Journal of Process Management and New Technologies
Vol. 14, Issue 1-2, 2026, pp. 50-65

DIGITAL PLATFORMS ECOSYSTEMS AND BUSINESS MODEL DYNAMICS: AN EMPIRICAL ANALYSIS OF INTERNATIONAL AWARD-WINNING PROJECTS

Nađa PETROVIĆ[1*], Milica NESTOROVIĆ[2]

[1]*Faculty of Social Sciences, Belgrade, University Business Academy in Novi Sad, Serbia,*
nadja.petrovic@fdn.edu.rs
https://orcid.org/0009-0005-6160-7433

[2] *Faculty of Social Sciences, Belgrade, University Business Academy in Novi Sad, Serbia,*
milica.nestorovic@fdn.edu.rs
https://orcid.org/0000-0002-8663-1721

Abstract: *Digital transformation and digital platforms have led to significant changes in the way value is created, delivered, and captured in the economy and modern business. The aim of this paper is to analyze the structure of business models, monetization models, and the geographical scope of digital platforms awarded within the World Summit Awards (WSA) program in the period 2021–2025. The research is based on a mixed-method approach with a primary focus on qualitative analysis, applying content analysis and comparative analysis to a selected sample of 25 digital platforms. The results indicate the dominance of marketplace and fintech models, which account for more than two-thirds of the analyzed sample, while SaaS and AI platforms have a smaller but globally oriented presence. From a monetization perspective, transaction-based fees represent a significant revenue generation mechanism, while subscription models are primarily applied to standardized technological solutions. The findings reveal a clear correlation between the type of business model, monetization structure, and market expansion strategy. Interaction-based platforms tend to achieve regional growth, whereas standardized models demonstrate higher global adaptability. The contribution of this paper lies in the empirical analysis of platform development patterns across different environments, thereby enhancing the understanding of growth dynamics and internationalization of digital platforms, particularly in developing countries.*

Keywords: *digital platforms, platform business models, monetization, network effects, digital transformation, internationalization*

Original scientific paper
Received: 22.04.2026
Accepted: 30.05.2026
Available online: 31.05.2026
DOI: 10.5937/jpmnt14-66690

[*] Corresponding author

1. Introduction

Digital transformation represents one of the key drivers of change in the modern economy, as it reshapes the way organizations create, deliver, and capture value. The digitalization of various social and economic systems, including education, has a significant impact on economic development and the formation of new competencies in the labor market (Stojanović et al., 2021).

In the traditional approach, the value chain is predominant, whereas today an increasing number of companies operate within digital systems, in which platforms serve as central tools for interaction among multiple user groups (Vial, 2019; Autio et al., 2021). This process is referred to as the platformization of the economy and has led to the emergence of new competitive dynamics based on network effects, scalability, and data management.

Contemporary platform business models differ from traditional models in that value does not arise solely from internal production, but rather from the ability to facilitate interactions among different groups of market participants (Jacobides et al., 2018). A key growth mechanism of such models lies in direct and indirect network effects, which enable exponential increases in value as the number of users grows (Cennamo, 2021). According to Stallkamp and Schotter (2021), digital platforms are characterized by a high degree of scalability and the ability to internationalize rapidly, leading to the emergence of "born-digital global firms."

Although a substantial number of studies provide detailed analyses of the strategies of global technology companies, there is a smaller body of research that systematically examines the structure of business models, monetization strategies, and the geographical scope of platforms in smaller and transitional markets. Furthermore, the relationship between the choice of monetization model and market expansion strategies, as well as the role of hybrid models in early growth stages, remains insufficiently explored.

Based on the above, the aim of this paper is to analyze selected digital projects through three key analytical dimensions: (1) type of business model, (2) monetization model, and (3) geographical scope. The paper seeks to identify and determine dominant patterns and to assess the extent to which theoretical concepts of platform systems are applicable within the analyzed sample.

The significance of this paper lies in the systematization and comparative analysis of platform business models that represent award-winning projects within the World Summit Awards initiative, as well as in linking contemporary theoretical frameworks of digital transformation and platform systems with empirical findings.

2. Theoretical framework

2.1. Digital transformation and the platformization of the economy

Digital transformation is a complex process involving organizational, technological, and strategic changes driven by the application of digital technologies in value creation. It does not merely imply the introduction of new technologies, but also the redesign of business models, processes, and customer relationships (Vial, 2019). Contemporary literature emphasizes that digital transformation leads to restructuring, the emergence of new intermediaries, and changes in the concept of competitive advantage.

One of the main outcomes of digital transformation is the platformization of the economy. Companies no longer operate in isolation but are instead viewed as part of large digital ecosystems that connect producers, consumers, and other stakeholders. Modern digital platforms differ from traditional firms in that value is not generated solely through internal production, but through enabling interactions between different sides of the market and

through network effects. Cennamo (2021) highlights that an increase in the number of users leads to greater value for all market participants, enabling exponential scalability and resulting in high market concentration. According to Autio et al. (2021), digital technologies further enable spatial independence of business operations, thereby reducing entry barriers and accelerating internationalization.

