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Research on the Influence and Strategy of Digital Transformation on Enterprise Strategic Management

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Abstract: ***With the rapid development of information technology, digital transformation has become a key measure for enterprises to seek survival and development in today's era. This study explores in depth the multi-faceted impact of digital transformation on corporate strategic management, including its transformative effect on strategic thinking, strategy formulation, strategy implementation, and strategy evaluation. Through detailed theoretical analysis and practical case studies, this paper reveals how digital transformation promotes the transformation of enterprises from traditional strategic mode to digital strategic mode, and puts forward strategic management strategies of enterprises under the background of digital transformation, including digital strategic planning, organizational structure adjustment, talent training and technological innovation. It aims to provide comprehensive theoretical basis and practical guidance for enterprises to realize strategic transformation and sustainable development in the digital wave.***

Keywords: Digital transformation; Enterprise strategic management; Strategic change; Digital strategy.

1. INTRODUCTION

In today's digital era, emerging technologies such as big data, artificial intelligence, cloud computing, and the Internet of Things are changing the global business environment at an unprecedented rate. Enterprises are faced with increasingly fierce market competition, rapidly changing customer needs and emerging innovative business models. Digital transformation is no longer an option for enterprises, but an inevitable path for their survival and development. Enterprises need to focus on the application and upgrading of digital technologies, including cloud computing [1], big data [2], blockchain [3], Internet of Things [4], and artificial intelligence [5], and make digital technology a core element of their digital business. Organizational and management change is an important step and key guarantee for the realization of digital transformation, which needs to be highly valued and actively promoted [6]. Through digital transformation, enterprises can connect the whole process of production management to achieve comprehensive changes in business, production and finance, thereby improving product quality and production efficiency [7]. At the same time, a shared belief in the readiness of people within an enterprise for digital transformation is a prerequisite for successfully guiding and implementing organizational change [8]. As the core guide for the long-term development of enterprises, enterprise strategic management is also undergoing profound changes and reshaping in the tide of digital transformation. It is of great significance for enterprises to grasp opportunities and cope with challenges in the digital age to deeply study the impact of digital transformation on enterprise strategic management and explore corresponding strategies.

2. CONNOTATION AND DRIVING FACTORS OF DIGITAL TRANSFORMATION

2.1 Connotation of Digital Transformation

Digital transformation refers to the process of enterprises using digital technologies, such as big data analysis, artificial intelligence, cloud computing, Internet of things, etc., to comprehensively optimize and innovate their business processes, organizational structure, business model, corporate culture, etc., in order to achieve the improvement of enterprise operation efficiency, customer experience improvement, value creation mode transformation, and market competitiveness enhancement. It is not only a simple digitization of traditional business, but also a deep and systematic change, involving enterprise strategy, operation, management and other levels, aimed at enabling enterprises to better adapt to the requirements of the digital economy era and achieve sustainable development in the digital ecosystem.

2.2 Drivers of Digital Transformation

The core driving force of digital transformation comes from the changing needs of users [9], who hope to obtain a more personalized, convenient and efficient experience [10]. Therefore, enterprises can achieve digital transformation to meet these needs and improve their competitiveness [11].

The explosive growth of big data provides enterprises with massive data resources, enabling them to gain insight into customer needs, market trends and business operations. The development of artificial intelligence technology gives enterprises the ability to make intelligent decisions, automate processes and personalize customer service. The popularity of cloud computing reduces the cost of enterprise IT infrastructure construction and operation, and improves the flexibility and scalability of IT resources. The Internet of Things technology closely connects the physical equipment of enterprises with the digital world, realizes the interconnection and data sharing between devices, and creates new business opportunities and value growth points for enterprises. The rapid development and widespread application of these technologies is the core technology driver driving the digital transformation of enterprises.

Under the influence of digital environment, modern consumers' demand for products and services is increasingly personalized, diversified and instant. They expect businesses to offer customized products, an omnichannel shopping experience, and responsive customer service. In addition, enterprise customers are also placing higher demands on supply chain collaboration, digital solutions and data sharing in the process of digital transformation. These changes in market demand make enterprises must use digital technology to meet customer expectations, enhance customer satisfaction and loyalty, so as to stand out in the fierce market competition.

In the digital era, new competitors are constantly emerging, especially some digital-native enterprises, which quickly seize market share with advanced digital technology, flexible business models and agile operating mechanisms. Traditional enterprises are facing unprecedented competitive pressure, and without digital transformation, it will be difficult to gain a foothold in the market. At the same time, digital transformation also provides enterprises with opportunities to surpass their competitors. Through innovative digital strategies and applications, enterprises can open up new market areas, optimize business processes, improve product and service quality, and thus build their own competitive advantages.

