ИНСТИТУТ ЗА ИКОНОМИЧЕСКИ ИЗСЛЕДВАНИЯ НА БЪЛГАРСКАТА АКАДЕМИЯ НА НАУКИТЕ
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DIGITAL TRANSFORMATION AND INNOVATION IN BUSINESS: THE IMPACT OF STRATEGIC ALLIANCES AND THEIR SUCCESS FACTORS[7]

The purpose of the article is to reveal the scientific approach that substantiates the impact of the creation of strategic alliances (SA) on the digital transformation of business and the development of their innovative power based on identified success factors. The aim was achieved using the following methods: abstract logic and typification (for classification of SA's success factors), generalisation (to determine the peculiarities of SA's influence on their innovation development), analytical and ranking method (to determine the relationship between the dynamics creating of SA and the degree of acceleration of digital transformation), expert evaluation (to determine the degree of influence of SA success factors by business areas). Implementing a business-integrated approach to understanding digital transformation will accelerate the implementation of innovation and organisational change, identifies future prospects for market, customer and business relationships, highlighting the importance of researching the factors that ensure their success. An alternative vision of SA's success factors is suggested, which are determined by the possibilities of the organisation of partnerships and organisational culture, integration of business sectors, compatibility of management goals, external relevance, obtaining synergies. Innovation is considered by the authors as an integration factor that reconciles all groups of SA success factors, giving them the necessary focus to solve business problems. The results of the study show that the creation of SA has a significant impact on accelerating and changes the priority of digital transformation of business areas involved in strategic partnerships, and the impact of SA on the development of their innovation power is crucial.
Keywords: digital transformation; innovation; strategic alliances; success factors of SA; business development
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1. Introduction

Nowadays an increase in the intensity of new digital technologies use in the context of increasing business innovation (Bourdeau et al., 2021), a radical transformation of all activities based on business digitalisation (Mezghani, Aloulou, 2019) is seen all over the world. This indicates the need to rethink the conceptual foundations of its development and direction in areas that meet today's demands. Business digital transformation has become the basis for growth and breakthrough innovation, providing modern digital business models (Ziyadin et al., 2020), implementing end-to-end organisational changes and improving business efficiency through operational model transformation (Salyaevich, Pardaev, 2021). It is also relevant for SA creation, which is activated in the growing role of partnerships (Al-Tabbaa et al., 2019) and provides competitive advantages to all parties in the business. The ongoing business' digital transformation forms the basis for reviewing theoretical and applied foundations of SA research, characterised by significant views alternativity. These issues include studying the prospects of organisational changes in SA environment (Albers et al., 2016), change of cooperation forms, efficiency management and SA research methods under the influence of digital transformation (He et al., 2020), studying the impact of key globalisation processes on SA development in the period of economies' digitalisation (Mikhno et al., 2022). However, this area of research is still full of experience paradoxes, needs to fill the theory and practice of SA functioning with new content. Therefore, one of the important areas of SA research today is to determine their impact on business' digital transformation and develop their innovation based on identified success factors.

2. Review of Literature

Research of the peculiarities of SA functioning requires a theoretical generalisation of concepts of digital transformation of business, critical analysis of modern approaches and further systematisation of factors contributing to SA success, revealing the importance of SA creating for their innovation development.

