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EVOLUTION OF DIGITAL PLATFORM MANAGEMENT

Global technological transformations and the exponential growth of information volume have led to the emergence and rapid development of digital platforms, which have changed management mechanisms, created new business models and strategic partnerships, and become key market players and monetization leaders. The research is based on the hypothesis that the evolution of digital platform management is sequential and cumulative, reflecting a transition from narrow, specialized communicational and technological concepts to a strategic social and economic management vision of complex multi-industry business ecosystems with hybrid functions that influence social and economic relations, market structure, workforce, consumer demand, competition, innovation, and so forth. The hypothesis was substantiated using the following research methods: systemic-structural analysis (for systematizing scientific research on the processes of genesis and structural formation of digital platforms), dialectical method and method of interdisciplinary synthesis (for studying the evolutionary context of the development of digital platforms from Web 1.0 to Web 3.0), method of comparison and Internet monitoring (to determine the differences in the management of digital platforms at various stages), and logical

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ЕВОЛЮЦІЯ УПРАВЛІННЯ ЦИФРОВИМИ ПЛАТФОРМАМИ

Глобальні технологічні перетворення та експоненційне зростання обсягів інформації спричинили появу і стрімкий розвиток цифрових платформ, які змінили механізми управління, створили нові бізнес-моделі та стратегічні партнерства, стали ключовими гравцями на ринку і лідерами монетизації. В основу дослідження покладено гіпотезу, що еволюція управління цифровими платформами має послідовний і кумулятивний характер, відображаючи перехід від вузькоспеціалізованих комунікаційно-технологічних концепцій до стратегічного соціально-економічного управлінського бачення складних багатогалузевих бізнес-екосистем з гібридними функціями, що впливають на суспільно-економічні відносини, структуру ринку, ринок праці, споживчий попит, конкуренцію, інновації тощо. Гіпотезу обґрунтовано з використанням таких методів дослідження: системно-структурного аналізу (для систематизації наукових досліджень щодо процесів зародження та структурного формування цифрових платформ), діалектичний та метод міждисциплінарного синтезу (для дослідження еволюційного контексту розвитку цифрових платформ від Web 1.0 до Web 3.0), методи порівняння та Інтернет-моніторингу (для визначення відмінностей в управлінні цифровими



generalization (for formulating the conclusions of the conducted research). It is noted that the evolution of digital platforms is inextricably linked with the development of the infrastructure and functionality of the global Internet network, which experts conditionally divide into the Web 1.0, Web 2.0, and Web 3.0 stages. Each of these stages created technological and economic prerequisites for the formation, dissemination, and dominance of certain types of platforms. The Web 1.0 stage is explored as the period of genesis of digital platforms, where general management was reduced to content administration and unilateral control by the website owner. The Web 2.0 stage is viewed from the perspective of the formation of the platform economy and the further development of digital platforms, where management shifted from administration and linear control to the "orchestration" of interactions within complex ecosystems. The Web 3.0 period is characterized in the context of the transformation of digital platforms, with a shift in the management focus from interaction management to decentralized ownership and coordination. Understanding this transformation is crucial for modern management, as it has offered fundamentally new mechanisms for regulating economic activity, new values, and a new social and economic architecture of network consensus. The conclusions emphasize that despite the transparent and democratic idea, the management system of Web 3.0 digital platforms has critical vulnerabilities that require further active research.

Keywords: digital transformation, management, business ecosystem, digital platforms, Web 1.0, Web 2.0, Web 3.0, the Internet (or Internet network), network consensus, and digital fragmentation.

JEL Classification: M11, L86, B40, L14.

Introduction

Global technological transformations and exponential growth in information volumes have led to the emergence and rapid development of digital platforms, which have changed management mechanisms, created new business models and strategic partnerships, and have become key market players and leaders in monetization. Digital platforms (DPs) have attracted the attention of many Ukrainian and foreign scholars as a field of study for the most transformational phenomena of the modern economy (Novikova et al., 2023; Zaitseva et al., 2024). However, their dynamic and interdisciplinary nature of origin has created certain difficulties in forming a unified

