

Research on the Innovation of Enterprise Economic Management Models in the Digital Economy Era

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Abstract. With the rapid expansion of the digital economy, enterprises face substantial changes in their operational environment and daily management. Conventional enterprise business management can no longer adapt to the current highly competitive market. This paper looks at how Chinese businesses change their management in the digital age. It describes new features of modern business management, points out three key weaknesses within older management systems, and searches for practical improvement methods. Adopting the literature research method, this study draws on Chinese journal articles, industry survey data, and public cases of enterprise digital transformation. It shows that old-fashioned management ideas, imperfect data systems and a shortage of digitally literate talent are the main barriers to business reform. Companies can address these practical problems by renewing management ideas, building shared data platforms, perfecting talent training and establishing robust data security policies.

Keywords: Digital economy, Enterprise management, Digital transformation, Management innovation

1. Introduction

Digital technology plays a crucial role in modern economic activities. Artificial intelligence has been deeply integrated into every core aspect of enterprise production and operation, decision-making and control, prompting traditional management models to shift towards an intelligent and refined direction. Various industries are accelerating the deployment of intelligent technologies to seize development initiatives [1]. Research also shows that digital transformation can influence business models, customer relationships and performance measurement [2]. Under these conditions, enterprise economic management faces both new opportunities and clear pressure. Data can support faster decisions, digital platforms can raise operational efficiency, and automation can help enterprises allocate financial and human resources more effectively. The contrast is fairly sharp. When firms rely too heavily on traditional management models, they may respond more slowly to market change and encounter a series of operational problems. Most existing studies discuss digital transformation at the level of the wider economic system, while fewer focus on the practical difficulties faced by ordinary domestic enterprises. This study therefore concentrates on the management transformation of Chinese enterprises and uses the literature research method to identify problems that appear during enterprise digital transformation. This paper examines

enterprise economic management under the digital economy. It explores practical challenges that enterprises face in digitally driven management transformation. This paper will describe core features for business management under the digital economy, analyze main obstacles rooted in traditional management, and put forward corresponding improvement suggestions. It hopes to offer some reference for Chinese enterprises which carry out digital management adjustment.

2. Problems in the traditional enterprise economic management model

2.1. Outdated management concepts

One of the main problems in traditional enterprise economic management is that some enterprises are still constrained by traditional management concepts and have insufficient understanding of digital transformation. They always equate digital transformation with technological upgrades, ignoring the core role of management innovation. This has led to a significant disconnection between their management concepts and the development trends of the digital economy era [3]. Quite a few managers hold a limited understanding of digital work. They think digitalization is nothing more than installing computer programs and hand over all related work to the IT team. They do not realize that every part of the company needs to adjust its old working habits. For that reason, even after IT workers finish setting up new systems, purchasing, sales and other teams still follow their original routines.

Although digital software is available, day-to-day work often remains unchanged. In many cases, digital initiatives become little more than formalities, and enterprises do not use data to guide managerial practices.

2.2. Deficiency in systematic data governance frameworks

A second problem is the lack of a complete data management system. In some enterprises, data security procedures are not organized systematically, and there are no clear standards for data classification and categorization. Protection during data collection, storage, use, and transmission also remains weak. In addition, technical measures such as data encryption, access control, and security auditing are often not implemented properly, which increases the risk of data leakage, tampering, and loss [4]. This creates extra work later. Businesses then have to spend time correcting errors, which lowers efficiency.

Weak data management can also lead to problems with data quality. If rules about data ownership, editing permissions, and storage periods are not clear, the system becomes harder to manage

2.3. Shortage of interdisciplinary talent with management expertise and digital literacy

The third problem is a shortage of digital talent. Digital economic management requires employees who understand both business needs and digital tools. In the digital economy era, companies need to use artificial intelligence tools well and link them to daily operations. Some enterprises still lack staff with this combination of skills. That makes it harder to bring AI technology into management work in a practical way.