3. THE IMPACT OF DIGITAL TRANSFORMATION ON ENTERPRISE STRATEGIC MANAGEMENT

3.1 Impact on Strategic Thinking

Digital transformation enables companies to collect, store, and analyze massive amounts of internal and external data, changing the traditional way of thinking about strategic decisions based on experience and intuition. Enterprises begin to attach importance to the value of data, and use data as the basis for strategic analysis, market forecasting and decision-making. Through deep mining and analysis of big data, enterprises can more accurately insight into customer needs, market trends, competitor dynamics and other key information, provide strong support for strategic decision-making, improve the scientific and accuracy of decision-making.

In the digital environment, companies no longer see themselves in isolation, but as part of a complex digital ecosystem. Enterprises need to establish a wide range of digital connections and collaborative relationships with suppliers, partners, customers, competitors and other stakeholders to jointly create value, share resources and risks. This kind of ecosystem thinking encourages enterprises to consider not only their own interests and development goals, but also the health and sustainable development of the entire ecosystem when formulating strategies, and achieve strategic goals by building a mutually beneficial and win-win ecological cooperation model.

The rapid iteration and update of digital technology requires enterprises to have a strong sense of innovation and agile adaptability. Enterprises must constantly explore new digital application scenarios, business models and business processes to adapt to the rapid changes in the market and the innovative development of technology. In terms of strategic thinking, enterprises should dare to break through traditional thinking patterns, have the courage to try new strategic initiatives, and be able to quickly adjust strategic direction and strategies to cope with various uncertainties and challenges in the process of digital transformation.

3.2 Impact on Strategy Formulation

The strategic objectives of traditional enterprises often focus on financial indicators, such as profit maximization

and market share expansion. In the context of digital transformation, the strategic objectives of enterprises are more diversified. In addition to financial goals, companies also focus on non-financial goals such as improving customer experience, building digital innovation capabilities, maximizing the value of data assets, and leveraging ecosystem synergies. For example, companies may consider improving customer satisfaction scores, increasing the share of revenue from digital products and services, and improving data security and privacy protection as important strategic goals to comprehensively measure their overall competitiveness and sustainability in the digital age.

The application of digital technology enables enterprises to obtain real-time market information, business operation data and customer feedback, which makes strategic planning no longer a static and cyclical process, but a dynamic and continuous optimization process. Enterprises need to adjust the content and direction of strategic planning in time according to the real-time situation of market changes and technological development to ensure the flexibility and adaptability of strategy. For example, based on the results of customer sentiment monitoring on social media, a company may quickly adjust its product development plan or marketing strategy to meet the latest needs and expectations of customers.

Digital transformation has opened up a range of new strategic options for enterprises. Enterprises can use big data analysis technology to carry out accurate market segmentation and positioning, and develop personalized marketing strategies; Intelligent upgrade of products and services through artificial intelligence and Internet of Things technology to create differentiated competitive advantages; Using cloud computing technology to promote the digital reengineering of enterprise business processes, improve operational efficiency and cost effectiveness. For example, some manufacturing enterprises have realized the interconnection and intelligent monitoring of production equipment by introducing industrial Internet of Things technology, thus optimizing the production process, improving product quality and production efficiency, and standing out in the market competition.

3.3 Impact on Strategy Implementation

In order to meet the implementation requirements of digital transformation strategy, enterprises need to adjust and change the traditional organizational structure. The traditional hierarchical organizational structure often has problems such as poor information transmission, low decision-making efficiency, limited innovation ability, etc., which is difficult to meet the needs of rapid response to market changes and innovation development in the digital era. Enterprises begin to transform to a flat, networked and agile organizational structure, reduce organizational layers, strengthen horizontal communication and collaboration between departments, establish project or task-oriented cross-functional teams, and improve organizational flexibility and innovation ability. For example, some Internet companies have adopted the organizational structure model of "small front desk, big middle desk" to make the front desk business team more flexible and agile, and can quickly respond to customer needs, while the middle desk integrates the enterprise's technology, data and business capability resources to provide strong support and empowerment for the front desk business.

Digital technology provides powerful tools and means for enterprise business process optimization. Enterprises can use automation software, artificial intelligence algorithm and robot process automation technology to automate and optimize traditional manual operation, tedious process and repetitive work, and improve the efficiency, accuracy and reliability of business processes. For example, the company introduced RPA technology in the financial reimbursement process, realized the automatic processing of invoice identification, expense approval, reimbursement payment and other links, greatly shortened the reimbursement cycle, and improved the financial work efficiency and employee satisfaction. At the same time, digital technology also promotes the integration and integration of enterprise business processes, breaks the information islands between departments, and realizes end-to-end business process collaboration and optimization.

