Volume 9, Issue 6, 2026 ISSN: 2617-4596
DOI: https://doi.org/10.31058/j.mana.2026.96007

Research on Corporate Innovation and Entrepreneurial Management in the Context of the Digital Economy: An Analysis Based on Dynamic Capability Theory

Chiguang Xia[1*]

[1] School of Economics and Management, Guangxi Normal University, Guilin, China
*Correspondence: Chiguang Xia

Received: 14 September 2026**; Accepted:** 20 October 2026**; Published:** 4 November 2026

Abstract:

The global economic pattern is being reshaped by the digital economy; this new economic trend brings both rare development chances and severe tests for modern enterprises. In the ongoing digital transformation era, enterprises must properly cope with various difficulties in innovation and entrepreneurship activities; this has become a key prerequisite for enterprises to maintain long-term market competitiveness. This article focuses on the internal operating rules of enterprise innovation and entrepreneurship management under the background of the digital economy; digital economic environments provide enterprises with potential development space while also bringing new operational risks. Based on the dynamic capability theory, this paper discusses the practical approaches for enterprises to build stable and lasting competitive edges. The research results show that the actual effect of enterprise innovation and entrepreneurship activities does not rely on fixed inherent enterprise resources; it is mainly determined by enterprises' dynamic capabilities, namely the capacity to perceive market changes, capture development opportunities and optimize resource deployment. On this basis, this paper constructs a dual-path model that explains how dynamic capabilities drive enterprise innovation and entrepreneurship; dynamic capabilities can affect the innovation and entrepreneurship performance of enterprises through two coordinated and interactive paths, which include knowledge integration and learning as well as resource allocation and restructuring. Meanwhile, this study summarizes five targeted and operable enterprise management strategies. This research organically combines the dynamic capability theory with current research achievements on digital economic innovation and entrepreneurship; it can provide solid theoretical support for enterprise managers to formulate development plans and realize sustainable corporate development.

Keywords:

Digital Economy, Dynamic Capabilities, Innovation Management, Entrepreneurial Management, Organizational Learning

1. Introduction

1.1. Research Background

The digital economy era has witnessed comprehensive changes in corporate operational modes; data, algorithms, digital platforms and intelligent technologies have greatly altered the ways for enterprises to obtain resources, discover market opportunities and carry out innovative activities. Digital technologies create multiple benefits for enterprise development; they cut down the cost of knowledge exploration, market expansion and product upgrading for businesses. Meanwhile, these digital tools also bring new risks to the market; they greatly increase the volatility and uncertainty of the industrial competition environment. A large number of enterprises have invested abundant funds and resources in digital transformation, yet most of them fail to gain matching innovation outputs; many businesses are also trapped in various practical dilemmas including isolated data systems, rigid organizational management, low-efficiency technology investment and outdated business operation models. For this reason, the core difficulty faced by modern enterprises does not lie in the possession of digital technology itself, but in the ability to convert digital technology advantages into stable organizational capabilities, so as to support long-term corporate innovation and entrepreneurial development.

Against this backdrop, the theory of dynamic capabilities offers a new perspective on corporate digital transformation and its impact on innovation and entrepreneurial performance. Dynamic capabilities refer to an enterprise's ability to adapt to a constantly evolving environment by integrating, constructing, and reorganizing its internal and external resources; their essence lies not in the static quantity of resources an enterprise possesses, but rather in its capacity to continuously update its existing resources, reshape its organizational structure, and seize emerging opportunities. In the era of the digital economy, the boundaries between innovation and entrepreneurship are becoming increasingly blurred: innovation is no longer confined to technical work within R&D departments, and entrepreneurship is no longer limited to startups; instead, it has evolved into a continuous process of discovering new opportunities, developing new products and services, and redefining value creation.

1.2. Research Questions and Significance

This paper puts forward three core research questions based on the above research background; first, how do enterprises apply dynamic capabilities to optimize innovation and entrepreneurship management in the digital economy era; second, what core functions do dynamic capabilities perform in the process of corporate digital transformation; third, how do dynamic capabilities affect the overall innovation and entrepreneurship performance of enterprises. This study builds a unified analytical model to answer the above three research questions, and it clearly clarifies the internal correlation between enterprise dynamic capabilities and innovative as well as entrepreneurial behaviors.

This research has three major theoretical contributions to existing academic research; it firstly improves the applicability and explanatory ability of dynamic capability theory under the digital economy scenario. Traditional studies on dynamic capabilities mostly focus on the changes of general external market environments, while this paper fully considers the high uncertainty, data-driven features and network linkage effects of the digital economy; it redefines the three core dimensions of

dynamic capabilities including perception, acquisition and transformation, and systematically explores their internal operating mechanisms. Secondly, this paper fills the research vacancy of existing related studies; most previous scholars discuss enterprise innovation management and entrepreneurship management as two independent research objects, and this study combines the two research perspectives, puts forward two correlated research paths, and verifies the logical consistency of these two paths based on dynamic capability theory. Thirdly, this research sorts out high-quality Chinese and foreign literature; it constructs a complete theoretical system including conceptual graphs, mechanism analysis tables and path integration diagrams, which provides a reliable theoretical basis for subsequent empirical research.

