a journalist, she worked in marketing communications in Silicon Valley, studied design and ran an interior design business for 16 years before turning her focus to philanthropy in 2006.

Programs of Schmidt Futures

Rise is a program that finds promising young people and provides opportunity for life as they work to serve others.

The Technologists for Global Transformation program (formerly the Associate Product Manager program, or APM) develops and deploys an exceptional network of early career technologists to solve systemic global challenges for public benefit.

The Innovation Grants Program supports extraordinary ideas that leverage technology thoughtfully to solve important societal challenges.

Convergent Research is an incubator within the Schmidt Futures Network that aims to help fill a structural gap in today's R&D system by enabling research that requires unusual levels of scale and coordination yet is not rapidly monetizable by industry. Convergent Research applies scientific roadmapping to systematically identify high-leverage research opportunities in this category, ultimately defining and launching these projects as Focused Research Organizations (FROs).

Learn more on schmidtfutures.org





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Face to face with the future

CHAPTER FROM THE BOOK

"CYBERNATION: FORMAT OF FREEDOM"

BY FUTURIST FRANZ JOSEPH SCHMIDT

We stand on the threshold of an era in which human existence is being redefined through the lens of interaction with artificial intelligence. This process not only changes the external aspects of our existence but also touches the deep ontological foundations of human identity. The question arises: What is the essence of a person in a world where the boundaries between biological and artificial, organic and digital are blurred? For instance, what will sex be like and how will the concept of «love» transform? How will children be born, and what happens if the institution of the family disappears? Why do I touch upon these issues? Because today, it's already possible to have a girlfriend or boyfriend in the neural network, create an image and appearance you desire, and have sex in virtual reality just as you wish. Equipping with the necessary devices—from humanoid biobots to tactile units, stimulators, and other sex toys—will allow one to achieve satisfaction and sexual happiness at the highest level as often as one desires. It's likely that self-satisfaction in the digital world will take precedence over the complexities of traditional love and sexual relationships. After all, we know that humans are slaves to their desires.

Conceptually, on this subject, we can outline the following positions: In a future where artificial intelligence and virtual reality technologies reach unprecedented heights, we face fundamental changes in relationships, sexuality, and the concept of family. These technological advancements offer humans capabilities previously considered the realm of fantasy but also present us with new ethical and social questions. In a world where everyone can create the perfect partner in a neural network, preferences shift from physical intimacy to virtual reality. Tactile units and humanoid biobots offer sexual gratification without the emotional limitations and social consequences of traditional relationships. This could lead to human intimacy disappearing as a necessity for many, and sexual self-gratification becoming the dominant form of sexual expression. Love, as a deep emotional connection between people, may be at risk in such a world. Technologically created illusions of satisfaction could diminish the value of interpersonal relationships, leading to a decline in emotional depth

From Hi-Tech Inovace Publishing

A writer-futurist is an author whose works focus on the future and often include elements of science fiction, technological innovation, social change, and speculative ideas. Futuristic writers aim to explore possible future scenarios and the implications of technological and social progress on society and the individual. Their works often challenge established notions and spark discussions about the directions in which humanity might move.

The proposed conceptual book by German futurist and researcher, chief editor of FUTURUM magazine, and AI consultant Franz Joseph Schmidt is of interest to the digital community and all those who are curious about the future, formats of digital transformation, and the possibilities and consequences of influencing ongoing processes.

The book has practical significance as it is based on examples of civic initiatives of European non-governmental organizations aimed at peaceful transformation of humanity into the digital age. According to the author, the driving force behind the digital transition is the advanced community of digital creators capable of playing a positive and influential role in the development of digital democracy and in the global processes of human civilization.

90% of the royalties received from this book, by the author's instruction, are transferred as sponsorship assistance to the public non-profit institution «Futurum Platform».



and mutual understanding in human connections. With the development of reproductive technologies, including extracorporeal fertilization and genetic editing, the birth of children may become a process entirely separated from sexual relations. This could lead to a rethinking

of the role of the family as the primary social institution responsible for raising children and passing on cultural values. The institution of the family may undergo a transformation where biological kinship and traditional parental roles become one of many possible bases for forming family ties. Alternative forms of family, based on choice, friendship, and shared interests, may become more common.

