Analysis of the Impact of Enterprise Digital Transformation on Enhancing Customer Service Capabilities

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Abstract: In recent years, the role of new digital technologies such as big data, cloud computing, the Internet of things, the mobile Internet and smart cities have become increasingly prominent in the field of economics. At the same time, the development of digital technology is changing rapidly, making it the "number one form of productivity", which in turn is accelerating the continuous innovation both within and outside enterprises. Enterprise digital transformation is not only a "hot topic", but also a "pass" that can not be overlooked. This paper analyses the impact of digital transformation on enterprise customer service capabilities from four aspects: behavioral data analysis, smart service, big data prediction and data drive, all of which can provide reference for digital transformation among enterprises.

1. Introduction

In the digital era, great changes have taken place in the external environment of enterprise management, including in terms of technology, society and the market. These changes have brought unprecedented competitive pressure and development opportunities for enterprises, and provided a powerful driving force for the digital transformation of enterprises. Driven by technology, society and the market, the concept of digitalization is also expanding. Today, it has a richer connotation [1]. In addition, the "digital enterprise" is gradually gaining increased recognition by the public with the commercial application of digital concepts, which was first put forward by Adrian J. Slywotzky, the Vice President of Mercer Management Consulting. Slywotzky believes that the digital enterprise refers to an enterprise that changes and greatly broadens its strategic choices using digital technology [2]. Nowadays, with the progress of technology, digital enterprises show new characteristics, and their capability in creating value is further enhanced.

The basic idea of enterprise digital transformation is to create new value growth by changing internal productivity and production relations, maximizing the leading role of data as a new means of production [3]. The most direct role of an enterprise's digital transformation and upgrading is that of enhancing customer service capabilities, changing the traditional top-down production or service mode and gradually changing to the mode that customer demand as the main driving force. By strengthening the comprehensive understanding of customers, it can enhance the customer consumption experience, and provide customers with agile response and personalized service.

With the gradual improvement of customer status, customer demands and customer demands for a positive service experience are increasing, and the commercial economy has truly entered the "customer era". All of the financial, retail and traditional manufacturing industries need to change their service model from being product-centered to being customer-centered [4]. Frost & Sullivan, a market research company, pointed out in its 2016 Global Customer Experience Survey that by 2020, customer experience is expected to exceed product price and product quality in terms of importance, as well as become a key factor in brand differentiation. By 2020, more than 70% of Fortune 500 companies plan to provide "product as a service". This requires the utilization of abundant data to understand customers, including a variety of channels and closer interaction with customers in order

to enable them to participate in production, and ultimately achieve personalized customer service and products.

With the advent of the digital age, enterprises begin to pay attention to the customization needs of customers [5]. Customers are the only source of business value. The application of digital technology has shortened the distance between enterprises and customers, enabling customer demand to be fully recognized by enterprises. Enterprises can rely on this information to develop new business models, to help them succeed in market competition. For enterprises, focusing on customer demand can greatly promote business transformation and upgrading, as well as create profits for enterprises and reduce costs. Driving management change and transformation, as well as upgrading in a digital way, is an interrelated organic whole. By realizing external customer value, enterprises can achieve a mutual promotion between management change and transformation and upgrading, to maximize the value of digitalization.

2. Achieving customer's comprehensive understanding through behavioral data analysis

Achieving a comprehensive understanding of customers is the basis for providing targeted and humanized services and products to customers [6]. With the continuous enrichment of data acquisition methods and the continuous improvement of data dimensions, enterprises have successfully changed the situation of only being able to use customer information to analyze transactions in the past. Instead, through a series of digital technologies such as online buried points, offline WIFI probes, the Internet of Things, mobile payments, location-based services and setting scenarios, enhancing the interaction between existing and potential customers and enterprises can enable companies to enrich their database of data assets, and then realize proper analysis of customer interaction behavior across various "scenarios" to form comprehensive customer insight.