This thesis also has important practical guiding significance for real enterprise development; the five management strategies proposed in this study can provide effective references for enterprise managers to carry out digital transformation, and they offer operable solutions for enterprises in terms of knowledge management system construction, management model innovation and digital ecological integration. In addition, the research conclusions can help government departments accurately grasp the practical difficulties of enterprise digital transformation, so as to formulate targeted supporting policies and industrial regulatory measures.

1.3. Research Methods

This study primarily employs theoretical analysis and a literature review as its core research methods. It systematically synthesizes research findings from dynamic capability theory, innovation management theory, entrepreneurship management theory, and the field of the digital economy, and constructs a comprehensive theoretical analytical framework through logical deduction and theoretical reasoning. All conclusions of this study are derived logically from existing high-quality literature; no empirical validation using primary research data has been conducted. The study strictly adheres to the writing conventions of non-empirical academic papers, focusing its efforts on building a theoretical framework and elucidating its underlying mechanisms of action.

2. Theoretical Foundation and Literature Review

2.1. Development and Core Connotations of Dynamic Capabilities Theory

Dynamic capability theory is a widely adopted theoretical framework in strategic management research; Teece, Pisano and Shuen put forward this complete theoretical concept for the first time in 1997, and they defined it as the ability of enterprises to integrate, construct and restructure internal and external resources to adapt to fast-changing market environments [1]. This new theory is different from traditional static competition theories including Porter's industrial positioning theory and resource-based view theory; industrial positioning theory focuses on how enterprises obtain advantageous positions in the existing industrial structure, and resource-based view theory stresses the possession of rare and hard-to-replicate enterprise resources. These two traditional theories cannot fully explain the sustainable competitive advantages of enterprises under the background of rapid technological and institutional changes; dynamic capability theory just makes up for this research deficiency, and it shifts the research focus from the inherent resource reserves of enterprises to the dynamic adjustment and renewal of enterprise resources. On the basis of previous research, Teece further divided dynamic capabilities into three core dimensions; these

dimensions include the sensing ability to identify market opportunities and potential risks, the capturing ability to seize opportunities and create market value, and the transforming ability to adjust enterprise resource allocation and organizational structures [2]. This three-dimensional analytical framework has become the mainstream research model for most subsequent empirical studies.

Clear differences exist between dynamic capabilities and traditional enterprise operation capabilities; basic operation capabilities support the daily business operation of enterprises, they cover conventional work contents such as product production, commodity sales and logistics service operation, and they guarantee the normal operation of enterprise business. Dynamic capabilities belong to higher-level organizational abilities; they focus on the optimization and reform of existing enterprise operation modes, and they dominate the overall upgrading and adjustment of enterprise operation capability systems. Stable market environments enable enterprises to maintain basic competitiveness relying on mature operation capabilities; the fast-changing and complex digital economic environment breaks this traditional development rule, and enterprises with perfect basic operation capabilities may still be eliminated from the market if they lack sufficient dynamic capabilities. Scholars have gradually applied dynamic capability theory to digital economy research since the 2010s; Jiao Hao and other researchers have explored the formation mechanism of data-driven dynamic capabilities from the perspective of full-cycle data management, and they pointed out that enterprises' data processing abilities in collection, storage, analysis and application will directly affect their market perception accuracy, opportunity grasping efficiency and industrial transformation level [3]. Jones and Tonetti found that data resources have non-competitive usage characteristics; these characteristics can create conditions for the scale income growth of enterprise dynamic capability cultivation. William and his research team analyzed the enterprise development rules under the data economy from the perspectives of knowledge accumulation and data privacy protection; their research results further enrich and improve the theoretical system of digital dynamic capabilities.

2.2. The Impact of the Digital Economy on Corporate Innovation Management

The impact of the digital economy on corporate innovation management can be examined from three dimensions: innovation models, innovation speed, and innovation risks.