It is quite possible that these changes entail profound social and psychological consequences. On the one hand, they offer liberation from social constraints and the opportunity for personal self-expression. On the other hand, there is a risk of losing interpersonal closeness, empathy, and a sense of belonging to a kind and to humanity as a whole. It is also possible that individualism and self-centeredness will intensify, when a person, absorbed in satisfying their desires, may lose the ability to some traditional human values, such as empathy and sacrifice, which are the basis of deep human relationships. It becomes very important to find a balance between embracing new technologies and preserving those aspects of human life that make us truly human. By the time the book was completed and edited, we had already learned of more than 60,000 companies around the world that are creating AI in one way or another. We were literally inundated with a multitude of tools, assistants, generators, bots based on AI, offering astonishing possibilities for people without special knowledge and professional education to become singers or app developers, editors or writers, translators or composers, artists or TV hosts. The possibilities are indeed limitless, but so far chaotic and limited by the unpreparedness of users. This means that the transformation of knowledge and its acquisition in the era of AI implies a transition from classical methods of cognition to flexible, dynamic models of learning and interaction with information. This gives rise to a new epistemological paradigm, where knowledge becomes not so much a mastered or accumulated product as a continuous process integrated into everyday life and interactions with artificial intelligence.

The AI industry is currently characterized by fierce competition and rapid innovations. Giants like

OpenAI, supported by Microsoft, and other major technology companies such as Google, Amazon, and Meta, possess vast resources, including advanced research labs, proprietary databases, unique specialists, and global talent pools, which they use to maintain and develop their leadership in artificial intelligence technologies. This race is obviously joined by several other major players in the field of technological innovations, and a new global industry will be formed. In a competitive environment, leading AI creators will rapidly introduce innovations and form alliances for the applied use of AI in various spheres of our lives, greatly changing our world. Thus, the concept of the future, based on technological innovations and the rethinking of social structures, suggests a comprehensive approach to restructuring the world. This restructuring requires deep philosophical and scientific analysis aimed at understanding both external and internal transformations of human existence in the new era.

In my view, AI has paved the way and given humanity the prospect of peaceful restructuring of the world and its transformation into a global community without any borders, where the driving force will be the digital community, the fruits of whose labor are, after all, boundless. Besides radically changing the social structure, rethinking the individual's purpose (the proverbial meaning of life) will change the system of money, incentives, rewards, and business as a whole, as well as interpersonal relationships and many human values. In a general sense, humanity will be divided into creators of goods and users. These two classes will not be antagonistic, but integrated into the overall harmony - «there is a need - it is created, there is something created – it is consumed. Both are formed interdependently.» Values will change even in traditional details. Today, many dream of having their own house, while the dream of a digital creator is their own neural network, which develops and monetizes with you, which is always with you! And this is - the main capital. Today, many still dream of a cool Mercedes, but tomorrow - a humanoid robot. Values and benchmarks will change very quickly. Accordingly, the world's appearance will change.

Today, a person is tied to a place of residence, to work, to a bank, and much more. Globally available communication and means of communication, cryptocurrencies, digital democracy, and freedom of choice of creativity and needs will free billions of people on the planet from a multitude of restrictions and conventions. Within the two classes we have

outlined, naturally, there will be stratification. Digital creators or qualified users of AI tools already have the opportunity, sitting at a computer and having, conditionally, 100 dollars in their pocket, to create a billion-dollar business — these are potential billionaire leaders, while others will cooperate or work for them. Such opportunities are provided by AI (but this will be a separate topic of analysis in the next book). And consumers in the digital society will have degrees of access «to goods and service,» which will depend on the contribution to the community or to humanity (pay attention to the processes in China and you will see models of the future). The lower layers — these are marginals, who have never played any constructive role at any time, will also be forced to integrate into the digital and certain social environment for them.

This vision of future society highlights a shift from traditional structures and values to individualized, technologically oriented forms of interaction and self-realization.

