

Business Management Model For Smes, Clothing Types That Affect The Advantage In The Competition Of Jiangsu China

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ABSTRACT

The purpose of this research was(1)to study the level of knowledge management, marketing capability, product innovation and information technology affect the competitive advantage of clothing SMEs in Jiangsu, China. (2) To study the causal relationships in knowledge management, marketing ability, product innovation, information technology and competitive advantage of clothing SMEs in Jiangsu. (3)To study the model of competitive advantages of clothing SMEs in Jiangsu. This study was adopted quantitative research methods. The population consisted of 1116 clothing SMEs in Jiangsu. The research instrument collected empirical data was questionnaires. Descriptive statistic such as frequency, percentage, mean, standard deviation, skewness, kurtosis, and reliability analysis were analyzed the empirical data. Moreover including inferential statistics to analyze the effect of structural relationship with AMOS program. The relating variables included knowledge management, marketing capability, product innovation, information technology and competitive advantage.

Index Terms—Knowledge Management, Marketing Capability, Product Innovation, Information Technology , Competitive Advantage.

I. INTRODUCTION

The clothing industry is one of the most important manufacturing industries in the world and a traditional pillar industry in China. It is of great significance in promoting the development of the national economy, solving employment problems, increasing national income, and promoting social harmony. China is a country with population of 1.4 billion and the world's largest consumer and producer of clothing.

However, with the development of the Internet and the widespread use of big data, artificial intelligence, the Internet of Things, and blockchain technology, the survival paradigm of enterprises has fundamentally changed. Pure technological innovation is difficult to maintain competitive advantage of enterprises, while business model innovation plays an increasingly important role in the sustainable development of enterprises. As one of the most developed provinces in China, Jiangsu province's clothing industry has always been in a leading position in China, and its industry scale has long remained among the top three in the country. In 2022, the number of clothing enterprises above designated size in Jiangsu Province are 1,594, employing 308,000 people, and producing 2.153 billion pieces of clothing. However, affected by the slowdown in global economic growth and other factors, the development situation faced by the garment industry in Jiangsu province is still complex and severe, the number of clothing companies, especially SMEs, is decreasing rapidly[1]. Data shows that in the industrial field, SMEs contribute more than 50% of tax revenue, more than 60% of GDP, more than 70% of technological innovation, More than 80% of urban employment and more than 90% of enterprises in the national economy[2]. Therefore, it is of great significance to study the business models of SMEs in the clothing industry in Jiangsu province to achieve sustainable development.

On reviewing these literatures, it has founded that Knowledge is the most important strategic factor in business operations [3]. If clothing SMEs want to win in the fierce market competition, they need to change from the past following-the-trend strategy to an innovative strategy, pay attention to knowledge management,

which is related to ability of achieving company's competitive advantage[4]. Proper knowledge management is a key factor in determining a company's survival. Therefore appropriate management methods are important. This is a special challenge for small companies, because these companies often lack sufficient resources to leverage the knowledge base.

In the digital economic area, With changes in consumption habits and the emergence of new technologies, strong marketing capabilities can quickly respond to changes in the external environment, optimize existing resource allocation, timely adjust business strategies, and change the innovation process[5]. Marketing capability is the ability to adapt to changes in the market environment. With changes in consumer purchasing behavior and the emergence of new technologies, integrated marketing has become an important channel for organizations. To increase brand influence and promote products, in addition to traditional advertising methods, organizations must also use data analysis technology to gain an in-depth understanding of consumption. It also continuously integrates online and offline resources to carry out multi-channel marketing strategies, such as TIKTOK online store, Live sales videos, etc. are considered an effective way to promote user growth and conversion.

Product innovation may provide novelty to the market in many forms, ranging from extensions of existing products to differentiated products to new products that serve different purposes in a transformative way, which is important for understanding business how to manage product innovation is important. Product innovation is an important means to meet changes and new needs. SMEs should focus their development on product innovation and in-depth research on the core competitiveness of the market. Focus on consumer needs and key directions such as product differentiation. At the same time, functionality, fashion trends, environmental protection, and technology need to go deep into different subdivisions.

With the increasing maturity of artificial intelligence theory and technology, the continuous improvement of artificial intelligence scene fusion capabilities, the continuous progress of artificial intelligence multi-modal pre-training large models and general technologies such as computer vision, intelligent robots, and decision-making intelligence, the clothing industry is improving design, The efficiency of manufacturing, quality control, logistics, sales and other links will benefit greatly.

If an organization achieves sustainable competitive advantage, it is likely to demonstrate enhanced business performance[6][7]. Presently, Clothing SMEs encounter challenges stemming from the sluggish expansion of the global economy, the persistent Russo-Ukrainian conflict, and declining demand in the United States and Europe. These factors contribute to heightened competition. To attain sustainable competitive advantage, the clothing sector necessitates enhanced management model grounded in knowledge management principles. Moreover, it must explore novel avenues in marketing capability, product innovation, and information technology.

Thus, the authors desire to study the influence of knowledge management, marketing capability, product innovation, information technology factors that are believed to have the impact on the competitive advantage in clothing industry of Jiangsu province. This study is targeted for finding possible ways of business model which are usefully applicable for clothing industry in Jiangsu province, promoting the development of SMEs.

