Digital Transformation and the Evolution of Platform - Based Business Models

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Abstract

The rapid growth of digital technologies during the Fourth Industrial Revolution has provided businesses, consumers, and stakeholders with many new tools and opportunities. However, choosing the best digital strategy to transform business models and company strategies is still a major challenge. The main aim of this study is to identify the most beneficial areas for investing in digital transformation within business operations. To achieve this goal, a cross-iteration ranking method was used to evaluate expert opinions from 25 independent organizations. Based on their assessments, a list of 36 digital tools for transforming business models and strategies was created. From these, five digital technologies with the greatest potential to improve and modernize business processes were selected as the best investment options. The results show that these selected investment areas are moderately independent and have strong potential to improve business performance. In particular, automation and cyber security were identified as the most important areas for financial investment, as they offer the highest capacity to enhance efficiency, security, and long-term business sustainability. Future research should include a larger number of expert organizations to increase the reliability of the findings. Further studies should also focus on predicting how different types of business structures may develop under the influence of digital transformation. This would help in designing tools that assist companies in choosing the most suitable digital development strategies. This study has some limitations, including the research methodology, the time period considered, and the size of the dataset. These factors may affect the overall applicability and generalize ability of the results.

Keywords: *Artificial Intelligence, Cloud Platforms, Next-Generation Software Development, Digital Immune System, Hyper automation*

Introduction

In today's global economic environment, digital transformation has become a crucial strategic process that deeply reshapes the business models and strategic approaches of enterprises. This process involves the adoption and integration of digital technologies to increase operational effectiveness, build stronger customer engagement, foster innovation in products and services, and respond effectively to dynamic competitive conditions (Redko, Zaletska & Chyrva, 2023; Tkachuk et al., 2022; Bozhkova & Halytsia, 2022).

Current industry data highlights the significant influence of digital technologies on modern business activities. According to ZipDo (Essential Digital Transformation Statistics in 2023, 2023), approximately 70% of organizations have implemented a digital transformation strategy, while 89% are actively executing digital-oriented business initiatives. In addition, 60% of companies that completed digital transformation efforts have successfully developed and introduced new business models. Global expenditure on digital transformation reached USD 2 trillion in 2022.

Forecasts indicate that by 2025, enterprises will generate nearly 60% of global data, with the total volume expected to reach 175 zettabytes. Furthermore, around 60% of organizations are anticipated to depend on digital technologies to enhance productivity and performance, while up to 85% of business operations may be automated without direct human involvement. Quixy (Quixy Editorial Team, 2023a) estimates that investment in digital business transformation could amount to USD 7 trillion in 2023. By 2026, spending on the implementation of digital strategies and innovative business models is projected to reach USD 3.4 trillion. Additionally, the economic returns from digital transformation are expected to be substantial, and by 2025, nearly 65% of global GDP (approximately USD 53.3 trillion) is projected to be digitized.

According to Finances Online (Eira, 2023), 38% of conventional enterprises have adopted digital business approaches. The highest adoption rates of digital models are observed in the service industry (95%), financial consulting and auditing (93%), and healthcare (92%). Importantly, 75% of companies managed to mitigate the negative effects of pandemic-related restrictions through digital transformation measures.

Therefore, the acceleration of the shift toward digital business models and strategic renewal is driven not only by market competition and innovation opportunities but also by external shocks such as economic downturns, global health crises, and geopolitical conflicts. These circumstances require organizations to build resilient and flexible strategies, where digital transformation serves as a key adaptive mechanism (Verbivska et al., 2023; Nurgaliyeva, Ismailova & Sarybayeva, 2022; Nastenko, 2008; Syrtseva et al., 2022).

Literature Review

Li et al. (2023) examine the underlying processes through which industrial internet platforms contribute to the digital advancement of small and medium-sized enterprises (SMEs). Using the example of ROOTCLOUD, the study demonstrates that effective system integration and active knowledge sharing play a decisive role in enabling digital transformation. These platforms support SMEs by combining supplier knowledge, encouraging interdisciplinary information exchange, and establishing a knowledge-driven environment that supports digital development.