In such a world, where technological equipment places the inner world of the individual, his needs and aspirations at the center, we can expect the following features:

- In the future, every individual will possess a personal neural network, which not only aids in many areas of life but also serves as a lifelong tool for deep self-discovery and development. This contributes to the formation of more conscious and self-development-focused personalities, valuable for harmonizing the entire society.
- Thanks to technologies, basic needs for food, sex, and entertainment are met with a high degree of personalization. Such an approach frees up time and resources for professional activity/employment, creativity, and intellectual development, allowing the individual to explore and create new forms of self-expression and interaction with the world, especially if it is intelligently stimulated.
- The choice between development and stagnation becomes the main driver of personal growth. Stimulating individuals to continuous self-improvement and learning new things contributes to the progress of society as a whole.
- The individual aspiration to leave a legacy takes on new forms. The digital footprint in the new understanding is the successor, a «planted tree,» personal asset and property, benefit brought to the community or humanity. The motivation for action and self-development comes from the desire

to benefit society and humanity. The reward for contributing to the common good becomes a key incentive, supporting the drive for innovation and improving the quality of life for all.

- Moving away from rigid ideological frameworks in favor of a flexible, adaptive approach to solving societal issues reflects the transition to a more open and dynamic social structure. This is a society where individuality, innovation, and the ability to cooperate in various forms are valued.

The transition to a society divided into creators of goods and their users raises questions about the ethics of production and consumption. In this context, concepts of responsibility, sustainability, and fair distribution become key. What are the moral obligations of creators towards consumers and the highly diverse ecosystem of humanity? And how will these obligations be shaped under conditions where production capacities and consumer possibilities expand to previously unseen horizons? Therefore, there is a need for a new approach to management and development, where digital democracy takes center stage. This leads to a rethinking of future models of statehood and social organization, where power and authority are based not on the monopoly of force and coercion, but on the ability to serve the common good and stimulate individual and collective development. For this to be realized, the general population must be computerized and master the basics of digital existence. Remember the time span from the first Mac personal computer to today's virtual reality glasses connected to AI. The next stage will arrive three to four times faster!

CYBERNATION

Format of freedom



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Alex Schmidt,
Leader of the Public
Institution, Editorial Board
Member of FUTURUM
Magazine

**FUTURUM PLATFORM:
KEEPING PACE WITH THE TIMES
AND ASPIRING TOWARDS THE METAVERSE**

Who are we?

Cybernation Ecosystem

Cybernation is a platform, ecosystem, and metaverse built by digital creators for digital creators and all those involved in the digital sphere - from IT to digital content creators. In line with the Action Program, our non-profit public institution Futurum Platform initiates:

- The founding assembly to create an autonomous non-profit Global Alliance of Digital Creators (GADC) by national non-profit organizations/associations from different countries of the world based on a commonality of tasks and goals, as well as to promote digital democracy and protect the interests of the Alliance's members. Initiative and working groups in several countries are registering the respective national alliances, which will establish the Global Alliance by the summer of 2024. Teams from Germany, the USA, Switzerland, Czech Republic, Lithuania, Kazakhstan, Ukraine, Poland, India, and several African countries have already joined our initiative, and we invite proactive and creative individuals from other countries to participate in forming this movement in their country and join the Global Alliance through participation in the founding congress.

- Creation of the world's first non-profit Free University of Digital Technologies for entirely remote education based on specialized AI tools and integrated and personalized learning neural networks; The Futurum Platform team has prepared a complete concept and feasibility study for this university and is exploring the issue of its registration and licensing in one of the countries. This issue of the magazine publishes a brief concept presentation of this university.

- Development and implementation of an ecosystem that includes decentralized systems (DAO), blockchain, and its cryptocurrency - Futurum Currency Unit (FCU) with ECU (écu) crypto coins;
- Creation of a global international movement (in the form of a voluntary autonomous association)

«Cybernation» of workers, activists, and companies in the digital and information-communication sphere to protect and promote interests at the international level and in international organizations, development of the concept of self-regulation (code) of moral and ethical standards in the digital sphere, and to assist in a peaceful and creative digital transition and development of human civilization.

- Creation of an international network of innovative platforms «Cyberhub» - free economic digital zones and hubs. Unique models and innovative concepts of such free zones have been developed, which may be of interest to many countries striving to be participants in technological progress. The working group of developers implies adaptation and standardization for a specific country or region, considering specific conditions and needs.

