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КЛЮЧОВА РОЛЬ ІТ-СЕРВІСНИХ КОМПАНІЙ У РОЗВИТКУ СУЧАСНОЇ ЕКОНОМІКИ

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THE CRUCIAL ROLE OF IT SERVICE COMPANIES IN DRIVING THE MODERN ECONOMY

Abstract. This article provides a comprehensive analysis of the vital role IT service companies play in driving the modern digital economy, focusing on their functions, benefits, and the challenges they encounter. The research begins with an overview of different types of IT service companies, including consulting firms, outsourcing companies, and cloud service providers. Each type is examined in terms of its specific contributions to technological innovation and business transformation. Companies such as EPAM, Accenture, Intellias, SoftServe, GlobalLogic, Endava, and Globant are highlighted for their pivotal roles in providing specialized services that enable businesses

to leverage advanced technologies, foster digital transformation in different industries and development of new smart economy. To better understand the impact of IT-service companies on modern economy it was conducted a detailed comparative analysis between traditional consulting firms (the Big 4 and Big 3) and modern IT service companies. The analysis reveals how traditional firms are increasingly venturing into the digital and technology spaces, often collaborating with IT service providers to offer comprehensive digital transformation solutions. Examples of competition and collaboration between these entities illustrate the evolving dynamics in the consulting and IT services market. The article emphasizes the benefits of collaborating with IT service companies, such as cost-effectiveness, access to specialized knowledge in fields like AI, cybersecurity, cloud computing, and data analytics which is crucial in the process of business transformations and transition to so called smart economy. It includes case studies and examples of successful collaborations that have led to significant business growth and innovation, demonstrating the practical advantages of these partnerships. The role of IT service companies in facilitating digital transformation across various sectors is explored, with examples of successful digital transformation projects and their outcomes. These companies are shown to be instrumental in developing and implementing digital strategies, modernizing IT infrastructure, enabling data-driven decision-making, enhancing customer experience, and supporting agile transformation. Challenges faced by IT service companies are discussed, including talent acquisition and retention, rapid technological advancements, cybersecurity threats, and high client expectations. The article also addresses the competitive pressures from emerging markets and the need for continuous improvement and differentiation. It was identified future trends in the IT services market in modern economy which has significant presence of digital technologies. The adoption of agile and DevOps practices is also highlighted as a key trend driving efficiency and innovation in software development and IT operations. The conclusion reaffirms the importance of IT service companies in the development of modern economy, emphasizing their crucial role as strategic partners in innovation. The future potential of these companies is discussed, noting their contributions to shaping industries and economies globally. The evolving landscape of IT services is predicted to continue driving progress and enabling businesses to achieve new heights of success, underlining the indispensable role of IT service companies in fostering sustainable economic development.

Key words: IT-Service Companies, Modern Economy, AI, Data Science, Cybersecurity, Digital Transformation, Business Transformation.

JEL codes: O33, L86, M15

Анотація: У статті надано всебічний аналіз важливої ролі IT-сервісних компаній у стимулюванні сучасної цифрової економіки, зосереджуючись на їхніх функціях, перевагах та викликах, з якими вони стикаються. Дослідження починається з огляду різних типів IT-сервісних компаній, включаючи консалтингові фірми, аутсорсингові компанії та постачальників хмарних послуг. Кожен тип розглядається з точки зору його специфічного внеску в технологічні інновації та бізнес-трансформації. Компанії, такі як EPAM, Accenture, Intellias, SoftServe, GlobalLogic, Endava та Globant, висвітлюються як ключові постачальники спеціалізованих послуг, що дозволяють бізнесам використовувати передові технології, сприяти цифровій трансформації в різних галузях та розвивати нову розумну економіку. Щоб краще зрозуміти вплив IT-сервісних компаній на сучасну економіку, було проведено детальний порівняльний аналіз між традиційними консалтинговими фірмами (Велика четвірка та Велика трійка) та сучасними IT-сервісними компаніями. Аналіз показує, як традиційні фірми все частіше виходять на цифрові та технологічні ринки, часто співпрацюючи з IT-сервісними постачальниками для надання комплексних рішень з цифрової трансформації. Приклади конкуренції та співпраці між цими суб'єктами ілюструють еволюційні динаміки на ринку консалтингових та IT-послуг.Стаття підкреслює переваги співпраці з IT-сервісними компаніями, такі як економічна ефективність, доступ до

