Research on the Management Reform Path of Textile Manufacturing Enterprises Based on Digital Marketing

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Abstract. With the implementation and development of China's digital economy strategy, the integration of the real economy and the digital economy has become a national strategy. The traditional textile manufacturing enterprise has gradually become the main direction of enterprise reform in the form of digital marketing. In the face of the increasing consumer demand of consumers and the gradually unbalanced market supply and demand of textile manufacturing enterprises in China, this paper uses the methods of generalization and case analysis to comprehensively expound the necessity of digital marketing reform for textile manufacturing enterprises from the aspects of policy, technology and industrial environment. According to the research results, it is necessary to construct a new path for future upgrading and development from the two dimensions of industrial upgrading strategy and universe marketing layout based on different perspectives of textile manufacturing enterprise management reform, and to shape a closed loop of digital marketing, thus further promoting the deep integration of digitization technology and textile manufacturing enterprise.

Keywords: Digital Marketing · Digital Management · Channel upgrade · Intelligent · C2B(Customer-to-Business)

1 Introduction

With the development of information technology and the upgrading of the consumption environment, a wave of transformation of digitization and intellectualization has followed [1]. A single traditional marketing channel can no longer meet the needs of enterprise transformation and development. The intellectualization of the clothing industry is a "booster" for future social development [2], providing new impetus for the development of the entire economy and society. At present, China's intellectualization industry has rapidly developed into a key backbone of the scientific and technological revolution [3]. Through the autonomous control of intellectualization technology, human and machine exchange information, and the real and virtual worlds are perfectly integrated. In general, the mainstream and direction of the clothing industry in the future will pursue

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high efficiency, strong flexibility, full links, and rapid response [4]. According to statistics in recent years, with the development of society and science and technology such as the Internet, artificial intelligence, and big data, a large number of clothing brands will be eliminated every year. Facing the increasingly fierce competition in the clothing brand market, traditional clothing brands must carry out industrial upgrading and transformation to adapt to the future development pattern [5].

The domestic academic circle has carried out some studies on the intellectualization upgrade of the marketing channels of the clothing industry. Wang Manqi et al. put forward a systematic method for the image transformation and development of clothing brands on new media platforms [6]. On this basis, Li Xue et al. deeply studied the marketing strategies of clothing brands in the new media environment [7]. Shen Lei made a systematic summary and outlook on the development status and trends of intelligent clothing in different fields of technology [8]. This paper integrates the current situation of domestic clothing industry intellectualization transformation, analyzes the traditional clothing industry marketing channels, and proposes clothing industry intellectualization transformation and upgrading strategies and comprehensive marketing layout strategies, so as to provide more comprehensive practical measures for clothing brands whose marketing environment is changing.

2 Current Situation of Digitization of Textile Manufacturing Enterprises

2.1 Inevitability of the Digitization Transformation of Traditional Clothing Industry

From 1970 to 1980, a wave of technological development based on computer mainframes began to appear, and its corresponding business model was dominated by automated data processing. With the advent of the client-server interaction concept in the 1990s [9], more and more users owned personal computers, which led to the development of new business models based on knowledge-based work and the restructuring of enterprise in various fields. In 2000, the concept of Internet 1.0 promoted the rapid development of B2B, B2C, e-commerce, and ERP. Gradually, the interconnection of global customers enables global IT procurement. During 2010–2020, digitization gradually replaced Internet 1.0. People are more inclined to use mobile devices to socialize. Big data, cloud computing, Internet of Things and automation technology are gradually occupying all aspects of people's daily life. As shown in Fig. 1.

The clothing industry is a typical labor-intensive industry. In May 2015, China released the "Made in China 2025" strategic goal. Among them, the main goal is to transform from a world manufacturing power to a world manufacturing power [10]. In 2016, the Ministry of Industry and Information Technology mentioned in its interpretation of "Made in China 2025" that the realization of a manufacturing power must realize the intelligent manufacturing production method in China's manufacturing industry [11]. Based on new information and communication technologies and advanced industrial manufacturing technologies, technologies in the field of intelligent manufacturing are developing rapidly in China and are deeply integrated with other technologies. Through the synchronous development of design, production, management,