By building user portraits, enterprises can understand customers in an all-round way. This is essentially a kind of data thinking, which is used to extract paths that help make precise service decisions from massive user characteristics and behavioral data. The core task of building user portraits is to attach various "tags" for users. Some of these "tags" are based on a user's behavioral data, extracted by using algorithms, and some are obtained by using preset options to obtain user data. It is worth noting that enterprises can not only use their own channels to obtain data, but also integrate data from other external channels, such as social media data, video and audio website usage behavior data, etc. Through the analysis of these data with associated analytical value, enterprises can understand customers' real ideas, key influencing factors, customer problems in regard to products and customer preferences, so as to gain comprehensive insight into consumer habits and preferences and obtain information regarding product promotion suggestions and potential risks to the reputation of an enterprise. This enables enterprises to continuously promote the improvement of business behavior.

Beyond the Internet industry, analysis of customer behavioral data also provides important technical support for product iteration and service upgrading in traditional industries. For example, by analyzing the click hotspots on a client's mobile application, enterprises can gain information on what functions a given customer likes, and remove or de-prioritize functions that rarely receive clicks within the application. Enterprises can also gain an understanding of the app user experience through behavioral data such as number of active days, retention time and opening times. Long retention time and increased opening times indicate that customers have a strong preference for app. Therefore, through real-time feedback of user behavior data, the traditional industry can gain a timely understanding of user experience in order to constantly change and improve products. In the traditional retail industry, enterprises can achieve meticulous observation of consumer habits through the means of digital technology in order to fully understand their preferences and emotions, so that enterprises can engage more fully in customer service work. In the traditional industry, customers can also be added to the product design process, which can be said to be a profound practice of the "user-centered" concept. In the process of interaction and transaction between customers and industrial enterprises, a large amount of data is generated. Through the excavation and analysis of

these dynamic customer data, customers can participate in product demand analysis and product design, which not only ensures products are more in line with customer demand, but also enables customers achieve more active participation. At the same time, it provides ideas for product innovation.

In today's high-cost and competitive business environment, the concept of "customer-centered" management has become a common understanding among enterprises. In the era of rapid development of Internet, especially the mobile Internet, the analysis and utilization of customer data has become an inevitable choice for enterprises in their efforts to gain improved understanding of customers and achieve business growth.

3. Promoting customer consumption experience with smart service

Promoting customers' consumption experience is an effective means to retain existing customers and attract potential customers, and is the goal that enterprises strive to pursue. Every link in contact with consumers is designed to maximize the satisfaction of consumer demand and provide services that exceed expectations, which is the new connotation of "improving the customer consumption experience" in the digital era. The utilization of virtual reality technology, AI, mobile payments, LBS and other digital technologies, as well as the integration of all-channel customer data, can comprehensively upgrade the customer experience and ultimately enhance the effectiveness of enterprise marketing, operations and services [7].

The vigorous development of digital technology including virtual reality technology has led to a substantial leap in consumer experience. For today's consumers, with the increasingly blurred boundaries of online and offline shopping, consumers require a more convenient, personalized, flexible, transparent and intuitive shopping experience. VR and AR technology and other virtual reality technologies can effectively integrate the characteristics of online channels and physical stores, greatly enhance the customer consumption experience, and promote consumers to choose products that meet their specific needs.

The development of digital technology not only significantly improves the consumption experience of customers, but also greatly reduces his/her negative consumption experience. Under the background of new retail practices, returning goods has always been one of the largest costs of e-commerce. According to the data of some supply chain experts, the return rate of e-commerce products can be as high as 40%. At the same time, returning products a large number of times also represent an obstacle reducing the positive consumer experience of users. However, digital technology provides a perfect solution to this problem.

In fact, digitization has revolutionized many industries. For example, with the advancement of digital technology, Internet industry giants have gained significant access to retail markets, one after another. Traditional small and medium-sized retailers are facing shocks, while leading offline enterprises are transforming themselves in an all-round way, and the retail industry has officially entered the era of smart retail. The core of smart retailing is the customer experience, integrating data thinking, exerting the technological capabilities and commercial tools of Internet enterprises, making retailers closer to consumers and bringing a better consumer experience to customers through new digital operations. From concept to application, the facts have proved that these new formats or products do not represent the deformation of traditional retailing, but instead a new mode of development which is highly integrated with the real economy and mutually beneficial to one another. Therefore, smart services realized by digital technology activate the real economy, realize the two-way integration of online and offline development, and become an important force driving industry change.