2.1. Scientific approaches in the conceptual vision of the digital transformation of business

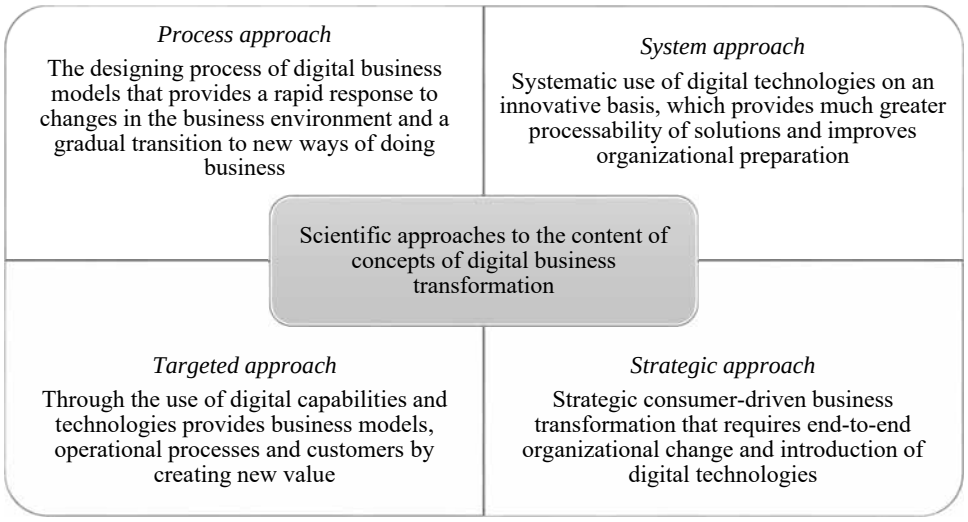
Modern scientific thought, where the field of research is a conceptual vision of transitioning processes and technologies to more modern and innovative digital, highlights four main approaches.

The most important for process approach while considering the concept of business' digital transformation is researching IT initiative and knowledge transfer (Li et al., 2022), designing digital business models by combining best practices of business modelling, innovation processes and digital business (Sathananthan et al., 2017), which provides a rapid response to changes in the business environment and a gradual transition to new ways of business activity. A system approach provides a broader understanding of the concept of business' digital transformation, as the systematic use of digital technologies on an innovative basis

provides much greater manufacturability of solutions (Campino et al., 2021), and digital transformation improves organisational readiness of companies (Orji, 2019). Applying a targeted approach emphasises that digital transformation through the use of digital capabilities and technologies provides business models, operational processes and customers by creating new value (Morakanyane et al., 2017). Understanding of strategic importance of a business' digital transformation indicates that the main stages of its implementation should be associated with the impact of digital technologies on the roadmap formation for a business' digital transformation (Strutynska et al., 2019), creating awareness, developing capacity, achieved by implementing digital technologies and digital innovation (Berghaus, Back, 2016). Research worth highlighting, in which the disclosure of the concept of business' digital transformation presents its comprehensive vision from the standpoint of integrating process, system, target and strategic approaches, which is important in terms of getting optimal management decisions (Fenton et al., 2020; Nwaiwu, 2018).

The analysis of modern scientific works highlights concepts of digital transformation of business and is the base for selecting process, system, target and strategic approaches while determining their content, as shown on Figure 1.

Figure 1. Generalisation of scientific scientists' views on implementing digital business transformation



Source: compiled by the authors.

The importance of integrating basic principles of management theories, international business and innovation development indicates that in defining the essence of digital transformation concepts, it is more appropriate to use a business-integrated approach. Thus, digital transformation of business is proposed to define as the vector of business development, which involves the introduction of advanced digital technologies in the management system that requires end-to-end organisational changes, and along with

improving business interaction with customers, partners, staff, government and society it provides new products, qualities and values creation in a clearly defined strategic perspective.

Following the business integrated approach, the basic directions of digital transformations of SA business into creating value chains include the sphere of interaction with clients, business processes and development of business models, which implementation results in unified data and processes, improvement of analytical and digital opportunities, business integration and IT, automating the decision-making process. Given the accelerated implementation of innovative changes, it will ensure formatting a new market, customer and business.

2.2. Systematisation of strategic alliances' success factors

At the current stage of improving the interaction between business partners, SAs play an important role in the exchange of resources and technologies, risk sharing in order to adjust and coordinate activity of creating new business value (Fatehi, Choi, 2019). Indicated goal acquires a higher level if, during SA formation, the focus on creating new value and existing opportunities of partner companies are mutually agreed (O'Dwyer, Gilmore, 2018). It has a positive impact on the results of partners' activity in terms of financial, operational and organisational efficiency (Britchenko et al., 2018; Kryvovyazyuk et al., 2019), as well as on the companies' market performance with a moderate number of SA participants (Moghaddam et al., 2016). However, SA success may also depend on the promotion of innovation implementation at different levels of management and the strategic compatibility of partner companies' goals.