Skare, de Obesso, and Ribeiro-Navarrete (2023) state that digital transformation is significantly altering the operational structures of SMEs, bringing both benefits and challenges. Their research evaluates how digital technologies affect key aspects of SME performance, such as market access, competitive pressure, financial strength, increasing operational expenses, shortages of qualified personnel, external disturbances, global crises, and regulatory constraints. The findings reveal that digital transformation improves SMEs' adaptability and strengthens their ability to respond to market and environmental changes. However, the study also highlights possible risks, including insufficient digital skills and the threat of losing competitive advantage.

Zhang, Xu, and Ma (2023) identify information technology (IT) investment as a fundamental enabler of enterprise digitalization within the modern digital economy. Applying a resource-based framework, the authors analyze the effect of IT infrastructure on shaping digital transformation strategies. They further investigate the mediating influence of top management in connecting IT capabilities with strategic digital initiatives and overall transformation outcomes. The results indicate that digital strategy fully mediates the relationship between IT infrastructure and enterprise digital transformation, while strong managerial involvement positively strengthens this linkage.

Favoret to et al. (2022) introduce a conceptual model that outlines key digital transformation challenges and connects them with business model design and the different stages of transformation in manufacturing firms. Through systematic analysis and modeling techniques, the researchers identify critical obstacles, including organizational readiness, value creation and delivery mechanisms, validation of competitive pricing structures, development of appropriate IT systems, and the implementation of digital security measures.

Vaska et al. (2021) conduct a comprehensive literature review to explore the progression of digital transformation within business model research. The study focuses on how digitalization influences the development and assessment of competitive pricing strategies across industries. The authors conclude that this field has expanded rapidly since 2014 but remains fragmented, with no dominant theoretical perspectives or leading scholars. Furthermore, they identify a disconnect between industry practices and academic research in the area of digital transformation.

In line with Vaska et al. (2021), it can be noted that current academic studies provide limited actionable recommendations regarding priority investment directions for enterprise digital transformation strategies and business model innovation. The absence of a strong methodological foundation makes it difficult for investors and decision-makers to determine the most effective allocation of financial resources toward digitalization initiatives and long-term digital development.

Objective

The study aims to pinpoint the most effective investment avenues in the realm of digital transformation for business activities.

Objectives of the Study:

1. Establish an appropriate expert environment that will allow defining line of digital transformation tools for business activities.
2. To determine the range of available means of digital transformation of business activities, which will allow to form an optimal list of appropriate areas for investment in the digitalization of business models and business strategies.

3. To identify the most appropriate digital technologies for transforming business activities, which will determine the practical goals of directing investment flows to the industry under study.
4. The objective is to assess the anticipated influence of optimal digital technologies and tools on shaping business models and strategies for entrepreneurial endeavors. This evaluation aims to underscore the practical significance of the current study.

Methodology

In this study, the method of cross-multi-iteration re-entry is used, the procedure of which is as follows.

Iteration1: Identification of the relevant expert community that provides personalized ratings for digital transformation tools for business.

A broad sample of expert organizations is employed to mitigate the impact of individual opinions and potential biases, ensuring the formation of a comprehensive and impartial research subject area. The sample consists of 25 independent expert organizations that provide personal ratings and assessments of individual digital solutions in the context to of their impact on the digital transformation of business models and business strategies on a free-of-charge basis: Built In(Appel,2023), Quixy (QuixyEditorialTeam, 2023b), Ideassion Technology Solutions (Ideassion Technology Solutions, 2023), McKinsey & Company (Chui et al., 2023), ECM Consultant Company (Malak, 2023), Atlas Communications Ltd(Top tech trends for businessesin2023,n.d.),Veritis GroupInc.(Veritis,n.d.), Mightybytes (Mightybytes, 2023), Simplilearn Solutions (Simplilearn, 2023), Booth & Partners (Marksons, 2023), NationalRetailAssociation(Giardina,2023),Stormboard (Saraev, 2023), Forbes (Marr, 2022), IntelliSoft Confidential (Mitrofanskiy, 2022), Deloitte (Chonkov & Ganchev, 2023), Zühlke Group (Top 10 key business technologytrendsfor2023,2023),Aura Quantic(Gundín,

Iteration 2. An examination of ranking reports from 25 independent expert institutions made it possible to identify a comprehensive spectrum of digital tools and technologies that influence the evolution of business digital transformation. In total, 36 categories of digital solutions were identified. These included Artificial Intelligence (AI) and Machine Learning (ML); operational expenditure (OPEX) optimization; AI TRiSM; Edge Computing; AI Ops for microservices support; Hybrid and Multi-Cloud environments; Industry Cloud Platforms; High-Performance Computing (HPC); Software 2.0 approaches such as Low-Code and No-

Code development; advanced software engineering methods; performance optimization strategies; digital marketing technologies; revenue models such as ad-based, fermium, on-demand, sharing, subscription, and open-source; e-commerce and online marketplace platforms; contactless technologies; digital payment systems including Buy Now, Pay Later (BNPL); email marketing tools; video marketing solutions; and mainframe systems.

