ISSN (Print) 2307-6968, ISSN (Online) 2663-2209
Вчені записки Університету «КРОК» №2 (82), 2026

УДК 004.738.5:655.3:338.46
DOI: 10.31732/2663-2209-2026-82-296-304

Дата надходження: 30.04.2026
Дата прийняття до друку: 15.05.2026
Дата публікації: 30.05.2026

ПЛАТФОРМНА СЕРВІТИЗАЦІЯ ЯК МОДЕЛЬ СТРАТЕГІЧНОЇ ТРАНСФОРМАЦІЇ У ЦИФРОВІЙ ПОЛІГРАФІЧНІЙ ІНДУСТРІЇ

Артур Лапідус[1]

[1]Асистент Університету прикладних наук Ансбаха, Ансбах, Німеччина, e-mail: artur.lapidus@gmx.de, ORCID: https://orcid.org/0000-0002-9928-6453

PLATFORM-BASED SERVITIZATION AS A STRATEGIC TRANSFORMATION MODEL IN THE DIGITAL PRINTING INDUSTRY

Artur Lapidus[1]

[1]Assistant Professor at Ansbach University of Applied Sciences, Ansbach, Germany, e-mail: artur.lapidus@gmx.de, ORCID: https://orcid.org/0000-0002-9928-6453

Анотація. *Цифрова трансформація промисловості формує нові підходи до стратегічного управління виробничими підприємствами шляхом зміни механізмів створення цінності, структури конкурентних переваг і моделей взаємодії з клієнтами. Особливо динамічно ці процеси розвиваються у цифровій поліграфічній індустрії, де традиційні друкарські компанії трансформуються в інтегровані цифрові платформи, екосистеми Web-to-Print та сервісно-орієнтовані бізнес-моделі. Актуальність дослідження зумовлена недостатнім рівнем наукового опрацювання платформної сервітизації як комплексної моделі стратегічної трансформації підприємств цифрової поліграфії в умовах цифрової економіки. Метою дослідження є розроблення концептуальної моделі платформної сервітизації як механізму стратегічної трансформації компаній, що функціонують у цифровій поліграфічній індустрії. Об'єктом дослідження є процеси цифрової трансформації та сервісної інтеграції в межах платформних поліграфічних екосистем. Теоретичну основу дослідження становлять концепції сервітизації, платформної економіки, екосистемного управління, цифрової трансформації та data-driven governance. У дослідженні використано методи системного аналізу, порівняльного аналізу, структурно-функціонального аналізу, теоретичного узагальнення та стратегічного аналізу. У статті систематизовано теоретичні підходи до платформної сервітизації та визначено ключові чинники стратегічної трансформації цифрових поліграфічних компаній. Дослідження демонструє, що розвиток платформ Web-to-Print, хмарних інфраструктур, автоматизації workflow-процесів, інтеграції штучного інтелекту та data-driven управління формує нову операційну модель поліграфічних підприємств, у якій цифрові сервіси, мережеві ефекти, платформна масштабованість і управління клієнтським досвідом стають основними джерелами конкурентних переваг. Запропоновано концептуальну модель стратегічної трансформації платформних поліграфічних компаній, що інтегрує механізми платформного governance, оркестрації екосистем та цифрового управління бізнес-процесами. Практичне значення дослідження полягає у можливості застосування запропонованої моделі для розроблення стратегій цифрової трансформації, оптимізації workflow-процесів, розширення платформних екосистем та вдосконалення клієнтоорієнтованих сервісів у цифровій поліграфічній індустрії.*

Ключові слова: *платформна сервітизація; цифрова поліграфічна індустрія; платформна економіка; Web-to-Print; цифрова трансформація; екосистемне управління; data-driven управління; платформне governance; клієнтський досвід; автоматизація workflow-процесів.*