Traditional closed innovation modes are no longer dominant in current enterprise innovative activities, and open innovation has become the mainstream innovation form instead; Yin Ximing and other scholars have conducted relevant research to prove that manufacturing enterprises' digital transformation is closely related to open innovation behaviors, and enterprise dynamic capabilities play a key intermediary role in this correlation [4]. Single enterprises are restricted by their own organizational boundaries in traditional development modes, while digital platforms can effectively break such limitations; these platforms allow enterprises to share professional knowledge and carry out technical cooperation with suppliers, customers and cross-industry partners, which can continuously drive the progress of enterprise research and development work. Digital technology can also assist enterprises in expanding their business scope across different industries; it allows enterprises to break away from their original core business scope, explore new market fields, and acquire more innovative development possibilities. A study completed by Kopalle's research team shows that traditional enterprises need to build open and cooperative industrial ecological systems during their digital service transformation process; this transformation measure is essential

for enterprises to complete the shift from pure product sales modes to diversified service-oriented operation modes.

Digital technology can greatly optimize the product research and development process of traditional manufacturing industries and accelerate the overall speed of enterprise innovation; it can be applied to multiple core links of product development such as model design, virtual simulation test and user experience assessment, which shortens the original long R&D cycle from several weeks to a few days. Current academic studies have confirmed that progressive technological innovation can effectively boost the digital upgrading of enterprises; breakthrough disruptive innovation, however, puts forward higher comprehensive requirements for enterprises, and only businesses with perfect organizational learning ability and complete risk control systems can successfully implement such innovative modes. Relevant investigation data of domestic manufacturing enterprises further proves that digital transformation can cut down enterprise R&D investment and operating costs, enrich corporate information acquisition channels, accelerate the accumulation of industrial resources, and ultimately improve the comprehensive innovation level of enterprises in an all-round way.

Regarding innovation risks, while the development of digital technologies has, to some extent, reduced the cost of trial and error in certain sectors, it may also introduce hidden risks such as path dependence and lock-in effects. Some scholars have pointed out that although digital transformation can positively impact a firm's overall innovation capability, excessive reliance on information technology may constrain the emergence of fundamental innovations [5]. This suggests that, while advancing digital transformation, firms should also carefully consider its long-term implications and strive to achieve an optimal balance between digital investment and innovation outcomes. Furthermore, according to the "innovation–automation–strategy" cycle proposed by Tomasz and Yuya , increased automation levels can enhance firm productivity in the short term; however, this may also diminish the firm's motivation to pursue further innovation [6]. Consequently, firms need to adopt strategic measures to mitigate these risks and achieve their long-term development objectives.

2.3. The Impact of the Digital Economy on Entrepreneurial Management in Enterprises

Research boundaries in entrepreneurship management are constantly widened by the development of the digital economy; two key parts of entrepreneurship activities, which include market opportunity recognition and enterprise resource integration, also gain greater room for development in this context. Market entry thresholds are greatly reduced by various digital platforms, and this change provides chances for micro and small enterprises as well as individual entrepreneurs; these main market participants can take advantage of online communication channels to connect with global markets and expand their overseas business layouts. Wang Molin and other scholars have verified the positive connection between digital transformation and enterprise internationalization in their research; dynamic capabilities play an important intermediary role in influencing this developmental relationship [7]. Enterprises can rely on big data analysis tools to find potential business opportunities in a faster and more accurate way; Chen Yantai’s research team has proven that big data technology can improve the internal resource allocation mode of enterprises, reshape the industrial value chain, and greatly promote the business model innovation of manufacturing enterprises [8]. Saleh’s team has offered further empirical evidence for

the above research conclusions; their study confirms that organizational learning can fully mediate the link between big data analysis ability and corporate market competitiveness [9]. Simply owning large quantities of data resources cannot ensure the smooth progress of enterprise entrepreneurship; the final entrepreneurial results of enterprises mainly depend on their basic capabilities, enterprises need to sort out effective information from massive data materials, and they must apply such valuable information into daily business operation and practical development.

The continuous development and refinement of digital ecosystems have provided robust support for entrepreneurs to leverage external platform resources and address their own limitations in resources and capabilities. Ma Jia et al. (2024) proposed that the relationship between digital transformation and corporate innovation performance is mediated by dynamic capabilities, with this mediation primarily manifesting in the flexibility of corporate resource allocation and market responsiveness; furthermore, the success of a firm's entrepreneurial development largely depends on its ability to integrate and utilize its limited resources efficiently. In the context of the digital economy, the two research domains of innovation management and entrepreneurial management are no longer isolated; instead, they are increasingly exhibiting a trend of integration. Wu Xiaobo et al. (2020) conducted research on the servitization capabilities of manufacturing enterprises and found that the dynamic upgrading process through which such enterprises achieve leapfrog development requires the synergistic coordination of technological innovation activities and market-oriented entrepreneurial exploration activities. This finding also calls upon the academic community to adopt an integrated theoretical perspective to comprehensively examine corporate innovation activities and entrepreneurial behaviors within a digital environment.