Iteration 3. Using the evaluations provided by experts, individual scores and rankings were assigned to each identified digital solution category.

Iteration 4. Based on the comparative assessment of expert ratings, a composite ranking was developed. This ranking was determined by calculating how frequently each digital solution was referenced in relation to business model and strategic digital transformation initiatives. (1) Hyper automation, Super apps, Business Process Automation Solutions, Robots, Autonomous System, Robotic Process Automation (RPA); Clean Energy and Sustainable Tech; Met averse, Social Platforms; Zero-Trust Cyber security and Architecture, Digital Immune System; Responsible Data fiction, Corporate Digital Responsibility (CDR); Embedded Finance and Block chain; Compostable Business, Compostable Software Platforms; Everything as a Service (XaaS), API-Based Integrations; Customer Data Platform (CDP) for Personalization, (Connected User Experience, User-Generated Content (UGC); Total Experience (TX), Partner Ecosystem, Virtual Business Collaboration; Enterprise Resource Planning; Data-Driven Business, Big Data Analytics, Real-Time Analytics; Internet of Things (IoT); 5G, Advanced Connectivity, Wireless Value Realization; Web3 Includes Platform sand Applications; VR/AR/MR, Extended Reality, Immersive- Reality Technologies, Digital Twins; Quantum Technologies; Mobility Technologies (Mobile First); Bioengineering; Space technologies; Intelligent Search, Voice Search (VoIP), Computer Vision, Semantic Search, Contextual Search and Natural Language Processing, GPT Transformers, Search Engine Optimization(SEO): Impact Business Models(IBM); UXDesign; Headless Word Press; the frequency of mention digital transformation solutions for business activities in the expert; IR_i is the sum of individual ratings from each expert organization contributes to the overall assessment or ranking for digital trans formation solutions for business models and business strategies ;iFM is the frequency of mentioning digital transformation solutions for business activities in the expert community.

Iteration5.Arelativeprioirtyratingisestablishedbasedon the number of times each of the

considered solutions for the digital transformation of business activity attains the leading position according to the individual assessments provided by each independent expert organization participating in the study (2):

$$RRP_i = RRMF_i \times \left(1NTO1LP + \frac{1}{2}NTO2LP + \frac{1}{3}NTO3LP + \frac{1}{4}NTO4LP + \frac{1}{5}NTO5LP \right), \quad (2)$$

where ***RRPi*** is the priority ranking of each considered solution is determined based on various factors, such as the frequency of taking the leading position in individual assessments from independent expert organizations involved in the study for the digital transformation of business activities; *NTO*1*LP*.....*NTO*5*LP* is the frequency with which each solution for the digital transformation of business models and business strategies is ranked first through fifth in individual assessments by independent expert organizations determines the respective number of occurrences.

Iteration 6. Utilizing the outcomes of the priority cross- iteration ranking, an optimal set of solutions for the digital transformation of business activities has been established. This set is deemed to possess the highest potential for attracting suitable investments.

Iteration7.Theprobabletransformationalimpactofthe identified optimal (based on the results of cross-iteration- rating) digital tools, technologies, and means on the processes of forming business models and business strategies is determined.

Results and Discussion

In accordance with the developed methodology of cross- multi-iteration ranking, a variable set (input dataset) of personal (individual) ratings and impact assessments of digital transformation tools (intheamountof36clustered areas and solutions) is formed, identified from open data obtained from 25 independent relevant expert organisations (Table-1).