Формули: 10; рис.: 0; табл.:2; бібл.: 51

Abstract. *Digital transformation of industry creates new approaches to strategic management of manufacturing enterprises by changing value creation mechanisms, competitive advantage structures, and customer interaction models. These processes are particularly dynamic in the digital printing industry, where traditional printing companies are transitioning toward integrated digital platforms, Web-to-Print ecosystems, and service-oriented business models. The relevance of the study is determined by the insufficient scientific development of platform-based servitization as a comprehensive model of strategic transformation for digital printing enterprises in the context of the digital economy. The purpose of the study is to develop a conceptual model of platform-based servitization as a strategic transformation mechanism for companies operating in the digital printing industry. The object of the research includes digital transformation processes and service integration within platform-based printing ecosystems. The theoretical framework is based on the concepts of servitization, platform economy, ecosystem management, digital transformation, and data-*

driven governance. The study applies methods of system analysis, comparative analysis, structural-functional analysis, theoretical generalization, and strategic analysis. The article systematizes theoretical approaches to platform-based servitization and identifies key factors of strategic transformation in digital printing companies. The study demonstrates that the development of Web-to-Print platforms, cloud-based infrastructures, workflow automation, AI integration, and data-driven management creates a new operational model for printing enterprises in which digital services, network effects, platform scalability, and customer experience management become the main sources of competitive advantage. A conceptual model of strategic transformation for platform-based printing companies is proposed, integrating platform governance mechanisms, ecosystem orchestration, and digital business process management. The practical significance of the research lies in the possibility of applying the proposed model for developing digital transformation strategies, optimizing workflow processes, expanding platform ecosystems, and improving customer-oriented services in the digital printing industry.

Keywords: *platform-based servitization; digital printing industry; platform economy; Web-to-Print; digital transformation; ecosystem management; data-driven management; platform governance; customer experience; workflow automation.*

Formulas: 10; fig.: 0; tab.: 2; bibl.: 51

Introduction. The digital transformation of industry is significantly changing traditional business models of manufacturing enterprises, forming new mechanisms for creating value, interacting with customers, and organizing a competitive environment. These processes are especially dynamic in industries that combine production processes with information technologies, platform solutions, and the service economy. One such industry is the digital printing industry, where in recent years there has been a transition from traditional printing production to integrated digital ecosystems.

At the same time, the digital printing industry faces a number of practical challenges, including increased global competition, the growing role of personalized production, the reduction of the life cycle of printed products, the need to integrate cloud-based services, automate workflow processes, and improve the efficiency of customer experience management. Traditional printing enterprises often do not have sufficiently flexible business models to function in the digital economy, which makes the transition to platform-based ecosystems and service-oriented management models urgent.

The scientific problem lies in the lack of a comprehensive approach to the strategic transformation of digital printing industry enterprises based on platform-based servitization, which would combine the mechanisms of digital integration, platform governance, data-driven management and ecosystem orchestration.

The modern development of Web-to-Print platforms, cloud-based infrastructures, SaaS models, workflow automation systems and integrated CRM/MIS solutions forms a new logic of the functioning of printing enterprises. In such conditions, the competitiveness of companies is less and less determined solely by production capacities and increasingly depends on the ability to manage data, digital services, platform interaction and customer experience (Baines & Lightfoot, 2014).

The transformation of the printing industry is taking place under the influence of the concept of servitization - the process of transition from selling a physical product to providing complex service solutions. In the digital environment, this process takes on a new form – platform-based servitization, in which the service model is implemented through digital platforms that ensure the integration of customers, manufacturers, suppliers and digital services within a single ecosystem (Kowalkowski et al., 2017).

The aim of the article is to study platform-based servitization as a strategic model for the transformation of digital printing industry enterprises, identify the main stages of the transition to platform ecosystems, analyze the factors of competitive advantage formation and develop a conceptual model for managing the digital transformation of printing companies.

