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# Research on the Innovation Strategy of Management Models in Entrepreneurial Technology Enterprises

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**Abstract:** With the continuous advancement of global technological innovation, entrepreneurial technology enterprises have become increasingly important in the modern economy. Management model innovation has become one of the key factors for these enterprises to maintain competitive advantages and promote sustainable growth. This paper aims to explore how entrepreneurial technology enterprises can enhance their core competitiveness through management model innovation in a rapidly developing environment. By analyzing the characteristics and challenges faced by entrepreneurial technology enterprises, the paper further elaborates on the theoretical foundations of management model innovation, focusing on the paths and practices related to organizational structure, leadership and decision-making mechanisms, talent management, and corporate culture innovation. By combining practical case studies, this paper summarizes both successful and unsuccessful experiences and proposes strategies for implementing innovative management models and risk mitigation measures. The research findings indicate that innovative management models not only help enterprises adapt to changes in the external environment but also improve internal operational efficiency and team cohesion, providing strong support for the sustainable development of entrepreneurial technology enterprises.

**Keywords:** entrepreneurial technology enterprises; management model innovation; organizational structure; leadership; decision-making mechanisms

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## 1. Introduction

In the context of rapid global technological innovation, entrepreneurial technology enterprises, as an essential part of emerging economies, have become a significant driving force for economic growth and technological progress. These enterprises are typically technology-driven, continuously breaking through industry bottlenecks through innovation, thus forming unique competitive advantages. However, with the increasing complexity of the market environment and intensifying competition, entrepreneurial technology enterprises not only face pressure for technological innovation but must also continually innovate their management models to meet the changing market demands and organizational development needs. Therefore, management model innovation is crucial to the survival and development of these enterprises. Management model innovation refers to adopting new ideas and methods in various aspects of enterprise management, including organizational structure, decision-making mechanisms, leadership styles, and talent management, in order to enhance the enterprise's adaptability, flexibility, and efficiency. In entrepreneurial technology enterprises, management model innovation not only helps address challenges such as resource scarcity, talent turnover, and market competition but

also facilitates the rapid expansion and long-term sustainable development of the enterprise [1]. As a result, exploring how entrepreneurial technology enterprises can enhance their competitiveness through innovative management models has become a hot topic in both academia and practice. This paper aims to study the management model innovation strategies of entrepreneurial technology enterprises, analyze the main challenges they face, and discuss the theoretical foundations of management model innovation. By reviewing the paths and practical experiences of management model innovation, this paper hopes to provide valuable insights for entrepreneurial technology enterprises [2].

## 2. Characteristics and Challenges of Entrepreneurial Technology Enterprises

### 2.1. Core Characteristics of Entrepreneurial Technology Enterprises

Entrepreneurial technology enterprises typically exhibit several distinctive characteristics that determine their survival and development strategies in a highly competitive market environment. Firstly, innovation-driven growth is one of the core features of entrepreneurial technology enterprises. These enterprises often rely on technological innovation or business model innovation to create competitive advantages. Innovation is not limited to product development but also includes continuous exploration in areas such as business processes, marketing strategies, and user experience. This innovation-driven nature enables entrepreneurial technology enterprises to quickly respond to changes in market demand and enter the market with unique products or services. Secondly, flexibility and adaptability are key characteristics of entrepreneurial technology enterprises. Compared to traditional large corporations, these enterprises are typically smaller in size, with flatter management structures and more efficient decision-making processes [3]. This flexibility allows them to quickly adjust strategies and respond to market changes and customer demands. At the same time, entrepreneurial technology enterprises can rapidly experiment, fail fast, and iterate, allowing them to quickly adjust their business direction and product features. Thirdly, risk tolerance is another significant characteristic of entrepreneurial technology enterprises. These companies typically face higher uncertainty in the early stages, with risks related to market acceptance, technical feasibility, and funding. Entrepreneurial technology enterprises need to have a strong ability to bear risks and strategies to mitigate them. They must learn from failures and continuously refine their innovation paths. Finally, limited resources and the efficient use of resources is another defining feature of entrepreneurial technology enterprises. Compared to traditional businesses, these enterprises often face financial shortages and limited team capacities in the startup phase. Therefore, they typically achieve efficient operations through streamlined organizational structures, flexible external collaborations, and resource sharing, maximizing the value of every resource available. These core characteristics allow entrepreneurial technology enterprises to grow rapidly in an environment filled with uncertainty and competition, and to establish a foothold in the market through innovation. However, due to these very characteristics, they also face a series of complex challenges that require continuous optimization of management models to address various internal and external pressures.