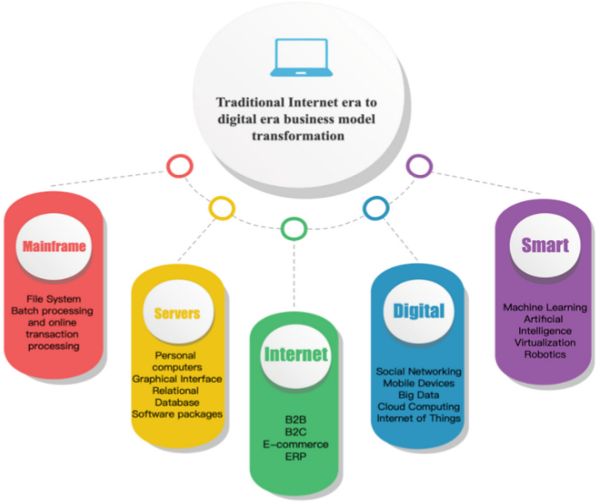

Fig. 1. Traditional Internet era to intelligent era business model transformation.

service and other links, new production and marketing channels with functions of self-perception, self-learning, self-decision, self-execution and self-adaptation have been created. Intellectualization can also assist clothing industry managers to process or analyze large amounts of online data and predict customer consumption preferences and future trends. In 2019, new technologies such as big data, cloud computing, Internet of Things, blockchain and artificial intelligence developed rapidly. In the clothing industry, clothing e-commerce and new technologies are further integrated and applied. New formats such as live streaming of Internet celebrities, e-commerce in mini program, and intelligent retail have exploded. The professional market is empowered by digitization, and the e-commerce ecosystem is becoming more and more complete. Gradually, a new type of economy in the B2B market is formed. Driven by new models, new business formats, and new policy systems, rural e-commerce and cross-border e-commerce have ushered in explosive growth, which further promotes the expansion of the transaction scale of the clothing e-commerce B2C market.

2.2 Marketing Path of Traditional Textile Manufacturing Enterprise

With the development of intelligent technology, the enterprise business model and operation model have changed. Since traditional clothing brand marketing is based on the goods that suppliers can provide, customers can only choose and buy clothing products in the existing market. In this model, there are strong barriers between customers and suppliers. The mismatch between the customer's real needs and the supplier's supply prevents both parties from achieving an optimal solution. For customers, the choice of purchase is extremely single. In terms of enterprise and brand, when the isolated customer data cannot be effectively connected, the complex hierarchical structure makes the development of enterprise slow, and the rigid process makes the supply chain unable to optimize customer service. The current way of upgrading clothing industry marketing

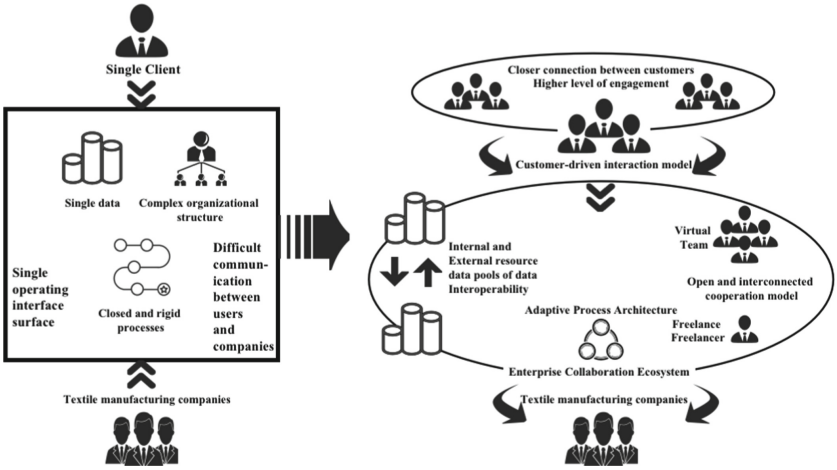

Fig. 2. The current stage of the textile manufacturing industry marketing channels to upgrade the way.

channels is shown in Fig. 2. Through the intellectualization upgrade of traditional clothing brand marketing channels, enterprise and consumers are interconnected, thereby improving information transparency and participation. Through a collaborative ecosystem, enterprise is equipped with an adaptive process approach and integrated internal and external data, so as to achieve more accurate big data analysis and a more complete flexible supply chain system. This not only provides better service to customers, but also maximizes the benefits of the enterprise.

2.3 Construction of the Key Factor System

Currently, there is no complete theory and practice of upgrading the digital marketing reform path of textile manufacturing enterprises. In constructing the key elements of the reform path, the respondents selected for this article were asked to have a certain understanding and awareness of this research area. Therefore, 4 senior professors in the field of digitization, 4 executives from textile manufacturing enterprises, and 4 textile manufacturing industry marketing experts were selected as interviewees. Focus group interview was adopted. Under the guidance of the host, experts in different fields conducted a full and comprehensive discussion on the digital marketing reform path of textile manufacturing enterprises. It should be noted that the researcher made the recording after obtaining the consent of the interviewee. Moreover, relevant content was consolidated after the interview. In more detail, the high-frequency vocabulary is organized by open coding, and the core coding of the upgrade path is classified and summarized to construct the path paradigm and influencing factors of textile manufacturing enterprise digital marketing. In this paper, the initial concepts whose word frequency is repeated 4 times or more are selected for input. (Sub-core demand points are repeated 4–9 times, and core demand points are repeated 10 times or more). According to the

Table 1. Focus Group Discussion Core Coding.