Literature Review. The issue of platform-based servitization is actively developing in modern economic and management science in the context of digital

transformation of industry, service economy and platform business models. The first conceptual approaches to servitization were formed in the works of Vandermerwe and Rada (1988), who defined servitization as the process of integrating service components into traditional production products. Further development of the concept is presented in the studies of Baines and Lightfoot (2014), where servitization is considered as a strategic mechanism for transforming manufacturing companies into providers of comprehensive solutions. Kowalkowski and Gebauer (2017) made a significant contribution to the development of the theory of service transformation, who substantiated the role of digital technologies, data analytics and platform integration in the formation of service-oriented business models. In parallel, the theory of platform economy was actively developing. Parker, Van Alstyne and Choudary (2016) define digital platforms as a mechanism for coordinating interactions between different groups of users, where data, network effects and digital ecosystems become key resources.

The issues of platform governance and ecosystem management were investigated by Tiwana (2014), Gawer (2014), Jacobides, Cennamo and Gawer (2018), focusing on the mechanisms of orchestrator management, balancing openness and control and ecosystem coordination. A significant body of research is devoted to the digital transformation of manufacturing enterprises. Porter and Heppelmann (2014) argue that smart connected products change the logic of competition, while Westerman, Bonnet and McAfee (2014) consider digital transformation as a complex change in business models, organizational culture and customer experience.

In the context of the digital printing industry, research is mainly focused on Web-to-Print technologies, workflow automation, variable data printing and cloud-based printing systems. Kumar and Reinartz (2016) examine personalization and data-driven services, while Coreynen, Matthyssens, and Van Bockhaven (2017) analyze the relationship between digitization and servitization. Davenport and Harris (2007) argue for the role of data analytics as a source of strategic competitive advantage.

At the same time, the analysis of the scholarly literature indicates that the majority of studies examine servitization, platform economy, and digital transformation in a fragmented manner. Insufficient attention has been devoted to the mechanisms of platform governance within digital printing ecosystems, the role of data-driven management, the transformation of traditional printing firms into platform orchestrators, and the formation of ecosystem-based competitive advantages. Furthermore, the existing body of research lacks comprehensive conceptual models integrating servitization, platform governance, and digital transformation within the context of the digital printing industry, thereby underscoring the necessity for further research in this field.

Aim and Methodology. The aim of the article is to study platform-based servitization as a strategic transformation model for enterprises in the digital printing industry and to develop a conceptual model of their transition toward digital platform ecosystems. The study focuses on the role of Web-to-Print platforms, workflow automation, cloud infrastructure, artificial intelligence, data-driven management, and customer experience management in the formation of new competitive advantages.

The methodological basis of the research combines the concepts of servitization, platform economy, digital transformation, ecosystem management, and data-driven governance. The study uses system analysis to examine platform-based servitization as an integrated transformation process, comparative analysis to distinguish traditional printing business models from platform-based ecosystems, and structural-functional analysis to identify the main components of the proposed model. Theoretical generalization is applied to systematize scholarly approaches, while strategic analysis is used to define the key factors of competitiveness, including network

effects, platform scalability, service integration, ecosystem orchestration, and AI-based personalization.

Results. In modern economic science, servitization is considered as a strategic process of transforming manufacturing companies into providers of integrated service solutions. The concept was initially formulated by Vandermerwe and Rada (1988) as a process of supplementing physical products with service components to increase consumer value. Later, servitization evolved from product-service systems to digital service ecosystems. Baines and Lightfoot (2014) define servitization as a strategic mechanism for transforming manufacturing companies into providers of integrated solutions, while Gebauer et al. (2005) emphasize the role of digital services, data analytics, and customer interaction in creating competitive advantages. Kowalkowski and Gebauer (2017) argue that modern service transformation is impossible without platform integration and data-driven management.

Platform-based servitization is a new stage in the development of service transformation, in which digital platforms become the central mechanism of ecosystem orchestration. Unlike traditional linear business models, platform ecosystems provide distributed value creation through the integration of external stakeholders. Tiwana (2014) and Gawer (2014) emphasize that digital platforms create network effects and form new sources of platform competitiveness. Jacobides, Cennamo and Gawer (2018) consider ecosystem coordination as the basis of the platform economy, and Parker, Van Alstyne and Choudary (2016) define digital platforms as a mechanism for coordinating interaction between different groups of users. Choudary (2015) emphasizes that platform business models change the mechanisms of value creation through the integration of data, digital services and ecosystem interaction. Hagiu and Wright (2015) analyze network effects and platform scalability, and Tirole (2017) argues that the platform economy transforms modern mechanisms of competition.