спеціалізованих знань у таких сферах, як ШІ, кібербезпека, хмарні обчислення та аналіз даних, що є вирішальним у процесі бізнес-трансформацій та переходу до так званої розумної економіки. Вона включає приклади успішних співпраць, що призвели до значного зростання бізнесу та інновацій, демонструючи практичні переваги цих партнерств. Роль ІТ-сервісних компаній у сприянні цифровій трансформації в різних секторах досліджується на прикладах успішних проектів цифрової трансформації та їх результатів. Ці компанії показані як інструментальні у розробці та впровадженні цифрових стратегій, модернізації ІТ-інфраструктури, забезпеченні прийняття рішень на основі даних, підвищенні якості обслуговування клієнтів та підтримці гнучкої трансформації.
Обговорюються виклики, з якими стикаються ІТ-сервісні компанії, включаючи залучення та утримання талантів, швидкі технологічні зміни, загрози кібербезпеці та високі очікування клієнтів. Стаття також висвітлює конкурентний тиск з боку ринків, що розвиваються, та необхідність постійного вдосконалення та диференціації. Були визначені майбутні тенденції на ринку ІТ-послуг в сучасній економіці, яка має значну присутність цифрових технологій. Прийняття гнучких практик та DevOps також підкреслюється як ключова тенденція, що стимулює ефективність та інновації у розробці програмного забезпечення та ІТ-операціях. Висновок підтверджує важливість ІТ-сервісних компаній у розвитку сучасної економіки, підкреслюючи їх ключову роль як стратегічних партнерів в інноваціях. Обговорюється майбутній потенціал цих компаній, зазначаючи їх внесок у формування галузей та економік у всьому світі. Прогнозується, що еволюція ландшафту ІТ-послуг продовжуватиме стимулювати прогрес та дозволяти бізнесам досягати нових висот успіху, підкреслюючи незамінну роль ІТ-сервісних компаній у сприянні стійкому економічному розвитку.

Ключові слова: ІТ-сервісні компанії, сучасна економіка, ШІ, наука про дані, кібербезпека, цифрова трансформація, бізнес-трансформація.

Introduction. In today's rapidly evolving economic landscape, technology has emerged as a pivotal driver of growth and innovation. The development of the digital economy and ICT-based cyber- physical systems is a priority field for global technical, techno- logical, social, economic and institutional transformations [**1].** Technological innovations play a particularly important role in the development of Smart Industry, a key aspect of which is the integration of digital technology into industrial value chains [3]. The new industry generates disruptive manufacturing technologies that change individuals and society, leading to transformations in the geo-economic structure and forming a new cyber-physical reality. Disruptive technologies are those that impact the normal operation of an industry or market, displacing established products or technologies, and creating a new industry or market [3].

The new industrial era is characterized by disruptive manufacturing technologies that alter human and societal interactions, lead to the transformation of the geoeconomic structure, and create a new cyber-physical reality. Disruptive technologies impact the normal operation of an industry or market, displacing established products or technologies, and creating new sectors or markets [4]. Blockchain technology and 5G networks are integral to the digitalization of various sectors, enhancing efficiency, security, and connectivity [5]. Blockchain ensures secure, transparent transactions and data management, while 5G provides the high-speed connectivity necessary for the seamless operation of IoT devices and smart systems [1]. Research on mathematical methods and models for long-term industrial development reveals significant insights into optimizing resource allocation, forecasting market trends, and enhancing production efficiency [4]. These models

help predict the impact of technological advancements on industrial growth and competitiveness [4]. The integration of digital technologies, including blockchain and 5G, alongside innovative modeling techniques, is crucial for enhancing national competitiveness in the digital economy. As industries evolve, embracing these advancements will be key to sustaining growth and leading in the global market.

The integration of advanced technologies such as artificial intelligence (AI), cloud computing, cybersecurity, and data analytics is transforming the way businesses operate, compete, and engage with their customers. However, the development and implementation of these technologies often require specialized expertise and substantial investment, which can be prohibitively expensive for many enterprises. This is where IT service companies play a crucial role.

IT service companies, including prominent players like EPAM, Accenture, Intellias, SoftServe, GlobalLogic, Endava, and Globant, provide essential technological solutions and services that enable businesses to harness the power of modern technology without the need for extensive in-house capabilities. These companies offer a range of services from system integration and IT outsourcing to custom software development and strategic consulting, making them indispensable partners in the digital transformation journey of various industries. As technology becomes increasingly integral to business success, IT service companies have become more relevant than traditional consulting giants such as the Big Four (PwC, Ernst & Young, Deloitte, KPMG) and the Big Three (McKinsey, Bain, BCG). These traditional firms are now expanding their footprints in the digital and technology space, competing with IT service providers like Cognizant and Tata Consultancy Services. Meanwhile, IT service companies are broadening their scope, offering end-to-end digital transformation services and stepping into the consulting domain. This article aims to explore the significant impact of IT service companies on the modern economy. It will examine their role in driving technological innovation, enabling businesses to achieve market leadership, and fostering competitive advantage. Through an analysis of their functions, benefits, and the evolving competitive landscape, this article will highlight why IT service companies are essential for businesses and smart industry seeking to thrive in the digital age.