платформами на різних етапах), логічного узагальнення (для формулювання висновків проведеного дослідження). Зазначено, що еволюція цифрових платформ нерозривно пов'язана з розвитком інфраструктури та функціоналу всесвітньої мережі Інтернет, яку фахівці умовно поділяють на етапи Web 1.0, Web 2.0 та Web 3.0. Кожен з цих етапів створював технологічні та економічні передумови для формування, розповсюдження та домінування певних типів платформ. Етап Web 1.0 досліджено як період зародження цифрових платформ, загальне управління якими зводилося до адміністрування контенту та одностороннього контролю з боку власника вебсайту. Етап Web 2.0 розглянуто з позиції формування платформної економіки та подальшого розвитку цифрових платформ, управління в цей період змістилося від адміністрування та лінійного контролю до "оркестрації" взаємодій у складних екосистемах. Період Web 3.0 охарактеризовано з огляду трансформації цифрових платформ зі зміщенням управлінського фокусу з керування взаємодією на децентралізоване володіння та координацію. Розуміння цієї трансформації є важливим для сучасного менеджменту, оскільки вона запропонувала принципово нові механізми регулювання економічної діяльності, нові цінності та нову соціально-економічну архітектуру мережевого консенсусу. У висновках зазначено, що, попри прозору і демократичну ідею, система управління цифровими платформами Web 3.0 має критичні вразливості, які надалі потребують активних досліджень.

Ключові слова: цифрова трансформація, управління, бізнес-екосистема, цифрові платформи, Web 1.0, Web 2.0, Web 3.0, мережа Інтернет, мережевий консенсус, цифрова фрагментація.

scientific and methodological approach to determining the essence, purpose, and management mechanisms of digital platforms.

Despite significant scientific achievements, a fragmented approach prevails in existing studies: platforms are considered either as technological tools or as separate business models without taking into account their dynamic transformation. The scientific problem of conceptual systematization of the evolutionary logic of management changes, which would explain the transformation of the role of management depending on the change of Internet generations, remains unresolved. Most sources do not reveal the mechanism of transition from hierarchical administration (characteristic of the early stages) to decentralized governance and network consensus. This article closes the indicated gap, proposing a holistic periodization of the development of digital platform management, which correlates the change of technological structures (from Web 1.0 to Web 3.0) with fundamental shifts in the management paradigm.

The aim of the article is to study the evolution of digital platform management in the context of the relevant stages of its formation and development.

The research is based on the hypothesis that the evolution of digital platform management is consistent and cumulative in nature, reflecting the transition from highly specialized communication and technological concepts to a strategic social and economic management vision of complex multi-sector business ecosystems with hybrid functions that affect socio-economic relations, the structure of the labor market, consumer demand, competition, innovation, etc.

The hypothesis is substantiated using the following general scientific research methods: system-structural analysis (to systematize scientific research on the processes of emergence and structural formation of digital platforms), dialectical method and interdisciplinary synthesis method (to study the evolutionary context of the development of digital platforms from Web 1.0 to Web 3.0), comparison method and Internet monitoring (to identify differences in the management of digital platforms in the context of the relevant stages of their formation and development), logical generalization (to formulate the conclusions of the research).

The information, theoretical, and methodological basis of the study was analytical reports of international and national organizations, research on the platform economy, monographic literature, and scientific publications of domestic and foreign authors studying the issues of analysis and systematization of scientific and methodological approaches to determining the essence and purpose of digital platforms.

The structure of the main part of the article has three consecutive sections. The first section examines the stage of the emergence of the concept of digital platforms, starting with the first publications on the mentioned issues, which appeared in the 1990s and early 2000s (Web 1.0) and were associated with the spread of information technologies, the growth of the

popularity of the Internet, the emergence of relevant network structures, a description of the main characteristics of digitalization and an assessment of their impact on existing economic systems. These transformations created the prerequisites for the formation of the platform economy. The second section examines the maturity and dominance of digital platforms (Web 2.0) as established business models based on value-based interactions between two or more interdependent user groups, with the possibility of further diversification. The value of a platform increases the number of users; they evolve through targeted changes in their own design, operations, and ecosystem management rules, which create powerful positive feedback loops and contribute to their rapid scaling. The third section is devoted to the processes of decentralization and further hybrid development of digital platforms (Web 3.0) and the formation of a new network consensus architecture.

1. The emergence of the digital platform concept (Web 1.0)

The evolution of digital platforms is inextricably linked to the development of the infrastructure and functionality of the World Wide Web, which experts conditionally divide into the phases of Web 1.0, Web 2.0, and Web 3.0. Each of them created technological and economic prerequisites for the emergence, spread, and dominance of certain types of platforms.

