

Research on the influence of digital age on the management of multinational enterprises

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Abstract: *This paper look for to examine the control of digitalization on multinational firm management, particularly the piece of provide tether administration. To start with, it will supply an survey of the the past and significance of digitization in multinational firm administration, as well as clarify the description and aspect of digitization management. This paper seeks to elucidate the significance of digitization to multinational enterprises' management, as well as to investigate the optimization strategies and difficulties digitalization poses to supply chain management. It further examines the trend of digitalization in the context of globalization, as well as the difficulties encountered by traditional supply chain management and its effect on supply chain management. This paper, through first-hand research and situation analysis, check the effect and optimization of digitalization on the provide chain administration of multinational firm, summarizing the research results and anticipating the future research direction and development trend.*

Keywords: *Multinational enterprise management, Supply chain, Digitization*

1. Introduction

This paper look for to research thoroughly into the effect of digitalization on the administration of multinational firms, particularly the provide chain, in the digital years. Examining the difficulties encountered by the customary supply chain administration of multinational firms and the features and tendency of digital management, this paper inspects further optimization policies of digitalization for the supply chain administration of multinational enterprises. To provide reference for how to apply digitalization to enterprise management in multinational enterprises.

2. Digital management

2.1 Definition and characteristics of digital management

The utilization of digital technology and digital methods for firms administration and decision-making, such as information digitization, networking, intellect and visualization, can improve the effectiveness of firms and the quality of decisions made through digital management. The characteristics of enterprise digital management are mainly high efficiency, high timeliness, high intelligence and strong information traceability.

Digital management's capacity to expedite the transmission and processing of data between departments within the enterprise, as well as augment work productivity, is what is known as high efficiency; while its capability to realize real-time updates and surveillance of information is referred to as strong timeliness, thus allowing for more timely and exact management. Digital management's high intelligence enables it to facilitate the decision-making of high-level enterprises through AI-driven algorithms and technologies; moreover, its powerful information traceability allows for the record and path of all domestic worker work associated operations and information, thus guaranteeing the control and traceability of the administration procedure.

2.2 The digital trend in the context of globalization

The sudden increase of information technology and the ubiquity of the Internet have been catalysts for the digitalization tendency, which has become a important element in multinational enterprise management. This shift has enabled multinationals to attain centralized information management and

global coordination, as well as to enhance their management efficiency and global vision.

By leveraging cloud calculate, large data, artificial intellect, and Internet technologies, firms can obtain centralized and clever administration information, thus unifying multinational enterprise management and broadening the global vision by constructing a digital platform for their company. Transnational corporations' management mode, through digital development, can not only bolster their market competitiveness but also effectively facilitate the rationalization of resource allocation [1]. The further strengthening of the tendency of globalization has brought distributed administration method and complicated business needs to multinational firms.

Under the grip of domestic market economy system and Western market economy mode, multinational corporations need to continuously improve their core competitiveness if they want to achieve rapid development. By utilizing digital management mode and leveraging big data technology, the international big market environment can be effectively analyzed, thereby providing a structural basis for the optimization and adjustment of production and operation mechanisms [2], thus continually enhancing the overall management level.

3. The current country of customary provide chain administration in multinational trades

3.1 An inspection of multinational companies' provide chain management.

The global vision of the supply chain system necessitates its expansion to the entire globe, with the most competitive partners chosen globally in accordance with the requirements of businesses. This is referred to as Global Supply Chain. Transnational enterprise supply chain management refers to the coordination and cooperation among enterprises that carry out logistics, procurement, production and sales activities across national borders. The centre of global provide chain management is akin to its own, striving to scheme, organize, operate, control and optimize the requirements of consumers worldwide while simultaneously comprehending them in a comprehensive and expeditious manner.

Utilizing modern web information technology, the provide chain between core enterprises, their suppliers, suppliers of suppliers, core firm and their dealer, and even the ultimate consumers is integrated and quickly responded to, allowing for the harmonious coordination of business, logistics, capital, and information flow to satisfy global consumer demand [3].

3.2 Traditional supply chain management confronts numerous difficulties

Traditional supply chain management is faced with many challenges, including information asymmetry, information delay and low efficiency of coordination. The rapid expansion of globalization and the influx of vast data into the global market have caused enterprises in the customary supply chain management approach to be plagued by an inability to accurately forecast market conditions, resulting in a greater number of deviations in the supply chain management's bottom-up transmission process.

Secondly, in the traditional mode, many departments may not communicate in a timely manner and their business is not transparent, and supply chain management will become fragmented. In addition, the departments' business adjustment ability is not strong, and the incoherent supply chain is prone to disruption [4]. Once a link fails, the traditional supply chain's upstream and downstream links, so closely linked, will be completely destroyed [5].

4. The optimization policy of digital provide chain management

4.1 Optimizing digital provide chains through the choice of a policy.

In the digital era, multinational enterprises need to choose appropriate digital optimization strategies when optimizing supply chain management.

Multinational firms can choose information technology to optimize digital provide chain management, such as the Internet of Things, large data analysis, cloud calculate, etc. These technologies can enable real-time sharing and efficient supply chain information management, as well as cutting down on the cost of information transmission and processing. Multinational enterprises can capitalize on digital technology to optimize the provide chain's procedure management.

By establishing a global unified digital process management system, all links of the supply chain

can be seamlessly connected and efficiently coordinated. Multinational enterprises can, at last, implement a digital supply chain risk management plan, allowing for real-time monitoring and early detection of provide chain risks through digital technology, and charming quick countermeasures to ensure the safety and firmness of the supply chain.