### 2.2. Major Challenges Faced by Entrepreneurial Technology Enterprises

Although entrepreneurial technology enterprises have significant advantages in terms of innovation and flexibility, they also face a series of unique challenges that can impact their survival and development, and even determine whether they can successfully overcome early-stage difficulties. First, funding shortages and difficulties in financing are among the major challenges faced by entrepreneurial technology enterprises. Many startups rely on venture capital or angel investment to drive technological development and market expansion [4]. However, securing funding is often difficult, especially in the early stages of the business. Without adequate financial support, key areas such as

technology development, market promotion, and team building can be significantly restricted. Additionally, these enterprises often do not have stable profit models in their early years, leading to reluctance from traditional financial institutions to provide funding. As a result, raising capital becomes a crucial issue for the survival and development of the enterprise. Second, talent shortages and high employee turnover represent another significant challenge for the growth of entrepreneurial technology enterprises. The high-tech industry requires a large number of innovative professionals, but entrepreneurial tech companies often cannot offer the same salaries and career development opportunities as large corporations. This makes it difficult to attract and retain talent. In the early stages of the business, when the team is small and each member carries substantial responsibility, high employee turnover not only affects team stability but may also harm the company's core technologies and management capabilities. Third, market competition and uncertainty are recurring challenges for entrepreneurial technology enterprises during their growth. These enterprises typically enter rapidly evolving and highly competitive markets, which requires them to be not only innovative in technology but also highly flexible and forward-thinking in areas such as marketing and customer service. However, factors such as market demand uncertainty, fierce competition from other players, and changes in industry policies can put significant pressure on startups. In this highly uncertain environment, the ability to quickly respond to market changes, seize opportunities, and avoid market risks becomes a major challenge. Fourth, lack of management experience and lagging organizational development is a common issue faced by entrepreneurial technology enterprises. Many startups are initially led by technically skilled founders who excel in research and innovation but have limited experience in business management, operations, and finance. As the company expands and the team grows, the complexity and challenges of management increase. Establishing a management structure and standardized processes that can adapt to the company's growth becomes a critical issue for the business.

### **3. Theoretical Foundation of Management Model Innovation**

#### *3.1. The Concept and Classification of Management Models*

A management model refers to a systematic combination of management ideas, methods, and systems adopted by an enterprise to achieve its goals under specific organizational and external environmental conditions. It encompasses the core operational methods of an enterprise in areas such as strategic planning, organizational structure, operational processes, decision-making approaches, and cultural development. A management model is not only the internal operation standard of the enterprise but also the way it interacts with the external environment. As market demands evolve and technologies advance, management models also continuously evolve and innovate to address new challenges and opportunities. Management models can be classified based on different dimensions, and the most common types include traditional management models, innovative management models, lean management models, and agile management models. The traditional management model is typically suited for larger enterprises with more fixed organizational structures. This model emphasizes hierarchical management, clear division of responsibilities, and standardized operational processes. In the traditional management model, decision-making is usually top-down, with management focusing on control and process standardization and stability. While this model can operate effectively in a stable market environment, it often appears rigid and inefficient in rapidly changing and uncertain environments. The innovative management model is particularly suitable for entrepreneurial and high-tech enterprises [5]. These companies often face high levels of uncertainty and need to remain flexible and adaptable in a fast-changing environment. The innovative management model typically includes a flat organizational structure, decentralized decision-making mechanisms, and highly flexible workflows. It encourages creativity among employees and promotes cross-functional team collaboration, thereby