The exchange of knowledge between partners is extremely important in SA environment, providing access to the knowledge of another business partner, the joint development of new knowledge, their application in management, as well as to support effective work. SA's success factors include the ability to combine skills, knowledge, technology and other resources, strategic matching, trust between partners, informal communication, determinants of obtaining knowledge that promotes innovation, organisational innovation, partner relationships during the agreement, strategic compliance between partners (Drewniak, Karaszewski, 2020), external compatibility of partner companies competencies, communication, integrative competencies, cultural compliance of business partners (Čirjevskis, 2021), compatibility of partners strategic goals and their strategic capabilities (Kryvovyazyuk, Strilchuk, 2013).

SA success factors are systematised according to the criteria presented on Table 1.

Given classification demonstrates the importance of innovation as a mutually reconciling factor that contributes to SA success.

Table 1. SA success factors and the benefits they can provide

Criteria for classifying success factors	SA's success factors	Obtained benefits
The level of organising partnerships and organisational culture	o organisational innovations; o additional skills and partners' knowledge; o high level of trust; o openness and interactivity of communication; o minimal overlap of partner markets; o respect for differences in corporate culture.	Introduction of new methods of organising procedures and methods of work.
Business sectors' integration level	o compatibility of high-tech industries and partners sectors by business; o compliance with the levels of digital business transformation; o interchangeability of methods and forms of work in the market; o compliance of applied technologies of digital transformation; o speed of business diversification in relation to the spread of innovations; o degree of staff mobility.	Increasing business mobility based on digital transformation.
Level of compatibility of management goals and strategic capabilities	o compatibility of partners' strategic goals; o attainability of strategic goals of mutual benefit; o compliance of partners' contribution to the business scale; o compliance of partners' contribution to the implemented innovations; o coordinating or adjusting the speed of the agreement objectives; o negotiating or adjusting the speed of agreement parameters.	Accelerate decision-making and increase their efficiency through managerial innovations.
Possibilities of achieving a synergistic effect	o inspiring innovations; o complementary assets and technologies exchange; o knowledge acquisition factors that contribute to the introduction of innovations; o external compliance of the competencies of partner companies; o partners' abilities and adaptation during implementation; o strengthening operational integration as SA develops.	Promoting achieving synergies through inspiring innovation.
Level of external relevance	o integration into globalisation processes; o strengthening positions in international markets; o demonstration of competitive advantages in the struggle for new segments of international markets; o responding to the effects of political and legal restrictions; o creating conditions for creating alliances.	Adaptation to changing circumstances of the market environment through market innovations.

Source: compiled by the authors.

2.3. Strategic alliances and their innovation development

Cooperation within the SA provides greater opportunities for developing and implementing innovation processes using new methods and forms of work, new solutions in the high-tech sector, and innovations in management. Such cooperation gets special development in conditions of training the alliance with modern methods, ensuring its appropriate volume and intensity (Hübel et al., 2022). Scientists have found SA's positive direct impact on innovations and new product development, mediating the role of exploration and exploitation as dynamic capabilities. It is recommended to improve the exchange of knowledge between

business partner companies to increase innovative results (Ferreira et al., 2021). It is necessary to create an appropriate incentive mechanism in order to increase the ability to acquire and transfer knowledge between partner companies for further development of SA's innovation system (Zhao et al., 2019). SA creation leads to better innovation results if the partners have a common institutional owner or have a higher degree of technological proximity (Chemmanur et al., 2016). It is important to apply managerial innovations needed to improve the quality of decision-making, create long-term competitive advantages (Kryvovyazyuk et al., 2020). Another study demonstrates SA's impact on innovation outcomes through the accumulation of internal R&D through increased absorption capacity (Paula, Silva, 2018). In order to avoid negative consequences of SA creation on the development of innovation, it is necessary to avoid overspending on innovation activities and consider national specifics of partners' development and regional peculiarities of SA formation.