4. Achieving agile service capability with big data prediction

Agile service demands emerge in the data age. The basic definition of agility is "quick response", and agile service capabilities are intended to enable enterprises to quickly and effectively explore

customer needs, while also responding quickly and effectively, so that customers can be fully satisfied in the process. The realization of this service capability depends on data analysis [8]. Today, with the prosperity and development of new retail, in order to achieve agile service, the first problem faced is that of logistics distribution efficiency. The application of digital means creates conditions for solving this problem.

Digitalization not only brings about the reform and development of the logistics industry itself, but also improves the efficiency of distribution. Meanwhile, enterprises use various products' electronic identification technology, as well as that of the mobile Internet and Internet of Things to obtain complete product supply chain data. Through the analysis of these data, storage, distribution and efficiency integration can be greatly improved to shorten the time to require to reach the end user of goods [9]. In addition to greatly shortening delivery time, the "agility" of service is also reflected in reducing customer's ineffective use of time in the consumption process. In the traditional consumer service process, users may spend more time on links unrelated to the consumer service itself, thus reducing the user experience. The application of digital means can greatly reduce this time wastage, saving the time of users and shortening the consumer service process.

Therefore, agile service capabilities are ultimately intended to achieve timely response and satisfaction of customer needs, but agility doesn't only mean be quick. Its fundamental meaning is to achieve the goal of improving product and service quality at a steady pace, so that customers are highly valued. Therefore, agility is not an end, but a means. The transformation of service to agility requires not only the support of technology, but also the transformation to agility of any enterprise organization, to provide stable and dynamic background strength.

5. Personalized services driven by data interconnectivity

The economy and society have developed into an era in which consumers' personality advocates are strongly displayed. Providing services according to consumer preferences, rather than "standardized", "large-scale" and "undifferentiated" services, is the focus of an enterprise in its efforts to enhance competitiveness. Personalized services represent an active service mode, which integrates and classifies resources of various channels to meet varying consumer needs. Differing from the traditional passive service mode, personalized services can make full use of various resources, and in fact represent an omni-directional service aimed at satisfying users' personalized needs [10]. Based on the above, through the analysis of behavioral data, we can comprehensively understand consumers, screen out individual needs and optimize and improve service models to meet different types of needs.

Beyond the service industry, the traditional manufacturing industry has begun to implement information technology in the era of big data for personalized customization production. In the traditional manufacturing industry, there is a lack of consideration for the potential rich, intuitive or super-personalized experience of increasingly complex customers. However, as customers are no longer satisfied with letting manufacturing enterprises design products for them, but instead hope to increasingly instill their ideas into enterprises through the Internet so that enterprises can develop and develop products that meet their needs, the traditional large-scale batch production mode has entered an era of change and a wave of individualization. Customization and multiple varieties of products have begun to emerge, which is set to completely change enterprises in four aspects: procurement, production, distribution and the supply chain model. Therefore, the main catalyst for enterprise digital transformation is that of customers, whose high demand for personalized services has become the driving force behind changes to the traditional business model [11].

In the past, consumers were the end of the market consumption industry chain, passively accepting products or services designed by enterprises. Now, with the development of the Internet, the progress of digitalization and the gradual prominence of users' personalized needs, the status of consumers in the market is undergoing subversive changes, and personalized customization is constantly rising. Private customization has become a trend of the future. In an Accenture survey, 53% of business managers said they had used big data technology to provide more personalized services

to their customers. However, it should also be recognized that change from the traditional production business model to the realization of digital enterprises cannot be completed overnight, and that basic automation should first be achieved, before being digitalized and eventually achieving customization.

6. Conclusion

The importance of customers to enterprises is self-evident, and digital transformation enhances the customer service capabilities of enterprises across four perspectives: 1) understanding customers through digital technology and classifying them through labels, 2) using technologies such as smart mobile payments to promote smart services and improve the quality of services such as the customer experience, 3) using big data technology to identify customer needs and respond in advance, reduce enterprise inventory and improve turnover, and eventually reduce the overall operating costs of enterprises, 4) the inter-linkage and mutual drive of data helps improve product characteristics so that personalized customer needs can be met. Digital transformation enables enterprises to carry out supply-side reform from the perspective of thinking, linking enterprises closely with customers and improving the situation of reduced contact between customers and enterprises that existed in the past, enabling enterprises to become closer to customers. Digital transformation brings the improvement of customer service capabilities for enterprises thanks to its unique advantages. Therefore, enterprises can gain more customers and value when they seize the opportunity of digital transformation.

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