increasing organizational responsiveness and innovation capacity to maintain competitive advantages. The lean management model originated from Japan's "lean production" concept, which focuses on reducing waste, improving efficiency, and optimizing resource allocation to enhance the overall competitiveness of the enterprise. This model is applied not only in production processes but also in various management areas such as financial management and supply chain management. The core idea of lean management is "continuous improvement," which involves continuously optimizing internal processes and resource use to improve overall efficiency, reduce costs, and strive for sustained competitive advantage. The agile management model was initially applied in software development but has gradually been adopted by other industries. Agile management emphasizes incremental progress, rapid iteration, and real-time product adjustments based on customer feedback. In this model, enterprises respond to changing market demands by quickly developing and continuously optimizing products. The agile management model is particularly well-suited for markets characterized by uncertain and frequently changing demands, enabling companies to rapidly adjust project scopes and resource allocation to remain competitive.

### *3.2. Innovation Strategy Theory*

Innovation strategy theory refers to the strategic ideas and methods employed by enterprises to gain a competitive advantage through innovation activities in the face of constantly changing market environments. With advancements in technology and the globalization of markets, enterprises increasingly rely on innovation to overcome traditional competitive limitations, enhance their market position, and improve profitability. Innovation is not limited to technological breakthroughs but also includes multidimensional innovations in business models, product design, and management models. Therefore, the formulation and implementation of innovation strategies are crucial for an enterprise to remain competitive. Firstly, open innovation is one of the key theories in current innovation strategy. Open innovation emphasizes that enterprises should not only rely on their internal research and development (R&D) efforts but also engage in knowledge and technology exchange and sharing with external organizations, such as research institutions, partners, and customers [6]. This strategy is particularly suitable for resource-constrained entrepreneurial technology enterprises. By adopting open innovation, companies can reduce R&D costs, accelerate the innovation process, and access external resources and intellectual support, thereby broadening the scope and sources of innovation. Secondly, the Blue Ocean Strategy suggests that companies should escape the intense competition in existing markets by exploring untapped or less competitive market spaces, thereby creating new demand and profit growth opportunities. The core idea of the Blue Ocean Strategy is to innovate products or services to create a radically different competitive landscape from existing markets, thus opening up "blue ocean" markets. This strategy is suitable for entrepreneurial technology enterprises that aim to stand out in highly competitive markets. Especially when facing fierce competition in traditional industries, companies can effectively break through market bottlenecks and gain sustainable competitive advantages through technological or business model innovation. The resource-based view (RBV) is another important theoretical framework for innovation strategy. This theory posits that a company's unique resources—such as technological capabilities, patents, and brand influence—are key to achieving innovation and competitive advantage. The RBV emphasizes that enterprises should acquire competitive advantages by accumulating, integrating, and innovating their resources. For entrepreneurial technology enterprises, technological innovation and human capital are the most critical resources. By efficiently utilizing these resources, companies can continuously drive product and service innovation, thus securing a favorable position in the market. Finally, technology convergence and cross-border innovation is an important trend in current innovation strategies. In the era of rapid technological change, the innovation of a single technology or a single field is

often unable to meet the market demand, and cross-industry and cross-field technology integration has become a new innovation direction. By integrating technologies from different fields, companies can create entirely new products and services and open up new markets. For entrepreneurial technology enterprises, cross-border cooperation and technology integration can not only expand the scope of business, but also greatly improve the depth and breadth of technological innovation. These innovation strategy theories provide diversified ideas and paths for entrepreneurial technology enterprises to help them find appropriate innovation ways in the fierce market competition and promote the sustainable development and long-term growth of enterprises.

