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Framework for the development of digital strategies for industrial companies: Principles, methods and tools

T.A. Gileva[1]

[1] Financial University under the Government of the Russian Federation (Moscow, Russia)

Abstract

Strategic management and strategy as a tool for managing business development have become responses to the increasing instability of the external environment. With the advent and development of digital technologies, there has been another quantitative and qualitative leap in the growth of uncertainty in the operating conditions of industrial enterprises. In order to remain competitive, they have embarked on a digital transformation process, the success of which also largely depends on having a clear strategy for implementing the transformation. The requirements for such a strategy, and the methods and tools used to develop it, are in some respects very different from those used in traditional strategic management. This determines the research relevance in the field of determining the nature of the digital strategy of the industrial enterprise, methods and tools for its development. It is shown that a digital strategy is a strategy for business development in a digital environment and that the key problem in its development is the need to significantly increase flexibility while maintaining a certain stability. Analysis of trends in the area of adaptation and development of methods for strategy development in the digital environment was carried out. Four broad sets of methods for increasing strategic flexibility have been identified: based on scenario development, experimentation, the use of organisational and management mechanisms, and on the use of ecosystem capabilities. Taking into account the stages of digital transformation process of the industrial enterprise and the basic practices of adaptive management, a landscape of methods and tools for the formation of a digital strategy of a company has been built up, allowing to broaden the understanding and to make a reasonable choice of an instrumental and methodological base. The concept of a minimum viable strategy is highlighted as a promising direction for developing a flexible digital strategy for an enterprise. A tool for its development is proposed in the form of a one-page presentation (canvas) that logically combines the key components of a digital strategy, ensuring its flexibility and sustainability.

Keywords: enterprise, digital strategy, flexibility, landscape of methods and tools, minimum viable digital strategy.

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工业企业数字战略开发框架：原则、方法与工具

T.A. Gileva[1]

[1] 俄罗斯国立财政金融大学 (俄罗斯，莫斯科)

简介

战略管理和战略作为企业发展管理工具，早已成为应对外部环境不稳定性增强的策略。随着数字技术的出现和发展，工业企业经营环境的不确定性又经历了一次数量和质量上的跃升。为了保持竞争力，它们开始进行数字化转型，而这一转型的成功程度在很大程度上取决于是否有明确的转型策略。对于这样一种策略，其要求、方法和开发工具在某些方面与传统战略管理中使用的要求、方法和工具显著不同。这决定了对工业企业数字战略的实质、方法和开发工具进行研究的重要性。研究表明，数字战略是指在数字环境中发展业务的战略，其开发的关键问题是在保持一定稳定性的同时，需要大幅提高灵活性。在数字环境中，进行了关于战略开发方法的适应性和发展趋势的分析。四种提高战略灵活性的方法被归纳为：基于场景开发、实验、组织管理机制应用以及利用生态系统的可能性。考虑到工业企业数字转型的阶段和基本的自适应管理实践，建立了企业数字战略形成方法和工具的景观，这有助于扩展理解并进行合理选择工具和方法。作为形成灵活数字战略的前景方向，提出了最小可行战略概念。提出了一种以单页形式呈现的工具（画布），它在逻辑 上将数字战略的关键组成部分进行了整合，从而确保其灵活性和稳定性。

关键词：企业、数字战略、灵活性、方法和工具景观、最小可行数字战略。

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Introduction

The process of digital transformation has become an integral component of the development of industrial companies. The efficacy of the implementation of digital technologies and business models, initially postulated, has been substantiated by numerous successful instances [Gurumurthy et al., 2020; Angevine et al., 2021; Wang, Shao, 2024]. Ilkevich's work [Ilkevich, 2022] presents the effects of introducing smart manufacturing technologies as part of a digital transformation strategy in an industrial enterprise. However, not all digital initiatives have been successful. Major consulting firms (McKinsey, BCG, Deloitte, KPMG, and Bain & Company) have identified a significant risk of failure associated with digital transformation, with failure rates estimated between 70 to 95% (Forth et al., 2020; Block, 2022). The absence of a clearly defined digital transformation objective and strategy has been cited as the primary reason for these failures [Kane et al., 2015; Baculard, 2017; Forth et al., 2020; Holt, Gibson, 2023]. A comparable result was documented in a survey of Russian enterprises' digital transformation practices [Digital Transformation in Russia..., 2020], where over 50% of respondents identified a strategy and management support as pivotal factors for success in digital transformation, with only 'necessary skills of employees' receiving a higher number of votes (64%).