The period of Web 1.0 (late 1980s – early 2000s) is characterized as the initial stage of digital mediation with a technological basis of static web pages (HTML), limited bandwidth, and the absence of dynamic databases. At this stage, there was a rapid spread of information technologies, the popularity of the Internet grew, and the corresponding network structures were built. The network was used mainly for publishing and consuming information by companies, government, academic institutions, and users on websites, and communication did not involve active interaction through a read-only model; communication was carried out via email, chats, forums, SMS on mobile phones, and was not yet built into digital platforms.

Platforms originated in the form of vertical portals and early aggregators, which were mostly one-way or two-way, focused on providing information or cataloging. Prototypes of early digital platforms include the first search engines and online stores, which acted as linear intermediaries (seller-buyer) or simple catalogs.

At this time, a corresponding "reconfiguration" of market structures was taking place (Konsynski & McFarlan, 1990), with the emergence of extended global enterprises and partnerships (Harasim, 1993), "virtual corporations" and "network organizations" (Bradley et al., 1993), "intermediary players in the electronic market" with new forms of receiving, processing, transmitting information and forming shared databases (Rockart & Scott Morton, 1993).

The concept of a "digital platform" in the Web 1.0 period was not yet clearly formulated in its modern sense, but was considered by scholars

mainly as a technological infrastructure that provided information exchange. Its economic value was formed through access to information, not user interaction. And although the general management of such structures was reduced to content administration and unilateral control by the site owner, these technologies created the prerequisites for fundamental changes in management practice and the formation of an "interorganizational" culture as a business philosophy (Sarkar et al., 1995).

The transition period from the technological base of Web 1.0 to Web 2.0 is characterized by the active development of search engines (AltaVista, Google), information portals (Yahoo!, AOL, Lycos), content management systems (CMS) for publications, online stores (Amazon, eBay) and other forms of e-commerce, which had much greater potential for shaping the system of platform values, as they provided the possibility of interaction between different groups of users, intermediaries and even competitors, who became part of the value chain in the digital economy as a new type of "cyber intermediaries" (Zimmermann, 2000).

Later, researchers Rochet and Tirole defined platforms as "two-sided markets" where two groups of users (sellers and buyers, advertisers and consumers of advertising) interact, whose interests are balanced, resulting in cross-network effects: the value of the platform for one group depends on the number of participants in the other (demand interdependence). Platforms can subsidize one side of the market (provide free access) to attract more users from the other side, i.e., mediate transactions between groups of agents (Rochet & Tirole, 2003, 2006; Armstrong, 2006). They also analyzed the dilemma of a firm choosing between two different business models: the first – acting as an intermediary (merchant), which buys goods or services from suppliers and resells them to customers, and the second – functioning as a two-sided platform, which allows suppliers and customers to interact directly (Hagiu, 2007). It has been determined that a two-way digital platform is not just an intermediary function, but a business model that stimulates cooperation between both parties through pricing, technology, and partner trust, acting as a catalyst for transactions, thereby reducing transaction costs (Evans et al., 2006). It has been emphasized that ignoring the multilateral nature of the platform economy can lead to misleading consequences in both business strategies and regulatory policies (Evans, 2008).

2. The development of the platform economy, maturity, and diversification of digital platforms (Web 2.0).

The Web 2.0 period can be divided into two stages: the formation of the platform economy (early 2000s – 2015) and the maturity and diversification of digital platforms (from 2016 to the present). This period, according to O'Reilly (2005), became the "golden age" for centralized digital platforms. If Web 1.0 was the so-called "reading network", then Web 2.0 became a "participation network", where value was created not by site

owners, but by users themselves (User-Generated Content – UGC). Digital platforms did not own the main means in the traditional sense but created value using assets and resources belonging to their users. Management during this period shifted from administration and line control to "orchestrating" interactions in complex ecosystems. This is due to the integration emergence of cross-platform services (APIs and mash-up services), which are becoming more flexible, modular, and extensible, and the platforms themselves are acquiring economic, technological, and social meaning.

The main task of Web 2.0 platform management was to create an infrastructure that allowed external producers and consumers to find each other and exchange value (Van Alstyne et al., 2016), so digital platform managers (Facebook, Uber, Airbnb) focused on reducing transaction costs and removing barriers to entry to enable network effects through mass engagement, where the value of the platform increases with each new user. To trigger network effects, strategies were used to subsidize one side of the market (e.g., free access for Facebook users) at the expense of the other (advertisers) (Evans & Schmalensee, 2016). Successful interaction management required reaching a critical mass, after which the platform began to grow on its own through feedback loops (Parker et al., 2016). However, platforms could not be managed through direct orders (as in traditional corporations), because users were external agents. Therefore, management was transformed into Governance, which was implemented through two levers (Tiwana, 2014):

- Architecture: the program code defined what could and could not be done on the platform; management consisted of making decisions about how modular the system was and which interfaces (APIs) were open to third-party developers.