Digital transformation requires enterprises to make corresponding adjustments and inclinations in resource allocation. Enterprises need to increase resource investment in digital technology research and development, data infrastructure construction, digital talent training and introduction to support the implementation of digital strategy. For example, enterprises may increase capital investment in big data analysis platforms, artificial intelligence algorithm model development, cloud computing service subscriptions, and strengthen the recruitment and training of professional talents such as data scientists, digital engineers, and artificial intelligence experts. In addition, enterprises also need to reevaluate and optimize the allocation of traditional resources, such as fixed assets and human resources, transfer resources from traditional business fields to digital business fields, and improve resource utilization efficiency and value creation ability.

3.4 Impact on Strategic Evaluation

In line with the diversification of strategic objectives, the index system of enterprise strategic evaluation under digital transformation is also more diversified. In addition to the traditional financial indicators, enterprises have added a series of non-financial indicators to comprehensively evaluate the effect of strategy implementation. For example, customer related indicators such as customer net recommendation value, customer loyalty index, customer acquisition cost, etc., are used to measure the effectiveness of an enterprise in customer experience and customer relationship management. Digital operation indicators such as digital business process coverage, data processing efficiency, system response time, etc. are used to evaluate the progress of enterprises in the application of digital technology and business process optimization; Innovation indicators, such as the speed and success rate of the launch of new products or services, the number of digital patent applications, etc., are used to reflect the ability and results of enterprises in digital innovation. Through the comprehensive use of diversified evaluation indicators, enterprises can understand the effect of strategy implementation more comprehensively and accurately, find problems in time and take targeted improvement measures.

Digital transformation provides intelligent methods and tools for enterprise strategic evaluation. Enterprises can use technologies such as big data analysis, artificial intelligence algorithms and machine learning models to monitor, analyze and forecast massive strategy implementation data in real time, so as to improve the efficiency and accuracy of strategy evaluation. For example, by building a sales forecasting model based on machine learning, enterprises can forecast future sales performance according to historical sales data, market trends, customer behavior data and other multidimensional data, and conduct comparative analysis with strategic objectives to evaluate the impact of strategy implementation on sales performance. At the same time, intelligent evaluation methods can also help enterprises find hidden patterns and relationships in the data, and provide enterprises with deep insight and optimization suggestions for strategic decision-making.

Digital technology enables enterprises to realize real-time and dynamic strategic evaluation. Through the real-time data acquisition and analysis system, enterprises can carry out real-time monitoring and evaluation of various key indicators in the process of strategy implementation, and obtain timely feedback information of strategy implementation. Compared with the traditional periodic evaluation, real-time evaluation can enable enterprises to find the deviation and problems in the process of strategy implementation more quickly, and take timely corrective measures to avoid the accumulation and expansion of problems. For example, in the operation process of the e-commerce platform, enterprises can timely adjust marketing strategies, optimize website user experience or improve product and service quality through real-time monitoring of website traffic, conversion rate, customer complaint rate and other indicators to ensure the smooth realization of strategic objectives.

4. STRATEGIC MANAGEMENT STRATEGIES OF ENTERPRISES UNDER DIGITAL TRANSFORMATION

4.1 Develop Digital Strategic Planning

Before making a digital strategic plan, enterprises need to conduct a comprehensive assessment of their own digital maturity. The evaluation includes the level of digital technology infrastructure construction, data management ability, digital business process coverage, digital talent team status, and the adaptability of corporate culture to digital transformation. Through digital maturity assessment, enterprises can accurately understand their own position and advantages and disadvantages in the process of digital transformation, and provide a basis for the development of targeted digital strategic planning.

Based on the results of the digital maturity assessment and the long-term development plan of the enterprise, the enterprise needs to clarify the goals and vision of the digital strategy. Digital strategic objectives should be coordinated with the overall strategic objectives of the enterprise, and reflect the characteristics and requirements of digital transformation. For example, a company's digital strategy may aim to achieve 50% of digital business revenue in the next three years, build an industry-leading big data analytics platform, and create an omnichannel digital customer experience. Digital strategic vision is the ideal state that an enterprise expects to achieve after the completion of digital transformation, which provides the long-term direction and motivation for the implementation of digital strategy.