In recent decades, corporate strategy has served as a primary instrument for directing business growth and evolution. However, the digital environment has exacerbated the fundamental contradiction in strategy between its sustainability and its flexibility. As a tool for long-term planning, a strategy must have a certain level of stability. Yet, in a digital environment, key factors for competitiveness are flexibility and the ability to adapt quickly (Hunsaker & Knowles, 2020; Teece et al., 2020).

Furthermore, the hierarchical structure of strategy (corporate strategies, business unit strategies, functional strategies) has led to a lack of consensus regarding the scope and objectives of an enterprise's digital strategy. This underscores the importance of research in strategy development for digital transformation and business growth in the digital environment. Consequently, this

Table 1
Approaches to defining a digital strategy

Definition	Source	Notes
Stage 1: Functional Level		
The strategy of digital transformation of production entails a substantial increase in business benefits through comprehensive automation of business processes and the introduction of new information technology (IT) solutions that markedly alter business processes, thereby reducing the workforce required	[Mikhailov, 2023]	Digital transformation strategy as a functional IT strategy
Stage 2: Business Strategy Level		
Digital strategy is a comprehensive view that integrates both IT and business strategy, focusing equally on business and technology	[Chanias et al., 2019]	Integration of business strategy with IT strategy
A digital transformation strategy is a business development strategy that employs modern digital solutions. It should address two key questions: what outcomes should the company aim to achieve and how can it best achieve them. It is essential to establish the fundamental objectives and strategic direction of the business before exploring how digital technologies can support achieving the company's goals. The strategy prioritises business development over IT.	About Digitalisation and Digital Transformation: Textbook 4 CDTO. Club 4CIO, 2020	The primacy of business development strategy
Digital strategy is a business strategy in which technology enables innovation and creativity, allowing companies to create new and better customer experiences.	[Adner et al., 2019]	Business strategy, technology, and innovation
Digital strategy as a route for an organisation, industry, or region. It is based on understanding the current situation and predicting the future. The strategy allows for choosing goals, direction, routes, resources, and backup options.	[Digital transformation strategy.., 2021]	Emphasis on strategy flexibility: route, reference point, goal, fallback options
Digital transformation strategy as a state company document that defines the goals, KPIs and their target values, strategic directions, digital infrastructure, organisational changes, personnel development, and management model for digital transformation.	Methodological recommendations for the digital transformation of state corporations. M., 2023	Formalisation of requirements: document and its contents
Stage 3: Corporate Level		
A digital transformation strategy is an action plan for repositioning a business in the digital economy. It is not a standalone digital strategy but a business development strategy in a digitally enriched environment	[McKeown, 2017]	Business (enterprise) development strategy in the digital environment

article aims to provide a systematic overview of the approaches and methods, as well as to develop tools for formulating a digital strategy for an industrial enterprise.

1. Theoretical overview

Defining a digital strategy or an enterprise's digital transformation strategy can be approached in several ways. Analysis reveals three relatively distinct stages in understanding its essence (Table 1).

Initially, enterprises' digital strategies were frequently regarded as extensions of their IT strategies, classified as functional strategies. However, the limitations of this approach and the need for a more comprehensive perspective, one that includes creating business value, have been well-articulated in the works of Bharadwaj et al. (2013) and Adner (2019). The second stage involves merging digital strategy with business strategy, marking the transition towards an understanding of digital transformation. Initially, digital technologies were implemented for individual projects to increase production efficiency (digitalisation). Over time, there has been a shift towards changing business models and creating new value opportunities for consumers [Digital Transformation Strategy, 2021]. Based on extensive consulting experience, BCG experts proposed the concept of a smart digital strategy [Wald et al., 2019], focusing on making intelligent investment choices to gain a competitive advantage, ensure growth, and achieve profitability and value.

The objective of digital transformation is to create a continuously evolving and flexible company, capable of adapting to changing conditions through appropriate technologies, organisational learning, and decision-making processes that use high-quality data in shorter time frames (Shu et al., 2017). In this context, digital strategy is introduced at the corporate level, representing the next stage in defining digital strategy [McKeown, 2017].

