



KAPITEL 8 / CHAPTER 8⁸

DIGITAL ENTREPRENEURSHIP AND BUSINESS IN THE FIELD OF INFORMATION TECHNOLOGY

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Introduction

In the modern era of technological development, the field of Information Technology (IT) has become a key factor for economic growth, innovation, and societal transformation. Entrepreneurship in the IT sector occupies a unique place in the global economy, shaping new business models, transforming traditional industries, and creating development opportunities that were unimaginable just a few decades ago.

Entrepreneurship in IT is characterized by a high level of innovation and the rapid implementation of new solutions. Ideas generated in this field often have a significant impact on various aspects of life, including communication, education, healthcare, manufacturing, trade, and even public administration. The creation of startups and the adoption of cutting-edge technologies such as artificial intelligence, blockchain, cloud computing, and the Internet of Things (IoT) have opened vast opportunities for entrepreneurs seeking to change the world through digital innovations.

One of the key features of IT entrepreneurship is its global nature. Thanks to the Internet, entrepreneurs can launch businesses that operate on a global scale, almost without geographical limitations. Such scalability allows them to attract clients from different parts of the world and access international markets, which significantly broadens prospects for successful growth.

IT entrepreneurship also benefits from a unique ecosystem that supports rapid growth and innovation. This ecosystem includes investment funds, business incubators, accelerators, startup hubs, as well as access to venture capital. It promotes the development of an entrepreneurial culture and stimulates the emergence of new business ideas that can address both local and global challenges.

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However, IT entrepreneurship also faces numerous challenges. Market competition is extremely high, and the speed of technological change requires entrepreneurs to constantly adapt and make swift decisions. Furthermore, issues of financing, cybersecurity, data protection, and regulatory frameworks in different jurisdictions become critical factors that influence the success of IT businesses.

8.1 Fundamental Characteristics of IT Business

In the context of IT entrepreneurship, it is also essential to consider such topics as the role of human capital and creativity. The most successful IT companies usually focus not only on innovative technologies but also on attracting talented specialists capable of creative thinking and the development of new products and services.

Entrepreneurship in the IT sector is a powerful driver of modern economic development and innovation. It not only transforms traditional industries but also creates entirely new ones, opening vast opportunities for those who are ready to take risks, operate in highly competitive environments, and bring their ideas to life through technology.

To begin with, it is important to define what IT business represents. IT business is a type of entrepreneurial activity based on the creation, implementation, and use of information technologies for providing services or producing products. IT business encompasses a wide range of activities related to software development, hardware production, cloud technologies, internet services, mobile applications, cybersecurity, data analysis, and other areas that employ information technologies to solve diverse business challenges. Figure 1 illustrates the main characteristics of IT business.

The primary asset and resource of IT business are digital technologies and intellectual property. This may include the creation of software as well as other technological solutions, including hardware and platforms.

IT business is often a leader in implementing innovative solutions. This means that companies in this sector regularly develop new products, services, or business models that transform the market and society.

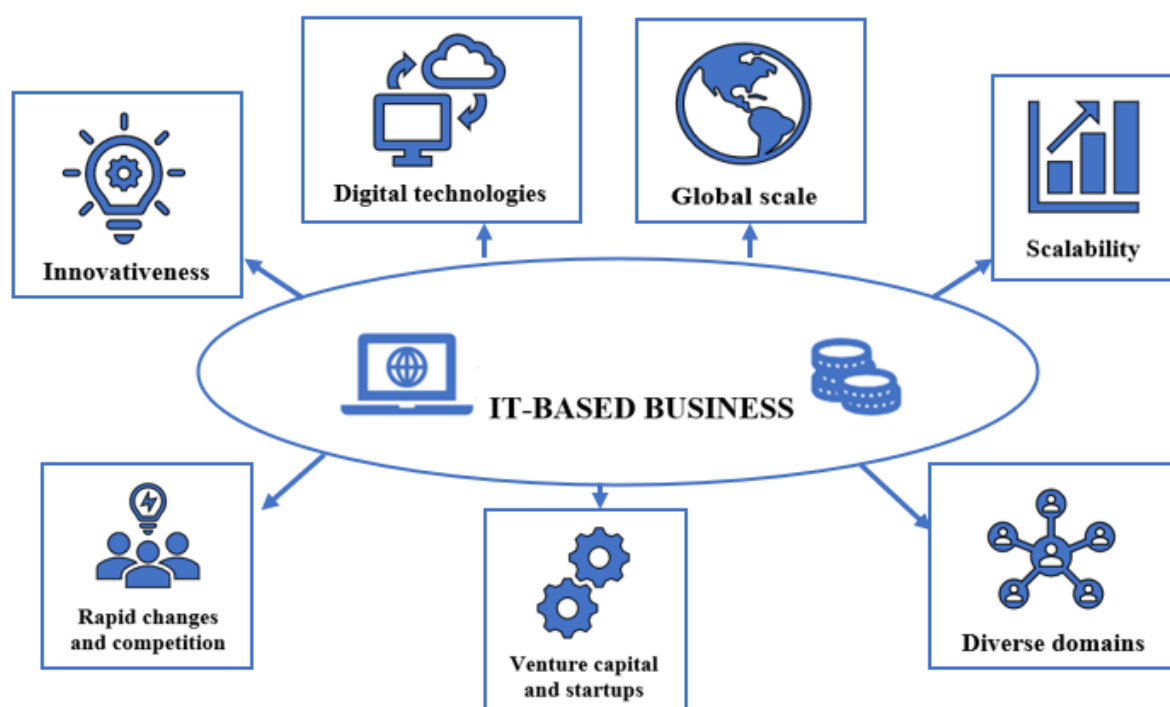


Figure 1 – Fundamental Characteristics of IT Business

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IT business usually operates in a global context. Due to the accessibility of the Internet and digital solutions, IT companies can serve clients from different parts of the world, making them global players even at the early stages of development.