After defining digital strategic goals and visions, enterprises need to develop specific digital strategic initiatives

and action plans. Digital strategic initiatives include digital technology application strategies (such as big data, artificial intelligence, cloud computing, Internet of Things and other technologies in enterprise business application planning), digital business model innovation strategies (such as exploring new business models such as platform economy, sharing economy, subscription system), and digital organizational structure change strategies (such as building flat, networked, agile organizational structure). Digital talent training and introduction strategies (such as developing digital talent development plans, establishing digital talent incentive mechanisms). The action plan is to refine the digital strategic measures into specific implementation steps and schedules, clarify the responsible departments and responsible persons, and ensure the smooth implementation of the digital strategy.

4.2 Adjust Organizational Structure and Culture

Enterprises should actively promote the transformation of organizational structures to agile, reducing organizational layers, breaking down departmental barriers, and building cross-functional teams that are project - or task-oriented. Agile organizational structure can improve the speed of information transmission, decision-making efficiency and innovation ability of enterprises, so that enterprises can quickly respond to market changes and customer needs. For example, an enterprise can set up a dedicated digital transformation project team with members from different departments, such as IT, marketing, operations, R&D, etc., responsible for promoting the implementation of the enterprise's digital transformation project and coordinating to solve various problems in the implementation process.

Digital transformation requires not only changes in technology and organizational structure, but also the cultivation of corporate culture that is compatible with it. Digital corporate culture emphasizes innovation, openness, collaboration, learning and data-driven. Enterprises should encourage employees to be innovative and actively explore new digital technologies, new applications and new business models; Promote an open and inclusive cultural atmosphere and strengthen exchanges and cooperation with external partners; Cultivate the team spirit of employees and achieve the successful implementation of digital projects through cross-functional team cooperation; Create a learning organizational environment, encourage employees to continuously learn digital knowledge and skills, and improve their digital literacy; Create a data-driven decision-making culture that enables employees to recognize the importance of data in strategic decision-making, business operations, and innovation development.

4.3 Strengthen the Training and Introduction of Digital Talents

Enterprises should pay attention to the cultivation of internal digital talents and formulate systematic digital talent development plans. Employees' digital knowledge and skills can be improved through digital training courses, online learning platforms, internal mentoring systems, and project practice exercises. For example, enterprises can design personalized digital training courses for employees at different positions and levels, including courses on the basis of big data analysis, introduction to artificial intelligence application, digital marketing skills, cloud computing technology principles, etc., to help employees master digital technologies and tools related to their own work. At the same time, employees are encouraged to participate in the internal digital project practice, accumulate experience in practice, and improve the digital application ability.

In addition to internal training, enterprises also need to actively introduce external digital talents to make up for their shortcomings in the construction of digital talent team. Enterprises can widely recruit data scientists, digital engineers, artificial intelligence experts, digital marketing talents and other digital professionals through recruitment websites, talent search, campus recruitment, industry exchange activities and other channels. In the process of talent introduction, enterprises should pay attention to the professional skills, innovation ability and teamwork spirit of talents, and provide competitive salary and good career development space to attract excellent digital talents to join the enterprise.

4.4 Promote Technological Innovation and Data Governance

Enterprises should take technological innovation as the core driving force of digital transformation, and continue to increase investment in digital technology research and development. Establish an internal technology research and development center or establish industry-university-research cooperation with universities, scientific research institutions, and science and technology enterprises to jointly carry out digital technology innovation research and application development. For example, enterprises can cooperate with computer schools of universities to carry out artificial intelligence algorithm optimization research, and cooperate with science and technology enterprises

to develop intelligent product solutions based on the Internet of Things. Through continuous technological innovation, enterprises can continuously improve their digital technology level, launch innovative digital products and services, and build differentiated competitive advantages.

Data is an important asset for digital transformation of enterprises, and strengthening data governance is of key significance to ensure data quality, improve data security and compliance, and maximize the value of data. Enterprises should establish a sound data governance system, including data governance organizational structure, data standards and specifications, data quality management process, data security and privacy protection mechanism. For example, you can set up a data governance committee to plan your data governance efforts. Develop unified data standards and specifications to ensure data consistency and accuracy; Establish data quality monitoring and evaluation mechanism to find and solve data quality problems in time; Strengthen technical protection of data security, using encryption, access control, data backup and other technical means to protect enterprise data assets from security threats.

5. CONSTRUCTION OF INTEGRATED FRAMEWORK FOR ENTERPRISE STRATEGIC MANAGEMENT UNDER DIGITAL TRANSFORMATION

In the tide of digital transformation, enterprise strategic management presents multi-dimensional change and reconstruction, and building an integrated framework helps to understand the interrelationship and synergy between various elements more clearly.