Without enough trained professionals, this integration often remains weak. In some cases, the gap between technology and management means that scheme design may drift away from the actual business situation [5].

A shortage of qualified employees can cause several problems. Even when enterprises invest in new digital systems, they may still be unable to use all their functions. As a result, enterprises can become too dependent on external technology suppliers and gradually lose practical knowledge inside the firm. Pressure on existing employees also rises when training is insufficient. This is a real constraint. A lack of talent is not just a human resources issue, because it can affect whether management innovation succeeds within the enterprise

3. Methods for innovating enterprise economic management models in the digital economy

3.1. Integrating digital thinking into enterprise economic management

The first method is to make digital thinking part of the enterprise's overall management strategy. Digital transformation should begin with business needs rather than technology itself. Before introducing a new system, managers should identify the problems that need to be solved, such as slow reporting, high inventory, weak customer analysis or poor cost control. Clear goals can prevent unnecessary investment and make the results easier to evaluate. Firms can make full use of their collected business data to spot market opportunities and potential risks, which supports more reasonable managerial decisions [6].

Management responsibilities should also be adjusted. Senior managers need to support digital projects and connect them with finance, operations, marketing and human resources. Each department should understand how its data and work processes affect the whole enterprise. Cross-department project teams can be used for important digital projects so that technical and business staff can work together.

Without these organizational changes, even advanced digital systems may not deliver the expected benefits because old working habits still remain in the firm. When different departments work together effectively, the firm can allocate resources more efficiently.

3.2. Building an integrated digital management platform

The second method is to build an integrated digital management platform. This does not mean putting every task into one software system. The goal is to connect key business data and convert it into unified, standardized management information. For this to work, the financial, procurement, inventory, sales and human resources systems need shablue data standards and compatible interfaces. In practice, this kind of platform is usually built in layers. The basic layer stores core information such as customers, products, suppliers and employees. The second layer records business process data, including orders, payments, inventory changes and production records. Above these two layers, the third layer analyzes data through dashboards and reports that managers can use when making decisions. Access control matters too. With role-based access control in place, employees can view the information they need without exposing sensitive data more widely than necessary.

This kind of platform can also improve work efficiency. Automatic data synchronization blueuces repeated manual entry, while warning functions can identify abnormal expenditures, payment delays or inventory shortages at an early stage. Still, automation cannot fully replace human judgment. Key decisions still need manual review. Managers have to check whether the underlying data is accurate and whether the system output fits actual business conditions. The platform supports management rather than replacing it.

When building this type of platform enterprises should start with core finance and operations data first so that budget planning, cost control and cash flow management are supported early on. Other functions can be added later based on actual needs. A phased approach usually lowers the risk of project failure and gives employees more time to adjust to the new system.

Before the platform is officially launched sample data should be tested against reports and original records. After implementation, the enterprise can assess its effect on management through indicators such as report time, error rate, inventory accuracy, and processing cost. The platform supports internal business operations first, but its role does not stop there. It can also connect upstream and downstream firms in the industry chain and help form a digital collaborative network. To keep cooperation fair among partners, businesses need clear access standards and profit-sharing rules [7].

3.3. Recruiting interdisciplinary talent and strengthening digital training

The third method is to improve the enterprise's digital talent structure. In the digital economy, talent supports changes in enterprise management models and their later upgrading. Traditional single-type professional talents are no longer capable of meeting the demands of the digital transformation and development [8]. Recruitment should focus on employees who can connect digital tools with business problems. In the era of digital economy, an appropriate management model cannot be achieved without a combination of talents who possess digital literacy, critical thinking skills and the ability for continuous learning [9]. Businesses need to hire through both external and internal channels. Still, relying only on external recruitment to close a company's talent gap is not enough. Digital technology changes fast, and even newly employees with strong technical skills often need time to understand the company's product features, customer situations, and internal business processes. Veteran employees are in a different position because they already know how daily operations work in practice. That matters. For this reason, internal employee training is necessary. Enterprises can arrange training at different levels based on job needs. Basic-level training can help ordinary employees develop basic data awareness, learn common information security knowledge, and use the various digital systems within the company more effectively. For employees in core positions, enterprises can offer more advanced training content, including basic data analysis, workflow automation, and ways of using artificial intelligence tools to support daily business judgment and management decisions. Through this kind of internal training, existing employees can combine their business experience with new digital skills and participate more effectively in the company's digital transformation.