Table-1. A set of 32 digital transformation solutions for Marketing communications with in dividual ratings by 25 expert organisations

Digital tools and technologies transforming business models and business strategies	Built In	Quixy	Ideassion Technology	McKinsey & Company	ECM Consultant Company	Atlas Communications Ltd.	Veritis Group Inc.	Mightybytes	Simplilearn Solutions	Booth & Partners	National Retail Association	Stormboard	Forbes	IntelliSoft Confidential	Deloitte	Zühlke Group	AuraQuantic	Harvard Business Review	Future Group	Digital Speaker	NetApp Inc.	Glue Up	Tencent	Gartner	Medium
Artificial Intelligence and Machine Learning, Cuttin Down OPEX, A TRiSM	1	6	3	1	3		1		1	2		1	1	7	3	3	1	3	5	5	2	4	3	2	2
Edge Computin AIOps to Suppo Microservices, Hybrid Clouds, Multi-Cloud Architectures, Industry Cloud Platforms, High Performance Computing (HPC)	2	10	5	7	2	6	7			9				2	4	4	6	5	3		1	8	1	3	9
Software 2.0: Low-Code / No-Code, Next-Generation Software Development	3	1	10	2	1		8					8		1	5	5		6						4	

Digital tools and technologies transforming business models and business strategies	Built In	Quixy	Ideassion Technology	McKinsey & Company	ECM Consultant Company	Atlas Communications Ltd	Veritis Group Inc.	Mightybytes	Simplilearn Solutions	Booth & Partners	National Retail Association	Stormboard	Forbes	IntelliSoft Confidentia	Deloitte	Zühlke Group	AuraQuantic	Harvard Business Review	Future Group	Digital Speaker	NetApp Inc.	Glue Up	T encent	Gartner	Medium
Hybrid Work E and Retention	4	7				3				5								12					7		
Hyperautomation, Superapps, Business Process Automation System, Robotic Process Automation (RPA)	5				5			14		4		5	8	6		7	3	7	1			3	6	6	5
Clean Energy and Sustainable Tech	6	9		12				1					7				4	2	2				4	8	
Metaverse, Social Platforms	7					1							2		1	8	2		4					7	
Zero-Trust	8	4	6	3			2	12			5	7		5		1	7	8					8	1	7

C Digital Immune System																									
Corporate Digital R (CDR)	9							4		1															
Embedded Finance and Blockchain	10				6									9						2					
Composable Software Platforms		2						2									8								
Everything Service (XaaS), API-Based Integrations		3			9					10		3		8					6			7			10
Customer Data Platform (CDP) for Personalisation,		5	2		8		4	15	5		4	2		4											

(Connected User Experience, User-Generated Content (UGC)																									

Digital tools and technologies transforming business models and business strategies	**Built In**	**Quixy**	**Ideassion Technology Solutions**	**McKinsey & Company**	**ECM Consultant Company**	**Atlas Communications Ltd.**	**Veritis Group Inc.**	**Mightybytes**	**Simplilearn Solutions**	**Booth & Partners**	**National Retail Association**	**Stormboard**	**Forbes**	**IntelliSoft Confidential**	**Deloitte**	**Zühlke Group**	**AuraQuantic**	**Harvard Business Review**	**Future Group**	**Digital Speaker**	**NetApp Inc.**	**Glue Up**	**Tencent**	**Gartner**	**Medium**
Total Experience (TX), Partner Ecosystem, Virtual Business Collaboration		8	9		7		9	3	4		6	6			6										
Enterprise Resource Planning			1				3																		
Data-Driven Business, Big Data Analytics, Real-Time Analytics			4				5			7		4				2					3	6			8
Internet of Things (IoT)			7				9			8				10							4	2	2		4

5G, Advanced Connectivity, Wireless Value Realisation			8	5		4	10							3		6	5	11			5			5	
Web3 Includes Platforms and				4				8					3			9		10		3			5		1
Extended Reality, Immersive- Reality Technologies, Digital Twins				6		2							4		2			4		1	6	5			6
Quantum Technologies				8									6												11
Mobility Technologies (Mobile First)				9				7														1			3
Bioengineering				10									5					9							
Space				11														1							
Intelligent Search, Voice Search (VoIP), Computer Vision, Semantic Search, Contextual Search and Natural Language Processing, GPT Transformers, Search Engine Optimisation (SEO)					4	5		13			2									4					