#### **4. the path and practice of management mode innovation of entrepreneurial science and technology enterprises**

##### *4.1. Organizational Structure Innovation*

In entrepreneurial technology enterprises, innovation in organizational structure is key to driving rapid growth, responding to market changes, and improving decision-making efficiency. Unlike traditional enterprises that typically feature hierarchical, bureaucratic structures, entrepreneurial technology companies tend to adopt flexible, flat organizational structures. This innovative organizational setup enhances adaptability, creativity, and responsiveness, allowing companies to gain a competitive edge in uncertain and competitive environments. Firstly, flat organizational structures are common in entrepreneurial technology enterprises. Traditional enterprises often rely on multi-layered management structures, which, while helping with clear division of labor and standardized processes, can lead to communication bottlenecks, slow decision-making, and delayed responses to market changes. In contrast, flat structures reduce managerial layers and shorten decision chains, enabling faster information flow and more efficient decision-making. This structure not only improves operational efficiency but also fosters employee autonomy and creativity. In technology-driven startups, where quick decision-making and effective communication are crucial, a flat structure proves particularly beneficial. Secondly, the matrix organizational structure has been increasingly adopted by some entrepreneurial technology enterprises, especially those requiring cross-departmental collaboration [7]. The matrix structure manages employees by both function and project, allowing teams from different departments to collaborate closely on a project basis. This approach breaks down silos between departments, enhances interdepartmental cooperation, and ensures smooth project progression across various stages. For fast-growing entrepreneurial tech companies, the matrix structure helps promote technological innovation, product iteration, and strengthens project execution. Additionally, self-organizing teams are another organizational innovation explored by some entrepreneurial technology companies. This model relies on highly autonomous teams where members organize and collaborate according to project needs, with minimal dependence on traditional management hierarchies. Self-organizing teams are highly responsive to market changes, solve problems quickly, and encourage creativity, which drives innovation within the company. While this structure offers significant flexibility, it also demands high levels of team collaboration, leadership, and a strong organizational culture. Furthermore, the network-based organizational structure is another emerging innovation in entrepreneurial technology enterprises. Network organizations leverage relationships with external partners, stakeholders, or even independent contractors, rather than relying solely on internal resources. This structure facilitates flexibility, scalability, and rapid adaptation to new opportunities and market demands. By operating within a network of resources and expertise, entrepreneurial tech enterprises can access a broader range of capabilities and insights, making them more agile and competitive in an increasingly globalized market.

#### 4.2. Leadership and Decision-Making Mechanism Innovation

In entrepreneurial technology enterprises, innovation in leadership and decision-making mechanisms is crucial for driving rapid growth and responding flexibly to market changes. Compared to traditional companies, entrepreneurial tech enterprises often face greater uncertainty and competitive pressure. Therefore, they require flexible and efficient leadership and decision-making systems to foster innovation, enhance team cohesion, and tackle external challenges. Firstly, leadership innovation is particularly important in entrepreneurial technology enterprises. Traditional leadership models are typically top-down, directive, and suited to stable and mature organizations. However, in entrepreneurial tech companies, leaders often need to be more forward-thinking, open, and adaptive. Transformational leadership is a common leadership style in these enterprises. Transformational leaders not only focus on achieving short-term goals but also emphasize long-term vision and strategy. They inspire team members, bringing out their potential and leading the team through challenges. By motivating employees, encouraging innovation, and setting clear objectives, transformational leaders help the company achieve rapid growth in turbulent market environments. Moreover, empowerment leadership is another significant direction for leadership innovation in entrepreneurial technology enterprises. Empowerment leadership involves decentralizing authority, granting team members more autonomy and decision-making power, and encouraging employees to participate in decision-making and take responsibility for their work outcomes. This approach enhances employees' sense of responsibility and belonging, boosting the team's creativity and execution capacity. In early-stage companies, where teams are often small, leaders must leverage empowerment leadership to mobilize each team member's enthusiasm and make the best use of limited resources, thereby improving efficiency. Secondly, the innovation of decision-making mechanisms is also a key to the success of entrepreneurial technology enterprises. Traditional companies often use centralized decision-making systems, where decision-making authority is concentrated at the top levels of management. While this can ensure decision unity, it may also lead to slow decision-making and delays in information flow. In contrast, entrepreneurial tech companies, aiming to enhance responsiveness and flexibility, usually adopt decentralized decision-making mechanisms. In such systems, decision-making is not solely dependent on top leaders, but more authority is delegated to middle managers and frontline employees. Decentralized decision-making shortens decision chains and ensures that companies can quickly respond to market demands and external changes. Data-driven decision-making is also an essential innovation in decision-making mechanisms for modern entrepreneurial technology enterprises [8]. By leveraging data analytics, these companies can make more informed, timely decisions based on real-time data, consumer behavior, and market trends. This approach minimizes the reliance on intuition or traditional hierarchical processes and allows businesses to be more agile in adapting to new information and shifting market conditions. In high-tech environments, where rapid decision-making is crucial, data-driven strategies significantly enhance competitiveness and innovation capability.