The products and services of IT business can be easily scaled. For example, software can be sold and used without significant additional costs for production or distribution.

IT business encompasses various sectors: from web development and cybersecurity to artificial intelligence and blockchain. Companies may focus on providing IT services to other businesses (B2B) or on creating products directly for end consumers (B2C).

A significant share of IT business is represented by startups funded by venture capital. These are companies focused on rapid growth and innovation, often starting with a small team of developers and expanding into international giants.

The IT industry develops very rapidly, which means that enterprises in this field face constant competition and the need to adapt quickly to new technologies and market conditions.



IT business can be fully oriented toward technology development (for example, creating new software) or may employ IT solutions to optimize processes or deliver traditional services in digital form (e.g., e-commerce, financial technologies, online education).

Software development is one of the key and most common areas in IT business. It includes the process of creating, designing, programming, testing, and maintaining software products or applications used on computers, mobile devices, or other digital platforms (Fig. 2). Software development serves as a central link in the technological ecosystem, integrating innovative solutions, business processes, and digital platforms.

The main types of software are usually classified as system software, application software, mobile applications, and web software.

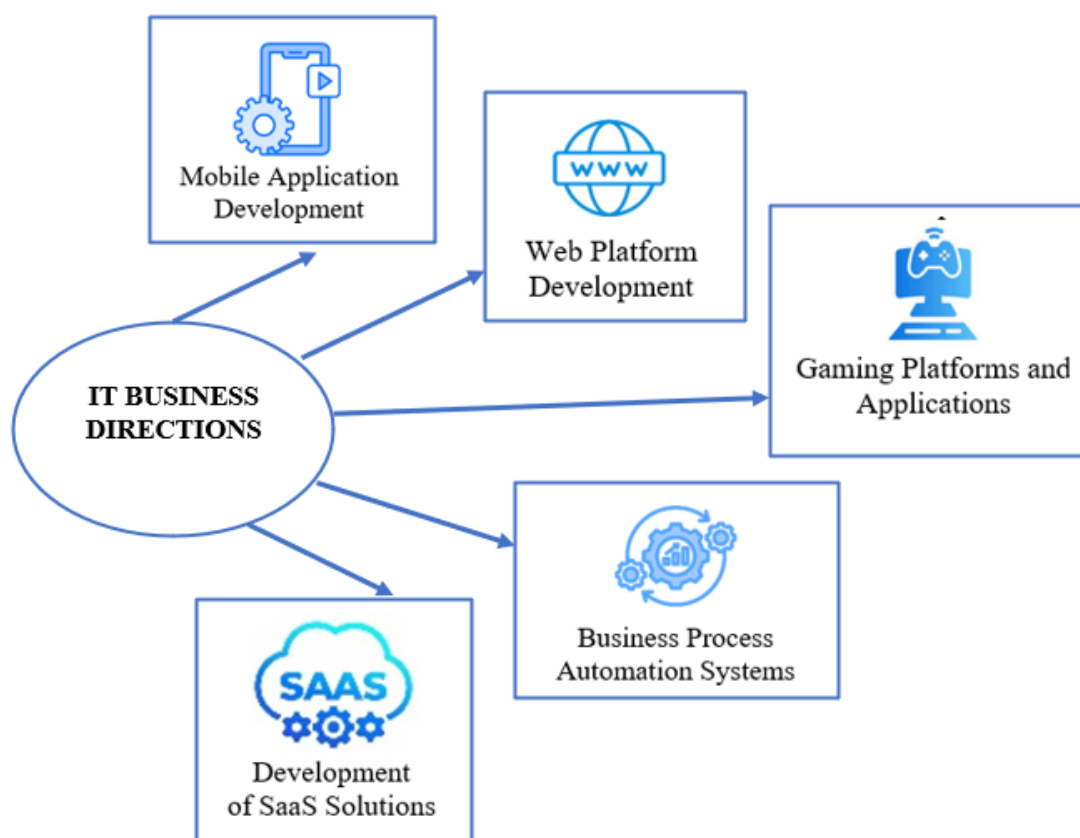


Figure 2 – The Most Widespread Direction of IT Business

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System software includes operating systems, drivers, utilities, and other programs that manage computer hardware resources and ensure the functioning of other applications. Examples: Microsoft Windows, macOS, Linux.



Application software refers to programs that perform specific tasks for the end user. These may include office applications, multimedia tools, games, or financial accounting software. Examples: Microsoft Office, Adobe Photoshop, Zoom.

Mobile applications are programs developed specifically for mobile platforms (Android, iOS). These may include communication services, social networks, mobile games, or customer service applications (e.g., banking, e-commerce). Examples: Instagram, Uber, Google Maps.

Web software refers to programs that operate through web browsers and do not require installation on the user's device. These may include online business services, e-commerce platforms, content management systems (CMS), or information-sharing platforms. Examples: Gmail, Shopify, WordPress.

Software development is the most widespread direction of IT business for several reasons.

First, due to the high demand for software products. In today's digital world, demand for software solutions is extremely high. Software is used in every sector—from finance to education, healthcare, and manufacturing. This means the need for new applications and systems is constantly growing.

Second, broad business opportunities. Software development is a profitable area of IT business, as it can target both global markets and highly specialized niches. Companies may create products for millions of users or work with corporate clients by developing customized systems for internal use.

Third, scalability. Software is highly scalable: once a product is created, it can be distributed without significant additional production costs. This makes the software business very attractive in terms of financial efficiency and growth potential.

Fourth, rapid technological development. Innovation in the IT sector continuously stimulates the creation of new types of software. For instance, the advancement of artificial intelligence, blockchain technologies, or the Internet of Things (IoT) opens new opportunities for software developers to create products for emerging markets.

Fifth, the startup ecosystem. Software development is a central element for startups. Many startups begin with the idea of creating an innovative software product



that addresses a specific problem. With the support of venture capitalists or business angels, such startups can scale quickly and achieve global success.