Literature review. Zaripov discusses the significance of cloud service providers in the digital economy, noting that cloud computing technologies have become indispensable for modern organizations. The study highlights how IT service companies offering cloud services contribute to economic development by enabling businesses to scale efficiently and securely [6]. Ivanov summarizes the global experience of IT companies' management, revealing that the integration of modern IT solutions significantly enhances business processes. The research underscores the importance of IT service companies in ensuring the national security of states and improving the efficiency of production through advanced technologies [7]. Research indicates that traditional consulting firms, including the Big Four and Big Three, are increasingly venturing into the digital and technology space. This shift is driven by the need to remain relevant and competitive in an economy where technological expertise is paramount. The competition between traditional consulting firms and IT service companies is reshaping the consulting industry, with both sectors striving to offer comprehensive digital transformation solutions. The literature consistently highlights the transformative impact of IT service companies on various industries.

By providing expertise in cloud computing, AI, cybersecurity, and data analytics, these companies enable businesses to adopt cutting-edge technologies that drive efficiency, innovation, and market competitiveness. The collaboration between businesses and IT service companies is essential for achieving significant technological advancements and economic growth. The reviewed literature underscores the critical role of IT service companies in the modern economy. Their ability to offer specialized technological solutions and services is pivotal for businesses aiming to navigate the complexities of digital transformation and maintain competitive advantages in an increasingly digital world. Kalyan Chakraborty and William S. Remington (2004) investigate the effects of offshore outsourcing on the US economy. They found that while outsourcing reduces the price of IT hardware and boosts productivity, it also raises concerns about job losses. Their study suggests that the net effect of outsourcing is positive, contributing significantly to GDP growth [8]. B. Cohen discusses how IT has improved business operations and product development in the US. The study highlights that advanced IT infrastructure enhances service delivery, benefiting both businesses and consumers [9]. Derek F. Channon explores the impact of IT on the retail financial services industry, particularly in deregulated markets in Europe. The integration of banking, insurance, and brokerage sectors driven by IT has led to cost reductions and improved service quality, emphasizing the strategic importance of IT service companies in the EU [10], [11]. Gopinath Krishnan and Vinod Ravindran examine the adoption of IT service management (ITSM) frameworks like ITIL in Europe, originally developed by the UK government. The study shows that automation in ITSM has transformed industries by optimizing service delivery and reducing costs, underlining the essential role of IT service companies in the European economy [12]. The work by Derek F. Channon also provides insights specific to the UK, where deregulated markets have seen significant integration of financial services driven by IT. This integration has resulted in innovative service delivery models and cost efficiencies, underscoring the pivotal role of IT service companies [10], [11]. This study [13] investigates how outsourcing IT services impacts the performance of IT operations and the overall organization. The research found that outsourcing can have both positive and negative effects, emphasizing the importance of collaboration between in-house IT teams and outsourced service providers for optimal service delivery and process alignment. This paper [14] analyzes the role of IT in business growth and economic performance. It highlights how IT innovations facilitate business penetration into new markets and enhance overall business performance through improved communication and information exchange. This research [15] discusses how outsourcing improves organizational performance by enabling efficient resource allocation. The study emphasizes the global market's evolution through business cooperation and outsourcing as a strategic tool for enhancing competencies. This review explores how digital technologies, including IT services, have driven economic growth and productivity across various industries. The study provides insights into the transformative effects of digitization on business operations and societal interactions [16].

Common Gaps in Existing Literature. Many studies primarily focus on the impacts of IT services and outsourcing in specific regions, often neglecting a comprehensive global perspective. There is a need for comparative analyses that explore these impacts across different economic contexts, including developed and

developing nations. Existing research often examines the effects of IT outsourcing and consulting in isolation, without considering their broader implications on overall business strategy, organizational culture, and long-term competitiveness of organizations as well as certain industries. Few studies delve deeply into the practical challenges and best practices for integrating outsourced IT services with in-house operations. This includes the need for effective communication, alignment of goals, and management of outsourced teams. There is an imbalance between quantitative data on the economic impact of IT services and qualitative insights into how these services affect organizational processes, employee morale, and customer satisfaction. Rapid technological advancements mean that many studies quickly become outdated. There is a need for continuous research to keep up with emerging trends such as AI, machine learning, and cybersecurity.