Recent research indicates that data and algorithmic analysis have become key resources in the digital economy, as they enable service personalization and offer optimization. The role of artificial intelligence is particularly emphasized in the automation of business processes, decision-making, and the enhancement of user experience, further accelerating the digital transformation of modern organizations (Gojković et al., 2025). Recent studies also emphasize the importance of evaluating digital platforms through multidimensional criteria such as transparency, usability, accessibility, and decision-support efficiency. Such approaches indicate that digital platforms increasingly function not only as technological infrastructures, but also as mechanisms for optimizing organizational and managerial processes in digitally transformed business environments (Mladenovic et al., 2024). Based on this, it can be concluded that platforms do not act merely as intermediaries, but as dynamic systems that manage information flows and digital ecosystems. In this context, artificial intelligence plays a central role in shaping platform dynamics by enabling continuous learning from user interactions and data generation processes. Rather than functioning solely as a supporting analytical tool, AI increasingly operates as an embedded mechanism within platform infrastructures, influencing value creation, distribution, and optimization across digital ecosystems.

2.2. Platform business models, monetization, and network effects

In the literature, digital platforms are often categorized according to the structure of interactions and the mechanisms of value creation. The most common types include marketplace platforms, which connect supply and demand; SaaS models, which are based on delivering software solutions through subscription (Cusumano et al., 2019); fintech platforms, which digitalize financial services; and hybrid models that combine multiple sources of value and revenue. Such typologies enable a detailed systematization of different growth strategies and competitive positioning.

A key element of platform business models is the monetization mechanism. Unlike traditional firms, platforms often rely on multiple revenue streams, including subscriptions, transaction fees, freemium models, and licensing (Hagiu & Wright, 2020). The choice of monetization model directly affects the structure of the user base, the rate of growth, and the intensity of network effects. For example, freemium models facilitate rapid user base expansion, while transaction-based models stimulate the intensity of interactions between market participants.

Network effects represent the central mechanism of value creation in platform models. Cennamo (2021) distinguishes between direct and indirect network effects, noting that direct network effects occur when the value of a platform increases with the number of users within the same group, while indirect network effects arise from the growth of complementary user groups. These effects can lead to strong dominance of leading actors and market concentration, often described in the literature as a "winner-takes-most" dynamic.

In addition to network effects, platform governance also plays a crucial role, encompassing access rules, quality control, and the distribution of value within the system. Cusumano et al. (2019) emphasize that the key strategic challenge lies in balancing openness and control, as this balance influences the innovativeness of complementors and the sustainability of the business model.

Understanding the correlation between the type of business model, monetization structure, and the intensity of network effects provides the theoretical foundation for the empirical analysis in this paper, particularly in the context of identifying patterns among the analyzed platforms.

2.3. Internationalization and geographical adaptability of digital platforms

Digital platforms are characterized by a specific internationalization dynamic that differs from traditional models of international expansion. Stallkamp and Schotter (2021) note that, unlike traditional firms that internationalize gradually through stages of entry into foreign markets, digital platforms often achieve rapid international expansion due to technological adaptability and low marginal distribution costs.

According to Brouthers et al. (2016), firms can overcome traditional barriers to internationalization, but they simultaneously face various challenges such as regulatory constraints, local competition, and institutional differences. Although digital infrastructure enables global accessibility, successful internationalization requires adaptation to local market conditions and effective management of network effects across different institutional environments.

Monaghan et al. (2020) highlight the concept of "digital-born global" firms, emphasizing that digital platforms possess international expansion potential from their inception. Their ability to rapidly collect and analyze data enables the optimization of market entry strategies and the adaptation of user experience to local market specifics.

It should be emphasized that platform internationalization is not solely a technological issue, but also depends on the structure of the business model and the chosen monetization strategy. According to Shaheer and Li (2020), platforms based on transaction models tend to expand internationally more rapidly due to universal market mechanisms, whereas SaaS models require additional localization and regulatory compliance. Furthermore, the intensity of network effects may vary across markets, influencing the speed at which a critical mass of users is achieved.

Recent studies (Chen et al., 2021) emphasize that the geographical adaptability of platforms depends on their ability to simultaneously manage global and local ecosystems. A key factor for sustainable international growth is the management of relationships with local partners, adaptation to institutional frameworks, and strategic control over the platform.

Based on the above, it can be concluded that the analysis of geographical scope and growth strategies is particularly relevant for digital platforms that represent innovative and award-winning solutions within the WSA program. These projects constitute an empirically significant sample, enabling the examination of how business model structures and monetization strategies influence adaptability and internationalization processes. By linking specific project characteristics with theoretical concepts of platform ecosystems, it is possible to identify dominant development patterns and assess the extent to which theoretical models correspond to real-world growth strategies of digital platforms.

3. Methodology

3.1. Research design

The research is designed as a mixed-method study with a predominantly qualitative approach, complemented by elements of descriptive quantitative analysis. Such an approach enables a deeper understanding of the structure and functioning of digital platform business models, as well as their systematic comparison through predefined analytical categories. According to Creswell (2014), combining qualitative and quantitative methods contributes to

greater relevance and interpretative breadth of research. Furthermore, Saunders et al. (2019) emphasize that the integration of different methodological approaches increases the reliability of results in management and business economics research.

Given that digital platforms are complex and constitute part of contemporary socio-technological systems, the research is based on a case study strategy. The case study approach is appropriate for analyzing contemporary phenomena in a real-life context, particularly when the boundaries between the phenomenon and its environment are not clearly defined (Yin, 2018). Digital platforms operate within dynamic systems characterized by network effects, multi-sided interactions, and digital infrastructure, which further justifies the choice of this research strategy.