Finally, a low entry barrier. Starting a software development business does not always require significant initial investment. Thanks to accessible programming tools and cloud technologies, even small developer teams can create competitive products with minimal costs.

Understanding the key stages of software development in business is critical for successful planning, effective resource management, product quality assurance, and gaining competitive advantage. Awareness of development processes enables better project management, the integration of innovations, cost optimization, and responsiveness to market changes, ultimately contributing to the long-term sustainability of the business (Table 1).

Table 1 – The Five Main Stages of Software Development

Stage	Name	Description
1	Requirements Analysis	At this stage, the objectives and functions that the software must perform are determined. It is essential to clearly understand the needs of the client or end user.
2	Design	The system architecture is created, including user interfaces and functional components of the program. This also involves selecting the technologies and development environment.
3	Programming (Coding)	Based on the design, coding begins. Developers create algorithms and program components that meet the requirements defined in the previous stage.
4	Testing	The completed software is tested for errors, functionality, security, and compliance with requirements. It is important to ensure that the program operates reliably under various conditions.
5	Implementation and Maintenance	After development is completed, the software is deployed in the market or production environment. Ongoing support and updates are necessary to address emerging issues or add new features.

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Software development is not merely a technical process but also an important business tool that influences the innovative development of various industries. The software sector allows IT businesses to grow rapidly, explore new markets, and address key challenges in the modern world. Due to high demand, innovative opportunities, and accessibility for startups, this area remains one of the most attractive and promising in the IT industry.



8.2 Principal Domains of Cybersecurity in IT Business

Cybersecurity has also emerged as a crucial area of IT business. As more companies and organizations transition to digital operations, the number of cyberattacks, hacking incidents, data breaches, and other security-related events is increasing. This makes cybersecurity an integral part of modern business.

Cybersecurity encompasses a set of technologies, processes, and practices aimed at protecting computer systems, networks, software, and data from cyberattacks, unauthorized access, modification, or destruction. The primary objective of cybersecurity is to safeguard the confidentiality, integrity, and availability of information. Figure 3 illustrates the main areas of cybersecurity within IT entrepreneurship.

Network protection involves measures aimed at safeguarding an organization's internal and external networks from attacks. This includes firewalls, intrusion prevention systems (IPS), virtual private networks (VPNs), and Wi-Fi security.

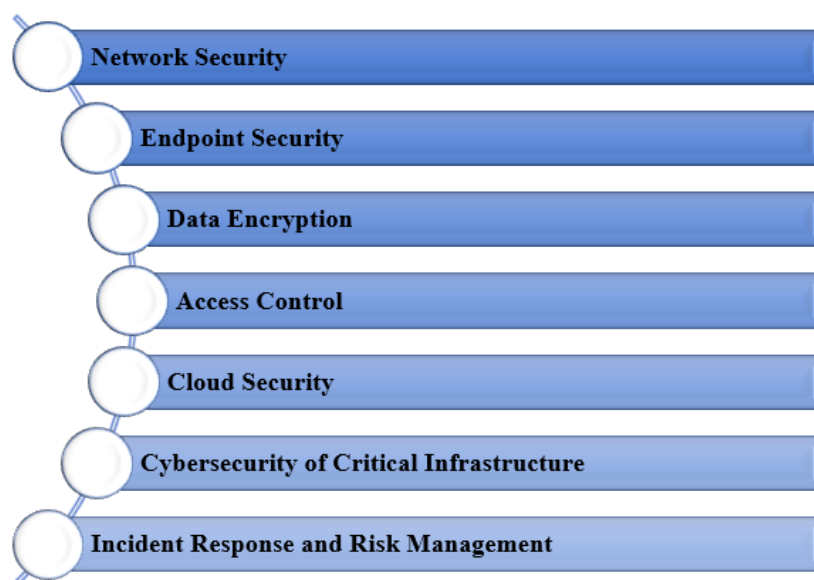


Figure 3 – Principal Domains of Cybersecurity in IT Business

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Endpoint protection focuses on securing computers, mobile devices, and servers connected to the network. This includes antivirus software, threat monitoring systems, and malware protection tools.



Data encryption is used to protect information during storage or transmission by converting it into a format that cannot be read without the appropriate key.

Access management refers to methods and technologies that control who has access to specific resources or data. This includes authentication systems, multi-factor authentication (MFA), and role-based access control (RBAC) systems.

Cloud service security includes measures to ensure the protection of data and services stored and used in cloud environments. This is particularly relevant for companies using platforms such as Amazon Web Services (AWS), Microsoft Azure, or Google Cloud.

Critical infrastructure cybersecurity involves protecting essential infrastructure sectors such as energy, transportation, healthcare systems, and other critical industries that require a high level of protection against cyberattacks.

Incident response and risk management is a system for rapid reaction to cyberattacks, including the detection, analysis, and mitigation of incidents. It also encompasses risk management methods to minimize the likelihood of future attacks.

The reasons why cybersecurity has become one of the most promising areas within IT business are primarily associated with:

- the increasing number of cyber threats;
- the transition to cloud technologies;
- regulatory requirements;
- digital transformation;
- the high cost of cybercrime;
- rapid technological development.

With the growing volume of digital information and widespread Internet use, the number of cyber threats has significantly increased. These include hacking, phishing, viruses, ransomware, and more. Every company, organization, or government entity requires protection for its data and infrastructure.

At the same time, more companies are transitioning to cloud services, creating new security challenges. Protecting data in the cloud requires new approaches, which stimulates the growth of the cybersecurity market. In many countries, legislation also



requires companies to comply with certain cybersecurity standards to safeguard customer and business data, creating demand for cybersecurity professionals and services.

In recent years, economic sectors have become increasingly digitalized, increasing vulnerability to cyberattacks. Accordingly, companies must invest in security technologies. Cyberattacks can result in significant financial losses, reputational risks, and legal liabilities. Protecting against these threats is critically important for any organization, driving the development of the cybersecurity market.