Investigating SA impact on the development of their innovation, it is important to form an understanding of the need to create them to address the strategic objectives and goals of partner companies. Growing geopolitical threats, demographic changes, increasing competition in international markets, as well as the need for organisational changes under the influence of digital transformation of business cause a more serious attitude to partnerships between companies of different types, scales and achievements.

Summarising the views of scientists reveals that in the conditions of digital transformation of business, SA success depends on many factors, where innovation is a special factor that reconciles all groups of factors of SA success, giving them the necessary focus to solve business tasks.

3. Methodology and Data

Within the research, the scientific approach is suggested, which in combination with applied scientific and special methods, ensures achievement of the research goal – justification of the impact of SA creation on the digital transformation of business and development of their innovative power based on defined success factors. It will allow forming an appropriate platform to confirm the feasibility of activating the further SA creation based on the obtained evidence.

The practical implementation of this idea requires the development of an appropriate analytical basis: summarising analytical conclusions based on the study results of the dynamics of SA creation and changes in the priority of business' digital transformation, determining how SA forming provides growth of innovation power based on the study of the influence of factors creating their success. Research period: 2014-2021.

In the modern environment of IT and fierce competition in an innovative market economy, the smallest information advantage over competitors is able to play a critical role in effective enterprise management (Vakhovych et al., 2021). This advantage for business is provided by the relevance of collected data and scientific methods that add validity to conclusions justification.

The article uses the development of descriptive research using a system of scientific methods. The use of research design and data collected ensured the reliability of obtained results. Information databases were obtained using a targeted sampling method based on the compilation and processing of statistical information from the International Institute for Management Development (Bradley et al., 2015; Wade, 2017; Yokoi et al., 2019; Wade et al., 2021), BSG (Özbek, 2022) and World Bank (2022). Such research methods were used to solve set tasks: analytical and ranking methods (to determine the relationship between the dynamics of partnership agreements concluded by joint ventures and SA with the degree of acceleration of digital transformation and change its priority by business areas; study the dynamics of SA innovative power); the method of reference scoring (to determine the degree of SA success factors influence by business areas).

The analytical method helped to identify dynamic changes in the conclusion of strategic partnership agreements to make an analytical comparison with the degree of acceleration of digital transformations (by areas of its priority). The priority areas indicate the branches of business that differ in the degree of acceleration of digital transformation. The rank of the business sphere from 1 to 14 indicates the degree of acceleration of digital transformations: from 1 – the highest to 14 – the lowest degrees. The priority ranking of digital transformation by business spheres was determined based on the results of quantitative analysis of market data of business representatives of the most developed countries of the world. It is recommended to choose as evaluation criteria the level of venture capital investment for conducting digital business transformation, the speed of digital transformation of business, the efficiency of using the resource base to overcome barriers on the way to digital transformation, and the level of existential threat to the industry in case of non-compliance with the pace of digital transformation. In order to ensure justification of results, the value of the final indicator for each of the evaluation criteria is formed on the basis of the calculation of the relevant indicator systems and is subject to standardisation. For each branch of business, the integral indicator is calculated as the sum of the products of standardised indicators with the corresponding weighting coefficient within the selected evaluation criteria and their level of influence, and the resulting score is used for further ranking. The priority classification of business areas according to the degree of digital transformation is carried out by the Sturges rule method, which allows ensuring the reliability of the research results. Therefore, the analysed areas of business are divided into three assessment groups: high priority (which indicates changes in profitability and growth opportunities of the business sector), medium priority (characterises the efficiency and stabilisation of development, studying opportunities for concentration in the business sector) and low priority (determines opportunities for cost optimisation and business consolidation in the industry). An analytical method was also used to study the dynamics of SA's innovation power.