CURRENTLY, WEBSITES ARE BEING DEVELOPED

Free University of Digital Technologies digitaltechuni.com

Cybernation Metaverse cybernationverse.com

Global Alliance of Digital Creators globalcreatorsnetwork.com

Mission and Key Objectives of GADC



To foster peaceful societal development through cutting-edge achievements in digital technologies and AI, overcoming global challenges hazardous to humanity;

- To protect the interests and rights of Alliance members;
- To support and develop digital creativity and innovation;
- To unify the digital community, facilitate mutual development, exchange of experience, and information among members for creative purposes;
- To promote the ideas and principles of structuring innovative platforms «cyberstate» and «Cyberhub,» aiding progressive reform, digital education, and digital transformation of society;
- To assist in the development and implementation of software, applied technologies, and digitization based on AI and neural networks across various human activities;
- To develop principles of self-regulation, foundations of digital law and digital democracy, standards, and codes in the digital sphere, ethics of social interaction for the prosperity of human civilization.
- The Global Alliance is a voluntary association of legal and physical persons acting for creative purposes. Membership in GADC is akin to citizenship and residency in a cyberstate.

GADC - an innovative decentralized platform

In the era of digitalization and globalization, there arises a need for innovative forms of professional

union in the fields of AI, digital products, software, and content creation, as these are the driving forces of this very era. The Global Alliance of Digital Creators (GADC) is a free movement within the global internet that unites the interests of companies, organizations, and citizens of countries around the world creating a digital future.

GADC aims to become a beacon and platform for all those seeking support, education, and collaboration in the field of digital products and creativity, as well as an organization that will initiate and implement ideas, models, and concepts of digital transition.

A distinctive feature of GADC is its organizational and technological structure. Membership in the cyberstate is based on alliance membership, utilizing blockchain technology for management, identification, and protection of member rights. This ensures maximum transparency, security, and democratic decision-making and management of the organization.

Members of the Global Alliance of Digital Creators (GADC) are granted privileged access to platform resources and databases, a discount system for a wide range of services and assistance, including legal aid and consultations, diplomatic and consular support, SOS assistance for digital nomads in difficult situations, copyright and intellectual property rights protection, significant discounts on education at the Free University of Digital Technologies, assistance in obtaining a Digital Nomad Visa or permanent residency in the global project of free economic digital zones «Cyberhub» in various countries, etc.

Thus, membership in the «Global Alliance of Digital Creators» (GADC) can offer a range of significant benefits not only to companies but also to individual digital creators and digital nomads.



Activities of GADC

Promoting Global Digital Integration: Developing and implementing international projects and programs aimed at improving global digital connectivity across various aspects of human life and access to digital resources for development, security, and overall well-being of humanity.

Creating International Educational Platforms: establishing and developing an international University of Digital Technologies based on AI, specialized neural networks, and blockchain with remote, impartial, and objective machine education for new digital specialties and global educational standards, to radically change the educational paradigm, making it more accessible, personalized, and aligned with the needs of a modern technologically advanced society.

Development and expansion of training and professional development platforms for civil servants and top corporate managers in digital management.

Development and support of online platforms, schools, and courses accessible to students worldwide, to promote global education in the field of digital technologies.

Creating and supporting «Cyberhub» free economic digital zones with a special tax regime, a network of innovative laboratories, and business incubators to support international and national startups and research projects in AI and new digital technologies in various countries in need of digitalization and technological progress.

Establishing a unified database and electronic registries of digital objects' intellectual property on the blockchain.

Organizing a system for copyright protection and licensing, as well as effective systems for applied use and commercialization.

Creating within the organization a guild of professional mediators and an International Commercial Arbitration Court as structural units for resolving disputes in the field of digital technologies and property.

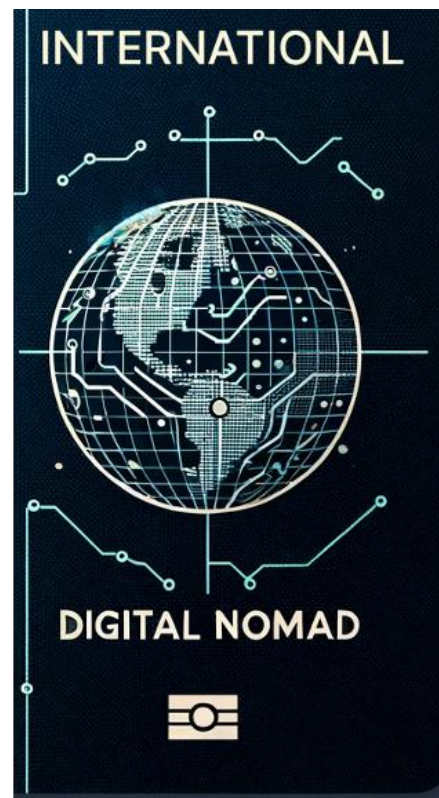
Developing and using proprietary accounting tokens for internal operations, service and resource exchange, and for service, consultation, and interaction with cryptocurrencies for diversification and increasing organization revenues.