The theoretical framework of the research is grounded in the concept of two-sided markets and platform business models. Soares and Nieto-Mengotti (2024) emphasize that platforms represent intermediary structures that connect at least two interdependent groups of users, and that value in such markets is generated through cross-network effects, i.e., through the mutual reinforcement of demand between different sides of the market.

The literature further expands this concept by emphasizing the importance of a systemic approach and digital value. Parker et al. (2016) point out that platforms achieve competitive advantage through ecosystem orchestration and by enabling scalable user interactions. Additionally, the importance of digital platforms functioning as dynamic systems that integrate data, technology, and user networks into a unified infrastructural structure is highlighted (Cusumano et al., 2019).

Recent research emphasizes that the success of platforms depends on managing multi-sided interactions, data monetization, and strategic positioning within digital markets (Gawer, 2021). Today, platforms are not merely market intermediaries but also infrastructural actors that shape market conditions and innovation processes. These theoretical concepts provide the basis for interpreting the empirical results of this study.

3.2 Sample and selection criteria

The research sample includes digital platform projects that have been awarded within relevant international innovation programs. The sample was selected purposively, with the aim of choosing information-rich cases, which is consistent with contemporary purposive sampling methodologies that enable the research focus to be directed toward relevant and informative units contributing to the qualitative depth of the analysis (Ahmad & Wilkins, 2025).

Purposive sampling allows for the identification and inclusion of units whose performance directly corresponds to the research objectives, thereby improving the quality and credibility of the findings. This approach enables analytical generalization rather than statistical representativeness, which is typical of case study research (Yin, 2018).

The selection criteria included:

- the existence of clearly defined digital business models based on platform systems,
- the presence of at least two interdependent user groups,
- evidence of market validation (number of users, investments, recognitions, and awards),
- availability of publicly accessible data on the operation of digital platforms.

3.3. Data sources

The data included in the study were collected from secondary sources, including official websites, publicly available reports of the award organizers (World Summit Awards – WSA), platform websites, startup databases, media articles, and interviews with founders. According to Bryman (2016), secondary data represent a legitimate and widely accepted source of

information in contemporary research, particularly when analyzing organizational structures and market behavior.

In order to increase the validity and reliability of the research, methodological triangulation was applied, i.e., the systematic comparison of data collected from several independent sources. Contemporary literature emphasizes that triangulation is a key indicator for enhancing the credibility of qualitative and case study research (Flick, 2018; Saunders et al., 2019). Comparing multiple sources enables the identification of potential inconsistencies, reduces researcher bias, and strengthens the analytical reliability of the findings.

As Yin (2018) highlights, the use of multiple sources of evidence represents one of the fundamental principles of case study research design. Furthermore, contemporary approaches to qualitative methodology indicate that combining different types of data contributes to the transparency of the analytical process and increases the conceptual validity of the results (Tracy, 2020).

3.4. Data analysis method

Data analysis was conducted using content analysis, descriptive analysis, and comparative analysis. Content analysis enables the systematic coding and categorization of textual and numerical information into predefined analytical frameworks (Krippendorff, 2018). In this study, the following categories were coded: type of business model (such as marketplace, fintech, SaaS, hybrid model), revenue structure, target user groups, geographical scope, and type of innovation.

The classification of business models was based on contemporary typologies of platform models (Täuscher & Laudien, 2018). Particular attention was paid to identifying network effects as a key mechanism of value creation (Evans & Schmalensee, 2007). The results are presented through tables and descriptive statistics, enabling the identification of dominant patterns and trends within the analyzed sample.

Data coding was conducted manually through the review and analysis of publicly available information and official project descriptions included in the study. Each digital platform was classified according to predefined categories within operationalized variables.

In order to increase reliability and reduce subjectivity, the criteria were clearly defined prior to the analysis and consistently applied across all cases. The classification process was verified multiple times, and in cases of ambiguity, additional comparisons of information from multiple sources were conducted.

The analytical procedure was based on the comparison of variables with the aim of identifying key patterns and relationships between the type of business model, monetization model, and geographical scope.

4. Empirical analysis of WSA projects for the period 2021–2025

Digital platforms are described in the literature as multi-sided market structures that connect different users and enable value creation through network effects and digital infrastructure (Rochet & Tirole, 2003; Evans & Schmalensee, 2007). In this context, platforms function as intermediaries between market participants, whereby their value increases with the growth in the number of users and the intensity of interactions within the ecosystem. Parker et al. (2016) emphasize that platform business models enable scalability, reduction of transaction costs, and the creation of new forms of economic value through innovative digital mechanisms.

Table 1 presents the empirical research sample, which includes 25 different digital platforms awarded in the Business & Commerce category for the period from 2021 to 2025. The table contains information on the project name, country of origin, business model applied in each

project, monetization model, and market coverage. This classification enables a systematic analysis of the structural and economic characteristics of digital platforms.