2.4. Existing research reviews and research gaps

A large number of existing academic works have analyzed the connection between enterprise digital transformation and innovative development, and they have obtained abundant research results in this field; empirical tests conducted by Ma Jia and other researchers confirm that dynamic capabilities exert a significant mediating effect between digital transformation and corporate innovation; Ling Hua’s research team finds that enterprises can achieve long-term innovative development with the support of dual capabilities during digital upgrading; Shao Bing and his research partners also verify that digital knowledge management modes can greatly improve the technological innovation performance of enterprises. There are still several obvious research limitations in current studies; innovation management and entrepreneurship management are treated as two independent research objects in most existing literature, most scholars only study how digitalization affects enterprise innovation or entrepreneurship separately, and few researches combine these two research directions for unified analysis, so dynamic capabilities are taken as the core variable in this paper to explain the interactive relationship between enterprise innovation and entrepreneurship. The internal structural features of dynamic capabilities also need more systematic exploration; the mediating effect of dynamic capabilities has been confirmed by previous studies, but insufficient detailed discussions are made on its three core dimensions including environment perception, opportunity acquisition and resource transformation, and the interaction mechanism between these dimensions is also lack of in-depth explanation. Most existing theoretical frameworks cannot match the unique institutional and market environment in China; this paper tries to build a

universal theoretical model which can be applied to the actual development situation of domestic Chinese enterprises.

3. Construction of Theoretical Model

The theoretical model established in this study is named the dual-path model of dynamic capabilities driving enterprise innovation and entrepreneurship under the digital economy background; the overall logical operation of this model can be concluded in the following content. The external environment of the digital economy can motivate and push enterprises to cultivate and improve their dynamic capabilities, which mainly include market perception capability, opportunity capture capability and resource transformation capability; the improvement of dynamic capabilities can further activate two correlated core development paths for enterprises, one path focuses on knowledge integration and organizational learning, and the other path focuses on enterprise resource allocation and structural adjustment; the two coordinated paths can finally promote the overall improvement of enterprises' innovation level and entrepreneurial development performance.

3.1. Core Proposition

Proposition 1: In the digital economy environment, dynamic capabilities serve as the core driving force for enterprises to achieve effective innovation and entrepreneurial management.

Proposition 2: The three dimensions of dynamic capabilities correspond to distinct innovation and entrepreneurship mechanisms: perceptual capability primarily drives opportunity identification, capture capability primarily drives resource mobilization, and transformation capability primarily drives structural reconfiguration.

Proposition 3: The knowledge integration and learning path approach focuses on enhancing innovation performance, whereas the resource allocation and restructuring path approach aims to improve entrepreneurial performance; however, these two paths exhibit overlapping effects and synergistic interactions.

Proposition 4: Digital maturity and organizational culture positively moderate the relationship between dynamic capability and innovation and entrepreneurship performance.

3.2. Defined variable

To clearly define the core constructs of the model and their respective connotations, this study provides unified definitions for the independent variables, mediating paths, dependent variables, and moderating variables, as detailed in Table 1.

Table 1. *Variable Definitions.*

Variable type	Variable name	Subdimension / path link	Explanation
independent variable	Dynamic capabilities	Perceptual ability	Identify and anticipate opportunities and risks, conduct technical monitoring, and grasp user needs
		Capture capability	Rapid decision-making and flexible resource allocation
		Transformation capability	Adjust enterprise resources, organizational structure, and business models

Intermediary pathways	Path One: Knowledge Integration and Learning	Digital knowledge management→ organizational learning→ dual innovation	Mainly affects innovation performance
	Path 2: Resource Allocation and Refactoring	Big data recognition opportunities → flexible resource allocation → restructuring business models	Mainly affects entrepreneurial performance
Dependent variable	Innovation and entrepreneurship performance	Innovation performance	Product, process, and business model innovation
		Entrepreneurial performance	Expand new businesses, open up new markets, and stimulate internal entrepreneurial vitality
Adjust variables	Digital Maturity		Digital facilities, data assets, and digital talent reserves
	Organizational culture		Embracing risk, valuing learning, and openness to faults

Table 1 delineates the core connotations of the three dimensions of dynamic capabilities, the dual mediating paths, entrepreneurial and innovative performance, and the moderating variables, thereby establishing a variable foundation for subsequent mechanism analysis and strategy formulation. Based on the aforementioned variable definitions and core propositions, this study constructs a dual-path model of dynamic capabilities driving corporate entrepreneurship and innovation in the context of the digital economy, as illustrated in Figure 1.