Core Code	Word frequency	Open coding	Word frequency	Whether to enter	Point of Need	Upgrade Path	Percentage/%	Sorting
182 Enterprise side	54	Cloud Data	19	Yes	Easy to extract and share data	Establishing a cloud-based architecture system	10.44	2
		Digital Center	12	Yes	Unified control management	Establishing an integrated digital center	6.59	6
		Flat Management	3	No	/	/	/	/
		Factory	2	No	/	/	/	
		Data Resource Pool	7	Yes	Big Data Analytics	Create data resource pools	3.85	14
		Intelligent workshop	9	Yes	Speed up production	Upgrade traditional factory floor	4.95	7
		Raw Materials	2	No	/	/	/	/
Brand side	58	New Retail	14	Yes	Establishing new consumption channels for consumers	Expanding new retail channels	7.69	3
		C2B	13	Yes	Consumer-oriented consumption model	B2C to C2B transformation	7.14	4

(*continued*)

Table 1. (*continued*)

Core Code	Word frequency	Open coding	Word frequency	Whether to enter	Point of Need	Upgrade Path	Percentage/%	Sorting
		Expanding the scale of physical stores	1	No	/	/	/	/
		Online Live Streaming	21	Yes	Brands expand into new marketing approaches	Open online live channel	11.54	1
		Smart Store	9	Yes	Offline smart consumption	Upgrade offline brand stores	4.95	7
Technical side	38	Big Data	13	Yes	Precise targeting of customers	Build a big data platform	7.14	4
		Smart Ecology	5	Yes	Linkage online and offline unified command	Establishing an eco-wise ecological network	2.75	17
		Internet of Things (IoT)	9	Yes	Internet of Everything	Building an IoT ecosystem	4.95	7
		APP Develop	3	No	/	/	/	/
		Artificial Intelligence	8	Yes	Help with decision making through algorithms	Optimization of artificial intelligence	4.40	11

(*continued*)

Table 1. (*continued*)

Core Code	Word frequency	Open coding	Word frequency	Whether to enter	Point of Need	Upgrade Path	Percentage/%	Sorting
Platform side	43	Tmall	6	Yes	Consumer purchase demand	Products on Tmall	3.30	16
		Taobao	8	Yes	Consumer purchase demand	Products on Taobao	4.40	11
		Tik Tok	8	Yes	Consumer purchase demand	Enterprises improve online live	4.40	11
		1688	5	Yes	Consumer purchase demand	Products on 1688 platform	2.75	17
		WeChat applet	9	Yes	Consumer purchase demand	Enterprise open WeChat small program side	4.95	7
		Little Red Book	7	Yes	Consumer purchase demand	Products on Little Red Book	3.85	14

demand points proposed by experts, the path upgrade measures are output, as shown in Table 1.

It can be seen from Table 1 that there are 6 core codes and 23 open codes in total. The entered core requirement points and sub-core requirement points are converted into core design points and sub-core design points. There are 6 core design points in total, including cloud data, digital center, new retail, C2B, live webcast, and big data. The 12 sub-core design points include data resource pool, intellectualization workshop, intelligent store, intelligent ecology, Internet of Things, artificial intelligence, Tmall, TaoBao, Tik Tok, 1688, WeChat mini program, and Little Red Book. In this paper, open coding phrases with word frequency less than 4 times are not entered. The core design points and sub-core design points in the focus group interview are taken as the key factors in the reform path of the textile manufacturing enterprise digital marketing.

3 Plight of Textile Manufacturing Enterprises in the New Environment

3.1 Fashion and Technology Barriers

With the further development of science and technology, the concept of intelligence is no longer limited to abstract ideas, but is applied to real life. Consumers have gradually adapted to the convenient and comfortable experience brought by intelligent life. At present, the transformation and upgrading of clothing brands should not only satisfy people's demand for fashionable clothing, but also realize the combination of fashion and technology. This will further blur the barriers between fashion and technology. The combination of the two is overwhelming.

In order to maximize the value of technology products, companies usually deliberately create or amplify a certain "sensory experience". Fashionable technology products can eliminate the user's vigilance and the scrutiny of third parties to the greatest extent. This urges the integration of technology products and fashion.