Goal of the Article. To provide a comprehensive analysis of the critical role of IT service companies in driving modern economic growth and business transformation of the organization or even industries, emphasizing the importance of the synergies between IT consulting, outsourcing, and in-house IT operations.

Main part.

Section 1: The Role of Technology in the Modern Economy. Technology has become a cornerstone of modern economic growth, driving innovation, improving productivity, and fostering global competitiveness. The advent of digital technologies has transformed traditional industries, enabling them to operate more efficiently and reach new markets. Technologies such as artificial intelligence (AI), cloud computing, and the Internet of Things (IoT) are not just enhancing existing processes but also creating entirely new business models and opportunities. One of the primary ways technology drives economic growth is through increased productivity of organizations and certain industries. For example, automation and AI enable businesses to streamline operations, reduce costs, and increase output. According to a study by the McKinsey Global Institute, AI has the potential to add $13 trillion to global GDP by 2030 by enhancing labor productivity and innovation [17]. Moreover, technology facilitates the creation of new industries and the expansion of existing ones. The rise of the digital economy has led to the emergence of sectors such as e-commerce, fintech, and digital marketing, which have become significant contributors to economic growth. For instance, the global e-commerce market was valued at $9.09 trillion in 2019 and is expected to grow at a CAGR of 14.7 % from 2020 to 2027 [18].

Examples of Technological Innovations Impacting Industries

– AI and machine learning are revolutionizing various industries by enabling smarter decision-making and predictive analytics. In healthcare, AI algorithms can analyse medical data to predict disease outbreaks or recommend personalized treatment plans. In finance, AI-powered algorithms improve fraud detection and automate trading strategies [19].

– Cloud computing has transformed the IT landscape by providing scalable and cost-effective computing resources. Companies no longer need to invest heavily in physical infrastructure; instead, they can leverage cloud services to access computing power, storage, and applications on demand. This shift has enabled businesses to scale rapidly and innovate without the constraints of traditional IT infrastructure [20].

– IoT is connecting billions of devices worldwide, enabling the collection and analysis of vast amounts of data. In manufacturing, IoT devices monitor machinery and predict maintenance needs, reducing downtime and improving efficiency. In agriculture, IoT sensors optimize irrigation and monitor crop health, leading to better yields and resource management [21].

– Blockchain offers a decentralized and secure way to record transactions, which is particularly transformative for industries like finance, supply chain management, and healthcare. It ensures transparency and security in financial transactions, reduces fraud, and streamlines supply chains by providing real-time tracking of goods [22].

– As businesses increasingly rely on digital technologies, the importance of cybersecurity cannot be overstated. Advanced cybersecurity measures protect sensitive data, maintain customer trust, and ensure compliance with regulations. Innovations in cybersecurity, such as AI-based threat detection, are essential in safeguarding digital infrastructure [23].

The integration of advanced technologies into business operations has become indispensable for economic growth and competitive advantage of organizations. By fostering innovation, improving productivity, and enabling new business models, technology continues to be a key driver of economic transformation. As industries evolve, the role of IT service companies becomes ever more critical in facilitating this technological adoption and helping businesses navigate the complexities of the digital age.

Section 2: Types of IT Service Companies and Their Functions. IT service companies are broadly categorized into consulting firms, outsourcing companies, and cloud service providers. Each type plays a unique role in supporting business operations and technological transformation in table 1.

IT service companies, encompassing consulting firms, outsourcing companies, and cloud service providers, play crucial roles in modernizing and enhancing business operations. Consulting firms provide strategic guidance and expert advice on optimizing IT infrastructure, aiding businesses in aligning their technology with overarching goals. Outsourcing companies offer a comprehensive suite of IT services, allowing businesses to delegate their IT needs and concentrate on their core competencies. Meanwhile, cloud service providers furnish scalable and flexible IT resources, enabling businesses to efficiently manage and expand their technological capabilities without substantial capital investment. Together, these IT service sectors drive innovation, operational efficiency, and digital transformation across industries.