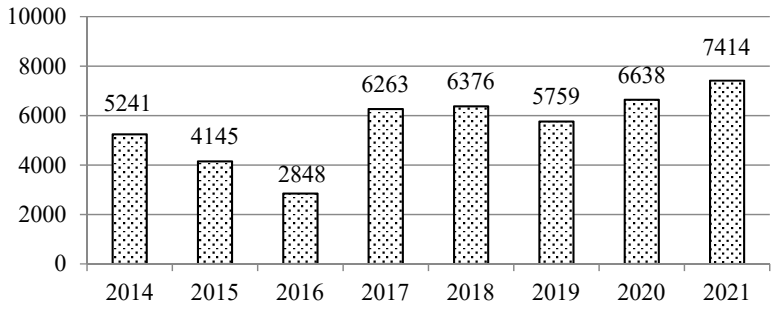
The method of reference point evaluation was used to determine the degree of SA success factors influence by business areas. Each of the success factors that meet the defined criteria of their classification and takes place in the SA management (according to Table 1) is awarded 2 points for constant influence, 1 point for partial influence, 0 points for no influence of the selected factor. The interpretation of SA success rate impact is as follows: 10-12 points – high level, 8-9 points – sufficient level, 6-7 points – medium level, 5 points and below – low level (for each criterion).

4. Results and Discussion

4.1. Creating SAs and prioritising digital transformation of business

Up to 76,000 joint venture agreements and 127,000 SA agreements have been concluded worldwide since 1985, bringing the total number of strategic partnerships to about 204,000 (Refinitiv, 2022). According to the research results, more than 40,000 different types of agreements were concluded in 2014-2021; their dynamics are shown in Figure 2.

Figure 2. Dynamics of concluded agreements within the framework of strategic partnership in 2014-2021



Source: compiled by the authors in accordance with World Bank, 2022; Refinitiv, 2022.

It is established that in 2017-2021 the number of concluded agreements in the field of strategic partnership compared to the crisis of 2016 increased by 2-2.6 times. The dynamic growth of concluded agreements number on SA creation has accelerated the digital transformation of business industries involved and expanded the scope of strategic business partnership, changing their structure and priority of digital transformation, as defined in Table 2.

In 2014-2021 the largest acceleration of the digital transformation was made by Healthcare & Pharmaceuticals (+4), Telecommunications (+2), Retail (+1), Media & Entertainment (+1), and the largest slowdown – Manufacturing (-5), Energy & Utilities (-4), Hospitality & Tourism (-3), Technology Products & Services (-3), Financial Services (-1). For other areas of business, digital transformation has had a neutral impact – Education (0). The business areas, that have appeared in the ranking since 2017, are characterised by the following changes: Professional Services (+1), Real Estate (0), Transportation & Logistics (0) and Consumer Packaged Goods (-3).

Table 2. Priority of digital transformation by business areas

Business areas distribution	2014-2015	2016-2017	2018-2019	2020-2021
High-priority digital transformation	1.Technology Products & Services 2.Media & Entertainment 3.Retail 4.Financial Services 5.Telecommunication	1.Media & Entertainment 2.Technology Products & Services. 3.Retail. 4.Financial Services. 5.Telecommunication	1.Media & Entertainment 2.Technology Products & Services 3.Telecommunications 4.Retail 5.Financial Services	1.Media & Entertainment 2.Retail 3.Telecommunications 4.Technology Products & Services 5.Financial Services
Medium-priority digital transformation	6.Education 7.Hospitality & Travel 8.CPG & Manufacturing 9.Healthcare	6.Consumer Packaged Goods 7.Education 8.Professional Services 9.Hospitality & Tourism	6.Hospitality & Tourism 7.Transportation & Logistics 8.Education 9.Professional Services	6.Education 7.Professional Services 8.Healthcare & Pharmaceuticals 9.Consumer Packaged Goods
Low-priority digital transformation	10. Utilities 11. Oil & Gas 12. Pharmaceuticals	10. Manufacturing 11. Transportation & Logistics 12. Real Estate 13. Healthcare & Pharmaceuticals 14. Energy & Utilities	10. Consumer Packaged Goods 11. Healthcare & Pharmaceuticals 12. Manufacturing 13. Energy & Utilities 14. Real Estate & Construction	10. Hospitality & Tourism 11. Transportation & Logistics 12. Real Estate & Construction 13. Manufacturing 14. Energy & Utilities

Source: compiled by the authors in accordance with Bradley et al., 2015; Wade, 2017; Yokoi et al., 2019; Wade et al., 2021.