Digital tools and technologies transforming business models and business strategies	Built In	Quixy	Ideassion Technology Solutions	McKinsey & Company	ECM Consultant Company	Atlas Communications Ltd.	Veritis Group Inc.	Mightybytes	Simplilearn Solutions	Booth & Partners	National Retail Association	Stormboard	Forbes	IntelliSoft Confidential	Deloitte	Zühlke Group	AuraQuantic	Harvard Business Review	Future Group	Digital Speaker	NetApp Inc.	Glue Up	Tencent	Gartner	Medium
Impact Business Models (IBM)								5																	
UX Design								6								10									
Headless WordPress	Ad-Supported, Freemium, On-Demand, Sharing, Subscription, Open-Source eCommerce, Marketplace							9																	
Prioritising Performance								10																	
Digital Marketing								11																	
									2		1														
									3																
Contactless Solutions, Digital Payment, Buy Now Pay Later (BNPL)										3															
Email Marketing Software										6															
Video Marketing											3														
Mainframe Technology															7										

Source: created by the author

A preliminary analysis of the dataset of individual ratings by expert organizations, formed randomly based on open data (Table-1), shows that modern digital solutions provide entrepreneurs and stake holders with numerous opportunities to implement a digital transformation strategy, but the expert ranking is also rather random, which disorients a typical user in search of trendy solutions for developing their own business. A preliminary analysis of the existing set of digital transformation solutions in the context to business shows that most representatives of the relevant independent expert community see the potential for a fundamental change in business processes using AI, machine learning, cloud services, automation, and cyber security. This cross-section of expert opinions demonstrates the current situation among business organizations that are unable to decide on the direction of the investment for fear of economic losses and leveling results. Therefore, it is necessary to introduce an additional cross-industry ranking mechanism, the mathematical principlesofwhicharedescribediniterativesteps4and5 of this study.

The calculation of and finally

*RRPi*ispresentedinTable-2. FM_i NTO1LP...NTO5LP $RRMF_i$

According to the calculated data set(Table-2),it is possible to approximate the median of individual ratings, with some differences between the functions of *RRMFi* and .Given that certain digital technologies have received very low relative and priority cross-ratings, we set the limit parameters below which the relevant digital solutions are not taken in to account(3):

$$\begin{aligned} RRMF_i &\le 0,367; \\ RRP_i &\le 0,0235. \end{aligned} \qquad (3)$$

Table-2.

Dataset of cross-multi-iteration ranking of the individual rating of expert organizations on the potential of solutions for the digital transformation of business models and business strategies

Digital tools and technologie transforming business mode and business strategies	Mention Frequency	Ranking Based on Mention Frequency	Frequency of Achieving the Top Position	Frequency of Securing the Second Top Position	Frequency of Attaining the Third Top Position	Frequency of Securing the Fourth Top Position	Frequency of Securing the Fifth Top Position	Priority Ranking Based on Relevance
Artificial Intelligence and Machine Learning, Cutting Down OPEX, AI TRiSM	22	0,101	7	4	6	1	2	1,173
Edge Computing, AIOps to Support Microservices, Hybri Clouds, Multi-Cloud Architectures, Industry Cloud Platforms, High-Performance Computing (HPC)	19	0,087	2	3	2	2	2	0,439
Software 2.0: Low-Code / No Code, Next-Generation Softwa Development	12	0,055	3	1	1	1	2	0,246
Hybrid Work Engagement an Retention	6	0,028	0	0	1	1	1	0,021
Hyperautomation, Superapps Business Process Automation Solutions, Robots, Autonomou System, Robotic Process Automation (RPA)	15	0,069	1	0	2	1	4	0,186
Clean Energy and Sustainabl Tech	10	0,046	1	2	0	2	0	0,114
Metaverse, Social Platforms	8	0,037	2	2	0	1	0	0,119
Zero-Trust Cybersecurity and Architecture, Digital Immune System	15	0,069	2	1	1	1	2	0,239
Responsible Datafication, Corporate Digital Responsibili (CDR)								