- Policies: establishing rules of conduct, content moderation, rating, and feedback systems. These are "soft control" mechanisms that provide trust and security to unfamiliar participants.

Key management competencies have become the collection and control of giant data sets (Big Data) about user behavior that are difficult for competitors to reproduce. The data was used to: improve matching algorithms (Matching: connecting the "right" driver with a passenger or a product with a buyer); personalize the experience to maintain attention (Lock-in effect); monetize through targeted advertising (O'Reilly, 2005). The mature period of Web 2.0 was characterized by aggressive competitive strategies, the actualization of leadership issues, the ability to effectively manage the digital ecosystem, maintain a balance between openness and control over the platform, as well as promote innovation not only in one's own company, but also in the entire ecosystem, which allowed to "tilt the market" in one's favor and create sustainable competitive advantages (Gawer & Cusumano, 2008). The dominance of digital platforms in one market provided opportunities to use their own user base to enter adjacent markets, absorbing the functionality of competitors (for example, adding Stories

features to Instagram to compete with Snapchat). This required management to constantly monitor the ecosystem, react quickly, integrate new services (Parker et al., 2016) and solve a strategic trade-off: strive to attract a wider range of users, which may lead to a decrease in uniqueness, or focus on attracting exclusive "complementors" (partners/developers/co-creators/users), which may improve the quality of content, product, service, but limit the potential scalability of the platform (Cennamo & Santalo, 2013). Currently, the crucial formation of online identity and accumulation of social and economic capital of digital platforms is taking place, which has become a large-scale environment for the interaction of millions of users and the development of businesses, and a dominant force in many sectors of the economy and social life.

3. The development of digital platforms and the formation of a new network consensus architecture (Web 3.0)

Today, the world is on the threshold of a new era of the "Internet of Value", the direction of the "Creator Economy" is developing (Johnson & Woodcock, 2019), their role in monetizing content through direct interaction with the audience is growing, and new forms of ownership of digital objects are emerging (Wang et al., 2021). Web 3.0 technologies are improving so quickly that scientists often try to "catch up" with practice. Knowledge is generated in developer communities, so-called "white papers", projects, startups, and speeches at specialized conferences. The architecture of digital platforms is changing with a shift in the managerial focus from controlling interaction to decentralized ownership and coordination. Understanding this transformation is important for modern management, since Web 3.0 offers fundamentally new mechanisms for regulating economic activity (Tapscott D. & Tapscott A., 2016).

Understanding the essence of Web 3.0 digital platforms is appropriate to consider in comparison with their previous iterations, the evolutionary context of the development of which is presented in *Table 1*.

Table 1

The evolutionary context of digital platform development
from Web 1.0 to Web 3.0

Web-period	Characteristics of digital platforms
Web 1.0 (Read-Only)	The period of protocols and static content, digital platforms as such in the modern sense were not formed; there were websites (HTML) with limited bandwidth, no dynamic databases that provided information unilaterally; management was completely centralized in the hands of the owner, administrator, and webmaster
Web 2.0 (Read-Write)	In the period of aggregator platforms (Facebook, Uber, Amazon), users are allowed to create content, but the platforms (intermediaries) own the data and monetize it; management is carried out by a corporate hierarchy, and the architecture of the digital platform is a "walled garden" (O'Reilly, 2005)
Web 3.0 (Read-Write-Own)	During the period of decentralization, digital platforms are built on blockchain; users not only generate content, but also own their own data and digital assets (through tokens); the role of the intermediary is minimized by the program code (Voshmgir, 2020)

Source: (O'Reilly, 2005; Voshmgir, 2020).

Web 3.0 digital platforms (also called dApps – decentralized applications) have a number of architectural and value differences that determine the specifics of their management:

- data decentralization: instead of storing data on central servers (e. g., AWS), Web 3.0 uses distributed registries, which reduces the risk of a single point of failure and censorship (Werbach, 2018);

- interoperability (compatibility): in Web 2.0, profile transfer between platforms was impossible; in Web 3.0, the user has a universal identifier (wallet) that works on different platforms, which forces platforms to compete not for "closing and retaining" the user, but for providing a better service (Chen, 2018);

- economics of ownership of digital objects: the use of NFTs (non-fungible tokens) allows the ownership of digital objects to be fixed with the user, not with the platform.