As part of the digital transformation process, the development of digital strategies is also evolving. One of the main challenges is to make strategies more flexible to manage enterprise development in the digital environment. This is reflected in the definitions in Table 1, where digital strategies are presented as a journey, a common approach to strategy development [McKeown, 2017].

Given the inherent instability of the external environment, strategic planning can be considered a form of perspective planning. Research in strategy flexibility has been going on for a significant period, with notable contributions such as the Harvard Business Review study [Courtney et al., 1997], which focused developing strategies in the context of uncertainty. The study identified four levels of uncertainty: (1) a fairly clear future; (2) an alternative future, which can be described as one of several alternative outcomes or discrete scenarios, with probabilities that can be established for each scenario; (3) a range of future options, when the actual outcome can lie anywhere along a continuum defined by a selected range of variables; and (4) true uncertainty, marked by the following characteristics:

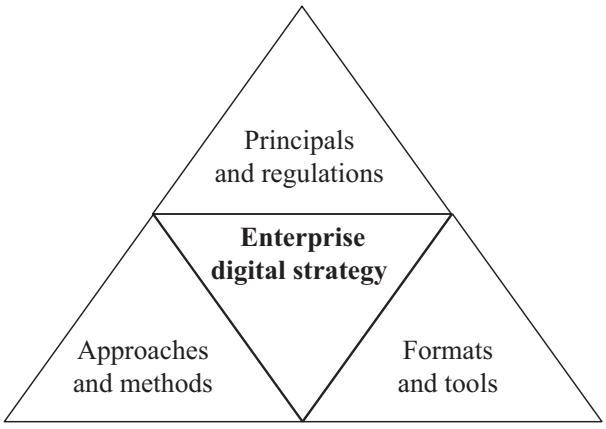
- the interaction of numerous uncertain factors creates an environment that is virtually impossible to predict;
- the range of potential outcomes is undefinable, and the scenarios within that range are similarly unidentifiable;
- it is often impossible to identify, much less predict, all the important variables that will shape the future.

Additionally, the study provided recommendations for each level of uncertainty. This environment is conducive to the digital world today, necessitating further research into developing agile digital strategies for enterprises.

2. Methodology and methods

The framework for developing an enterprise digital strategy is presented in Figure 1. The necessary flexibility of the strategy is largely determined by the procedures and methods used in its development. Let us highlight a number of trends in terms of the development of approaches and methods of strategic management of an enterprise in the digital environment [Gileva, Shkarupeta, 2022].

Fig. 1. Enterprise digital strategy development framework



1. An increasing number of researchers are questioning the applicability of traditional systematic calendar planning principles to strategy development in the digital environment, suggesting that such an approach may be inexpedient or even impossible. According to D. Bonnet and P. Maulik, the era of clear strategic planning has ended. The traditional approach of defining a strategy as a series of sequential steps to be taken in the predetermined

future is no longer tenable. Instead, strategy must be conceptualised as a dynamic, evolving process [Bonnet, Maulik, 2018, pp. 23-26]. Effective response to continuous change requires adopting an event-situation approach and viewing strategy as a flexible trajectory to achieve key objectives[1]. Authors [Hunsaker, Knowles, 2020] argue that it is essential to focus on what is changing rather than what is stable, enabling the identification of how changes can neutralise historical advantages while creating new opportunities and expanding the number of stakeholders whose needs and potential contributions should be given due consideration in the strategic planning process.

2. The set of methods for analysing the external environment has been updated with new additions and changes of emphasis:

- increasing role of such traditional but insufficiently applied methods of strategic planning and management such as scenario analysis and weak signal management [Venkatraman, 2019];
- expanding the scope of analysed external factors as potential sources of disruptions [Webb, 2020], singling out ecosystem impact factors as a separate group [Toner et al., 2015], and considering the interrelationships between different factors [Wiles, 2021];
- in-depth analysis of technology development as a source of destruction and new opportunities, increasing the role of technology scanning and scouting [Ashton, 2020];
- expanding the application of big data analytics in technological and competitive analysis (Open Source Intelligence, OSINT).