Section 3: Benefits of Collaborating with IT Service Companies. Collaborating with IT service companies offers significant cost advantages compared to developing capabilities in-house. Outsourcing eliminates the need for substantial investments in infrastructure, recruitment, and training. Companies can leverage the existing expertise and resources of IT service providers, reducing operational costs and time-to-market. Outsourcing allows businesses to convert fixed costs into variable costs, freeing up capital for other investments [27]. IT service providers operate on economies of scale, offering services at a lower cost due to their specialized focus and optimized processes [28]. IT service companies bring deep expertise in cutting-edge technologies that are essential for modern business operations. These companies have dedicated teams focused on areas like AI, cybersecurity, cloud computing, and data analytics, providing clients with access to the latest innovations without the need for

internal development. IT service firms offer AI solutions that can transform business operations, from automation to advanced data analytics. This specialized knowledge helps companies implement AI-driven strategies efficiently [29]. Collaborating with IT service providers ensures robust cybersecurity measures are in place, protecting businesses from evolving threats. Providers stay up-to-date with the latest security trends and regulations, offering comprehensive protection [30]. Cloud service providers enable businesses to scale their IT resources according to demand, enhancing flexibility and reducing costs associated with maintaining physical infrastructure [31]. IT service companies provide advanced data analytics solutions, helping businesses extract valuable insights from their data to drive informed decision-making [32].

Table 1

COMPARISON OF THE FUNCTIONS OF IT SERVICE PROVIDER, OUTSOURCING COMPANIES AND CLOUD PROVIDERS

	Definition	Functions:	Example:
IT Consulting Firms	These firms offer expert advice on the strategic use of IT to achieve business objectives. They assess an organization's IT environment and recommend improvements or new technologies.	IT consultants help with technology strategy, IT governance, business process improvement, and digital transformation. They often work on short-term projects aimed at enhancing IT infrastructure or deploying new systems.	Accenture provides IT consulting services that encompass strategy development, technology implementation, and IT transformation [24].
IT Outsourcing Companies	These companies provide comprehensive IT services, including software development, infrastructure management, and technical support, usually on a long-term contractual basis.	Outsourcing firms offer services such as application development, system integration, IT support, and maintenance. They enable businesses to focus on core activities while leveraging external expertise for IT needs.	EPAM Systems specializes in software engineering and IT consulting services, delivering end-to-end solutions for complex technological challenges [25].
Cloud Service Providers	Cloud service providers offer a range of services including data storage, computing power, and software applications delivered over the internet.	These providers offer infrastructure as a service (IaaS), platform as a service (PaaS), and software as a service (SaaS). They enable businesses to scale their IT resources according to demand and reduce capital expenditure on physical infrastructure.	Amazon Web Services (AWS) is a leading cloud service provider offering scalable cloud computing solutions for businesses of all sizes [26].

Source: [24, 25, 26].

Numerous case studies highlight the transformative impact of collaborating with IT service companies. These examples demonstrate how such partnerships can lead to significant business growth and innovation. Philips partnered with Accenture to implement a digital transformation strategy that leveraged AI and data analytics. This

collaboration resulted in improved operational efficiency and enhanced healthcare industry solutions [33]. EPAM collaborated with Google Cloud to provide scalable cloud solutions to various clients. This partnership enabled companies to enhance their IT infrastructure, leading to increased agility and innovation [34]. SoftServe helped Telenor, a telecommunications company, to modernize its IT systems and adopt digital solutions, resulting in improved customer experience and operational efficiency [35]. GlobalLogic worked with Toyota to develop advanced software solutions for connected vehicles, enhancing the company's innovation in the automotive industry [36]. Endava partnered with Worldpay to implement agile methodologies and modernize its payment processing systems, leading to faster transaction processing and better customer service [37].

Intellias Case Study: Digital Transformation in Solar Power Plant Construction with Intellias. This case study explores how Intellias, collaborated with Moss & Associates to develop a sophisticated construction management software tailored for solar power plant projects. The case highlights the challenges faced, the solutions provided, and the outcomes of this digital transformation initiative. Moss & Associates, a leading construction company in the U.S., sought to enhance their solar engineering, procurement, and construction (EPC) services. Their existing systems relied heavily on manual processes and lacked centralized integration, which impeded efficiency and real-time tracking. Moss required a comprehensive software solution to streamline project management, provide analytical insights, and facilitate effective decision-making across multiple solar projects. Intellias embarked on a detailed requirement-gathering and analysis phase to understand Moss's needs. Intellias developed a web application enabling project setup, status tracking, and data reporting. This included capabilities for geospatial and CAD visualization, allowing real-time updates and monitoring. The second phase focused on integrating analytical tools to provide insights into project performance, helping executives make informed decisions. Key features of the web application included: Centralized platform for tracking project progress and managing resources; Streamlined operations through intuitive UI and robust backend architecture; Ensured compatibility across various devices and offline functionality for field use. The implementation of Intellias' software led to significant improvements in Moss's operational efficiency. Key outcomes included:

- Increased Efficiency: Automated processes reduced manual workloads and enhanced data accuracy;
- Better Decision-Making: Analytical insights enabled proactive management and informed strategic decisions;
- Scalability and Flexibility: The scalable architecture allowed Moss to expand its digital capabilities as needed.