Table 1. Business & Commerce Project (2021–2025)

Year	Project	Country	Business model	Monetization	Market Coverage
2021	Velotax	Brazil	Fintech / digital tax platforma	Transaction services	Regional
2021	Arbor Dashboard	Canada	SaaS / Business analytics	subscription	Global
2021	Chimege	Mongolia	AI / Digital language platform	Лицензинг	Regional / Global
2021	Lucinity – Make Money Good	Iceland	Fintech / Compliance AI	B2B subscription	Global
2021	Bina App	Iraq	Digital marketplace	commission	Lokal / Regional
2022	Mozare3	Egypt	Digital marketplace / fintech	commission	Regional
2022	Paymenow	South Africa	Fintech (plata / avans)	Transaction services	Regional
2022	Aloi	Singapore	Business SaaS platform	subscription	Global
2022	JABU	Namibia	B2B digital supply platform	commission	Regional
2022	Kola	Ghana	Digital commerce platform	commission	Lokal / Regional
2023	Fefifo	Malaysia	Marketplace (agri/commerce)	commission	Regional
2023	TradeTrust	Singapore	Blockchain trade platform	Transaction services	Global
2023	Ethiack	Portugal	Cybersecurity SaaS	subscription	Global
2023	Tappoyo Fintech	Peru	Fintech platforma	commission	Regional
2023	Wakilni	Lebanon	Digital service marketplace	commission	Lokal / Regional

Year	Project	Country	Business model	Monetization	Market Coverage
2024	LendForGood	Australia	Fintech lending platform	Transaction services	Global
2024	naPorta	Brazil	Digital commerce + logistics	commission	Regional
2024	Achieve	Ghana	Investment fintech	commission	Regional
2024	TrollWall AI	Slovakia	AI SaaS (content protection)	subscription	Global
2024	GoBarakah	Malaysia	Fintech platform	commission	Regional
2025	mytalents.ai	Austria	SaaS / Digital training	subscription	Global
2025	engaze.ai	Bangladesh	AI / Digital commerce	commission	Regional
2025	mamame	Iraq	Marketplace platform	commission	Lokal / Regional
2025	Semart	Malaysia	Business support / POS	commission	Lokal
2025	Ethiopian Export Market	Ethiopia	Digital export marketplace	commission	Regional

Source: Author's analysis based on WSA data (2021–2025)

The analysis shows that the awarded projects originate from a wide range of countries, including developing economies, which highlights the global nature of digital innovation in the field of business and commerce. Although transaction-based models are dominant, a smaller number of platforms rely on subscription or licensing models, indicating specialization and adaptation of business models to specific market conditions (Evans, 2003).

It can be concluded that the presented data in the table do not only illustrate awarded projects, but also confirm theoretical assumptions regarding the economic mechanisms of digital platforms.

Figure 1 presents the distribution of business models among the analyzed platforms. The classification is based on a content analysis of platform functionality and operational structure.

According to the literature, business model structure plays a significant role in creating and maintaining the economic advantages of digital platforms. Parker et al. (2016) and Evans & Schmalensee (2007) demonstrate that different business models directly influence monetization strategies, user interaction, and business scalability. Täuscher & Laudien (2018) emphasize that adaptive business models enable platforms to quickly adjust to market changes and technological innovations.

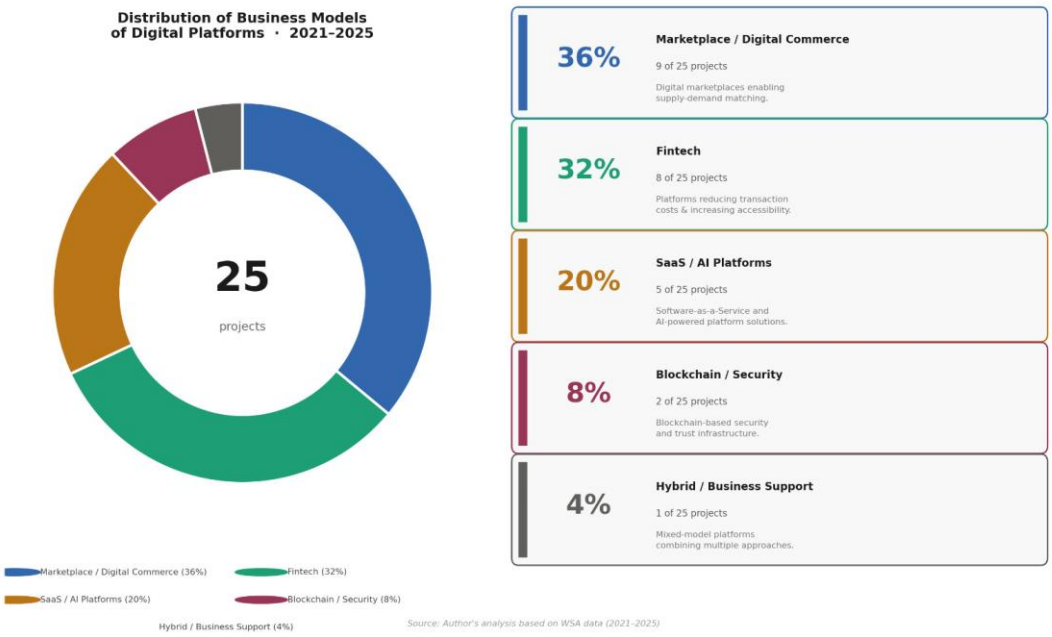

Figure 1. Distribution of Business Models (2021–2025)
Source: Author's analysis based on WSA data (2021–2025)

The analysis of business models shows that marketplace and fintech models are the most prevalent, while the SaaS model is less represented due to its focus on specific market segments. Marketplace platforms enable rapid matching of supply and demand, thereby generating high economic value and strong network effects (Rochet & Tirole, 2003). Fintech platforms provide financial services that reduce transaction costs and increase market accessibility, confirming the importance of digital transformation in contemporary business (Evans & Schmalensee, 2007).