The Media & Entertainment sector is assigned the highest priority for the digital transformation of business due to its greatest vulnerability to digital disruption. Intense threats of disruption have led to increased innovation in the sector. For example, some film studios have experimented with the online release of films. While movie studios struggled to distribute their content through traditional channels, streaming services derived revenue from subscribers (Wade et al., 2021). The Retail sector is assigned a high level of digital transformation mainly due to the growth of e-commerce, the share of which in the global volume increased from 7.4% to 19.5% in the researched period (Coppola, 2022). Amazon, Alibaba, and Zalando had a significant impact on the development of e-commerce. Digital shifts in the Telecommunications sector have been implemented by improving the interaction with customers based on digital solutions, automation of work processes, use of big data and artificial intelligence. In particular, process improvement and innovation have been achieved by AT&T based on artificial intelligence and machine learning programs by Deutsche Telekom through the use of search engines and Globe Telecom based on cloud technologies (Javaid, 2022). The Technology Products & Services sector significantly supported the development of financial services, retail, media, education and transportation during the pandemic. The Financial Services sector also belongs to the centres of digital transformation of business, but in recent years it has lost its position to a small extent due to the reduction in consumer demand for goods. However, electronic platforms are developing, among which Fintech is actually a high-priority digital transformation (focus on profitability and growth), including Revolut and Robin Hood. The Healthcare & Pharmaceuticals sector, which

underwent the greatest digital transformation in 2019-2021, due to the spread of the COVID-19 pandemic, achieved this thanks to the increase in strategic alliances, the growth of venture capital investment in the area of biotech and pharma. It is worth emphasising that more than 20% of digital healthcare start-ups in Europe emerged during the first waves of the pandemic (Wade et al., 2021). The Hospitality & Tourism sector has experienced a slowdown in the digitalisation of business due to a reduction in the provision of tourism services, a reduction in venture capital funding as a result of the COVID-19 pandemic. The Education sector has seen improvements in digitisation due to the shift to distance education as a result of the spread of COVID-19, but the shifts in the public sector have been much slower compared to the commercial education sector and due to increased venture capital funding.

However, the inclusion of Transportation & Logistics in the sphere of low-priority of digital transformation remains a debatable issue, which is partly due to the significant digitalisation of this business area in 2019. After all, this sector is characterised by both positive and negative changes. Among the positive ones, such as the ongoing electrification of transport and autonomous vehicles, an increase in cargo transportation by air transport should be highlighted, while among the negative ones – a reduction in passenger transportation services by air transport. The same goes for Real Estate & Construction, where the growth of digital transformation can make business much easier. The digital transformation of Manufacturing remains incomplete due to the lack of a high economic effect impact on companies and its active implementation in the period preceding 2015.

Among the factors influencing identified trends in the digital transformation of business are the spread of the COVID-19 pandemic, resulting in a growing need for information exchange and consumer goods, crises in the development and energy supply of industrial production, and reduction of tourist and financial services. The pandemic has accelerated digital business transformation, in particular, in April 2020, 68% of respondents, and in January 2021, 83% of respondents noted that. A survey of companies' senior management teams found that prior to COVID-19, only 68% of them considered the digital transformation of the business as a top priority for promoting development, compared to more than 90% of them during the COVID-19 pandemic. There is also a clear link between the propensity for the digital transformation of business and company size. Thus, for small firms, 55% of respondents are inclined to use digital strategies and transformations, for medium – 62%, for large – 78%, then for very large ones, which include SA, this tendency has 90% of respondents. The focus on investing in digital instruments is more on supporting innovation and growth (Wade et al., 2021).