3.4. Strengthening digital risk management and data security

The fourth approach is to deal with the risks that come with digital management. Interconnected systems can raise operational efficiency, but they also make enterprises more reliant on data and networks. If a system fails, data is leaked, or networks are attacked, daily operations can be disrupted immediately. The effects are direct. Enterprises may face financial losses, and their reputation may also be damaged.

For this reason, businesses should prepare before problems occur instead of reacting only after damage has already happened. When introducing digital management, they need to consider risk prevention at an early stage and put measures in place to limit possible losses. This includes both clear information security rules and the technical systems needed to carry them out. At the institutional level, companies should establish strict regulations for data access, storage, and

transmission. They also need to define clearly the responsibilities and authority of employees in different positions in relation to information security, so that information security management follows clear rules [10].

Still, safety systems and technical support cannot remove digital risks completely. As technology changes, new cybersecurity threats continue to emerge. Security cannot be treated as a one-time arrangement. Companies need to update risk control measures regularly and keep reminding employees to follow data safety rules.

This takes continuous attention. If businesses can maintain that effort over time, their digital systems are more likely to operate safely.

4. Characteristics of enterprise management in the digital economy

Compared with the past, digital technology has changed business management models in clear ways. Earlier forms of business management depended mainly on human labor, raw materials, machinery, and equipment as the main factors of production. Today, data has become a central factor of production for enterprises. It has several main characteristics:

4.1. Real-time responsiveness and rapid information dissemination

Digital technologies enable real-time capture of dynamic changes in markets and enterprise operations, allowing rapid optimization of economic management models in response to evolving demands [11]. In this way, companies can judge market directions in good time and modify their business choices, for instance product design and sales plans.

4.2. Low marginal operating cost

Digital technologies have significantly reduced the time consumed in traditional manual operations, while the application of artificial intelligence and algorithmic models enables more precise alignment of management actions [11]. The digital system incurs almost no additional costs during ongoing operation, resulting in extremely low marginal costs.

5. Conclusion

The growing digital economy is reshaping the ways companies run their internal management. Previously, many businesses made decisions mainly from past experiences. Different departments worked separately and seldom shared information. Today more companies depend on data, which helps teams connect better and makes whole-company work more adjustable. Digital tools create new chances for firms to collect market messages, arrange inner resources, and react quickly to market shifts. Simply using digital technology, however, will not bring these good results automatically.

This paper points out several common limits from old-fashioned management. Old-thinking managers disconnected systems that stop data exchange, and the lack of workers who understand both business and digital skills all slow down company digital reform.

Therefore, changing management patterns needs company-wide adjustment, not just buying new tech. To begin with, businesses should add digital ideas into their overall plans and design digital projects for real-life management troubles instead of following popular trends blindly. Next, companies can create shared digital platforms so different departments can exchange data easily, simplify report work and cooperate better. Third, firms can hire versatile workers and provide

ongoing training for current employees to raise digital skills across the whole organization. When building digital systems, businesses also need to watch over risks including data security, system failure recovery and possible dangers from outside partners, so managers can make quicker and better choices. Besides, reform plans need to fit each firm's size, industry condition and available resources. Small businesses can begin with basic cloud services and a few core data processes. Larger companies usually have more room to build complex platforms and use stronger data analysis functions.

This study has clear limitations. It relies only on literature materials and does not include an empirical field investigation. It also does not examine differences across industries or enterprise sizes in much detail. As a result, the findings may apply only to some extent to different types of enterprises.

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