The continuous advancement of technologies such as artificial intelligence, the Internet of Things (IoT), and big data creates new opportunities but also introduces potential vulnerabilities, further increasing the need for cybersecurity.

Cybersecurity remains a promising area due to the ongoing demand for information protection, regulatory requirements, and continuous technological advancement, ensuring strong business interest in this sector.

8.3 Main Factors Contributing to the Popularity of Cloud Technologies

Cloud technologies have also become one of the most widespread and promising areas in IT business due to their numerous advantages and wide-ranging applications across various industries. Table 2 presents the key reasons for the growing popularity of cloud technologies.

Table 2 – Main Factors Contributing to the Popularity of Cloud Technologies

No.	Reason	Description
1	2	3
1	Cost Reduction	Cloud technologies allow businesses to reduce capital expenditures on their own IT infrastructure. Companies do not need to purchase expensive servers, data storage equipment, or maintain their own data centers. Instead, they rent the necessary resources from cloud service providers on a subscription basis or pay-as-you-go.
2	Scalability and Flexibility	Cloud solutions enable rapid scaling of resources according to business needs. Companies can increase or decrease capacities (e.g., storage volume or computing power) without additional investment in physical hardware. This is especially important for startups or rapidly growing companies.



3	Accessibility and Mobility	Cloud technologies provide access to data and applications from anywhere in the world via the Internet. This is particularly relevant in the context of remote work, allowing employees to work from any location and device, which increases productivity and reduces costs for office infrastructure.
4	Security and Data Backup	Most major cloud providers (e.g., AWS, Microsoft Azure, Google Cloud) offer a high level of security, including protection against cyber threats, data encryption, and regular backups. This ensures that businesses can be confident that their data is secure and recoverable in case of system failure or data loss.
5	Innovation and New Technologies	Cloud platforms often provide a wide range of tools for implementing advanced technologies such as artificial intelligence (AI), machine learning (ML), big data analytics, the Internet of Things (IoT), and blockchain. This allows companies to easily integrate new technological solutions and adapt to market demands.
6	Faster Time to Market	Cloud technologies enable businesses to develop and deploy new products and services more quickly, as there is no need to spend time setting up physical infrastructure. Cloud platforms allow projects to be launched almost immediately, providing companies with a competitive advantage.
7	“As-a-Service” Model (XaaS)	A key factor in the growth of cloud technologies is the adoption of the “Everything as a Service” (XaaS) model, where companies can rent not only infrastructure (IaaS) but also platforms (PaaS) and software (SaaS). This allows businesses to focus on their core activities while leveraging ready-made solutions to support their operations.
8	High Availability and Reliability	Cloud technologies provide a high level of service availability through distributed data centers, helping to avoid downtime and minimize interruptions. Major cloud providers guarantee near 100% service availability, which is crucial for uninterrupted business operations.
9	Support for Sustainable Development	Using cloud solutions helps reduce energy and resource consumption, as centralized cloud data centers employ energy-efficient technologies. This enables businesses to lower their environmental impact and comply with modern sustainability standards.
10	Competitive Advantage	Companies using cloud solutions can be more flexible and respond faster to market changes, gaining a competitive edge. Cloud services allow businesses to quickly deploy new technologies and scale their operations efficiently.

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Cloud technologies enable businesses to remain competitive, flexible, and innovative, making this area one of the key directions in modern IT business. The most common cloud services are illustrated in Fig. 4.



Figure 4 – Principal Types of Cloud Services

A source: author's own compilation



Infrastructure as a Service (IaaS) – provides fundamental computing resources such as servers, networks, and storage.



Platform as a Service (PaaS) – offers platforms for application development, including necessary tools and development environments.



Software as a Service (SaaS) – provides ready-to-use applications, such as office suites, CRM, and ERP systems.

8.4 Artificial Intelligence (AI) and Machine Learning (ML) as a Promising Direction in the Field of Digital Business

Artificial Intelligence (AI) and Machine Learning (ML) have become some of the most widespread and promising areas in IT business due to their ability to transform various industries and deliver effective solutions for complex tasks. Their impact on business continues to grow due to several key factors, including:

- automation and optimization of business processes;
- processing of large volumes of data (Big Data);
- personalization;



- improving efficiency across industries;
- cybersecurity;
- development of autonomous systems;
- enhancement of customer service;
- innovation in manufacturing;
- improvement of user experience;
- increasing competitiveness.

AI and ML enable the automation of routine processes that previously required human labor. This allows businesses to optimize operations, reduce labor costs, and increase productivity. AI-based automation can be applied in areas such as logistics, manufacturing, customer service (chatbots), accounting, and more.

Through ML, companies can process large volumes of data (Big Data) more quickly and accurately than before. ML algorithms can identify hidden patterns and trends in data, providing businesses with valuable insights for strategic decision-making. This is particularly useful in marketing, financial services, healthcare, and e-commerce.

Artificial Intelligence allows businesses to create more personalized products and services for customers. For example, recommendation systems (used on platforms like Netflix or Amazon) can predict user needs and offer tailored solutions. This increases customer satisfaction and drives higher sales.

AI and ML are applied across various industries to enhance efficiency. In healthcare, AI is used for disease diagnosis, treatment outcome prediction, and medical imaging analysis, allowing clinicians to make faster and more accurate decisions. In financial services, particularly banking, AI assists in fraud detection, credit assessment, risk management, and process automation. In retail, ML supports inventory management, demand forecasting, pricing optimization, and consumer behavior analysis.

AI and ML are key technologies for developing autonomous systems, such as self-driving vehicles, drones, and robots. Autonomous transport systems are already being used in many sectors, from goods delivery to industrial processes. ML enables these



systems to learn independently and adapt to environmental changes.