Accordingly, digital platforms optimize economic performance through transaction mechanisms and network effects, which is consistent with theoretical assumptions in the contemporary literature on platform ecosystems and economies of scale. This structure confirms the significant role of platform models based on scalability and multi-sided user interaction.

Figure 2. presents the distribution of monetization models applied by the analyzed digital platforms. The aim of this analysis is to identify the dominant revenue generation mechanisms, such as transaction-based models, subscription models, B2B licensing, and hybrid models, within the observed sample.

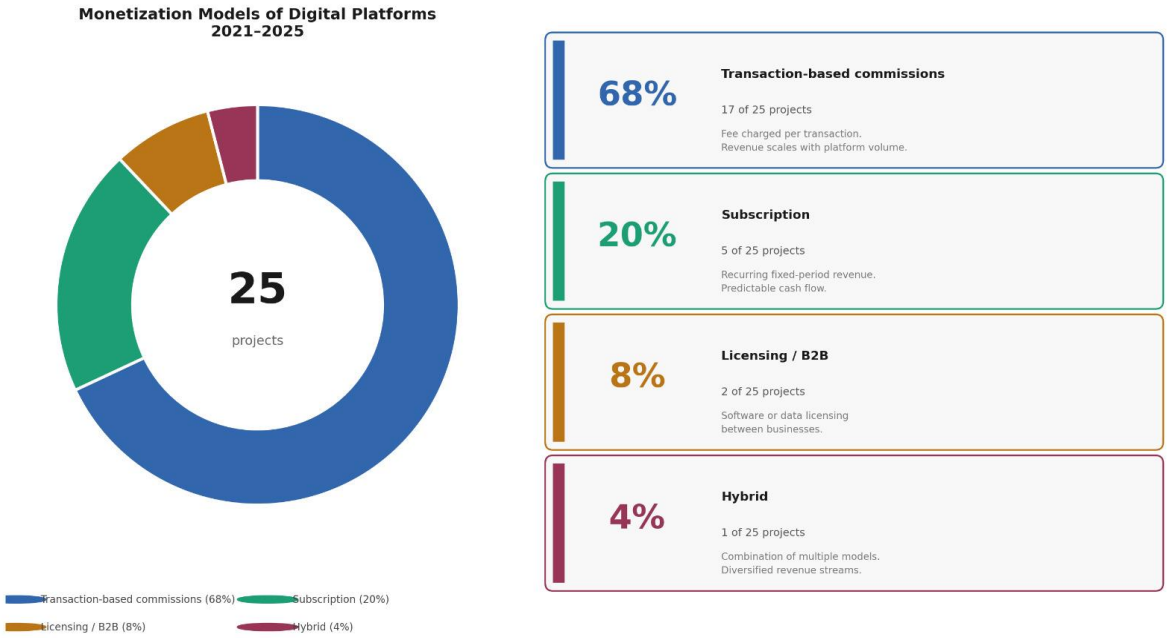

Figure 2. Monetization Models (2021–2025)
Source: Author's analysis based on WSA data (2021–2025)

The results indicate the dominance of transactional models, as a large number of platforms use transaction-based commissions as their primary revenue source, thereby confirming the theory of two-sided markets and network effects (Rochet & Tirole, 2003). Transactional models enable scalability and rapid growth of the user base, contributing to greater economies of scale and reduced distribution costs. In addition, subscription models and licensing are less represented, although they play an important role in platforms that offer specialized digital services. Overall, this suggests that platform growth strategies are primarily driven by volume-based value capture mechanisms rather than recurring revenue stabilization models.

4. Discussion

The results of the conducted empirical analysis indicate the dominance of marketplace and fintech models, but also highlight the need for a deeper understanding of how the digital economy functions in developing country markets. The distribution of business models in Table 2 shows that marketplace and digital commerce platforms account for 36% of the sample, fintech for 32%, while SaaS and AI models represent 20%. These results are consistent with contemporary research emphasizing that the application of artificial intelligence contributes to the optimization of business processes, cost reduction, and increased organizational innovativeness (Gojković et al., 2025). They also confirm the thesis that platforms based on improving interactions and market relationships have become a key organizational form of the modern digital economy (Cusumano et al., 2019).

The significant share of marketplace and fintech models indicates that value in the analyzed sample is primarily generated by enabling exchanges between different market participants, i.e., through the activation of network effects. These findings are consistent with the theory of multi-sided markets, according to which digital platforms achieve competitive advantage by increasing the interdependent demand of different user groups. In developing markets, digital platforms additionally serve a role of institutional bridging, as they help overcome structural barriers of traditional markets, such as inefficient distribution, lack of financial inclusion, or

limited access to formal institutions (Autio et al., 2021). The development of digital technologies and education directly influences the formation of a skilled workforce and long-term economic growth (Stojanović et al., 2021).

It is particularly important to note that a significant number of projects using the fintech business model originate from developing countries (Ghana, Peru, Malaysia, Iraq, South Africa). This pattern supports the claim that digital financial platforms play a crucial role in comprehensive economic growth and institutional modernization. However, despite the developmental potential of fintech platforms, their expansion in developing economies also raises concerns regarding regulatory instability, cybersecurity risks, digital inequality, and dependence on technological infrastructure. In many emerging markets, institutional capacity often develops more slowly than technological innovation, which may create regulatory gaps and long-term systemic vulnerabilities. Fintech models not only generate market value but also contribute to the formalization of economic flows and the reduction of transaction costs, making them an important strategic segment of digital transformation (Zetzsche et al., 2020).