In order to analyse internal capabilities of an enterprise in the digital environment, digital maturity assessment is typically employed. Identifying and assessing gaps between current and target digital maturity levels helps identify promising development directions and projects.

Key trends in strategic decision-making include:

- increasing role of mission and vision as guidelines for strategic sustainability;
- choosing a limited number of strategic priorities to link long-term vision and medium-term goals [Sull, Turconi, 2017];
- blurring the boundary between long-term and medium-term planning using flexible roadmaps[2], like the 'Waves and Stones' method, as a strategy presentation tool. "Waves" are major changes on the way to a target future state, while 'Stones' are tactical actions for the short or medium term;
- developing approaches and methods to increase strategy flexibility, including forming a smart KPI structure for faster, more accurate monitoring and necessary trajectory adjustments towards strategic priorities. The concept of smart KPIs [Scharge, Kiron, 2018] involves using big data analytics and AI technologies to collect, analyse, and justify the composition of the most representative indicators.

Let's explore methods to enhance strategic flexibility.

1. The Strategy Palette, developed by M. Reeves and colleagues (Reeves et al., 2016), classifies strategies based on three dimensions: predictability, or the ability to foresee future events; plasticity, or the capacity of the firm and its partners to influence the environment; and aggressiveness, or the level of external threats to the firm's survival.

In the absence of predictability or changeability in the environment, it is recommended that companies adopt an adaptive strategy, characterised by continuous experimentation. The process of adaptation involves developing and testing diverse strategic alternatives, followed by selecting and scaling the most successful options. This approach is similar to the widely adopted concept of the minimum viable product, although the underlying assumptions differ. The evolution of these concepts is the notion of Minimum Viable Strategy [Childs, 2018; Gileva, Babkin, 2022], which appears to be a promising avenue for further exploration.

2. The concept of Open Strategy primarily relies mainly digital technologies and organisational mechanisms, such as using crowdsourcing platforms to search for and select strategic ideas and solutions [Tavakoli et al., 2017]. It also involves expanding knowledge-sharing processes within online communities and stakeholder interactions [Morton et al., 2020].

3. Agile Approaches to Digital Strategy Development. According to Chanias et al. (2019), strategy should be seen as a 'moving target' that requires constant updates, emphasising the need to apply agile technologies not only during implementation but also during strategy development. The Russian consulting company Strategy Partners uses a dynamic and structured process for digital strategy development that includes three sprints: generation and evaluation of new ideas, in-depth testing of the most promising strategic options, and final strategic selection[3].

4. Scenario Building Approach. The 'circle of uncertainty' developed by Bain & Company [Toner et al., 2015] involves identifying key uncertainties, creating a set of plausible future scenarios, and analysing them to plan strategic actions for each scenario. It also establishes a clear set of indicators that signal important market changes and trigger pre-defined actions within the scenario planning process.

5. Gartner's Methodology for Developing Adaptive

[1] Digital strategy and roadmap (2016). https://www.cgi.com/sites/default/files/pdf/digital_strategy_and_roadmap.pdf.
[2] Building your digital transformation journey (2019). IDC, December 2019. https://www.ge.com/digital/sites/default/files/download_assets/idc-building-your-digital-transformation-journey.pdf; Digital strategy and roadmap (2016). https://www.cgi.com/sites/default/files/pdf/digital_strategy_and_roadmap.pdf.
[3] Agile-стратегия и цифровая трансформация (2023). Strategy Partners. https://strategy.ru/services/agile-transformatsiia-biznesa.

Strategies in the digital landscape [Wiles, 2023] is based on four fundamental practices: embracing and exploring uncertainty, initiating execution at the earliest possible stage, responding promptly and flexibly to changes, and engaging all relevant stakeholders in the strategy creation process.

6. The use of visualisation tools, specifically a 'one-page' format for the presenting strategic concepts (Colella, 2015), is an effective approach to articulate and visualise key aspects of strategic planning, thereby facilitating engaged discourse. A group of tools collectively known as 'canvases' has recently gained considerable popularity. While they are quite widespread in foreign management practice, there is only one representative of this group has gained significant recognition: the Canvas business model of A. Osterwalder and its modification, the Lean Canvas of E. Maurya. The term 'canvas' is frequently rendered in English as 'template', which implies a range of analogous solutions. However, a canvas is more than just a template; it is a tool for creativity that systematises and establishes logical relationships between the identified key success factors. It ptovides a structured basis for joint discussion, integration, and development of ideas and opinions in a clear and visual manner. This is the context in which this tool is discussed in this article.