AI also significantly improves customer service. AI-powered chatbots and virtual assistants provide 24/7 support, responding to inquiries and resolving issues in real time. This enhances the efficiency of support services and reduces staffing costs.

AI technologies can analyze user behavior and improve product interfaces and functionality based on collected data. This enables companies to create products that better meet user needs and expectations, increasing loyalty and satisfaction.

Companies that implement AI and ML in their business processes can adapt more quickly to market changes and utilize resources more efficiently. AI enables operational optimization, more informed decision-making, and forecasting future trends, providing businesses with a competitive advantage.

The development trends of AI and ML in business highlight three main directions:

- *Ethical considerations*, as increased AI adoption raises questions about algorithmic ethics and transparency, particularly in critical decision-making contexts;
- *Integration with other technologies*, as AI is increasingly combined with advanced technologies such as blockchain, IoT, and quantum computing;
- *Unsupervised learning*, as AI fosters new learning methods that do not require large datasets and makes learning accessible to a broader range of users.

Thus, AI and ML are key drivers of innovation and growth in IT business, opening new opportunities for automation, analytics, and personalized solutions for businesses and society.

8.5 Financial Technologies (FinTech) as a Promising Direction in the Field of Digital Business

Financial Technologies (FinTech) are also among the most widespread areas in IT business, thanks to innovative solutions that transform traditional financial services. FinTech encompasses a broad range of services, from mobile payments and digital banking to cryptocurrencies and blockchain technologies.

The key reasons for the popularity and development of FinTech include:



Digitalization of financial services: Technologies enable financial services to be provided via the Internet and mobile applications, significantly facilitating access to bank accounts, loans, investments, and other financial instruments. FinTech allows clients to manage their finances without visiting physical bank branches.

Mobile payments and digital wallets: One of the most common applications of FinTech is mobile payments and digital wallets, such as PayPal, Google Pay, and Apple Pay. These technologies enable fast and secure transactions, replacing traditional card or cash payments, simplifying purchases for both consumers and businesses.

Online banking and Neobanks: Neobanks (digital banks without physical branches) have gained popularity due to fast and convenient access to banking services. They offer a wide range of services, including account opening, international payments, card management, and loans via mobile applications. Fig. 5 shows examples of neobanks successfully operating in Ukraine.

Fourth, lending and P2P platforms. FinTech also transforms lending by providing access to loans through online platforms. Peer-to-peer (P2P) lending platforms, such as Binance, BingX, Phemex, Bitcoin Global (WhiteBit), Qmall, ByBit, KuCoin, and others, allow users to both borrow and lend funds without the intermediation of traditional banks. This increases access to financing for small businesses and individuals, often offering better terms than conventional financial institutions.



Figure 5 – Neobanks Functioning in Ukraine

A source: author's own compilation



Fifth, cryptocurrencies and blockchain. One of the most revolutionary areas of FinTech is the development of cryptocurrencies, such as Bitcoin, Ethereum, and others. Cryptocurrencies offer a new method of exchange and store of value, independent of traditional financial systems. The blockchain technology underlying cryptocurrencies enables the creation of decentralized platforms for financial transactions, ensuring high levels of security and transparency.

Sixth, regulatory automation – RegTech (Regulatory Technology). RegTech is a FinTech subsegment focused on automating regulatory compliance processes. It enables financial institutions to automatically perform compliance checks (e.g., AML/KYC – anti-money laundering and customer identification), reducing the risk of violations and financial penalties. Automating regulatory processes decreases the burden on financial companies and enhances operational efficiency.

Seventh, inclusivity and financial accessibility. FinTech makes financial services more accessible to people who previously lacked access to traditional banking services, such as those in remote regions or individuals not meeting strict bank requirements. Mobile financial applications allow users to open accounts and manage finances without visiting bank branches.

Finally, speed of innovation. FinTech accelerates innovation in the financial sector compared to traditional banking institutions. FinTech startups often experiment with new technologies, test business models, and respond more rapidly to market demands. This drives industry development and increases competition in the financial services market. Fig. 6. illustrates the main advantages of FinTech for businesses.

Among the trends and challenges in FinTech is collaboration with traditional banks. Many FinTech companies cooperate with established financial institutions to provide innovative services, combining the agility of startups with the stability of large players. Additionally, the rapid growth of FinTech attracts regulatory attention, creating new challenges for companies in terms of compliance with local and international regulations. As FinTech develops, the risk of cyberattacks also increases, necessitating continuous improvement of security mechanisms.

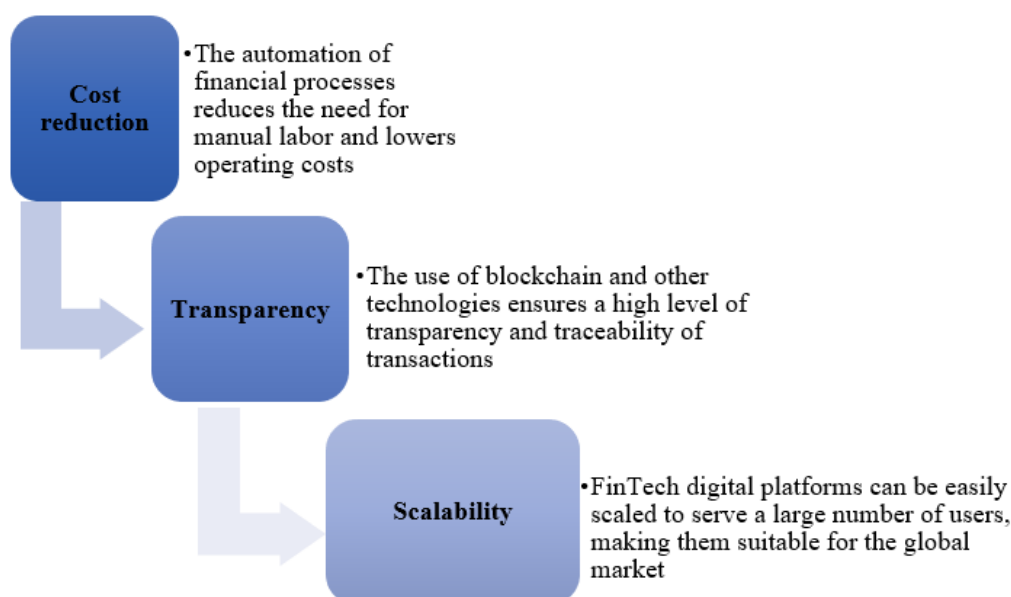


Figure 6 – Key Benefits of FinTech for Businesses

A source: author's own compilation

The most common areas of FinTech include:

- Payments and transfers (mobile and contactless payment technologies);
- Online banking (mobile applications for financial management);
- Investments (platforms for automated capital management);
- Lending (P2P platforms and fast online lending);
- Insurance (InsurTech) (automation and personalization of insurance services);
- Cryptocurrencies and blockchain (new methods of exchanging and storing assets).

Thus, FinTech continues to transform the delivery of financial services, making them more accessible, convenient, and efficient. This creates new opportunities for innovation while posing challenges for traditional market players.

8.6 Extended Reality (XR) and the Internet of Things (IoT) in Business

Extended Reality (XR) and the Internet of Things (IoT) have also emerged as highly promising and innovative areas in IT business. These technologies have the potential to change the way users interact with digital and physical objects, creating



new business opportunities across various industries.

Extended Reality (XR) has unique characteristics and capabilities, enabling the integration of digital elements into the real world through cameras, displays, and specialized devices (e.g., smartphones or smart glasses). XR allows users to view additional information or interact with virtual objects within real environments.

Fig. 7 illustrates the potential applications of this promising and innovative area in IT business: Extended Reality (XR).

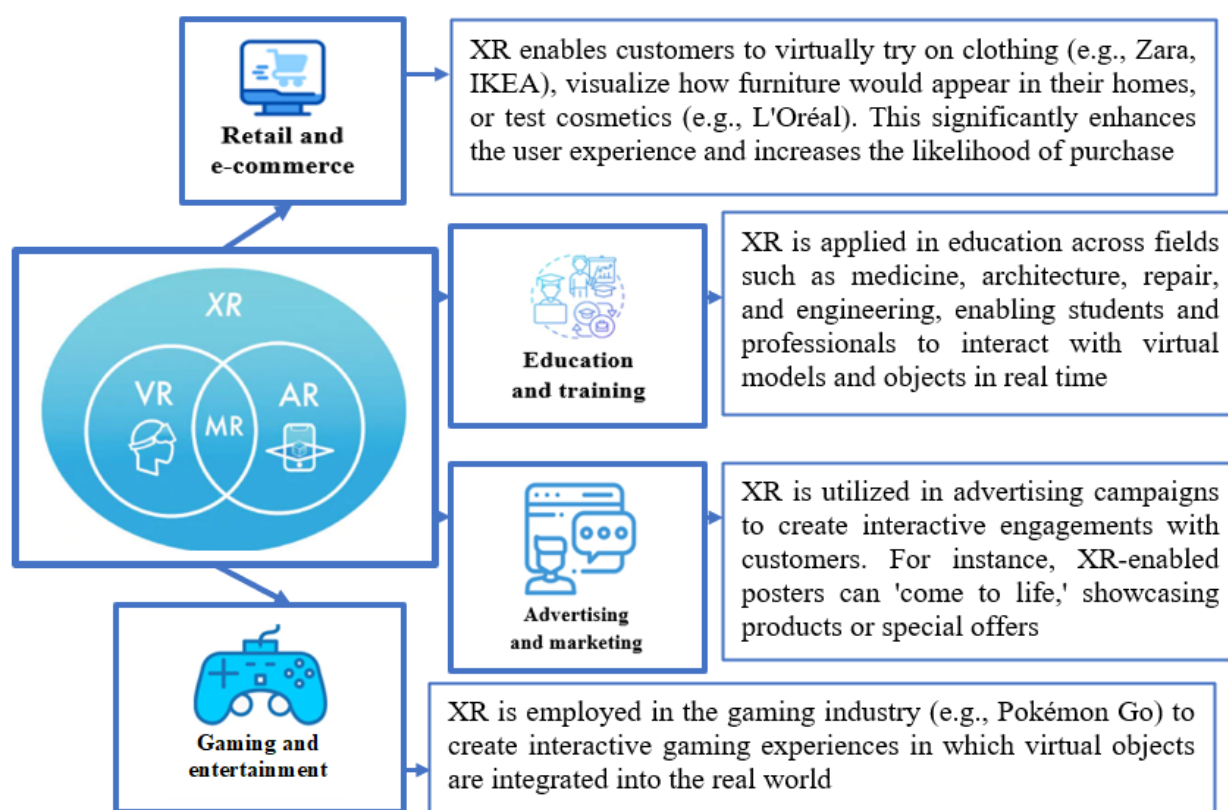


Figure 7 – Utilization of Extended Reality as a Business Area in IT
A source: author's own compilation

The XR market is growing due to improvements in mobile technologies and increased accessibility of XR platforms. In the future, XR is expected to become an integral part of many industries, providing new opportunities for interaction with customers and employees.

The Internet of Things (IoT) is a network of interconnected devices that collect and exchange data via the Internet. These devices may be equipped with sensors, software, and network connectivity, enabling automation of various processes and



data-driven decision-making.

The range of applications is diverse. For example, in the construction and real estate sector, Smart Home technologies use IoT devices such as smart thermostats, security systems, lighting, and household appliances, allowing users to automate home management via smartphones or voice assistants (e.g., Amazon Alexa, Google Home). This enhances comfort and energy efficiency for current and future clients. In industry, IoT is used for equipment condition monitoring, production process optimization, predictive maintenance, and downtime reduction. IoT enables the creation of “smart” factories with high levels of automation. In healthcare, IoT facilitates remote patient monitoring, medical device management, and improvements in healthcare systems through analysis of large patient datasets. IoT is also highly beneficial in logistics, enabling real-time tracking of cargo location and condition, automating vehicle management, and optimizing supply chains.