	3	0,014	1	0	0	1	0	0,017
Embedded Finance and Blockchain	4	0,018	0	1	0	0	0	0,009
Composable Business, Composable Software Platform	3	0,014	0	2	0	0	0	0,014
Everything as a Service (XaaS API-Based Integrations	8	0,037	0	0	2	0	0	0,024
Customer Data Platform (CDP for Personalisation, (Connecte User Experience, User-Generated Content (UGC)	9	0,041	0	2	0	3	2	0,088
Total Experience (TX), Partne Ecosystem, Virtual Business Collaboration	9	0,041	0	0	1	1	0	0,024
Enterprise Resource Planning	2	0,009	1	0	1	0	0	0,012
Data-Driven Business, Big Da Analytics, Real-Time Analytic	8	0,037	0	1	1	2	1	0,055
Internet of Things (IoT)	8	0,037	0	2	0	2	0	0,054
5G, Advanced Connectivity, Wireless Value Realisation	10	0,046	0	0	1	1	4	0,063
Web3 Includes Platforms and Applications	8	0,037	1	0	2	1	1	0,077
VR/AR/MR, Extended Reality Immersive-Reality Technologies, Digital Twins	9	0,041	1	2	0	2	1	0,111
Quantum Technologies	3	0,014	0	0	0	0	0	0,000

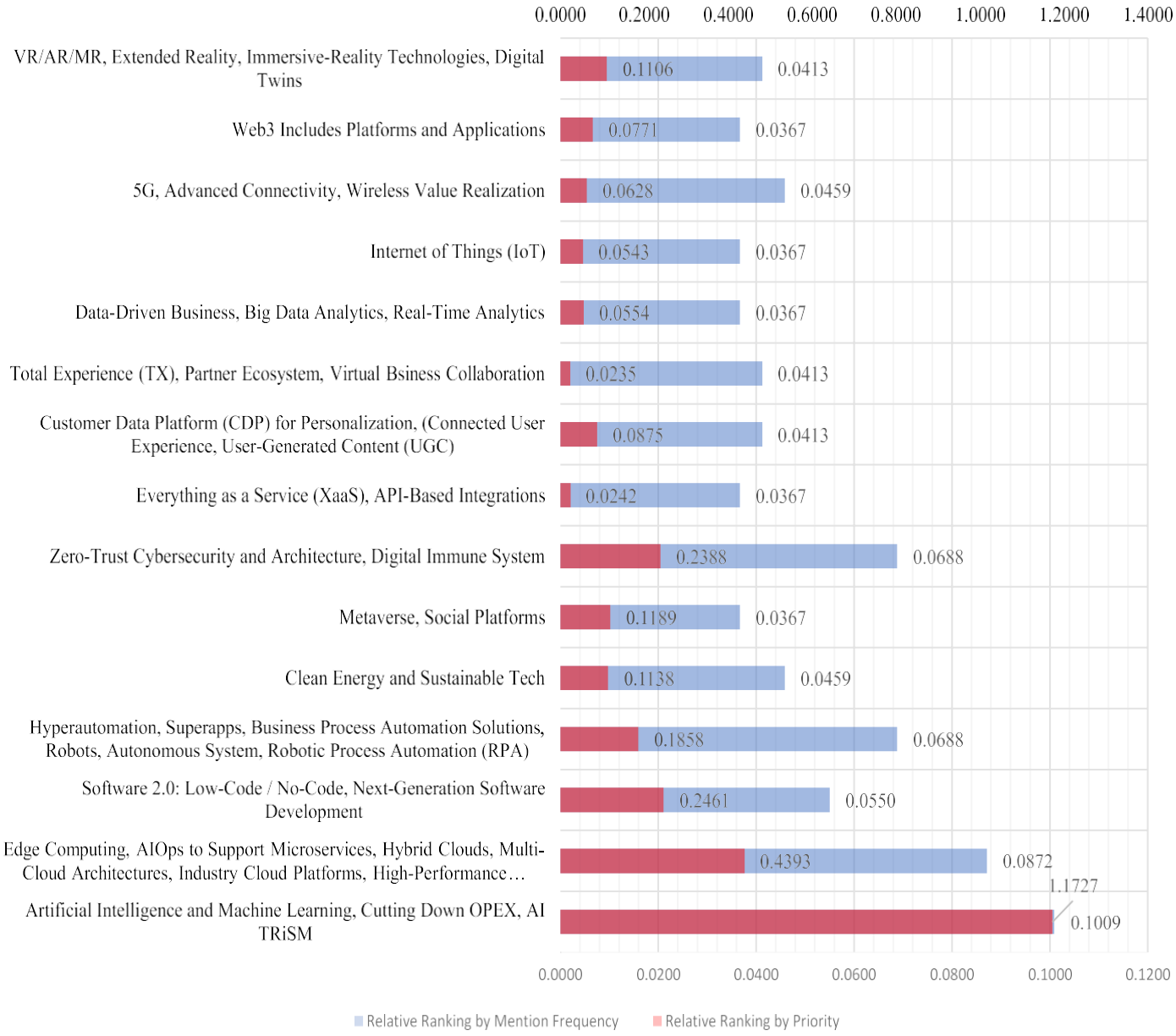
Mobility Technologies (Mobi First)	4	0,018	1	0	1	0	0	0,024
Bioengineering	3	0,014	0	0	0	0	1	0,003
Space technologies	2	0,009	1	0	0	0	0	0,009
Intelligent Search, Voice Searc (VoIP), Computer Vision, Semantic Search, Contextual Search and Natural Language Processing, GPT Transformers Search Engine Optimisation (SEO)	5	0,023	0	1	0	2	1	0,027
Impact Business Models (IBM	1	0,005	0	0	0	0	1	0,001
UX Design	2	0,009	0	0	0	0	0	0,000
Headless WordPress	1	0,005	0	0	0	0	0	0,000
Prioritising Performance	1	0,005	0	0	0	0	0	0,000
Digital Marketing	1	0,005	0	0	0	0	0	0,000
Ad-Supported, Freemium, On Demand, Sharing, Subscriptio Open-Source	2	0,009	1	1	0	0	0	0,014
eCommerce, Marketplace	1	0,005	0	0	1	0	0	0,002
Contactless Solutions, Digital Payment, Buy Now Pay Later (BNPL)	1	0,005	0	0	1	0	0	0,002
Email Marketing Software	1	0,005	0	0	0	0	0	0,000
Video Marketing	1	0,005	0	0	1	0	0	0,002