The digital printing industry is one of the most dynamic sectors of the digital economy. Westerman, Bonnet and McAfee (2014) consider digital transformation as a systemic process of restructuring business models, organizational culture and customer experience. Porter and Heppelmann (2014) argue that smart connected products change the logic of production system management. In the printing industry, digital transformation is manifested through Web-to-Print technologies, workflow automation, cloud manufacturing, SaaS systems and variable data printing. Kumar and Reinartz (2016) identify personalization and data-driven services as the main mechanisms of customer value creation, while Coreynen, Matthyssens and Van Bockhaven (2017) emphasize the relationship between digitization and servitization in manufacturing companies.

Platform-based servitization in the digital printing industry is manifested through the integration of Web-to-Print platforms, CRM/ERP systems, cloud services, AI-driven analytics and automated workflow management. As a result, traditional printing firms are transforming into platform-based service ecosystems, where competitiveness depends on ecosystem coordination, customer experience management, and data-driven governance. Data, digital services, network effects, and customer interaction are becoming key strategic assets of platform companies. Variable data printing plays a special role, allowing the creation of personalized printing products based on customer analytics and automated algorithms (Kumar & Reinartz, 2016). This approach ensures the transition from standardized mass production to adaptive customization. The integration of cloud technologies provides scalability, workflow automation, centralized management, and integration of geographically distributed production facilities. As a result, there is a transition from industrial competition to ecosystem competition, where competitive advantage increasingly depends not on production assets, but on the capability to orchestrate digital ecosystems and integrate heterogeneous data flows. In the platform

economy, companies are transformed into ecosystem coordinators, which ensure synchronization of customer interaction, production management, and digital communication. For the digital printing industry, this means the development of managed print services, subscription models, cloud-based design systems, and print-on-demand ecosystems.

An important element of platform-based servitization is data governance. Data is becoming a strategic resource that determines the effectiveness of personalization, predictive analytics, and customer engagement. Data-driven management ensures the transition from reactive management models to predictive governance systems. Management decisions are increasingly based on real-time analytics, AI systems, and customer behavior data. This allows for increased adaptive responsiveness and ecosystem coordination in the digital environment. Platform companies create competitive advantages through customer intelligence, automation, AI-based personalization, and omnichannel interaction. The transformation of traditional printing firms into platform ecosystems is a multi-level process. The first stage involves the digitization of existing processes through workflow automation, ERP/MIS systems, and CRM integration (Porter & Heppelmann, 2014). The second stage involves digital integration and the creation of Web-to-Print portals and omnichannel communication systems. The third stage is associated with the formation of service-oriented business models, where companies move from selling printed products to providing integrated digital solutions. The fourth stage is characterized by the transition to platform ecosystems, within which companies perform the function of orchestrator and coordinate the interaction between customers, suppliers, logistics providers and software developers. The fifth stage is data-driven platform governance, where management is based on AI systems, predictive algorithms and automated decision-support systems.

In the process of platform transformation, the organizational capabilities of enterprises change. For platform-based companies, digital competencies, ecosystem management, customer experience management, agile governance and innovation management become critically important. Organizational competitiveness increasingly depends on the capability to coordinate distributed interactions and ensure continuous innovation processes. The structure of companies' revenues is also changing: traditional production revenues are gradually replaced by subscription revenues, SaaS services, analytics services and cloud solutions. Recurring interaction models form the basis of sustainable platform ecosystems and ensure higher customer retention.