3.2 Fashion and Technology Barriers

In the process of major clothing brands rapidly sinking into the third- and fourth-tier markets, the model innovation of online new retail and the operation capability of terminal intelligent store have been strengthened. With the rapid and in-depth integration of online and offline, the needs of young consumers for personalized and diversified scene experience have been met. It is necessary for each clothing brand to actively explore the operation system with refinement and digitization Through the big data algorithm, the mechanism of trial sales and order reversal, and increasing the proportion of product placement, it can increase the accuracy of matching products and stores, improve the rapid response speed and operating efficiency of enterprise internal changes to the market, and promote the shaping of flexible supply chain.

4 Management Reform Path of Textile Manufacturing Enterprise Under Digitization

There are differences in the consumption habits and lifestyles of mass consumers. Consumers are accustomed to choosing their own special symbols to meet product requirements and personalized performance. According to the habits of mass consumption and future development trends, the clothing industry must carry out corresponding industrial upgrades to match the concept of mass consumption. The essence of the industrial upgrading strategy is to achieve precise positioning of consumers by adding intelligent factors to traditional clothing brands, as well as scientific analysis of consumer psychology and motivation. Through the means of intellectualization, fashion, and stylization, the appropriate connection between the consumer and the product meaning is constructed. Through the difference of meaning, the traditional clothing brand industry and the clothing brand industry under intellectualization can be distinguished.

4.1 Industrial Upgrading Strategy

4.1.1 Digitization Transformation of Enterprise Marketing Channel

In addition to changing the original production methods, the transformation of marketing channels and the upgrading of intellectualization help clothing brands find new innovative growth points online and offline. The upgrading of clothing industry channels is an iterative upgrade from digitization transformation to intellectualization. The change to the traditional "B2C" model provides more space for the technological innovation of intellectualization in all fields in the future. Through the intellectualization upgrade, enterprises can perform more accurate big data screening. At the same time, the supply of cloth enterprise from the production end to the sales end is promoted. By shaping the flexible supply chain system of clothing brands, the new retail model has been used more maturely. On the product side, intelligent manufacturing technologies are used to provide intellectualization services to consumers. Enterprise needs to introduce cloud architecture and platform thinking to establish an innovative and agile digitization ecological environment, so as to drive and lead the innovation and development of the clothing industry. In the process of transformation and upgrading of clothing brand channels, the integrated and shared operation and management platform, the production and operation platform of collaborative innovation intellectualization, the interconnected and efficient customer service platform, and the agile and safe basic technology platform are gradually established, and the intellectualization management and control mechanism can be improved. In the end, it becomes a modern clothing enterprise with intellectualization competitiveness. The cloud model brings together the data resources of various decentralized business applications to form a unified data resource pool, which can provide the possibility for centralized and efficient data analysis. The enterprise data architecture is changing from the previous application-centric model to the analysis-centric model. More precise positioning enables brands to better serve online and offline mass customers.

4.1.2 Transformation from B2C to C2B

Affected by the COVID-19 epidemic, most offline physical stores switched to online sales in 2020. "Home economy" has become a mainstream consumption method. Online consumption has gradually become the main shopping method for Chinese and even foreign consumers. Under this circumstance, cloth enterprises are facing transformation and upgrading in line with the current consumption habits of the public. The sales model of traditional clothing enterprise is mainly based on the B2C (Business-to-Consumer) model. In more detail, all products on the market are mainly produced by enterprise and put on the market. Therefore, some products on the market are determined by the enterprise of production, rather than the actual needs of the public. In the era of Internet economy, a new business model "C2B" (Customer-to-Business) emerges, that is, consumers participate in the entire industrial production model of enterprise. Enterprises need new technologies and capabilities to acquire customers, reduce costs, increase efficiency, and innovate products to gain market advantage and sustainable growth. No longer the "puppet" of the market, consumption can truly convey its own needs and allow industries to be put into production.

4.2 Universe Digitization Management Marketing Layout

Universe marketing refers to a new retail model that takes consumers as the core of the overall operation and uses big data as the energy source to achieve full links, full media, full data, and all channels. In this way, different consumer platforms or Internet platforms can present the most relevant content to consumers, thus completing the closed loop of full-cycle behavior between brands and consumers. Demand-oriented precise positioning marketing integrates the fragmented shopping time of consumers. Through big data analysis, consumers' consumption habits and consumption intentions can be accurately grasped. Furthermore, the direction of product production or sales is adjusted to meet consumer expectations for intellectualization, personalization and fashion.