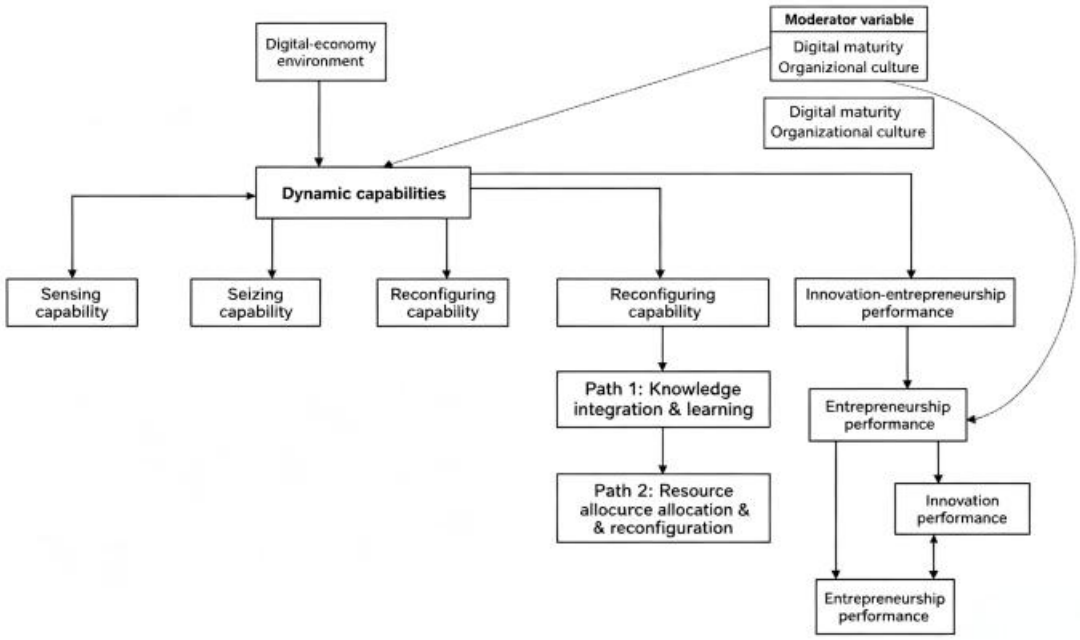

Figure 1. *Dual-path model of dynamic capabilities driving corporate innovation and entrepreneurship.*

After clarifying the specific roles of each dimension of dynamic capability, Figure 2 further focuses on the internal composition of two mediating pathways and their differentiated impacts on innovation performance and entrepreneurial performance.

The figure decomposes the "knowledge integration and learning pathway" into three components—digital knowledge management, organizational learning, and dual innovation—while decomposing the "resource allocation and reconfiguration pathway" into three components—big data-driven opportunity identification, agile resource orchestration, and business model reconfiguration—thereby intuitively illustrating the temporal sequence and causal relationships among these components.

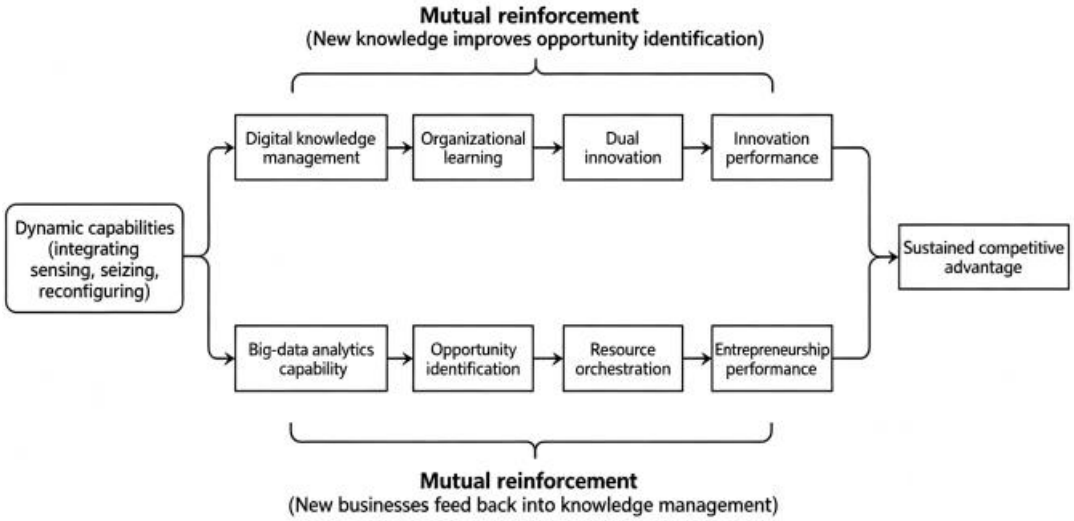

Figure 2. *Path Integration Diagram.*

3.3. Theoretical Interpretation of the Model

The theoretical logic behind the proposed model can be further explained; the digital economy features highly unstable market environments, which requires enterprises to equip themselves with strong capabilities to perceive and judge external market changes. The acquisition of market opportunities and risk identification has changed greatly compared with the traditional industrial era; current market information and potential business risks are mostly reflected through diverse data resources, including user evaluation data, online search volume, social media discussion content and sensor monitoring signals. Enterprises will fall into a passive competitive state if they cannot dig out effective and valuable information from massive market data; the full data lifecycle theory proposed by Jiao Hao and other scholars can effectively help enterprises build up this kind of market cognitive and judgment capability [11].