Licensing and Intellectual Property: granting licenses for technologies developed within GADC to commercial companies and other organizations.

Commercialization of innovative ideas and inventions created within the activities of GADC.

Benefits for GADC members

- Access to educational resources and training programs, a wide range of online courses, webinars, and masterclasses, opportunities for professional development through various educational programs, and obtaining qualification certificates both on the GADC platform and at the Free University of Digital Technologies.
- Invitations to exclusive events, conferences, and meetups organized by GADC, for networking with like-minded professionals and industry



experts from around the world, opportunities for networking, exchanging experiences, and forming partnerships with other digital creators and companies through the TeleDigi social network.

- Access to cutting-edge tools and technologies, software, and

platforms that can be used in the creative process or to enhance productivity, technical support, and consultations on the use of various digital technologies by partners.

- Support and protection of rights, including copyright and intellectual property rights, access to legal support in intellectual property, copyright, and other legal aspects of digital creativity, representation of members' interests in governmental and international organizations to protect the rights of digital creators and digital nomads.
- Financial opportunities and benefits, access to grants, funds, and financing opportunities for developing personal projects and initiatives, discounts, and special offers on products and services from GADC projects and partners.
- Opportunities to directly monetize works and services through the GADC platform, receiving payments including in FCU coins with automatic conversion to other currencies. This may include the sale of digital content, licenses for the use of digital products, works, or provision of services.
- Each GADC member receives a personal ID, integrated with a crypto and multi-currency wallet at a partner bank of the Global Alliance of Digital Creators, ensuring safe and convenient management of FCU funds, etc.

Monetization of the Ecosystem:

Futurum Currency Unit (FCU)



The Futurum Currency Unit (FCU), also referred to as ECU (écu), plays a pivotal role in the ecosystem

of the non-profit organization «Global Alliance of Digital Creators» (GADC), in the activities of the Free University of Digital Technologies, and broadly within the Cybernation metaverse. Utilizing FCU as an internal currency enables the creation of an effective, flexible, and transparent economic system for the non-profit organization, opening new opportunities for expansion and integration with the global economic and cryptocurrency spaces. Enhanced security through blockchain technology further strengthens this system. The concept of tokenization will be presented for consideration at the general assembly of the alliance.

Blockchain ensures a high level of security and impossibility of currency counterfeiting due to its distributed and immutable nature. All FCU transactions can be transparently tracked, preventing fraud and unauthorized operations. Using blockchain allows for a departure from centralized currency control, enhancing its resistance to external attacks and manipulation. Decentralization fosters a trustworthy and stable economic environment for FCU users. The ecosystem model with écu tokens is universal for use in other and related fields, offering opportunities and prospects for its global expansion. This could include virtual cities, societies, economic systems, and much more, allowing users to explore, interact, and create in a fully digital environment. It includes economic aspects such as the use of digital currency, tokenization, and securitization of assets, and the creation of new economic models and projects in the digital sphere. Some potential benefits of FCU for the internal ecosystem include: Integration into the educational system: Écu could be integrated into the educational system of the Free University of Digital Technologies, allowing students to pay for tuition, purchase educational materials, and receive rewards for successful learning in cryptocurrency. With the use of cryptocurrency, students from different countries can more easily access education at the university without facing currency conversion problems and transfer restrictions. The blockchain technology underlying écu provides a high level of security and transparency for all transactions, making it attractive for students and teachers and for use in all services and projects of Cybernation. The écu reward system can be used to encourage students to achieve success in learning, for example, for completing additional tasks, participating in research projects, or publishing scientific works. The possibility of integrating écu with personal neural networks of students will allow them to use cryptocurrency to pay for access to personalized educational resources and services.