7. The Ecosystem Approach and Ecosystem Strategy. The ecosystem format offers many opportunities for enterprise development [Jacobides, 2019; Pidun et al., 2022], such as obtaining missing resources and competencies, including new knowledge, more quickly and cheaply, participating in the creation of a highly attractive integral value proposition, and engaging in co-development (coevolution). Deciding to engage with ecosystems is a pivotal strategic choice for modern industrial enterprises [Chanias et al., 2019; Wald et al., 2019; Gileva et al., 2020]. While this article does not delve into ecosystem strategy development in terms of creating new ecosystems, it highlights the benefits of participating in existing ecosystems. This includes ecosystem selection, assessing the attractiveness of component enterprises, identifying potential ecosystem roles, and selection of models of interaction between ecosystem participants. Additionally, it is important to consider the impact of digital platforms on the development of industrial enterprises. These platforms can provide competitive advantages by offering better products, increasing market access, and enabling network interactions that are difficult to replicate.

The abundance of available approaches and methods can often prove to be more of a hindrance than a help when seeking solutions to specific problems. To enhance clarity, we present the author's grouping of the considered methods (see Table 2).

It should be noted that these groups of methods are complementary rather than mutually exclusive. The concept of a minimally viable strategy, for example, involves creating an adaptive strategy based on experimentation, leveraging ecosystems opportunities for scaling and and utilizing various organisational and management mechanisms. This includes continuous implementation monitoring, while maintaining such traditional 'strategic anchors' such as as reliance on the company's core competencies and competitive advantages in a continuously changing world, and defining a system of strategic priorities.

Table 2
Approaches to increasing flexibility in digital strategy of enterprises

Based on the development of scenarios	Experiment-based
Based on the application of organisational and management mechanisms	Based on ecosystem interactions

Summarising the analysis of digital strategy development for enterprises, several key rules and principles can be identified.

1. The primacy of strategy over technology. Positioning digital strategy at the corporate and business levels is analogous to competitive strategy, as digital transformation is now a essential for the competitiveness of industrial enterprises.

2. The primary aim of formulating a digital strategy is to enhance flexibility while balancing the inherent tension between flexibility and sustainability. Flexibility is primarily based on developments in ecosystem creation and minimum viable strategies, while sustainability involves establishing a system of strategic priorities. Integrating flexibility and sustainability leads to the development of a tool such as flexible roadmaps.

3. The integration of long-term and medium-term perspectives in the planning process.

4. The interactive approach to strategy development and implementation is the key element of this process. Applying agile development technologies and roadmaps with three horizons, formed by methods like the 'surging wave' or 'Waves and Steps', is crucial.

5. Systematic and validated methods. Utilising a wide array of methods and tools for digital strategy development, including both traditional methods (updated for current relevance) and those specific to the digital environment (e.g. digital maturity assessment models, one-page presentation formats, flexible roadmaps, etc.).

3. Results of the study

When considering digital strategy as a roadmap, it is logical to group the methods of its development and implementation according to the stages of the digital transformation process. This is based on the most generalised scheme from the joint study by the World Economic Forum and Bain & Company[4], which combines four key aspects: digital strategy, business model, identification of drivers and creation of the foundation of the company's digital transformation, and orchestration as an agile management process. Given the position that agile technologies should be applied not only during the implementation phase but also in the strategy development phase [Chanias et al., 2019], we will use the adaptive planning approach proposed by Gartner analysts [Wiles, 2023] as the second dimension to systematise methods and tools for developing an agile digital strategy for an enterprise. The proposed management practices are:

- accept and explore uncertainty (P1);
- start implementation as early as possible (P2);
- respond to changes as they occur (P3);
- involve everyone in the strategy (P4).

At each of the stages of digital transformation, different methods and tools should be used to implement these practices (see Table 3). The purpose of building this landscape is to broaden the perspective and create transparent navigation in applying methods and tools for forming the digital strategy of an enterprise.