Once an opportunity is seized, the most crucial step is to act promptly. The traditional approach—characterized by multi-level reporting and an annual planning cycle—no longer meets contemporary demands. To effectively capture opportunities, enterprises must, while adhering to their overarching strategic direction, cultivate the capability to rapidly experiment, learn, and iterate. The "Innovation–Automation–Strategy" cycle proposed by Tomasz and Yuya further demonstrates that automation can enhance capture efficiency; however, excessive reliance on automation may render a company's strategy rigid, thereby undermining its overall capture capability. To achieve sustained success, transformation capability is likewise indispensable.

The two research paths mentioned above are collectively referred to as the dual pathways; two separate yet mutually supportive logical modes are contained in enterprise innovation and entrepreneurship management, and these modes are divided into knowledge-driven logic and resource-driven logic respectively. Continuous

learning behaviors are adopted by enterprises under the knowledge-driven logical mode; these behaviors help enterprises renew their understanding of the external market environment, and new innovation opportunities can be discovered and grasped through such cognitive updates. Practical transformation and implementation are the core of the resource-driven logical mode; enterprises can adjust and redistribute their internal resources reasonably, and this process turns abstract market cognition into specific innovation and entrepreneurship behaviors for enterprises. Neither of these two logical modes can be ignored in corporate development; simple knowledge accumulation without practical operation can only remain in theoretical stages, and pure resource input without correct cognitive guidance will lead to invalid exploration and repeated trial and error in enterprise development. Relevant research results from Saleh and other scholars offer empirical support for the above viewpoints[10]; big data analysis capability and enterprise market competitive flexibility are fully mediated by organizational learning, and this research result proves that knowledge transformation is a necessary condition for enterprises to convert various resources into effective innovation outcomes.

4. Key Mechanisms by Which Dynamic Capabilities Drive Innovation and Entrepreneurship

4.1. Data-Driven Mechanism

Data is a critical resource in the era of the digital economy; however, data itself does not create value. The true value is created by a company's ability to extract insights from data and act accordingly. The essence of a data-driven mechanism is to leverage digital tools to enhance a company's precision and speed in perceiving its environment and identifying opportunities.

Three core components make up the operating mechanism of data-driven development; data collection and integration represent the first basic dimension. Enterprises used to obtain market information through narrow and backward channels in the traditional business environment, and the digital age changes this situation completely; massive real-time market data can be collected by modern enterprises through web browsing records, social media platforms and internet of things equipment. The shortage of market data is no longer the main problem for enterprises at present, and excessive data volume has become a new challenge instead; a complete set of systems covering data acquisition and practical application needs to be built by enterprises to solve this problem. Data mining and cognitive analysis form the second dimension; original disordered data resources can be converted into valuable market information through this process, and predictive data analysis serves as an important tool for enterprises to judge future technological changes and dynamic customer needs. The third dimension refers to the data-based decision-making mode; traditional experience-based judgment can be abandoned by enterprises, and a complete working logic of hypothesis proposing, experimental verification, result feedback and continuous improvement can be applied, which helps market analysis results be fully applied to corporate decision-making. This data-driven development method also has certain limitations; it will bring practical problems such as contradictions between data application and privacy protection, and personal subjective prejudice may be amplified by data screening results. For this reason, data-driven strategies cannot be used alone; they need to be matched with manual strategic judgment to achieve coordinated and reliable corporate decision-making.

4.2. Organizational Learning Mechanisms

Organizational learning is a process through which an enterprise acquires, disseminates, interprets, and stores knowledge to enhance its actions, thereby bridging perception and capture within its dynamic capabilities. Single-loop learning focuses on "doing better" —optimizing within existing frameworks—whereas dual-loop learning aims to "do differently" —questioning and altering its cognitive frameworks. Enterprises often become overly reliant on single-loop learning, falling into the "optimization trap," which can undermine exploratory innovation. A digital knowledge management system not only stores existing knowledge but also facilitates the codification of tacit knowledge and its cross-domain integration. From the perspective of dual capabilities, balancing exploitative and exploratory innovation is crucial for an enterprise's sustained innovation efforts. Digital tools can both enhance exploitative efficiency and support exploration; however, enterprises must consciously design learning mechanisms to avoid over-reliance on either dimension. Simply investing in technology is insufficient; it is equally important to invest in the willingness, speed, and depth of organizational learning [12].