Platform governance is one of the key factors of competitiveness of digital printing companies. Platform ecosystem management includes data governance, API management, cybersecurity, workflow standardization and ecosystem coordination. At the same time, platform governance must maintain a balance between platform openness and control, which is the central problem of ecosystem management. The effectiveness of platform ecosystems depends on interoperability, network interdependencies and synchronization of distributed digital processes. Innovation management is of particular importance. Chesbrough (2003) considers the open innovation model as a mechanism for creating innovations through ecosystem collaboration. In the digital printing industry, innovations include AI integration, smart workflow systems, predictive maintenance, recommendation systems and sustainability technologies. Open innovation environment provides acceleration of knowledge exchange and continuous ecosystem innovation. Sustainability is also becoming an important component of platform-based servitization. Print-on-demand ecosystems, workflow automation and cloud infrastructures contribute to optimization of resources, reduction of waste and energy efficiency. Thus, platform-based servitization is not only a technological innovation, but a comprehensive model of strategic

transformation of the digital printing industry in the digital economy.

An important component of strategic transformation is organizational culture change. Successful digital transformation is impossible without innovation-oriented culture, customer-centric management, digital mindset and continuous learning. Organizational culture in platform-based companies determines the speed of integration of innovations and readiness for ecosystem collaboration. Managing platform ecosystems is one of the most complex aspects of modern strategic management. Unlike traditional hierarchical organizations, platforms function as decentralized networks of interaction (Jacobides et al., 2018). Therefore, platform governance should provide flexibility of ecosystem participation, coordination efficiency and strategic control over digital infrastructure.

In the digital printing industry, platform governance encompasses data management, ecosystem coordination, API management, cybersecurity, and customer relationship management. The effectiveness of governance depends on the orchestrator firm's ability to support interoperability and synchronization of distributed digital processes. Platform ecosystems are characterized by a high level of network interdependencies, so a disruption in coordination efficiency in one ecosystem segment can impact overall platform performance. One of the key issues is balancing openness and control. Excessive openness reduces ecosystem control and cybersecurity, while excessive centralization limits innovation dynamics and network expansion.

Customer experience management is of particular importance. In the platform economy, customer experience is becoming one of the key strategic assets, as the quality of digital interaction determines customer loyalty and long-term platform competitiveness. Platform-based companies use AI-based recommendation systems, predictive analytics, customer journey mapping, and behavioral analytics. The integration of AI-driven customer management systems allows you to move from reactive service models to predictive customer engagement strategies. Platform ecosystem management also requires new organizational structures: agile teams, cross-functional structures, digital innovation hubs and ecosystem management offices.

In the modern digital economy, data is becoming a key strategic resource. For the digital printing industry, data-driven management is becoming the basis for building competitive advantages and efficiency of platform ecosystems. Unlike traditional industrial models, in the platform-based economy, data flows form the basis for strategic coordination, adaptive decision-making and ecosystem optimization. Data-driven management involves the use of data analytics to predict customer behavior, optimize workflow and personalize services.

Table 1

Data sources

Digital printing industry	Printing Companies
-CRM systems; -Web-to-Print platforms; -online customer behavior; -ERP/MIS systems; -production analytics; -logistics systems; -social media interactions.	-demand forecasting; -production process optimization; -customer segmentation; -personalization; -predictive maintenance; -inventory management.

Source: Davenport & Harris, 2007

Table 1 shows that modern digital printing companies are forming integrated data ecosystems that encompass CRM systems, Web-to-Print platforms, ERP/MIS systems, production analytics, and social media interactions. It is the integration of heterogeneous data sources that forms the basis of ecosystem intelligence and allows platform-based firms to carry out real-time coordination of customer interactions,