The methods and tools presented in the landscape can be divided into several groups:

- Traditional and widely used strategic planning methods, such as critical success factors, benchmarking, SWOT analysis, GAP analysis;
- Methods that are well-known but not widely used. These include technology scanning, scenario analysis, and weak signal analysis. These methods have gained relevance due to increased uncertainty in the external environment and significant advancements in Big Data and Artificial Intelligence;
- Methods updated for the digital environment. This group includes macro-environmental analysis methods like the analysis of 11 sources of possible failures [Webb, 2020], the circle of uncertainty [Toner et al, 2015], and the method of creating a

Table 3
Landscape of methods and tools for building a digital strategy for the enterprise

<table>
<tr><th></th><th>Digital Strategy</th><th>Business Model</th><th>Drivers of Digital Transformation</th><th>Orchestration</th></tr>
<tr><td>P1</td><td colspan="2">Analysis of drivers of change (macro environment): analysing 11 sources of failure, TESTRE, circle of uncertainty,
technology scan,
weak signal analysis,
customer journey map,
benchmarking,
SWOT analysis,
scenario analysis</td><td></td><td></td></tr>
<tr><td>P2</td><td>Critical success factors,
North Star Metric,
strategic priorities,
minimum viable strategy,
one-page strategy
strategic sprints</td><td rowspan="2">Digital platform, partner ecosystems
asset-light business models,
user flows (user story mapping),
predictive forecasting</td><td colspan="2">Digital maturity monitoring
GAP analysis, operating model linked to digital strategy, 3 horizons of the roadmap, p artner ecosystems, predictive forecasting, agile management technologies, investment decisions based on big data analytics</td></tr>
<tr><td>P3</td><td>Ecosystem strategy, 'rolling wave' method, prioritisation methods, experimentation-based strategy, smart KPIs</td><td colspan="2">Flexible roadmaps, partner ecosystems, intelligent agile operations, real-time solutions</td></tr>
<tr><td>P4</td><td colspan="4">Digital organisational cultures ambitious and transparent goals (OKR system), talent management, flexible workforce, agile teams</td></tr>
</table>

[4] The digital enterprise. Moving from experimentation to transformation (2018). World Economic Forum. https://www.weforum.org/publications/the-digital-enterpise-moving-from-experimentation-to-transformation/.

Table 4
Minimum viable enterprise digital strategy canvas

<table>
<tr><td colspan="5">Key Features</td></tr>
<tr><td>Partners (ecosystem)</td><td rowspan="2">Competitive advantages (key competencies)</td><td>Markets/ products</td><td rowspan="2">Mission and Vision</td><td>Success Criteria</td></tr>
<tr><td>Digital technologies</td><td>Strategic priorities</td><td>Metrics (KPI)</td></tr>
<tr><td colspan="5">Key risks</td></tr>
</table>

'tapestry' of interrelated factors TPESTRE [Wiles, 2021]. It also includes forming a system of strategic priorities [Sull, Turconi, 2017], flexible roadmaps[5] and other visual tools for decision-making (Canvas);

- A group of new methods complementing the traditional arsenal: customer value mapping methods (Customer Journey Map, User Flows, User Story Mapping, etc.), enterprise digital maturity assessment models, agile planning and management techniques, real-time data-driven decision making, minimum viable strategies, and smart KPIs [Scharge, Kiron, 2018]. The World Economic Forum's[6] analytical report presents a broad range of agile strategy methods, including strategy sprints, intelligent agile operations, and investment decisions based on big data analysis. An important aspect of management flexibility, particularly in strategy implementation, is the close link between the business model and the company's operating model[7].

As additional comments to Table 3, we note the following.

First, it is nether practical nor advisable to employ all methods simultaneously. To ensure the validity of strategic decisions, methods should be chosen to correspond to each stage of the digital transformation process, considering all four practices of adaptive planning. It is critical not to rely solely on traditional methods of strategising. To achieve the necessary flexibility in a digital strategy, methods from both the 'actualised' and 'new' groups must be employed.

Secondly, the current era is characterised by a high demand for developing methods and tools that cater to the digital environment peculiarities. This demand drives active research and leads to the emergence of new methods and tools, necessitating ongoing updates to the landscape of available methods.

Third, the development of new tools is feasible by combining different approaches and methods. For example, developing a one-page format (canvas) to create a minimally viable digital strategy for an industrial enterprise illustrates this.