Mainframe Technology	1	0,005	0	0	0	0	0	0,000

Source: created by the author

The application of the limit filter allowed us to identify15 digital technologies that, based on the cross-iteration ranking of expert organizations' opinions, received the most favourable ratings in terms of the potential for transformational impact on business and entrepreneurship-

Figure1



Source: created by the author

Figure-1. Determining the optimal range of digital technologies for modernizing business models and strategies that have the greatest potential for investment attraction as part of the digital transformation of business.

In accordance with the obtained values (Figure 1), the optimal composition of tools for digital transformation of business models and business strategies has been established:

1. Artificial Intelligence and Machine Learning, Cutting Down OPEX,AITRiSM with results at RRMF=0,1009 and RRP=1,1727;
2. Edge Computing, AIOps to Support Micro services, Hybrid Clouds, Multi-Cloud Architectures, Industry Cloud Platforms, High-Performance Computing (HPC)with results at RRMF=0,0872and RRP=0,4393;
3. Software 2.0: Low-Code/No-Code, Next-Generation Software Development with results from RRMF=0,0550 and RRP=0,2461
4. Zero-Trust Cyber security and Architecture, Digital Immune System with results and RRMF=0,0688 AND RRP=0,2388;
5. Hyper automation, Superspy, Business Process Automation Solutions, Robots, Autonomous System, Robotic Process Automation (RPA) with results from RRMF=0,0688 AND RRP=0,1858;

Let us assess the impact of the selected digital technologies on the formation of business models and business strategies

Table-3.

Assessment of the likely impact of digital technologies on the formation of business models and business strategies

Optimal technology	**Likely impact**
Artificial Intelligence and Machine Learning, Cutting Down OPEX, AI Trims	Technological innovations, such as artificial intelligence and machine learning, together with in it iativestoreduce operating expenses (OPEX)and implement AITRiSM, can have a significant impact on the evolution of business models and business strategies. The introduction of artificial intelligence technologies allows auto mating processes, analysing large amounts of data, and enabling businesses to make decisions based on real-time information analysis. This open sup new opportunities for optimizing operating costs and increasing productivity. AITRiSM, based on the integration of artificial intelligence and transformation strategies, helps businesses to be more adaptive and create