4.3. Resource Restructuring Mechanism

The resource reconfiguration mechanism matches the transformation dimension of dynamic capabilities; data-driven methods focus on external market observation, organizational learning aims to generate internal cognitive insight, and resource reconfiguration pays core attention to practical corporate action and adaptive adjustment. Resource reconfiguration can be divided into three progressive stages; the first stage refers to resource identification and assessment. Intangible resources including data assets, algorithmic capabilities and user connections have become increasingly valuable in the digital economy, and data resources also show the characteristic of decreasing marginal costs. The second stage is resource acquisition and integration; enterprises do not need to own all types of resources themselves, but they must master the ability to obtain and integrate external resources, and digital platforms effectively reduce the barriers for enterprises to complete resource integration. The third stage is resource scheduling and redistribution; the core of organizational transformation lies in the trade-off between resource abandonment and resource acquisition, and many enterprises fall into development bottlenecks simply because they are unwilling to eliminate outdated traditional resources. Digital transformation can greatly improve the overall efficiency of enterprise resource allocation; it acts as an effective accelerator to promote the full reconfiguration of corporate resources.

4.4. Interaction and Synergy Between Mechanisms

Three core mechanisms—data-driven approaches, organizational learning, and resource reconfiguration—exhibit interdependent characteristics, enabling mutual empowerment and synergistic evolution. Data provides the foundational material for organizational learning; organizational learning, in turn, guides enterprises toward clear strategic directions for resource reconfiguration; the implementation of such resource reconfiguration then generates new data assets, which further catalyze new cycles of organizational learning within the enterprise. This cyclical interaction among the three mechanisms establishes a virtuous ascending spiral of "perception—learning—action." Enterprises can leverage data to identify market opportunities, utilize organizational learning to deeply interpret the value of those opportunities, and

employ resource initiatives to effectively seize those opportunities; simultaneously, the outcomes generated through these actions can serve as a reference for the enterprise's next phase of opportunity identification. Corporate leaders should avoid treating digital transformation, talent development, and organizational change as isolated operational modules; instead, they should integrate these initiatives into a unified capability-building framework. Only by ensuring the coordinated implementation and synchronized advancement of these three initiatives can enterprises cultivate stable dynamic capabilities within a digital economy landscape, thereby continuously achieving breakthroughs and growth in innovation and entrepreneurship.

5. Conclusion and Outlook

5.1. Research Conclusions

This paper employs dynamic capability theory as its core analytical framework to systematically explore the underlying logic and implementation pathways of corporate innovation and entrepreneurial management in the context of the digital economy. Through theoretical construction and mechanism analysis, this study arrives at the following key conclusions:

First,The digital economic environment presents three typical features of high uncertainty, high penetration and high interconnection; under such a complex market background, the innovation and entrepreneurship performance of enterprises no longer relies on static inherent resource advantages, but depends more on dynamic organizational capabilities, which enable enterprises to perceive external environmental changes, grasp emerging market opportunities and continuously adjust and optimize their internal resource base.

Second, dynamic capabilities drive corporate innovation and entrepreneurship through two core pathways: the knowledge integration and learning pathway (focusing on digital knowledge management, organizational learning, and dual innovation) and the resource allocation and reconfiguration pathway (focusing on big data analytics, agile resource orchestration, and business model reengineering). These two pathways reinforce each other and co-evolve, collectively enhancing both innovation and entrepreneurial performance.

Third, the data-driven mechanism, the organizational learning mechanism, and the resource reconfiguration mechanism constitute three indispensable elements for the effective deployment of dynamic capabilities. Data-driven approaches enhance perceptual accuracy, organizational learning establishes the foundational basis for acquisition, and resource reconfiguration facilitates the transformation and implementation of capabilities. The "perception–learning–action" cycle creates a virtuous loop, thereby driving the continuous evolution of an enterprise's dynamic capabilities.

Fourth, enterprises can adopt five measures to build their dynamic capabilities: establishing a digital knowledge management system, enhancing big data analytics capabilities, creating a flexible organizational structure, fostering a dual-innovation culture, and integrating into digital ecosystems. These approaches address four key dimensions—technology, organization, culture, and ecosystem—making them practical and feasible solutions.

5.2. Theoretical Contributions and Practical Implications

Three major aspects can be concluded to reflect the theoretical contributions of this research; first, dynamic capability theory is applied in this study to the innovation and entrepreneurship management field under the digital economy background, and a complete theoretical analysis framework is established on this basis. Current academic research has obvious shortcomings in relevant fields; most existing studies regard innovation management and entrepreneurship management as two independent research objects, and they carry out separate research on the two fields, while this research makes up for such existing deficiencies. Second, a visual theoretical research system is formed in this paper; it includes intuitive model diagrams, mechanism analysis tables and path integration figures, and the constructed model can help follow-up empirical research sort out the complex correlation between various research variables, which also provides clear research directions for future academic exploration and practical research implementation. Third, this paper sorts out and summarizes a large number of high-quality domestic and foreign literature resources; it realizes the effective integration of universal basic theories and targeted research achievements under digital economic scenarios, and it further promotes the in-depth combination and interactive development of relevant theoretical knowledge.