Vasyl Hulyi,
Head of the Cybersecurity.
Department at Futurum
Platform, Representative in
Germany, Co-author of the
«Digital Democracy» concept

The Free University of Digital Technologies is an international innovative educational institution where distance learning and student development are facilitated through the use of advanced artificial intelligence technologies with a personal neural network for each student throughout their subsequent life. The personal network will become a person's main asset in the digital era.

Free University of Digital Technologies Project: Innovative Platform

Key Features of the University:

Personalized Learning

Utilizing AI to tailor the educational process to the individual needs and preferences of each student, adhering to international standards. Educational modules and courses are available in multiple languages, ensuring barrier-free learning. Custom-tailored learning programs and modules are crafted considering the student's interests and goals.

Automated Assessment and Feedback

Developing algorithms for the automatic evaluation of skills and knowledge and providing constructive feedback to students. Our neural network algorithms ensure an objective and accurate assessment of your knowledge and skills, remembering all your actions and achievements. Blockchain technology and the student's personal neural network guarantee transparency, updating, and preservation of academic achievements throughout life.

Security and Transparency

Using blockchain to ensure transparency and security of data on personal educational achievements and the student's personal neural network, not only for the duration of their studies but for life, serving as a personal development base.

Global Access and Scalability

Making educational resources accessible to students worldwide and offering lifelong support through an individually tailored database (digital archive/portfolio-profile) for each graduate with personal access.

Lifelong Learning

Continuous update of educational materials and courses according to the latest trends and developments in digital technologies. Perpetual learning includes upgrading graduates' qualifications and offering doctoral studies. There are no time limits; you can complete your course in 3 months or two years, depending on the student's capabilities and circumstances. The program consists of modules related to the curriculum.

Freedom of Choice

Students have the autonomy to choose which programs and modules to study and when, crafting their unique educational path, life, and career. The opportunity to study multiple specializations simultaneously for maximum potential and horizon expansion.

Learning Without Relocating

No need to spend time and money on flights and accommodation – you can learn from home. A personal «knowledge baggage» in the form of a personal neural network is created and stored in the university database, ensuring ongoing and lifelong access to one's achievements and knowledge base.

Flexible Payment System

Tuition is paid by the module, offering students freedom of choice and flexibility in their studies. Payment is not for a semester of education, but specific modules of a particular program.

Every faculty and specialization at the Free University of Digital Technologies is focused on preparing professionals capable of contributing to the development and application of cutting-edge technologies across various spheres of human activity in the digital era. The educational programs are designed considering the current trends and needs of the global market, ensuring students gain not only theoretical knowledge but also the practical skills necessary for a successful career in the digital domain.



Faculties

Faculty of Artificial Intelligence and Machine Learning

Supercomputing and Quantum Informatics;
AI and Neural Networks;
Machine Learning and Deep Learning;
Computer Vision and Natural Language Processing.

Faculty of Cybersecurity

Ethical Hacking and Penetration Testing;
Data Protection and Cryptography;
Cyber Risk Management and Compliance Standards.

Faculty of Computational Mathematics and Cybernetics

Computational and Applied Mathematics;
Computer Science and Programming;
System Programming.

Faculty of Digital Design and Graphics

Graphic and Web Design;
UX/UI Design;
3D Modeling;
Digital Art and Animation.

Faculty of Data and Analytics

Big Data and Data Analytics;
Economic Analytics;
Data Science and Predictive Analytics.

Faculty of Internet of Things (IoT) and Robotics

IoT Solution Development;
Robotics and Automation;
Embedded Systems and Microcontrollers.

Faculty of Sustainable Technologies and Ecology

Green Technologies and Renewable Energy;
Environmental Monitoring and Management;
Smart Cities and Sustainable Development;
Applied Technologies and Innovations.

Faculty of Digitization in Government and Corporate Management

Digital Technologies in Government and Corporate Structures;
Digitization and Electronic Services in Management and Control;
Digital Democracy and Civil Society;
Digital Strategies and Integrated Information System Management;
Decentralized Systems and Smart Contracts.

Faculty of Digital Medicine

Digitalization of Healthcare Systems;
AI in Medical Diagnostics;
Hardware Software.