	new business models that meet modern market requirements. Such innovations can define a competitive advantage and help businesses stay competitive inadynamic environment.
Edge Computing, I Post Support Micro services, Hybrid Clouds ,Multi- Cloud Architectures, Industry Cloud Platforms, High-Performance Computing (HPC)	Theadoptionofthesetechnologieshasasignificantimpactonbusinessmodelsand business strategies. They provide enterprises with the ability to optimize operating costs throughautomationandincreaseproductivitythroughdataprocessingatthenetwork edge .The flexibility of hybrid clouds and multi-path architectures allows enterprises to adapttochangeandexpandasneeded.Industrialcloudplatformsfacilitatecollaboration inspecificindustriesandthedevelopmentofnewbusinessmodels.Asaresultof implementing these technologies, enterprises become more competitive and can improve the efficiency and innovation of the reoperations.
Software 2.0: Low-Code / No-Code, Next-Generation Software Development	Thedevelopmentofsoftwaretechnologycanhaveasignificantimpactontheformation ofbusinessmodelsandbusinessstrategies.Theuseoftheseapproachessimplifies the processofdevelopingprogrammesandapplications,allowingbusinessestorespond morequicklytochangesandimplementinnovativesolutions.Reducingsoftware developmentcostscanalsoleadtooptimisedoperatingcostsandincreased competitiveness.Suchtechnologicaltoolscanhelpenterprisesrethinktheirbusiness modelsandstrategies,focusingoninnovationandrapidadaptationtochangesinthe market environment, creating opportunities to build competitive advantage and sustain successful operations.
Optimal technology	Likely impact

Source: created by the authors

According to the results of cross-iteration-rating, it forms the appropriate areas of

investment in the digital transformation of business models and business strategies Ranking of appropriate areas - Figure2

Figure-2.

Source: created by the author

For investment in digital transformation of business models and business strategies. It was found that automation and security are the leading areas of digital transformation, and, accordingly, investments in this industry.

Conclusion

Based on the findings of the research, several key conclusions can be outlined. The rapid and multidirectional advancement of digital technologies within the framework of the Fourth Industrial Revolution generates a form of informational “white noise” for businesses and stakeholders. This situation is characterized by an excessive variety of digital tools and solutions, which complicates the process of selecting the most suitable transformational direction for a company’s digital strategy.

By applying a cross-iterative ranking methodology, 25 independent expert organizations were identified according to their credibility and evaluation metrics. Drawing on their assessments, a comprehensive list of 36 digital solutions currently available for business model and strategy transformation was compiled. From this pool, five digital technologies were determined to have the highest potential for enhancing and modernizing business operations, and therefore represent the most promising directions for investment allocation.

The identified investment directions are statistically median-based and independent in nature, which strengthens the reliability and objectivity of the results.

Limitations

Important limitations of this study include:

- Methodological limitations: the study is based on the use of certain methodology and tools, which may affect the results and limit the overall scope of the study.
- Variable limitations: the study may not take into account all possible variables that affect the formation of business models and business strategies and does not take into account all possible scenarios.
- Time constraints: the study can only be relevant for a specific time period and does not take into account the dynamics of technology development and market conditions in the future.
- Limitations in the amount of data used: the study may not cover all aspects of the impact of the technologies under consideration on business models and business strategies, as this is abroad and complex topic.

In the future, it is planned to expand the methodological basis of the study, take into account the dynamics of technology development and consider a wider range of variables to obtain more comprehensive results.

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22. *Recent studies highlight that digital transformation is accelerating across industries due to rapid advancements in technology. Organizations are increasingly investing in modern digital tools to enhance efficiency, improve customer experience, and remain competitive in dynamic markets.*
23. *One of the major trends is the adoption of Artificial Intelligence (AI) and automation. Businesses are using AI-driven systems to analyze data, predict customer behavior, and automate routine processes. This not only reduces operational costs but also improves decision-making accuracy.*
24. *Another key development is the expansion of cloud computing. Companies are migrating their operations to cloud platforms to enable remote access, scalability, and better data security. Cloud solutions also support collaboration and real-time communication among teams.*

25. *Data analytics and big data technologies continue to play a critical role. Organizations rely on data-driven insights to shape strategies, understand market trends, and personalize customer experiences. Data security and cyber security measures have also become essential priorities as digital dependency increases.*
26. *Additionally, emerging technologies such as the Internet of Things (IoT), blockchain, and low-code/no-code platforms are transforming business models. These tools help organizations innovate faster, streamline workflows, and respond quickly to changing customer demands.*
27. *Statistics from recent reports indicate that global spending on digital transformation is steadily rising. Businesses that adopt digital strategies effectively tend to achieve higher productivity and better customer satisfaction compared to those that delay transformation.*
28. *Overall, digital transformation is no longer optional. It has become a strategic necessity for sustainable growth and long-term success in today's technology-driven world.*