The practical implications of this study can be summarized in two key dimensions. From the perspective of corporate managers, enterprises must recognize that digital transformation is not merely about investing in technological equipment; rather, its core objective lies in enhancing and building the enterprise's overall capabilities. The cultivation and development of corporate dynamic capabilities require systematic strategic planning, sustained resource allocation, and corresponding reforms within the internal organizational structure. From the standpoint of policymakers, relevant government agencies should prioritize the creation of a supportive external environment for fostering corporate dynamic capabilities. This can be achieved through diverse measures—such as digital public service platforms, targeted talent development programs, and innovation incentive policies—to lower the barriers to cultivating and building such capabilities, thereby reducing both the associated costs and developmental challenges for enterprises.

5.3. Research Limitations and Future Directions

As a theoretical study, this paper has several limitations. First, regarding the generalizability of the research context, the study did not conduct segmented analyses across different industries or enterprises of varying sizes; the mechanisms through which dynamic capabilities operate may differ between manufacturing and service industries, as well as between large and small-to-medium enterprises in the context of the digital economy. Second, although the theoretical model is logically self-consistent, it has not yet undergone empirical validation; future research could employ case studies, questionnaire surveys, or secondary data to test the mediating effects of the two pathways and the directional effects of the moderating variables. Third, this study focuses on the micro-level perspective of enterprises and does not sufficiently account for the influence of macro-level factors, such as the institutional environment, industrial policies, and socio-cultural contexts.

Subsequent research can carry out in-depth exploration targeting specific industries and enterprise categories; it can also implement cross-country and cross-region comparative analysis, and keep pace with cutting-edge technologies to enrich and

revise the theoretical connotation of dynamic capabilities. To conclude, the digital economy is not an external interference that hinders enterprise development; it serves as a crucial strategic opportunity for enterprises to reshape organizational capabilities and realize transformative growth. In addition, the rapid development of generative artificial intelligence, industrial internet platforms and data factor markets puts forward new requirements for theoretical research; the theoretical system of digital-economy-oriented dynamic capabilities therefore needs continuous improvement and iteration.

Conflicts of Interest

The author declares that there is no conflict of interest regarding the publication of this article.

Funding

This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

References

[1] Teece, D.J.; Pisano, G.; Shuen, A. Dynamic Capabilities and Strategic Management. *Strategic Management Journal,* 1997, 18(7), 509-533.

[2] Teece, D.J. Explicating Dynamic Capabilities: The Nature and Microfoundations of (Sustainable) Enterprise Performance. *Strategic Management Journal,* 2007, 28(13), 1319-1350.

[3] Jiao, H.; Yang, J.F, et al. Research on Data-Driven Corporate Dynamic Capabilities: An Analysis of Digital Transformation Processes Based on Full-Lifecycle Data Management. *China Industrial Economics,* 2021, 11, 174-192.

[4] Yin, X.M.; Ma, Y.L.; Wang, Z.H, et al. Digital Transformation of Manufacturing, Open Innovation, and Organizational Resilience: A Perspective Based on Dynamic Capabilities. *Science & Technology Progress and Policy,* 2025, 42(22), 43-53.

[5] Luo, J.L.; Wang, X.L.; Geng, X. Research on the Non-linear Impact of Digital Transformation on Corporate Innovation Output. *Science Research Management,* 2023, 44(08), 1-10.

[6] Tomasz, P.M.; Yuya, K. Automation-Driven Innovation Management? Toward Innovation-Automation-Strategy Cycle. *Technological Forecasting & Social Change,* 2021, 168, 1-11.

[7] Wang, M.L.; Song, Y.Y.; Yan, H.F, et al. Research on Digital Transformation's Effect on Corporate Internationalization Breadth: The Mediating Role of Dynamic Capabilities. *Foreign Economics & Management,* 2022, 44(05), 33-47.

[8] Chen, Y.T.; Lyu, Z.Q.; Hu, X.H. Big-data Analytics Capability, Dynamic Capabilities and Business-model Innovation of Manufacturing Enterprises: From the Resource-orchestration Perspective. *Science & Technology Progress and Policy,* 2024, 41(24):107-117.

[9] Saleh, K.A.; Fernando, G.; Manuel, J.I.M. Exploring the Interaction Between Big Data Analytics, Frugal Innovation, and Competitive Agility: The Mediating Role of Organizational Learning. *Technological Forecasting & Social Change,* 2024, 201, 1-12.

© 2026 by the author(s); licensee International Technology and Science Publications (ITS), this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)