From the strategic point of view, the digital strategy of the enterprise must be deeply integrated with the overall strategy. Digitalisation is no longer an isolated departmental function or project, but is embedded in the vision, mission and long-term goals of the company. According to the results of digital maturity assessment, enterprises need to determine the phased goals of digital strategy, such as short-term digital process optimization, medium-term digital product and service innovation, and long-term digital ecological construction. In the process of strategy formulation, full consideration should be given to the expansion and reshaping of market boundaries by digital technology, the use of big data analysis to explore new market opportunities and customer segments, and the use of artificial intelligence to predict market trends and competitive situations, so as to develop a more forward-looking and adaptive strategic plan.

Organizational structure and cultural dimension, agile organizational structure is the organizational foundation of digital transformation. By reducing layers and strengthening cross-functional collaboration, companies can accelerate the flow of information and decision-making efficiency, and better respond to rapidly changing market demands in a digital environment. The digital enterprise culture is the soul that gathers the organizational strength and promotes the transformation. Innovation culture encourages employees to try new technologies and models; open culture promotes extensive cooperation and knowledge sharing between enterprises and external partners; learning culture ensures that employees continue to improve their digital literacy to adapt to technological iterations; data-driven culture takes data as the core basis for corporate decision-making and operation, enabling enterprises to maintain keen insight and accurate decision-making in the digital wave.

Digital talent is a key resource for strategic transformation. Internal training and external introduction should be two-pronged, internal training focuses on improving the digital skills of existing employees, so that they can achieve digital transformation on the basis of their original positions, such as the transformation of traditional financial staff into digital financial analysts, sales staff into digital marketing specialists, etc. External introduction focuses on introducing high-end talents with cutting-edge digital technology and innovative thinking, such as data scientists and artificial intelligence engineers, to inject new vitality and wisdom into the enterprise. At the same time, establish a sound digital talent incentive mechanism, including salary incentive, career development incentive and innovation incentive, so as to attract and retain talents.

Technological innovation and data governance are the core driving force and guarantee of digital transformation. Continuous technological innovation requires enterprises to increase investment in digital technology research and development, establish independent research and development teams or cooperate with external scientific research institutions, and keep up with technological development trends, such as actively exploring the application of blockchain in supply chain management, quantum computing in big data analysis potential. In terms of data governance, a data governance system covering the whole life cycle of data is built, quality control is carried out from the source of data generation, security and compliance are ensured in the process of data storage and transmission, and data value is maximized and released through data analysis and mining, providing strong support

for enterprises' strategic decision-making, product research and development, and marketing.

6. CONCLUSION

This study deeply analyzes the comprehensive impact of digital transformation on enterprise strategic management, and puts forward the corresponding strategy framework. Digital transformation has profoundly changed the strategic thinking of enterprises from traditional empirical intuition to data-driven, ecosystem and innovation agile thinking. In the formulation of strategy, to promote the diversification of objectives, dynamic planning and the diversification of strategic choices based on digital technology; At the strategic implementation level, it triggers organizational structure change, business process optimization and resource allocation adjustment; Because of digitalization, strategic evaluation is moving towards diversified indicators, intelligent methods and real-time evaluation feedback. In order to cope with digital transformation, enterprises need to formulate integrated digital strategic planning, adjust organizational structure and cultivate adaptive culture, strengthen the construction of digital talent team, and promote technological innovation and data governance. Through these initiatives, enterprises can better grasp opportunities and respond to challenges in the digital age, and enhance their competitiveness and sustainable development capabilities.

Future research can be further expanded from multiple directions. First, in-depth research on the differentiated strategic management model of enterprises in different industries and different sizes in the process of digital transformation. For example, manufacturing and service industries may have significant differences in the focus and path of digital transformation, and large enterprises and small and medium-sized enterprises also have their own characteristics in digital resource investment and strategic flexibility. Further detailed research will provide more targeted guidance for enterprises. The second is to explore the internal connection between digital transformation and corporate social responsibility and sustainable development. With the increasing social attention to the environmental and social impact of enterprises, it is of great significance to study how to achieve the balance and synergy of economic benefits, social benefits and environmental benefits in the digital transformation. The third is to study the impact that emerging digital technologies such as edge computing and brain-computer interface may have on enterprise strategic management in the future, so as to provide forward-looking theoretical reserves for enterprise strategic planning in advance. The fourth is to pay attention to the risk management in the process of digital transformation, such as data security risk, algorithm bias risk, digital transformation investment risk, etc., and build a sound risk identification, assessment and response system to ensure that enterprises move forward steadily on the road of digital transformation. Through continuous and in-depth research, the theoretical and practical system of enterprise strategic management under the digital transformation is constantly enriched and improved, laying a solid foundation for the vigorous development of enterprises in the era of digital economy.

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