Looking ahead, the development of 5G networks will significantly enhance IoT capabilities, allowing the connection of a greater number of devices with faster data transfer rates. The number of IoT devices is expected to increase substantially across all sectors, from consumer products to industrial applications.

8.7 The Role of IT Consulting and Outsourcing Services in Business

Development

IT consulting and IT outsourcing are among the most popular and strategically important areas in the IT business. Both approaches enable companies to manage their information technologies effectively, optimize business processes, and reduce costs associated with IT infrastructure development and maintenance.

IT consulting involves providing expert services for planning, managing, developing, and implementing IT strategies for businesses. IT consultants help organizations utilize modern technologies more efficiently to solve business problems, optimize processes, and enhance competitiveness. Fig. 8 illustrates the objectives toward which IT consulting is directed in entrepreneurial activities.



IT consulting is most frequently applied in project management. Consulting supports the management of large IT projects, from developing technical specifications to implementation and post-project analysis. It is also indispensable for system integration, where consultants assist in integrating diverse IT systems within a company to ensure the seamless operation of all components. Recently, one of the most common IT consulting services has been the transition to cloud-based solutions, which allows companies to reduce costs associated with maintaining IT infrastructure.

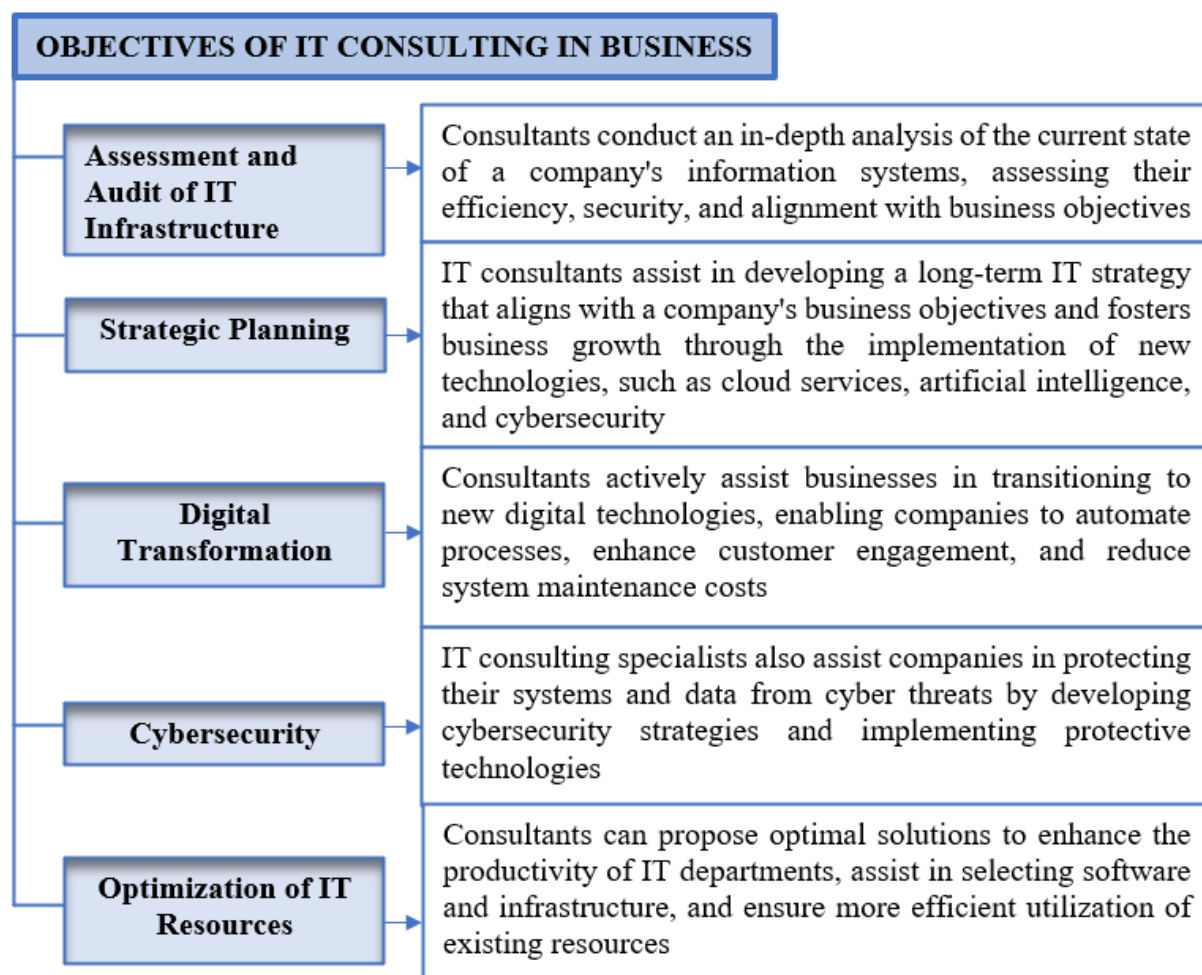


Figure 8 – Key Objectives of IT Consulting in Entrepreneurial Activities
A source: author's own compilation

IT outsourcing involves delegating responsibility for specific IT tasks or the management of entire IT functions to external contractors. This approach enables businesses to focus on their core activities while entrusting IT specialists with tasks such as infrastructure support, software development, or cybersecurity. However, the use of IT outsourcing has both advantages and disadvantages that should be carefully



considered in entrepreneurial activities (Table 3).