Secondly, the full coverage of online and offline product channels can achieve efficient conversion and private closed-loop. For example, Erke promotes the same style with the same price in Tmall official flagship store, WeChat mini program, and offline physical stores to ensure the online and offline consumption experience. The interconnection of online and offline consumption channels is realized, which supports the sales model of online ordering and offline pickup. In addition, consumers are provided with corresponding shopping guides and matching suggestions. Online channels can attract accurate customers to offline stores, thus realizing the qualitative change from traffic to sales. Online channels include artificial intelligence decision-making platforms based on big data technology. The intelligent traffic management system can also perform data feedback. Under the closed-loop system, marketing decisions are more scientific and efficient. The focus of offline intellectualization lies in intelligent store shopping guides. The analysis data of traditional stores is mainly based on the POS system. Intelligent stores use artificial intelligence devices to connect all information about people, goods and stores. A variety of operating systems have been derived from background sorting, and the sales efficiency of the store has been significantly improved. Through online transformation and store intellectualization, the entire textile manufacturing industry

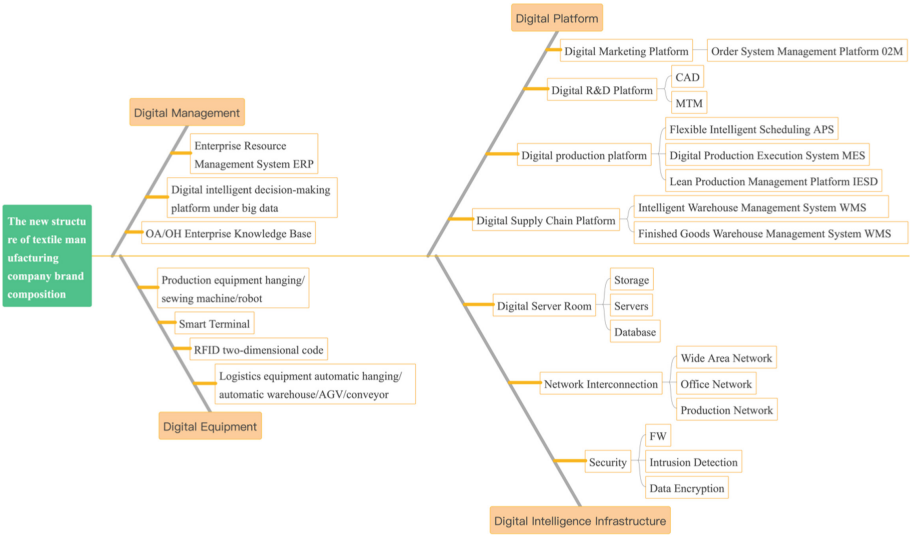

Fig. 3. A new framework for smart manufacturing in textile manufacturing companies.

has been restructured. In this process, many novel technical means will be applied, including consumer portraits, Internet of Things circulation, commodity tracking, and big data collection. The continuous improvement of intellectualization will inevitably bring opportunities for enterprise. Utilization of consumer data can drive innovation and improve customer experience. Therefore, capturing consumer data and value will be a key challenge for the entire manufacturing industry. All business activities of enterprise need to rely on the digitization platform model. In this model, all business activities are platform-to-platform relationships. The connection between the enterprise and the whole transaction link and the docking with all 2B and 2C platforms need to pass through the intellectualization platform. Through the intellectualization platform, enterprise opens up the connection between various links and elements, and realizes the connection of full coverage resources, thereby improving operational efficiency and reducing costs, as well as further universe marketing upgrades (Fig. 3).

5 Conclusion

Intellectualization has gradually become an important force in global economic growth. As an integral part of China's economy as a whole, the clothing industry is in urgent need of intellectualization transformation and upgrading. Through a large number of clothing industry cases, this paper studies the marketing channels of China's traditional clothing industry, and summarizes the current transformation and upgrading strategies and channels. From the two dimensions of industrial upgrading strategy and universe marketing layout, new channels for the future upgrading and development of clothing brands are established, the closed loop of manufacturing and marketing is shaped, and the transformation and upgrading of marketing channels are completed. The intellectualization upgrade of clothing brands should keep pace with the times. Through thinking,

innovation and the use of emerging technologies, a development model of coexistence of multiple channels in the universe of digital and intelligent integration has been created. Moreover, enterprise should continuously improve the inner depth and development breadth of brand symbols, so as to achieve multi-level and diversified development. With the continuous progress of society, the area covered by the intelligent field in the clothing industry will become wider. The future development of the clothing industry in the field of intelligent marketing is worthy of in-depth study.

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