Governance of digital platforms in Web 3.0 is different from corporate management – it moves from hierarchy to algorithmic consensus and communities. Decentralized Autonomous Organizations (DAOs) have become the central tool of governance, and instead of a board of directors, decisions are made by the owners of Governance Tokens. Governance tokens are a tool that turns platform users into its co-owners and operators. This is the foundation of the Web 3.0 economy, which shifts power from a centralized office to a distributed community, although it faces growth diseases, in particular the dominance of big capital (Buterin, 2021, August 16). Code becomes law, and voting results are often automatically executed through smart contracts (Voshmgir, 2020). Governance occurs through Trustless Management, but this does not mean the absence of trust, but that participants do not need to trust or delegate authority to a specific manager or intermediary. Trust is transferred to the software code and cryptographic proofs, and platform governance consists of writing reliable, audited smart contracts that guarantee the execution of transactions without third-party intervention (Werbach, 2018). Thus, digital platforms are governed through tokenomics (the economics of cryptocurrency tokens), when early adopters receive platform tokens for their activity; if the platform becomes successful, the tokens increase in value, and this turns users into investors and "evangelists" of the platform, aligning the incentives of all participants (Catalini & Gans, 2020). Owners of governance tokens decide strategic and technological issues that are closed to users in conventional companies. They participate in: shaping the platform's financial policy (changing the size of transaction fees on the platform; distributing platform funds to marketing, developer grants, charity, token buybacks); technical approvals (updating the software code, changing algorithms, or adding new features); making personnel decisions (in some DAOs hiring/firing developers who maintain the protocol (Buterin, 2021, August 16). And although the analogy of tokens with shares in the process of making management decisions is appropriate, there are important differences that should be noted (*Table 2*).

Table 2

Key differences between shares and tokens

Characteristics	Shares (Web 2.0 / TradFi)	Governance Tokens (Web 3.0)
Decision execution	Legal / HR (execution of orders by managers)	Programmatic / Automatic (smart contract makes changes itself)
Availability	Regulated, mainly for accredited investors	Open purchase of tokens on the exchange
Transparency	Closed reporting, insiders	Full transparency in the blockchain (on-chain)
Main function	Receive dividends + (sometimes) vote	Protocol management (value is tied to the utility of the platform)

Source: (Hassan & De Filippi, 2021; Tapscott D. & Tapscott A., 2016; U.S. Securities and Exchange Commission, 2017; Peirce, 2020, February 6; Voshmgir, 2020).

It should be noted that despite the transparency and democratic nature of the idea, the Governance Tokens system has its own risks, significant structural and behavioral problems that are currently being actively researched. The authors have identified several critical vulnerabilities that threaten the stability of Web 3.0 digital platforms (Table 3).

Table 3

Critical vulnerabilities that threaten the stability of Web 3.0 digital platforms

Risks and governance issues	Description
Plutocracy and centralization ("Whale Power")	The biggest problem with the "1 token = 1 vote" (Coin Voting) model is the tendency towards plutocracy (the rule of wealth). In most DAOs, the distribution of tokens is uneven: venture funds, founders, and early investors ("whales") can control more than 50% of the votes. This neutralizes the influence of retail users and allows a narrow circle of individuals to make decisions in their own interests, ignoring the community (Buterin, 2021)
User apathy and low participation	Most token holders view tokens as a speculative asset rather than a governance tool. This leads to the phenomenon of "rational ignorance": users do not waste time studying complex proposals because they understand that their vote will not mathematically affect the outcome. As a result, voter turnout in many leading protocols (Compound, Uniswap) may not exceed 5–10%, making the system vulnerable to minority manipulation (OpenZeppelin, 2021)
Governance Attacks	The low liquidity of tokens and the ability to lend them create threats of specific attacks. Within a single transaction on the blockchain, an attacker can borrow a large amount of cryptocurrency without collateral for a few seconds, buy management tokens, vote for a proposal to withdraw funds to their wallet, and immediately return the loan (Qin et al., 2021)
Conflict of interest and short-termism	The conflict between long-term compliance with the protocol and the short-term desire of token holders to make a profit. Token holders can vote to increase fees or aggressive risk strategies to increase the token price "here and now," even if it may destroy the ecosystem in the future. This is a classic agency problem where the interests of "shareholders" (tokenholders) do not coincide with the interests of "clients" (protocol users) (Eahrhardt et al., 2022)
Regulatory uncertainty	The legal status of Governance Tokens remains a "gray area." The U.S. Securities and Exchange Commission (SEC) and other regulators often view such tokens as unregistered securities, which creates legal risks for digital platforms (Hassan & De Filippi, 2021)