This project underscored the role of IT service companies like Intellias in driving digital transformation in traditional industries. By leveraging advanced technologies and bespoke software solutions, companies can significantly enhance operational efficiency and business intelligence [38].

Intellias Case Study: Enabling Nationwide Digital Transformation in Healthcare Services. Digital transformation in healthcare is crucial for improving patient care, efficiency, and overall health outcomes. This case study explores how Intellias collaborated with a national Ministry of Health of the Kingdom of Saudi

Arabia to introduce comprehensive eHealth services, enhancing the digital infrastructure of the healthcare sector. The Ministry of Health aimed to create a unified, omnichannel platform to support digital health innovations and improve patient-centric care. Intellias was chosen for their expertise in digital health technology and product development capabilities. The key challenges included transitioning from paper-based to electronic health records, consolidating health data, automating check-up processes, and ensuring a patient-centric approach. The urgency of the project required exceptional technical expertise and rapid implementation. Intellias mobilized a team of over 100 professionals to develop seven integrated products, including a patient portal, a communication platform for health practitioners, a motherhood application, a medical checkup system for expatriates, a school health screening solution, a hospital auditing platform, and a medical self-assessment tool.

Key Solutions:

1. **Patient Portal:** Provides 24/7 access to health records, appointment scheduling, and online consultations.
2. **Health Practitioner Platform:** Facilitates communication among doctors and supports e-prescriptions.
3. **Motherhood Application:** Guides women through pregnancy and early motherhood with digital health tools.
4. **Expatriate Medical Checkup System:** Streamlines visa-related health checks and consolidates data.
5. **School Health Screening Solution:** Monitors student health and vaccination records.
6. **Hospital Auditing Platform:** Automates compliance checks and audits.
7. **Self-assessment Tool:** Allows healthcare providers to self-evaluate compliance with standards.

The digital transformation led to numerous positive outcomes:

- Enhanced access to healthcare services
- Improved disease control and health monitoring
- Increased health awareness
- Elimination of paper-based processes
- Modernization and automation of healthcare services

Intellias' contribution was pivotal in winning the National Medical Award for strategic digital transformation efforts, significantly aiding the government's response to the COVID-19 pandemic. The collaboration between Intellias and the Ministry of Health has successfully modernized the national healthcare system, demonstrating the transformative power of digital solutions. This case study exemplifies how technology can bridge gaps in healthcare services, leading to better health outcomes and streamlined operations in healthcare industry [39].

Section 4: Comparative Analysis. The consulting industry has seen significant evolution with the rise of modern IT service companies. Traditional consulting firms, known as the Big 4 (PwC, Ernst & Young, Deloitte, KPMG) and Big 3 (McKinsey, Bain & Company, BCG), historically focused on strategic management consulting, auditing, and financial advisory. In contrast, modern IT service companies such as EPAM, Accenture, Intellias, SoftServe, GlobalLogic, Endava, and Globant specialize in technology services including software development, digital transformation, and IT

outsourcing. Traditional consulting firms offer a broad range of services, including strategy, operations, risk management, and financial consulting. Modern IT service companies focus more on technological implementation, digital solutions, and IT infrastructure [40]. Traditional firms often engage at the C-suite level, influencing high-level strategic decisions. IT service companies are typically involved in the execution phase, implementing technology solutions to realize strategic goals [41]. Recognizing the growing importance of digital transformation, traditional consulting firms have aggressively expanded into the technology sector. They are acquiring or partnering with IT service firms to enhance their capabilities in areas like cloud computing, AI, and cybersecurity. PwC has invested heavily in building its digital consulting practice, acquiring several tech firms and integrating advanced digital solutions into its service offerings [42]. Deloitte Digital offers a wide array of digital services, from strategy and implementation to user experience design and technology development. The firm has developed its own technology platforms and solutions [43]. McKinsey has launched McKinsey Digital, focusing on helping clients with digital strategy, technology transformations, and agile operations [44]. The competitive landscape has evolved, with traditional consulting firms and IT service companies both competing and collaborating to deliver comprehensive solutions to clients. Accenture and Deloitte often compete for large-scale digital transformation projects. However, they also collaborate on specific initiatives where their combined expertise can deliver superior outcomes [45]. KPMG has partnered with IBM to enhance its cognitive and analytics capabilities, integrating IBM's AI technologies into its consulting services [46]. EY collaborates with Microsoft to develop digital solutions for clients, leveraging Microsoft's cloud and AI technologies to enhance EY's consulting offerings [47]. The dynamics between traditional consulting firms and IT service companies are characterized by both competition and cooperation. While they compete for market share and client projects, they also recognize the benefits of leveraging each other's strengths through strategic alliances. Traditional consulting firms compete with IT service companies by building or acquiring technology capabilities, aiming to offer end-to-end services. Conversely, IT service companies are expanding their consulting services to provide strategic insights in addition to technological solutions [48]. Collaboration often occurs when the strengths of both types of firms are needed to address complex client challenges. Joint ventures and strategic partnerships are common, allowing firms to pool resources and expertise to deliver comprehensive solutions to improve business results of the organizations [49].