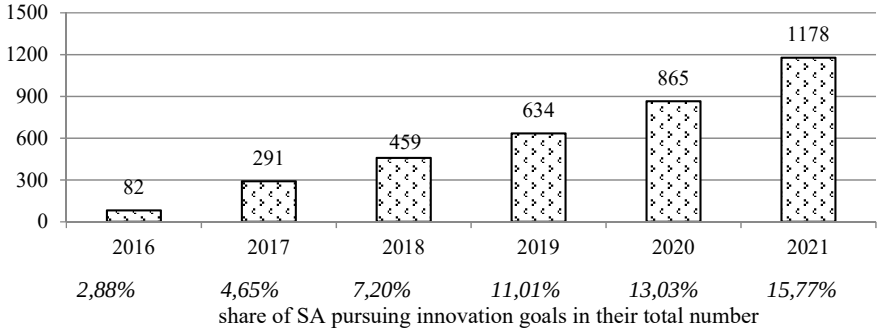
The obtained research results can be useful in determining further digital transformations in a certain sector of business from the point of view of the trends that characterise changes in the priority of its digitalisation. Their relevance for business increases when choosing a digital strategy when looking for reasons that make it difficult to determine the goals of digital transformations when establishing factors that influenced the acceleration or deceleration of digital transformation of business spheres. This will show the effectiveness or, conversely, the fragmentation of SA's digitisation policy, depending on the research findings.

4.2. The growth of SA innovative power

Acceleration of end-to-end organisational changes and introduction of innovations in SA's activity is carried out for the purpose of formation of a new market, clients and business. This, in turn, requires improving the organisation of partnerships and organisational culture, ensuring the integration of business sectors, achieving compatibility of strategic management goals, finding additional opportunities to achieve synergy effect, and increasing the level of external relevance of companies.

SA's number in the world is growing rapidly and their innovation power is increasingly becoming a determining motivating factor due to the rapid implementation of technological changes, achieving competitive advantage, improving the satisfaction of the need for innovation, creating opportunities to enter new markets, increasing the scale of activity (Özbek, 2022). This is evidenced by the research data summarised in Figure 3.

Figure 3. Number of SA formed to address these innovation topics in 2016-2021



Source: compiled by the authors in accordance with Özbek (2022) and own research.

Research has shown that SA's innovation is closely linked to the digital transformation of business processes based on information and communication technologies like big data analysis, artificial intelligence, blockchain, purchasing know-how, mobility, etc. That is, SA not only contributes to the digital transformation of various areas of business, but also through the use of digital technologies to increase their innovative power.

The significant influence of SA on the development of innovations is indicated by the following facts. Thus, the development and implementation of vaccines against COVID-19 have become possible thanks to the creation of associations of pharmaceutical giants with the capabilities and infrastructure necessary to successfully pass the drug through clinical trials, followed by its introduction into mass production and distribution. And therefore, Pfizer-BioNtech, Moderna, and AstraZeneca-Oxford vaccine-producing partnerships have performed with impressive efficiency. Daimler is leveraging the best in the automotive industry opportunities to address the challenges of future mobility through a portfolio of alliances and joint ventures. In the electric mobility sphere, Daimler has formed an SA with China's BAIC Group and American electric bus manufacturer Proterra. The company also collaborates with BMW, Bosch and Torc Robotics to develop autonomous driving systems

and with ChargePoint for innovative electric infrastructure solutions. Aluminium producer Alcoa and mining company Rio Tinto have formed SA to develop an innovative, low-emission aluminium production process. The purpose of SA Renault, Nissan and Mitsubishi was to acquire new opportunities and innovations in procurement, development and production, the target direction of which is to enter new markets and expand the scale of production. Among Google's many innovation-driven SAs is its relationship with luxury eyewear maker Luxottica, which the company relies on to develop wearables. The alliances between Tesla and Panasonic for the development and production of lithium-ion batteries for electric vehicles and between Uber and Spotify for mobile solutions, illustrate how members can use the different roles of their partners in the value chain for innovation (Özbek et al., 2022).

Research of SA success factors in 2014-2021 in various business areas (Sony and Panasonic; Daimler, BAIC Group, Proterra; Pfizer and BioNtech; Renault, Nissan and Mitsubishi; Elysis; Hewlett-Packard and Microsoft; Moderna and AstraZeneca-Oxford and others) using the method of reference scoring revealed results summarised in Table 3.