Despite the promising nature of this concept in increasing strategy flexibility (analogous to the development of a minimum viable product - MVP - widely and effectively used in management practice today), only theoretical and methodological provisions for a minimum viable strategy have been established to date [Childs, 2018], with no practical implementation tools.

Benchmarks for developing the canvas of the minimum viable digital strategy for an enterprise (see Table 4) are as follows:

- canvas of minimum viable product[8];
- the essence of strategy as an instrument of enterprise development management: analyzing and considering the influence of external opportunities and threats; creating competitive advantages based developing organisational competencies; determining priority areas of development (products, markets) by aligning external factors with the internal capabilities of the enterprise;
- research in the field of increasing strategy flexibility (enhancing the role of the mission and vision of the enterprise, developing a system of strategic priorities, utilising digital technologies and ecosystems as drivers of digital transformation; monitoring progress based on KPIs).

Thus, a minimum viable digital strategy (MVDS) is a tool for managing the development of enterprises in the digital environment. It provides the necessary management flexibility through the selection of a limited number of clearly defined strategic priorities and criteria for the enterprise success in relevant markets. It leverages digital technologies and ecosystems, allowing timely adjustments based on analysing external factors (opportunities and threats) and continuous monitoring through a representative system of key performance indicators (KPIs).

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Conclusions

Formulating a digital strategy is critical for the success of industrial companies undergoing digital transformation. It is a business strategy that focuses on enhancing company development through increased production efficiency of production based on digital technologies and creating new opportunities for greater customer value using new behavioural models grounded in digital technologies and a culture of continuous change.

Given the significant rise in external instability driven by the proliferation of digital technologies, both quantitatively and qualitatively, there is a pressing need to refine the principles, methods, and tools of traditional strategic management. The emphasis is on methods designed to enhance the flexibility of digital strategies. Key steps in this process include employing a scenario approach, continuously experimenting with successful practices, using various organisational and management solutions (such as crowdsourcing platforms, stakeholder networking, agile teams, and fostering the necessary organisational culture), and engaging with the broader ecosystem.

The flexibility of a strategy is largely determined during the analysis stage, which includes both the external and internal environments. The article presents a landscape of methods and tools for designing a company's digital strategy, allowing the selection of methods that ensure flexibility at all stages of digital transformation.

Integrating diverse approaches and methodologies forms the foundation for creating innovative tools that align with the requirements of the digital landscape. As an example, the article introduces a canvas for a minimum viable digital strategy for a company. The one-page presentation format provides a visual representation of the company's vision and strategic priorities, defining key markets and products, while considering external opportunities and risks, as well as the company's competitive advantages and organisational competencies developed through digital technologies and partnership interactions within the ecosystem. The advantages of such a presentation are threefold. Firstly, it allows the company to clearly and concisely define its vision and strategic priorities. Secondly, it ensures high visibility, facilitating employee understanding of the company's key values and priority areas. Thirdly, it provides a flexible platform for discussion and adaptation without the need for lengthy, often unreadable documents.

The framework of approaches, methods and tools of digital strategy development presented in the article offers a valuable opportunity to enhance the formation of a successful digital transformation strategy in an industrial enterprise. Further research should focus on developing a more detailed framework for a minimum viable digital strategy for enterprises. This should include a methodology for determining strategic priorities and a system of KPIs, as well as a roadmap for developing a digital strategy that considers various factors, such as enterprise size, market growth rates, and the impact of ecosystem players.

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About the author

Tatiana A. Gileva
Doctor of economic sciences, associate professor, professor at the Department of Strategic and Innovative Development of the Faculty 'Higher School of Management', Financial University under the Government of the Russian Federation (Moscow, Russia). ORCID: 0000-0002-2429-2779.
Research interests: business development strategy and management, including manufacturing business development, strategy formation in the digital environment, innovative ecosystem development.
tagileva@fa.ru

作者信息

Tatiana A. Gileva
经济学博士，副教授 ，俄罗斯国立财政金融大学高等管理学院战略与创新发展系的教授（俄罗斯，莫斯科）。ORCID: 0000-0002-2429-2779.
科研兴趣领域：公司战略和发展管理，包括在数字环境中制定生产企业发展战略，以及创新生态系统的发展。
tagileva@fa.ru

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