production workflows, and supply chain operations. One of the key areas of data-driven management is variable data printing. This technology allows you to create personalized printed materials based on customer data. The use of AI and machine learning provides automatic personalization, customer behavior prediction, intelligent workflow automation, and optimization of customer journeys. Predictive analytics plays an important role. Based on historical data, companies can predict customer needs, seasonal fluctuations, and load on production capacities. In platform ecosystems, data becomes a source of network effects. The more users interact with the platform, the more data accumulates, which increases the efficiency of analytics, personalization, and ecosystem coordination. At the same time, data-driven management creates new challenges: cybersecurity, privacy protection, ethical AI, data governance and regulatory compliance. Thus, data-driven management is a key component of platform-based servitization in the digital printing industry. In the modern platform economy, the sources of competitive advantage are significantly different from traditional industrial models. For the digital printing industry, digital services, platform integration and ecosystem management are becoming the main factors of competitiveness. If in traditional printing firms competitiveness was formed through ownership of production assets and economies of scale, then in platform-based ecosystems the main source of value creation is interaction efficiency, digital coordination and customer engagement mechanisms. An important factor is customer lock-in. Thanks to ecosystem integration, personalization and interoperability between digital services, switching costs increase, which ensures customer retention and ecosystem stability. Platform companies benefit from economies of data, automation, AI-based optimization and cloud infrastructures.

One of the most important advantages of platform companies is network effects (Eisenmann et al., 2006). Expansion of ecosystem participation automatically increases platform attractiveness and stimulates further growth of ecosystem scale. In the digital printing industry, this is manifested through the integration of designers, automation of supply chains and integration of marketing services. Digital printing platforms are transformed into multifunctional service ecosystems that integrate production, marketing, logistics and analytics within a single digital environment. Agility is of particular importance. Platform-based firms are able to adapt faster to market changes and integrate emerging digital technologies.

Innovation management is critically important for platform-based companies, as digital ecosystems are characterized by a high rate of technological change. In the digital printing industry, innovations include AI integration, cloud services, automation, smart workflow, personalized printing and sustainability technologies. Platform companies have a higher level of innovation capacity due to open ecosystems, collaborative innovation and user-generated improvements. Of particular importance is the open innovation model, in which innovations are created through interaction with partners and customers (Chesbrough, 2003). Continuous organizational learning is becoming a necessary condition for sustainable ecosystem competitiveness.

The issue of sustainable development is becoming increasingly important for the digital printing industry. Platform-based servitization contributes to sustainability through optimization, automation and resource efficiency. The integration of data analytics and workflow automation allows you to minimize waste generation and optimize resource utilization. Print-on-demand ecosystems synchronize production volumes with actual customer demand, which reduces overproduction and inventory costs. Automation of workflow provides energy efficiency and optimized production cycles. Cloud technologies contribute to sustainability through centralized infrastructures. At the same time, platform ecosystems create environmental challenges: data center energy

consumption, electronic waste and cybersecurity infrastructure costs.

Based on the research conducted, it is advisable to propose a conceptual model of platform-based servitization for the digital printing industry (Table 2).

Table 2

Levels of the platform-based servitization model for the digital printing industry

1. Production digitization -automation; -ERP/MIS integration; -digital workflow.	2. Service integration -Web-to-Print; -CRM systems; -customer portals.	3. Platform ecosystem development -ecosystem coordination; -API integration; -partner networks.
4. Data-driven governance -analytics; -AI systems; -predictive management.	5. Intelligent platform orchestration -autonomous optimization; -ecosystem intelligence; -adaptive management.	

Sources: Developed by the author based on the data and concepts of servitization, digital transformation, platform ecosystems, and data-driven governance proposed by Vandermerwe and Rada (1988), Baines and Lightfoot (2014), Parker et al. (2016), Tiwana (2014), Coreynen et al. (2017), Jacobides et al. (2018), and Porter and Heppelmann (2014)

The proposed model reflects the evolution of digital printing firms from production digitization to intelligent ecosystem orchestration and demonstrates the causal relationship between digital integration, ecosystem coordination and strategic competitiveness. The key success factors are digital capabilities, ecosystem management, customer-centricity, data governance and innovation culture. It is the integration of these factors that forms the basis of sustainable platform transformation and ensures the long-term adaptability of digital printing companies in the conditions of the platform economy.

Conclusions. The study substantiates that platform-based servitization is a key model for the transformation of digital printing industry enterprises in the digital economy. It has been established that the modern printing industry is moving from traditional production-oriented business models to integrated digital service platforms, where data, digital services, network effects and customer experience management are the main sources of value creation.