4.2 Realize data-driven supply chain management

Realizing data-driven supply chain management is a key tactic for optimizing multinational companies' supply chains in the digital age. Through big data analysis technology, multinational enterprises can deeply dig and analyze the data of each link of the supply chain, find the potential optimization space and risk points, and then formulate targeted optimization strategies.

In addition, multinational enterprises can also make use of data-driven predictive analysis to predict market demand and supply chain changes, adjust supply chain strategies in advance, and reduce business risks. At the same time, data-driven supply chain management can also help enterprises realize the fine control of supply chain costs, and find the links with high incidence of costs through data analysis, so as to achieve accurate control and reduction of costs.

4.3 Multinational enterprises can employ a digital supply chain management platform

Multinational enterprises can learn from advanced digital supply chain management models. Multinational enterprises, for instance, can construct a worldwide, unified digital supply chain management platform to attain centralized control and instantaneous surveillance of global supply chain data. Multinational enterprises can experiment with a distributed digital management model, give custody of regional or nationwide position with the decision-making and carrying out of digital supply chain management to create a more flexible and pliable supply chain management in their local markets.

Multinational enterprises can concurrently investigate a cooperative digital management model, construct a digital supply chain platform with suppliers, logistics providers and other partners, exchange data and resources, and realize collaborative optimization and resource integration of supply chains. To sum up, the impact of digitalization on supply chain management is first reflected in the realization of real-time information sharing, intelligent forecasting and collaborative optimization.

The circulation and accuracy of information within enterprises can be enhanced by digital management, the speed and accuracy of information acquisition can be heightened, real-time sharing and transparency of enterprise provide chain information can be realized, and information asymmetry and price decrease can be achieved through information interchange. By leveraging large data, artificial intellect, and other technologies to precisely predict market conditions, the elasticity and adaptability of the enterprise provide chain can be enhanced. Moreover, digital management can improve the collaborative effectiveness and overall benefits of all components of the enterprise provide chain through collaborative optimization technology.

The three aspects of digitalization's influence on supply chain management are: logistics, capital flow, and visual management. Logistics is particularly impacted by digitalization, as it increases efficiency, facilitates intelligent and efficient operations, and reduces costs while enhancing quality. Digitization of capital flow accelerates the speed and transparency of multinational enterprises' capital circulation, enhances capital management refinement and risk control, reduces capital occupancy costs, boosts efficiency in capital use, and guarantees the steadiness of the capital chain of enterprises.

5. The difficulties and solutions of digital supply chain management

5.1 Data security and privacy protection

Envisions of digital supply chain management face a major challenge in the form of data security and privacy protection. With the development of information technology, multinational enterprises are managing a large amount of sensitive data in a digital environment, including cooperative supplier information, customer information, transaction data, etc.

The leakage of these data may bring serious business risks and legal liabilities to multinational enterprises. Multinational companies must bolster their cognizance of data security and create a reliable data security management system, including encryption, access control, data backup, and other steps to

guarantee the safety and privacy of customers and their own information. Multinational enterprises must adhere to applicable laws and regulations, such as the European Union's General Data Protection Regulation (GDPR), to guarantee that they will not breach pertinent data protection laws and regulations while managing digital assets.

5.2 Technological advances have caused managerial alterations

The supply chain management of multinational enterprises is ever-evolving, with both advantages and disadvantages. Digital technology's continual advancement and utilization necessitates multinational enterprises to continually modify and refine their supply chain management approach and procedure. The demand for digital management roles such as data analyst, digital supply chain manager, and other new positions is escalating due to the technological shift, necessitating the training and alteration of management personnel to meet the new requirements.

5.3 Supply chain collaboration and cooperation model

In the digital environment, supply chain collaboration and cooperation models are facing new challenges and opportunities. In the digital environment, supply chain collaboration and cooperation are faced with challenges such as information security, cooperation platform selection, and data standard unification. Multinational enterprises need to formulate reasonable cooperation strategies and norms to promote the development and optimization of supply chain collaboration and cooperation mode.

6. Conclusions

6.1 Summary

Through in-depth analysis and discussion of the impact of digitalization on the management of multinational enterprises, this paper finds that digitalization has brought significant impacts on supply chain management, data-driven management and cooperation model optimization.

The implementation of digitalisation has enabled multinational enterprises to collaborate and synergise, as well as augmenting the efficacy and lucidity of supply chain management. Moreover, it has propelled the utilization of data-driven management models, allowing businesses to more effectively employ data for decision-making and optimization. Attention to data security and privacy protection must be given, and management and protection measures must be reinforced in practical applications, all the while. In addition, multinational enterprises should actively explore new digital management models and constantly innovate and optimize management methods to adapt to the rapidly changing international business environment.

Consequently, digitization's influence on multinational enterprise management is advantageous, augmenting the effectiveness of management and fostering collaboration between enterprises.

6.2 Outlook

In the future research on the digital management of multinational enterprises, it can be further developed from the following aspects: First, empirical analysis can be adopted, cases can be selected, and the research scope can be expanded to cover more cases in different industries and regions, so as to comprehensively understand the impact of digitalization on the management of multinational enterprises; Attending to the utilization of digital management in burgeoning technologies, such as artificial intelligence and the Internet of things, is a second priority., and deeply discuss how these new technologies and digital management can empower the management of multinational enterprises.

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