Table 3 – Advantages and Disadvantages of IT Outsourcing in Entrepreneurship

Advantages of IT Outsourcing	Disadvantages of IT Outsourcing
Access to Expert Knowledge. Collaborating with IT outsourcing companies provides access to highly skilled specialists across various IT domains, which the company may not have in-house.	Security and Confidentiality. Outsourcing the management of data or IT systems to external providers may introduce additional risks related to information security.
Cost Reduction. Outsourcing enables companies to lower expenses associated with maintaining an in-house IT team, as they only pay for specific services required at a given time.	Dependence on an External Provider. A company becomes reliant on the quality and reliability of the IT service provider, which may create risks in the event of a provider change or the emergence of conflicts.
Flexibility and Scalability. Companies can quickly adapt their IT resources to market changes or business growth, as outsourcing partners are capable of rapidly scaling the services provided.	Potential Communication Issues. If the outsourcing company is located in a different country or time zone, this may create difficulties in coordination and communication.
Focus on Core Business Activities. By outsourcing IT functions, a company can concentrate on its core operations, thereby reducing the burden on internal resources.	

A source: author's own compilation

IT outsourcing in entrepreneurship is an effective tool for reducing costs, enhancing flexibility, and gaining access to highly qualified specialists, enabling businesses to focus on their core activities. However, enterprises must consider the risks associated with dependence on external providers, as well as potential security and communication challenges. Selecting the right outsourcing partner is crucial for achieving success and minimizing these risks.

As we can see, entrepreneurship in the IT sector is extremely diverse, and its success depends on several key aspects that influence business efficiency and its capacity to grow in a competitive environment. Continuous implementation of new technologies and innovative solutions is vital for success in IT business. Companies that remain at the forefront of technological development have a greater chance of gaining a competitive advantage. The use of artificial intelligence, machine learning, cloud solutions, and other modern technologies helps create new products or improve existing ones.

The IT sector changes rapidly, making the ability to adapt to new market



conditions, technological changes, and customer needs critically important. Flexibility is also reflected in development methodologies (e.g., Agile, Scrum), which allow for effective project management and rapid response to changes.

The presence of qualified specialists is key to success. Building a strong team of developers, managers, marketers, and other professionals ensures high-quality products and services. Leaders and technical experts capable of making strategic decisions and guiding the team and business to success are especially important. At the same time, effective project management ensures tasks are completed on time, within budget, and in accordance with client requirements. Choosing the right tools for planning, monitoring, and process control is critical for the successful completion of projects.

Financial control, competent budget management, and understanding key financial indicators help prevent resource shortages for business development or project execution. Access to funding sources, such as investors or venture capital, is also important for rapid growth and business scaling.

Successful IT businesses are customer-oriented and continuously improve products and services according to client requirements. Feedback from customers helps enhance service quality and maintain long-term relationships. A personalized approach to clients and the ability to address their issues significantly increase the likelihood of success in entrepreneurship.

Running an IT business requires understanding and complying with legal requirements, particularly regarding data protection (e.g., GDPR), intellectual property, and licensing. Special attention should be paid to contracts, taxation, and legal safeguards.

Equally important is having a strong marketing strategy to promote products or services in the market. This includes the use of online advertising, content marketing, SEO, SMM, and other tools to increase brand awareness and attract customers. Creating a unique brand with clear positioning helps stand out in the market.

For IT businesses, entering international markets is a critical aspect. This requires considering the specifics of other markets, legal requirements, and cultural differences.



Establishing foreign economic activity (FEA) and proper documentation is essential.

Data security and system protection are critical aspects of IT business. Reliable information protection mechanisms and continuous security monitoring help prevent cyberattacks and data loss, which could result in financial losses and reputational damage.

Successful IT entrepreneurship requires combining technical innovation, a high-quality team, effective project management, and a customer focus. Flexibility, cybersecurity, and financial literacy are also integral components of long-term success in the IT sector.

Summary and conclusions.

This section presents a comprehensive study of the main directions of entrepreneurship development in the field of information technology, which has made it possible to systematize key trends in digital business transformation and identify the leading technological vectors of the modern IT market. The research provides a detailed analysis of the fundamental components of IT entrepreneurship, including software development, cybersecurity, cloud computing, artificial intelligence (AI) and machine learning (ML), financial technologies (FinTech), extended reality (XR), the Internet of Things (IoT), and IT outsourcing.

Based on the conducted analysis, it has been determined that each of these directions represents a strategically important element of the innovation-driven economy, contributing to the improvement of business process efficiency, the development of new forms of entrepreneurial activity, and the formation of competitive advantages in the global market. The study reveals the growing significance of digital business models founded on automation, cloud-based solutions, SaaS platforms, and artificial intelligence technologies.

It is established that cybersecurity serves as a key factor in ensuring the stability of digital infrastructure, while cloud computing provides scalability and cost optimization for enterprises. The research demonstrates that artificial intelligence has



become a driving force of digital evolution, transforming approaches to data management, customer interaction, and strategic planning. The FinTech sector is identified as one of the most dynamic areas, transforming the financial ecosystem through innovative services in electronic payments, investments, and lending.

Furthermore, it has been found that XR and IoT technologies are being actively integrated into various sectors of the economy, including education, healthcare, manufacturing, and marketing, contributing to the creation of “smart” systems and enhancing the level of interaction between businesses and consumers. IT outsourcing is recognized as an effective tool for cost optimization and business flexibility, particularly in the context of global competition.

Thus, the findings of this study confirm that IT entrepreneurship serves as a key driver of the digital transformation of the modern economy. It fosters innovation, international integration, and the creation of new formats of collaboration between business and technology.

Promising directions for further research include analyzing the impact of artificial intelligence on labor productivity and employment structures, studying the effectiveness of FinTech integration into banking systems, and assessing the economic impact of XR and IoT technologies on business models. Special attention should also be paid to exploring mechanisms for managing cybersecurity risks and examining the influence of international cooperation on the development of IT outsourcing in Ukraine and worldwide.