The analysis of monetization models in Table 3 shows a pronounced role of transaction-based commissions at 68%, while subscription models account for 20%. This structure confirms the theoretical assumption that platforms monetize interactions rather than products. Transaction-based monetization enables platforms to minimize entry barriers for users while simultaneously internalizing the value generated within the system.

On the other hand, SaaS and AI platforms in the analyzed sample make significant use of subscription models, indicating a value retention model. Unlike marketplace models, where interaction between participants is crucial, SaaS models create value through technological functionality and continuous delivery of digital services.

Beyond its supporting role, artificial intelligence increasingly functions as a core coordinating mechanism within digital platform architectures, reshaping value creation processes through algorithmic mediation of interactions and system optimization (Huang & Mithas, 2025). In AI-driven platforms, algorithmic systems are not only tools for optimization but also active decision-making agents that influence matching efficiency, pricing dynamics, and user behavior. This represents a shift from platform coordination based on human-mediated interactions toward algorithmically governed ecosystems, where data flows continuously feed machine learning models that refine platform performance over time.

In this sense, AI acts as an infrastructural layer that connects business model design, monetization logic, and scalability potential. Platforms with integrated AI capabilities demonstrate higher adaptability because they can dynamically respond to market signals, automate complex processes, and personalize services at scale. However, this increasing dependence on algorithmic governance also intensifies structural risks related to opacity, bias, and uneven access to data resources.

This increased stability of AI-enabled SaaS platforms is reflected in their revenue structures, as subscription-based models provide predictable and recurring income streams. This finding is consistent with McIntyre and Srinivasan (2017), who emphasize that software platforms achieve more stable revenues through subscription mechanisms, particularly when offering standardized services at a global scale. This reinforces the view that AI integration not only enhances operational efficiency but also fundamentally reshapes platform value logic by aligning technological capabilities with monetization stability.

The geographical distribution of projects further deepens the analytical dimension of the results. Most marketplace and fintech platforms operate at a regional level, while SaaS and AI models are more globally oriented. This leads to the conclusion that digital adaptability is not only a technological issue but also depends on the institutional and regulatory context of the country in which it is implemented. On the other hand, highly standardized technological

platforms more easily overcome geographical barriers, confirming the literature (Monaghan et al., 2020) on "born-global" enterprises. Nevertheless, excessive technological standardization may simultaneously reduce sensitivity to local institutional, cultural, and regulatory specificities. As a result, globally scalable digital models do not always guarantee successful adaptation within heterogeneous market environments, particularly in developing economies characterized by fragmented digital infrastructure and differing regulatory frameworks. These findings suggest that existing platform typologies may require further refinement to better capture the interplay between technological standardization and institutional heterogeneity in digital ecosystems.

It should also be noted that blockchain and security platforms, although representing only 8% of the sample, demonstrate significant global orientation. This indicates that technologically robust models with a high degree of standardization are associated with growth and development at the global level. This supports the claim (Autio et al., 2021) that the level of technological modularity and regulatory neutrality influences the speed and scope of internationalization of digital platforms.

When considering all aspects of the obtained results, a pattern can be identified that links three key dimensions: the type of business model, the structure of monetization, and geographical adaptability. This relationship suggests that the nature of the generated value—whether interaction-based or functional—shapes the growth and internationalization strategy of platforms.

Based on theoretical foundations, the results confirm the relevance of contemporary typologies of platform systems (Jacobides et al., 2018), while also extending the literature through their empirical analysis and validation on award-winning digital innovations originating from diverse economies and environments. The findings highlight that the success of digital platforms is not based solely on the level of technological sophistication, but also on the ability to effectively manage and adapt to specific market conditions (Cennamo, 2021).

It can be concluded that digital transformation is not a universal model of development, but rather a differentiated pattern that depends on a combination of various factors, including technological, market, and regulatory elements. The increasing reliance on AI-driven decision-making and automated platform governance raises broader ethical and managerial questions regarding transparency, accountability, algorithmic bias, and data privacy. Therefore, future digital transformation strategies must address not only efficiency and scalability, but also the long-term societal implications of platform-based economic systems. Therefore, the analysis of WSA projects provides an empirically grounded insight into the evolution and development of platform business models across different contemporary markets.

4.1 Implications for digital process management

The findings additionally suggest important implications for digital process management within platform-based ecosystems. Unlike traditional linear organizational models, digital platforms operate through interconnected and data-driven systems in which business processes are continuously optimized through automation, algorithmic coordination, and real-time interaction between users. In this context, process management increasingly depends on the integration of digital technologies, particularly artificial intelligence, cloud infrastructure, and advanced analytics tools (Wirtz et al., 2023).

The dominance of marketplace and fintech models indicates that transaction-intensive platforms rely heavily on automated process governance mechanisms, including digital payment processing, user verification systems, recommendation algorithms, and predictive analytics. These technologies contribute to reducing operational inefficiencies, accelerating

decision-making, and improving scalability across geographically dispersed markets (Huang & Rust, 2023).

At the same time, the results demonstrate that SaaS and AI-oriented platforms achieve higher levels of process standardization and global adaptability due to the modular nature of software-based infrastructures. However, this also raises important managerial challenges related to cybersecurity, data governance, algorithmic transparency, and regulatory compliance. Consequently, successful digital process management no longer depends solely on technological sophistication, but also on the ability to balance automation, trust, flexibility, and institutional adaptation within complex platform ecosystems (Gawer, 2023; Verhoef et al., 2024).