End of Table 3

Risks and governance issues	Description
Impact of political fragmentation of the Internet	Fragmentation, when world states, seeking to establish their digital sovereignty, apply political control not to infrastructure, but to digital platforms through certain mechanisms of influence: the attempt to create a "sovereign internet" in russia; China's periodic blocking of Google and Facebook and the promotion of its own ecosystems of WeChat, Baidu and Weibo; forcing governments (and, accordingly, the policies of individual platforms) to remove content that is considered illegal under national law or unethical; requirements for global platforms to store their citizens' data on servers physically located within the country, which is done under the pretext of "privacy protection", but also gives government agencies access to the data and complicates the operations of digital platforms (Mueller, 2022)

Source: (Buterin, 2021; OpenZeppelin, 2021; Qin et al., 2021; Ehrhardt et al., 2022; Hassan & De Filippi, 2021; Mueller, 2022).

The vulnerabilities listed in Table 3 have significant consequences for digital platforms, which lose global universality, are forced to create different versions of their rules, functionality, and policies for different countries, which increases operating costs; are transformed from purely commercial companies into political players, balancing the requirements of local laws, pressure from human rights defenders, and their own business interests; become agents of state control, fulfilling requirements for moderation and implementation of national policies in the digital space, and are forced to adapt to the new reality of a "politicized" and "territorialized" Internet (Mueller, 2022).

Negative aspects also include specific practices of some platforms that are not always illegal but systematically undermine fairness in the market. Such practices include:

- self-preferencing: giving preference to their own products and services in rankings and search results on their platform (for example, Google promoting Google Shopping, or Amazon promoting its own products);
- using competitors' data obtained from business users on the platform to develop their own similar products;
- interoperability restrictions: creating "closed ecosystems" or "walled gardens" that make it difficult for products and services to interact with competing platforms;
- tying and bundling services to force users to use the entire product portfolio.

According to the Digital Markets Act (Regulation (EU) 2022/1925, 2022), preventing the further implementation of anti-competitive practices requires a fundamental change in the regulatory paradigm and the creation of a so-called "constitution for digital markets" to make the Web 3.0 economy fairer and more competitive.

Thus, in the Web 3.0 environment, a dualism begins to be clearly visible: on the one hand, unprecedented opportunities for value creation are opening, and on the other, existential challenges arise for the functioning and

development of digital platforms. Therefore, the further evolution of digital platforms will depend not only on the improvement of blockchain technologies but also on the development of a new socio-economic architecture of network consensus.

Conclusions

The evolution of digital platforms is inextricably linked to the development of the infrastructure and functionality of the World Wide Web, which experts conditionally divide into the stages of Web 1.0, Web 2.0, and Web 3.0. Each of these stages had technological and economic prerequisites for the emergence, distribution, and dominance of certain types of digital platforms, which changed management mechanisms, created new business models and strategic partnerships, became key players on the market, and leaders in monetization.

The authors consider the Web 1.0 stage as the period of the emergence of digital platforms with static websites (HTML), limited bandwidth, lack of dynamic databases, and centralized management in the hands of the owner, administrator, or webmaster. The spread of information technologies influenced the growth of the popularity of the Internet and the emergence of corresponding network ecosystems, which became prototypes of digital platforms.

The Web 2.0 stage is associated with the formation of the platform economy and the further development of digital platforms. During this period, value was created not by site owners, but by users themselves. Digital platforms did not own fixed assets in the traditional sense, but created value by using assets and resources belonging to their users. The authors emphasize that management during this period shifted from administration and line control to the "orchestration" of interactions in the platform, the value of which increased with the increase in the number of users, which created powerful positive feedback loops and rapid scaling.

Subsequently, digital platforms underwent a transformation with a shift in management focus from interaction control to decentralized ownership and coordination in the Web 3.0 era. Understanding this transformation is important for modern management, as it has proposed fundamentally new mechanisms for regulating economic activity, new values, and a new social and economic architecture of network consensus. Thus, the aim of the article has been achieved, and the hypothesis has been substantiated and confirmed. A promising direction for further research will be an in-depth study of the consequences of digital fragmentation and the corresponding risks for the stable functioning of digital platforms.

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