Theoretical approaches to servitization, platform economy, ecosystem governance and digital transformation have been systematized, which allowed us to form a holistic vision of platform-based servitization as an interdisciplinary model of strategic management. It has been proven that the integration of Web-to-Print technologies, cloud-based infrastructures, workflow automation, AI-driven analytics and data-driven management forms a new architecture of digital printing ecosystems.

The scientific novelty of the study lies in the development of a comprehensive approach to the analysis of platform-based servitization in the digital printing industry based on the integration of the concepts of servitization, platform economy and ecosystem management. A conceptual model of the strategic transformation of printing companies into platform ecosystems is proposed.

The practical significance of the results lies in the possibility of using the proposed model to develop strategies for the digital transformation of printing companies, optimize workflow processes, develop Web-to-Print ecosystems, and increase the efficiency of customer experience management.

Prospects for further research are related to the assessment of platform ecosystem performance, the study of AI governance, and the formation of sustainability metrics for platform-based printing companies.

Conflict of interest. The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest, except where separately disclosed in the manuscript.

Funding. The author declares that the publication of this article was funded by the author.

Ethics statement. All procedures performed in this study complied with institutional and international ethical standards.

Generative AI statement. The author declares that no Generative AI was used in the preparation of this manuscript unless otherwise explicitly stated in the manuscript.

References:

1.Baines, T., & Lightfoot, H. (2014). Servitization of the manufacturing firm. *International Journal of Operations and Production Management*, *34*(1), 2–35.
2.Chesbrough H. Open Innovation. Harvard Business School Press, 2003. 272 p.
3.Choudary S. Platform Scale. Platform Thinking Labs, 2015. 304 p.
4.Coreynen W., Matthyssens P., Van Bockhaven W. Boosting Servitization through Digitization. Industrial Marketing Management. 2017. Vol. 60. P. 42–53.
5.Davenport T., Harris J. Competing on Analytics. Harvard Business Review Press, 2007. 240 p.
6.Eisenmann T., Parker G., Van Alstyne M. Strategies for Two-Sided Markets. Harvard Business Review. 2006. Vol. 84. № 10. P. 92–101.
7.Gawer A. Bridging Differing Perspectives on Technological Platforms. Research Policy. 2014. Vol. 43. № 7. P. 1239–1249.
8.Gebauer, H., Fleisch, E., & Friedli, T. (2005). Overcoming the service paradox in manufacturing companies. European Management Journal, 23(1), 14–26.
9.Hagiu A., Wright J. Multi-sided Platforms. International Journal of Industrial Organization. 2015. Vol. 43. P. 162–174.
10.Jacobides M., Cennamo C., Gawer A. Towards a Theory of Ecosystems. Strategic Management Journal. 2018. Vol. 39. № 8. P. 2255–2276.
11.Kowalkowski, C., & Gebauer, H. (2017). *Service growth in product firms*. Cambridge University Press.
12.Kumar V., Reinartz W. Creating Enduring Customer Value. Journal of Marketing. 2016. Vol. 80. № 6. P. 36–68.
13.Parker, G., Van Alstyne, M., & Choudary, S. (2016). *Platform revolution*. W.W. Norton & Company.
14.Porter M., Heppelmann J. How Smart, Connected Products Are Transforming Competition. Harvard Business Review. 2014. Vol. 92. № 11. P. 64–88.
15.Rifkin J. The Age of Access. New York: Penguin, 2001. 320 p.
16.Tirole J. Economics for the Common Good. Princeton University Press, 2017. 576 p.
17.Tiwana, A. (2014). Platform ecosystems. Morgan Kaufmann.
18.Vandermerwe, S., & Rada, J. (1988). Servitization of business: Adding value by adding services. European Management Journal, 6(4), 314–324.
19.Westerman G., Bonnet D., McAfee A. Leading Digital. Boston : Harvard Business Review Press, 2014. 304 p.