Section 5: Impact on Digital Transformation. IT service companies play a pivotal role in facilitating digital transformation across various industries by providing the necessary technological expertise and resources. They help businesses to develop and implement digital strategies [50]. IT service companies assist organizations in creating comprehensive digital strategies that align with their business goals. This includes identifying key areas for digital transformation, selecting appropriate technologies, and creating a roadmap for implementation. They also help businesses upgrade their IT infrastructure to support new digital initiatives. This involves migrating legacy systems to modern platforms, integrating cloud computing solutions, and ensuring robust cybersecurity measures [51]. By implementing advanced analytics and AI, IT service companies enable organizations

to leverage their data for better decision-making. They provide tools and platforms for collecting, analyzing, and visualizing data to derive actionable insights [52]. IT service companies develop digital solutions that improve customer engagement and satisfaction. This includes creating user-friendly websites and mobile apps, implementing CRM systems, and personalizing customer interactions through AI [53]. They can also guide organizations in adopting agile methodologies to improve flexibility and speed in project delivery. This involves training teams in agile practices, implementing agile tools, and fostering a culture of continuous improvement [54]. As an examples of digital transformation projects could be reviewed case of Accenture and Carnival Corporation. Accenture helped Carnival Corporation, a global cruise company, develop the Ocean Medallion wearable device and a connected ecosystem to enhance the guest experience. The project resulted in a highly personalized and seamless cruise experience for guests, increased operational efficiency, and new revenue streams for Carnival [55]. Another example is EPAM and Wolters Kluwer. EPAM partnered with Wolters Kluwer, a global provider of professional information, to develop an advanced digital platform for legal professionals. The platform improved access to critical legal information, streamlined workflows, and enhanced collaboration among legal professionals, leading to greater productivity and user satisfaction [56]. Good sample is cooperation between Intellias and HERE Technologies. Intellias worked with HERE Technologies to enhance their location-based services platform using AI and machine learning. The enhanced platform provided more accurate and real-time location data, which improved services for various industries, including transportation and logistics [57]. One more case is how SoftServe collaborated with Pfizer to develop a digital health platform that supports clinical trials and patient engagement. The platform streamlined clinical trial processes, improved patient recruitment and retention, and enhanced data collection and analysis, accelerating the development of new therapies [58]. Those cases show that IT service companies help businesses gain a competitive edge by enabling them to adopt the latest technologies and improve their operational efficiencies. By providing expertise in emerging technologies, IT service companies enable businesses to innovate rapidly and respond quickly to market changes. This agility helps companies stay ahead of competitors and seize new opportunities [59]. IT service companies optimize business processes through automation, integration, and the use of advanced analytics. This leads to cost savings, improved productivity, and better resource utilization [60]. By leveraging digital technologies, businesses can offer personalized and seamless experiences to their customers. IT service companies help design and implement customer-centric solutions that drive engagement and loyalty [61]. IT service companies provide scalable solutions that grow with the business. This flexibility allows companies to expand their operations without significant upfront investments in IT infrastructure [62]. With expertise in cybersecurity and regulatory compliance, IT service companies help businesses manage risks and protect their digital assets. This ensures business continuity and safeguards reputation of the organizations [63]. IT service companies are essential for driving digital transformation across various industries by offering technological expertise and resources. They help businesses develop and implement digital strategies, upgrade IT infrastructure, leverage data through advanced analytics and AI, and improve customer engagement through digital solutions. These companies

also guide organizations in adopting agile methodologies to enhance project delivery. Successful digital transformation projects, such as those between Accenture and Carnival Corporation, EPAM and Wolters Kluwer, Intellias and HERE Technologies, and SoftServe and Pfizer, illustrate how IT service companies enable businesses to innovate, optimize operations, and stay competitive. By offering scalable solutions, robust cybersecurity, and regulatory compliance, IT service companies ensure business continuity, cost savings, and improved customer experiences.