From a strategic perspective, the findings imply that organizations capable of integrating AI-supported automation and adaptive process management into their platform architecture are more likely to achieve long-term competitiveness and sustainable digital growth. This further confirms the growing importance of intelligent digital infrastructures as a central component of modern platform governance and business transformation.

Recent methodological contributions in the field of decision-making and evaluation of complex systems suggest that multi-criteria approach such as PIPRECIA-S can further support the assessment of digital platform performance and process efficiency. These methods enable structured analysis of multiple interdependent criteria, which may be particularly useful in future studies focusing on the comparative evaluation of digital process management strategies across different platform business models (Popović et al., 2025).

5. Conclusion

This paper and research aimed to analyze the structure of business models, monetization strategies, and market expansion patterns of digital platforms that are winners of the World Summit Awards (WSA) for the period 2021–2025. Based on contemporary theoretical frameworks of platform ecosystems and digital transformation, the research was conducted to identify dominant business patterns and relate them to broader concepts such as network effects, institutional embeddedness, and digital governance.

Empirical data show that marketplace and fintech models dominate the analyzed sample, while SaaS and AI platforms are less represented. From a monetization perspective, transaction-based commissions represent the dominant model, while subscription logic is applied in standardized technological software solutions. These results confirm the theoretical assumption that platforms generate value through managing interactions and activating network effects, with revenues increasing proportionally to system scale (Rochet & Tirole, 2003).

One of the key contributions of the paper is the identification of a correlation between the type of business model, the monetization structure, and geographical scope. The results show that marketplace and fintech platforms, which depend on local frameworks, most often adopt a regional growth strategy. In contrast, SaaS and AI models, based on technological standardization, demonstrate greater global adaptability. This analysis aligns with contemporary research on the internationalization of digital firms, which emphasizes the role of institutional context and the technological nature of products in shaping expansion strategies (Stallkamp & Schotter, 2021).

The findings of this research can also be interpreted in the context of domestic literature (Radenković, 2020), which emphasizes that digital transformation in developing economies involves not only technological innovation but also the adaptation of both institutional and regulatory environments to digital business models. Accordingly, the success of the analyzed platforms can be seen as a result of aligning technological innovation with local market and institutional conditions.

The theoretical contribution of the paper lies in empirically confirming contemporary typologies of platform ecosystems (Jacobides et al., 2018), while also highlighting the diverse growth logic within the digital economy. The findings demonstrate that digital transformation is not merely a universal development pattern, but that the nature of value creation influences monetization models and the dynamics of internationalization. In this way, the paper contributes to understanding how digital platform models function in different institutional environments, particularly in developing economies.

From a practical perspective, the findings have implications for entrepreneurs and policymakers. For entrepreneurs, the analysis suggests that successful digital platforms often require a phased development model—from local validation to regional consolidation and eventual global expansion. For policymakers, the analyzed data highlight the importance of regulatory support in fintech and digital commerce sectors, as well as the need to develop digital infrastructure that enables efficient functioning of network effects and technological competitiveness.

Although the paper provides a systematized insight into the structure of WSA-winning projects for the specified period, certain limitations exist. The analysis is based on secondary data and does not include financial performance indicators, while future research could expand the sample, incorporate quantitative performance metrics, and test the identified patterns across a broader range of digital platforms.

Overall, the findings demonstrate that digital platform success is determined less by technological innovation alone and more by the alignment between business model design, monetization logic, and institutional context, highlighting the importance of adaptive system management in achieving sustainable competitiveness in the digital economy.

References

Ahmad, M., & Wilkins, S. (2025). Purposive sampling in qualitative research: A framework for the entire journey. Quality and Quantity, 59(2), 1461–1479. https://doi.org/10.1007/s11135-024-02022-5

Autio, E., Nambisan, S., Thomas, L. D. W., & Wright, M. (2021). Digital affordances, spatial affordances, and the genesis of entrepreneurial ecosystems. Strategic Entrepreneurship Journal, 15(1), 72–95. https://doi.org/10.1002/sej.1360

Brouthers, K. D., Geisser, K. D., & Rothlauf, F. (2016). Explaining the internationalization of iBusiness firms. Journal of International Business Studies, 47(5), 513–534. https://doi.org/10.1057/jibs.2015.20

Bryman, A. (2016). Social research methods (pp. 374–400). Oxford University Press.

Cennamo, C. (2021). Competing in digital markets: A platform-based perspective. Academy of Management Perspectives, 35(2), 265–291. https://doi.org/10.5465/amp.2016.0048

Chen, L., Shaheer, N., Yi, J., & Li, S. (2021). The international penetration of digital platforms: Network effects, platform governance, and entry mode. Journal of International Business Studies, 52, 172–175 https://doi.org/10.1057/s41267-018-0176-2

Cusumano, M. A., Gawer, A., & Yoffie, D. B. (2019). The business of platforms: Strategy in the age of digital competition, innovation, and power. Strategic Management Journal, 40(9), 1–18. https://doi.org/10.1002/smj.3010

Evans, D. S. (2003). The antitrust economics of two-sided markets. Yale Journal on Regulation, 20(2), 325–381. https://ssrn.com/abstract=332022

Evans, D. S., & Schmalensee, R. (2007). Industrial organization of markets with two-sided platforms. Competition Policy International, 3(1), 151–179.