Table 3. The level of influence of SA success factors by business areas

Researched areas of business	Organisation of partnerships, organisational culture	Integration of business sectors	Compatibility of management goals and strategic capabilities	External relevance	Achieving a synergistic effect
Media & Entertainment	high	high	high	high	high
Retail	high	high	high	high	high
Telecommunications	high	high	high	high	high
Technology Products & Services	high	high	high	high	sufficient
Financial Services	high	high	high	high	sufficient
Education	sufficient	high	high	high	sufficient
Professional Services	sufficient	high	high	high	sufficient
Healthcare & Pharmaceuticals	sufficient	high	high	high	sufficient
Consumer Packaged Goods	sufficient	high	sufficient	sufficient	sufficient
Hospitality & Tourism	sufficient	sufficient	sufficient	intermediate	intermediate
Transportation & Logistics	sufficient	sufficient	sufficient	intermediate	intermediate
Real Estate & Construction	intermediate	intermediate	sufficient	intermediate	low
Manufacturing	intermediate	intermediate	intermediate	intermediate	low
Energy & Utilities	intermediate	intermediate	intermediate	intermediate	low

Source: compiled by the authors.

Ensuring a high level of priority for digital transformation and innovation through SA creation in Media & Entertainment, Retail, Telecommunications, Technology Products & Services, Financial Services is supported by a high level of partnership and organisational culture, integration of business sectors, compatibility of management goals, external relevance and synergy effect (for Technology Products & Services and Financial Services is

characterised by a sufficient level). For SA Education, Professional Services, Healthcare & Pharmaceuticals and Consumer Packaged Goods, the average level of digital transformations priority is provided by a high level of integration of business sectors, compatibility of management goals, and external relevance. The low level of acceleration of digital transformations and innovative power in such sectors of SA creation as Hospitality & Tourism, Transportation & Logistics – is caused by the decrease in external relevance and opportunities to achieve synergetic effect from sufficient to average, compared to other researched business areas; for Real estate & Construction, Manufacturing and Energy & Utilities – is caused by the average level of organisation of partnerships and organisational culture, integration of business sectors, compatibility of management goals, external relevance, low level of opportunities to achieve synergy effect.

Making an attempt to determine the degree of influence of SA success factors by business spheres is useful from the point of view of studying the feasibility of further improving the level of partnership and organisational culture, integration of business sectors, compatibility of management goals, external relevance and synergy effect. After all, this will affect the effectiveness of SA creation in the future, which has undeniable relevance for business. At the same time, obtained results are new, because previously conducted research was limited to studying the issues of the exchange of resources and technologies, risk sharing in order to adjust and coordinate activity of creating new business value, as well as establishing the influence of individual factors of SA success without their proper grouping. Therefore, it will have a certain significance for the development of scientific approaches to justifying the impact of the creation of SA on the digital transformation of business.

5. Conclusion

Research describes a scientific approach that justifies the impact of SA creation on the digital transformation of business and the development of their innovation based on 5 groups of success factors. Theoretical and empirical authors' contribution to research is to form a business-integrated approach to understanding digital transformation as a vector of business development, which involves the introduction of advanced digital technologies in the management system, accelerates innovation and organisational changes, and determines the importance of researching factors ensuring their success. Research results proved that SA creation is closely related to processes of accelerating the digital transformation of business areas involved in strategic partnerships, promoting its development, and through the use of digital technologies increases their innovation power. SA's success factors grouping and further assessment of their impact on digital transformation and innovation power allowed establishing the level of organisation of partnership and organisational culture, ensuring the integration of business sectors, achieving compatibility of management goals, ability to achieve synergy effect and increasing external relevance have different degree of influence on the studied processes in the analysed business areas. The research revealed a trend towards an increase in the number of strategic partnership agreements and a change in the priority of digital transformation of partner companies in various areas of business. It is important to confirm the fact that the innovative power of SA creating is growing. It was found that the

share of SA pursuing innovation goals in their total number in the analysed period increased from 2.88% to 15.77%. Therefore, in order to improve processes of business' digital transformation and increase innovation power, companies need to look for promising partners and create SA.

Further research should be directed at establishing the relationship between the dynamics of indicators of SA creation and the degree of acceleration of their digital transformation, and also focus on the development of digital strategies, taking into account the innovative power of SA.

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