Section 6: Challenges and Future Trends. IT service companies face several challenges as they strive to maintain competitiveness in a rapidly evolving market. One of the main challenges is talent acquisition and retention. Attracting and retaining skilled professionals is a significant challenge due to the high demand for expertise in areas like AI, cybersecurity, and cloud computing. The talent shortage can limit the ability of IT service companies to scale and deliver high-quality services [64]. Keeping pace with the rapid advancements in technology requires continuous investment in research and development. Companies must constantly update their skills and tools to remain relevant and competitive [65–66]. As cyber threats become more sophisticated, IT service companies must enhance their cybersecurity measures to protect client data and maintain trust. This involves staying ahead of emerging threats and complying with stringent regulatory requirements [67–68]. Clients increasingly expect IT service providers to deliver innovative solutions quickly and cost-effectively. Meeting these high expectations while managing project complexity and resource constraints can be challenging [69–70]. Companies from emerging markets, often offering competitive pricing, pose a threat to established IT service providers. This competition necessitates continuous improvement and differentiation [71–74]. Many IT service companies origin from Eastern Europe and were heavily impacted by Russian invasion to Ukraine. Such companies like N-iX, Intellias, SoftServe, ELEKS faced significant challenges to survive during Russian invasion and save their business. Such companies like EPAM, Luxoft, GlobalLogic and DataArt have to plan how to close business in Russia and Belarus. These challenges and how to overcome them will be part of further research and investigation.

Conclusion. The development of the digital economy is a crucial field for global institutional transformations. This article has explored the critical role of IT service companies in driving the modern economy. The analysis covered various aspects, including the types of IT service companies and their functions, the benefits of collaborating with these firms, a comparative analysis with traditional consulting firms, the impact on digital transformation, and the challenges and future trends facing the industry. It was research the distinct roles of IT consulting firms, outsourcing companies, and cloud service providers. Each type offers unique services that enable businesses to leverage advanced technologies and optimize their operations. Collaborating with IT service companies provides cost-effectiveness, access to specialized knowledge, and successful outcomes through case studies demonstrating significant business growth and innovation. The comparison between traditional consulting firms and modern IT service companies highlighted how traditional firms are expanding into digital spaces and collaborating with IT service providers to offer comprehensive solutions. IT service companies facilitate digital transformation across various industries by developing and implementing digital strategies, modernizing IT infrastructure, enabling data-driven decision-making,

enhancing customer experience, and supporting agile transformation. The industry faces challenges such as talent acquisition, rapid technological change, cybersecurity threats, and client expectations. Future trends include increasing demand for cybersecurity, advancements in cloud computing, AI integration, data analytics, and the adoption of agile and DevOps practices. IT service companies are indispensable in today's digital economy. Their ability to provide advanced technological solutions, support digital transformation, and enhance operational efficiency makes them crucial partners for businesses seeking to stay competitive and innovate. These companies bridge the gap between technological advancements and business applications, ensuring that organizations can leverage the latest innovations to drive growth and success. The future potential of IT service companies is vast, with their role set to expand further as they become strategic partners in innovation. The continuous evolution of technologies such as AI, cloud computing, and cybersecurity will create new opportunities for these companies to develop cutting-edge solutions that address emerging business challenges. As the global economy becomes increasingly digital, the demand for their expertise will only grow, cementing their position as key players in the business landscape. IT service companies will need to navigate challenges such as talent shortages and cybersecurity threats while embracing future trends like AI integration and data analytics. Their ability to adapt and innovate will determine their success in this dynamic environment. Ultimately, their contributions will be pivotal in shaping the future of industries and economies worldwide, driving progress and enabling businesses to achieve new heights of success. Further research can explore several key areas related to the challenges faced by IT service companies. One area of focus is talent acquisition and retention, examining strategies to attract and keep skilled professionals in high-demand fields like AI, cybersecurity, and cloud computing. Another area is the impact of continuous investment in research and development on competitiveness, studying how IT service companies can balance R&D expenditure with other operational costs to remain profitable. Advancing cybersecurity measures is also crucial, with research needed on the latest threats and the effectiveness of various security frameworks and compliance strategies. Balancing innovation with cost-effectiveness presents another research opportunity, exploring methodologies for delivering innovative solutions rapidly while managing project complexity and resource constraints. Competitive strategies against emerging market IT service providers can be studied to understand how established companies can differentiate themselves and retain market share. Additionally, the impact of geopolitical events, such as the Russian invasion of Ukraine, on IT service companies offers a rich area for investigation. This includes studying the strategies used by companies to survive and adapt during crises and the implications of closing business operations in conflict zones.

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ТЕОРЕТИЧНІ ОСНОВИ ПОЛІТИКИ СОЦІАЛЬНО-ЕКОНОМІЧНОГО ВІДНОВЛЕННЯ УКРАЇНИ