Flick, U. (2018). Triangulation in data collection. In The SAGE handbook of qualitative data collection (pp. 527–544). SAGE. https://doi.org/10.4135/9781526416070

Gawer, A. (2021). Digital platforms' boundaries: The interplay of firm scope, platform sides, and digital architecture. Long Range Planning, 54(5), 102045. https://doi.org/10.1016/j.lrp.2020.102045

Gawer, A. (2022). Digital platforms and ecosystems: Remarks on the dominant organizational forms of the digital age. Innovation: Organization & Management, 24(1), 110–124. https://doi.org/10.1080/14479338.2021.1965888

Gojković, B., Obradović, L., Kecman, A. V., & Stojanović, M. (2025). Uticaj veštačke inteligencije na savremeno poslovanje: Scoping pregled. Oditor, 11(3), 141–154. https://doi.org/10.59864/Oditor92503BZ

Harracá, M., Castello, M. I., & Gawer, A. (2023). How digital platforms organize immaturity: A socio-symbolic framework of platform power. Business Ethics Quarterly, 33(3), 440–472. https://doi.org/10.1017/beq.2022.40

https://wsa-global.org/wsa-awards/wsa-winners/#?category=38&year=2021& (20.02.2026.)

https://wsa-global.org/wsa-awards/wsa-winners/#?category=38&year=2022& (20.02.2026.)

https://wsa-global.org/wsa-awards/wsa-winners/#?category=38&year=2023& (20.02.2026.)

https://wsa-global.org/wsa-awards/wsa-winners/#?category=38&year=2024& (20.02.2026.)

https://wsa-global.org/wsa-awards/wsa-winners/#?category=38&year=2025& (20.02.2026.)

Huang, P., & Mithas, S. (2025). Artificial intelligence and digital platforms: Implications for value creation and capture. SSRN. https://doi.org/10.2139/ssrn.5008447

Jacobides, M. G., Cennamo, C., & Gawer, A. (2018). Towards a theory of ecosystems. Strategic Management Journal, 39(8), 2255–2276. https://doi.org/10.1002/smj.2904

Krippendorff, K. (2018). Content analysis: An introduction to its methodology (4th ed.). SAGE. https://doi.org/10.4135/9781071878781

McIntyre, D. P., & Srinivasan, A. (2017). Networks, platforms, and strategy. Strategic Management Journal, 38(1), 141–160. https://doi.org/10.1002/smj.2596

Mladenovic, M., Đukić, T., & Popovic, G. (2023). Analysis of financial reporting platforms based on the PIPRECIA-S method. Journal of Process Management and New Technologies, 11, Issue 3-4, pp. 95-104. https://doi.org/10.5937/jpmnt11-48186

Monaghan, S., Tippmann, E., & Coviello, N. (2020). Born digitals: Thoughts on their internationalization and a research agenda. Journal of International Business Studies, 51(1), 11–22. https://doi.org/10.1057/s41267-019-00290-0

Parker, G., Van Alstyne, M., & Choudary, S. (2016). Platform revolution. W. W. Norton & Company.

Popović, G., Stanujkic, D., Mihić, M., Smarandache, F., Karabašević, D., & Mirković, V. (2025).The single-valued neutrosophic extension of the PIPRECIA method. Knowledge-Based Systems, 315 Vol., 113271. https://doi.org/10.1016/j.knosys.2025.113271

Rochet, J.-C., & Tirole, J. (2003). Platform competition in two-sided markets. Journal of the European Economic Association, 1(4), 990–1029. https://doi.org/10.1162/154247603322493212

Saunders, M., Lewis, P., & Thornhill, A. (2019). Research methods for business students (pp. 184–202; 318–323). Pearson.

Shaheer, N., & Li, S. (2020). The CAGE around cyberspace? How digital innovations internationalize in a virtual world. Journal of Business Venturing, 35(1), 105892. https://doi.org/10.1016/j.jbusvent.2019.05.002

Soares, I., & Nieto-Mengotti, M. (2024). Network effects on platform markets: Revisiting the theoretical literature. Scientific Annals of Economics and Business, 71(4), 605–623. https://doi.org/10.47743/saeb-2024-0029

Stallkamp, M., & Schotter, A. P. J. (2021). Platforms without borders? The international strategies of digital platform firms. Global Strategy Journal, 11(1), 58–80. https://doi.org/10.1002/gsj.1336

Stojanović, J., Nešić, Z., & Bulut Bogdanović, I. (2021). Digitalization of education as a function of economic development. Društveni horizonti, 1(1), 29–40. https://doi.org/10.5937/DruHor2101029S

Täuscher, K., & Laudien, S. M. (2018). Understanding platform business models: A mixed methods study of marketplaces. Journal of Business Research, 89, 374–386. https://doi.org/10.1016/j.jbusres.2018.01.005

Tracy, S. J. (2020). Qualitative research methods (pp. 233–242). Wiley-Blackwell.

Vial, G. (2019). Understanding digital transformation: A review and a research agenda. Journal of Strategic Information Systems, 28(2), 118–144. https://doi.org/10.1016/j.jsis.2019.01.003

Yin, R. K. (2018). Case study research and applications (pp. 41–45; 114–121). SAGE.

Zetzsche, D. A., Buckley, R. P., Arner, D. W., & Barberis, J. (2020). Regulating a revolution: From regulatory sandboxes to smart regulation. Fordham Journal of Corporate & Financial Law, 23(1), 31–103.