#### 5. Implementation Path of Management Model Innovation Strategy

In entrepreneurial technology enterprises, the innovation of management models is not just a theoretical proposition, but a continuous process of practice. To effectively implement management model innovation strategies in the operation of a business, it is crucial to establish clear implementation paths and specific steps to ensure that each innovation is applied effectively in real operations and provides a sustainable competitive advantage. The following outlines the implementation path of management model innovation strategies: Firstly, clarify innovation goals and strategic positioning. The first step in management model innovation is to clearly define the strategic goals and development direction of the enterprise. When entrepreneurial technology enterprises engage in management model innovation, they need to consider factors such as their market positioning,

technological advantages, and core competencies to determine the focus and direction of innovation. For example, some enterprises may focus on “improving decision-making efficiency” as the primary innovation goal, while others might prioritize “enhancing team collaboration” or “strengthening innovation capability.” By conducting a comprehensive analysis of the current state of the business, companies can identify areas that require innovation and ensure that innovation strategies are closely aligned with the overall strategic goals of the company. Secondly, emphasize the cultivation and transformation of organizational culture. Management model innovation is not only about technical or structural adjustments, but more importantly, it involves changes in corporate culture and the way employees think. Organizational culture is a key factor influencing the success or failure of management model innovation, particularly in entrepreneurial tech enterprises, where culture often determines the team’s innovation capacity and execution strength. When implementing management model innovation strategies, businesses need to cultivate a culture that supports innovation, encourages risk-taking and learning from failure, and values collaboration. This can be achieved through organizational training, leadership incentives, internal communication, and other initiatives [9]. For example, companies can hold regular innovation workshops or brainstorming sessions to inspire employees to propose new management and working methods, thus promoting the innovation of management models. Thirdly, drive technology-enabled management model innovation. In the context of rapid digitalization and informatization, technology plays an increasingly important role in management model innovation. Entrepreneurial tech enterprises can leverage technologies such as big data, artificial intelligence, and cloud computing to support decision-making processes, optimize workflows, and improve resource allocation efficiency. For instance, through data analytics, companies can gain real-time insights into employee performance, market demand, and customer feedback, which can provide more scientific evidence for management decisions. Additionally, technology can help enterprises achieve automation and intelligent management, reducing human intervention and improving operational efficiency. Fourthly, implement small-scale pilots and iterative optimization. The implementation of management model innovation cannot be achieved overnight, especially in entrepreneurial technology enterprises, where there is a high level of uncertainty and limited resources [10]. Innovation efforts should begin with small-scale pilot projects that can be tested and adjusted before being scaled. These pilots allow companies to experiment with new management models in a controlled environment, identify potential issues, and make necessary adjustments. By iterating on these pilot programs, businesses can refine their strategies and gradually scale them to the entire organization. This iterative approach helps minimize risks while fostering a culture of continuous improvement and learning. By following these clear steps and ensuring continuous adaptation and refinement, entrepreneurial tech enterprises can successfully implement management model innovation strategies, thereby enhancing their overall competitiveness and ensuring long-term growth in dynamic market environments.

## 6. Conclusion

This paper explores the importance and implementation path of management model innovation in entrepreneurial technology enterprises. In a rapidly developing environment, these enterprises must leverage innovative management models to tackle challenges such as limited resources, market changes, and intense competition. Management model innovation involves aspects such as organizational structure, leadership, and decision-making mechanisms, with the core goal of enhancing the enterprise’s flexibility, responsiveness, and innovation capacity. By adopting a flat organizational structure, empowering leadership, and decentralized decision-making, companies can improve operational efficiency, promote team collaboration, and foster innovation. Additionally, the application of technology and the cultivation of corporate culture are also key drivers of management innovation. Successful implementation of management model innovation

requires clear strategic goals, small-scale pilot projects, and continuous optimization through iteration to achieve sustainable development. In conclusion, management model innovation provides entrepreneurial technology enterprises with a path to breakthrough development, helping them maintain a competitive advantage in a complex market environment.

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