Legal Faculty

Basics of Law in the Digital Domain, Digital Democracy;
Intellectual Property in the Digital Domain;
Cybersecurity and Digital Forensics;
Data Protection;
Digital Technologies in Law Enforcement;
Digital Technologies in Customs Authorities.

Faculty of Special Technologies

Applied Programming;
Department of Unmanned Systems and Automated Control Systems;
Department of Digital Analytics and Security.

Ph.D. Programs

- Artificial Intelligence and Machine Learning;
- Cybersecurity and Data Protection;
- Digital Transformation in Government and Corporate Management;
- Digital Healthcare;
- International Law and the Digital Domain;
- New Technologies and Innovative Processes;
- Finance and Cryptocurrencies;
- Decentralized Systems;
- Applied Cybernetics;
- Digital Creativity and Art;
- Digital Intellectual Property;
- Educational Innovations.

The Ph.D. programs at the Free University of Digital Technologies will offer in-depth research programs aimed at developing innovations and new theoretical approaches in the field of digital technologies. The doctoral program is designed to prepare highly qualified researchers and practitioners capable of making a significant contribution to the development of digital technologies and their application.

WELCOME TO THE FREE UNIVERSITY OF DIGITAL TECHNOLOGIES

EMPOWERING THE NEXT
GENERATION OF CYBER
PROFESSIONALS



FOUNDER CERTIFICATE

GLOBAL ALLIANCE OF DIGITAL CREATORS

Tissued to the delegate of the founding assembly

14/0000

Name Surname or Company

This certificate grants the right to participate in the founding assembly and membership in the organization for 12 months

2024
date



Schmidt
Futurum Platform



GLOBAL ALLIANCE OF DIGITAL CREATORS

Standard Agreement: This certificate is issued by the public institution Futurum Platform, Perkūniakio g. 13-91, Vilnius, Republic of Lithuania, LT-12114, Code: 306657828 IBAN: LT333500010017063000 SWIFT/BIC: EVIULT2VXXX Paysera LT, UAB, Pilaite pr.16, Vilnius, LT-04352, Lithuania, www.futurumplatform.org info@futurumplatform.org and serves as a numbered certificate of the founding contribution from an individual in the amount of €25 or from a legal entity in the amount of €250 and entry into the alliance. The founding contribution also serves as the annual membership fee. By paying this certificate, the founder acknowledges the Project Charter of the Global Alliance of Digital Creators, commits to support its activities, and consents to the processing of personal data as a member of the Alliance.

FUTURUM
PLATFORM



To prepare for the first general assembly of GADC to set the membership fees and approve the charter, the public institution Futurum Platform, as the initiator of the establishment of GADC, issued 10,000 invitation certificates for individuals at a flat price of €25.0 for privileged membership entry, and 1,000 certificates for legal entities priced at €250.0. The certificates exempt the organization member from the first annual fee approved by the general assembly. Certificate holders can participate in the founding assembly. All funds received from the sale of certificates will be transferred to the GADC account with the publication of financial reports. Send your application for a certificate and CV or company profile to the email info@futurumplatform.org with the subject «Certificate».

2024 JOURNAL AWARDS

Futurum Magazine, considering the opinions of readers, the editorial team, and with the aid of AI tools, will summarize the year 2024. Winners will receive commemorative prizes and publication of their achievements in the following categories:

Breakthrough of the Year

Innovations of the Year (unique technologies and solutions)

Leader (the magazine's golden sign to individuals who have made a significant contribution to the fields of AI and digitization)

Golden Team (among startups)

Discovery of the Year (creators or companies that have introduced novelty and innovations in the digital sphere)



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A close-up, front-facing view of a metallic, cybernetic face. The face is composed of dark, brushed metal with intricate circuitry patterns etched into its surface. The eyes are large, almond-shaped, and have a golden-brown, textured iris. The nose is a simple, rectangular metallic protrusion. The lips are thin and set in a neutral expression. The face is surrounded by a glowing, golden-yellow light that emanates from the center of the forehead and the eyes, creating a strong lens flare effect. The background is dark and out of focus, with some distant lights and a faint grid pattern.

CYBERNATION

FORMAT OF FREEDOM

A GLIMPSE INTO THE FUTURE