II. RESEARCH OBJECTIVES

- A. To study the level of knowledge management, marketing capability, product innovation and information technology affect the competitive advantage of clothing SMEs in Jiangsu, China.
- B. To study the causal relationships in knowledge management. Marketing ability product innovation Information Technology and Competitive Advantage of clothing SMEs in Jiangsu, China.
- C. To study the model of competitive advantages of clothing SMEs in Jiangsu, China.

III. SCOPE TO THE RESEARCH

This research study has identified the scope of research in four areas:(1) the content focused on knowledge management, marketing capability, product innovation, information technology influencing the competitive advantage of clothing SMEs in Jiangsu. (2) the population is 1116 clothing SMEs in Jiangsu. (3) the area included Nanjing, Wuxi, Suzhou, Changzhou, Xuzhou, Nantong, Lianyungang, Huaian, Yancheng, Yangzhou, Zhenjiang, Taizhou and Suqian. (4) the period was from January 2022 to June 2023.

IV. LITERATURE REVIEW

A. The Context of SMEs Clothing Industry in Jiangsu.

Clothing industry refers to the industry that produces, processes and sells clothing and related products. Jiangsu's clothing industry has a long history and is an important clothing production base in China. It has a large number of clothing companies which SMEs accounted for 92.5%, covering all aspects of garment manufacturing and sales. In the national ranking of "Top 100 Clothing Industry Companies in 2022", 39 companies in Jiangsu Province ranked first. In addition, high-end clothing clusters in Suzhou, Wuxi and Nantong were selected as national advanced manufacturing clusters[2]. With the acceleration of domestic

consumption upgrading and internationalization, Jiangsu's clothing industry is also constantly transforming and upgrading, focusing on the development of technological innovation, brand building, green environmental protection and other aspects.

B. Relating Research Variables

In this research, the author extracted concerned variables from the reviews of related theories, ideas and literature and could identify 5 main variables: knowledge management, marketing capability, product innovation, information technology and competitive advantage respectively.

Knowledge management. Knowledge management is a management concept related to organizations and knowledge. All the mentioned concepts and theories could be concluded that Knowledge management is due to the process of collecting, creating, organizing, communicating and applying knowledge in an organization, which will work more efficiently by developing systems, from information to information technology, to generate knowledge and wisdom to function effectively in the organization. According to [8], Systematically utilizing the existing knowledge and experience of people in an organization to develop innovations thereby generating new knowledge creating competitive advantage. This requires transforming individual knowledge into organization-wide knowledge that can be shared and applied across the organization [9]. To improve the competitive advantage of SMEs, Knowledge management processes should be established to effectively acquire knowledge, transform knowledge, and thereby apply, share and preserve knowledge. The advantage of Knowledge management for SMEs is that they are smaller and have less knowledge to manage, which makes it easier to organize and store knowledge [10].

Marketing capability. Marketing capability is a process of combining knowledge and resources within an organization to meet market needs, improve the value of products and services, and make the organization more competitive in the market competition [11][12]. Enterprises explore customer needs, understand competitors and different environmental factors, so as to solve business problems, create higher value than customer expectations, and stand out from the competition [11][13][14]. Scholars such as [11] emphasize that enterprises should have sufficient market resources and market skills to successfully develop new products. Therefore, information about customer needs and competitors should be taken into consideration for the development of new products [15].

[16] proposed the main concepts of marketing from six aspects: (1) production concept, (2) product concept, (3) sales concept, (4) market orientation concept, (5) customer orientation concept, and (6) socially oriented concept.

Product innovation. Innovation includes the improvement of new products and new processes, the expansion of new markets and the supply of new materials, which covering almost all areas of corporate economic activities [17]. Product innovation refers to the use of technology or practical methods to develop and demonstrate new products, including improving the original product. Product innovation is the productivity of the enterprise, which can be the product or service [18][19].

Product innovation can also be divided into tangible products such as new cars and other general products. Intangible products such as high-definition television (HDTV), digital video disc (DVD), and services such as nature conservation packages and telephone financial banking.

Regarding the effects of Product innovation, scholars have reached inconsistent conclusions. PI has a positive impact on both market performance and sustainable competitive advantage [20]; Product innovation and corporate performance are in an inverted U shape [21]; There is no significant relationship between PI and corporate performance [22].

Information technology. Information technology refers to the ability to use physical structure or knowledge embodied in an artefact (software, hardware, or methodology) to help accomplish some task [23]. Nowadays several technologies are used in operations and service science. [24] provide a useful classification incorporating data acquisition technologies, such as radio frequency identification systems (RFID); warehousing technologies, for instance automated storage and retrieval systems (AS/RS); transportation technologies, such as global positioning systems (GPS); and information technologies, including electronic data interchange (EDI) and point of sales (POS). Innovation applications fall within the group of information technologies involving networked systems [25] that focus on knowledge management and collaboration [26].

Competitive Advantage. Porter (1998, p. 67) defines competitive advantage as the organizational capability to lead in cost leadership, differentiate products or services, and target markets that surpass competitors [27]. The competitive advantage of an organization is that the organization has better management and is more successful [28]. Many scholars agree that creating competitive advantage includes three elements: cost leadership, differentiated products or services, and market focus. Cost leadership strategy empowers managers to reduce product prices below competitors, thereby augmenting market share and fostering enhanced profitability. Differentiation emphasizes the creation of unique product features or exceptional customer service, with product design playing a pivotal role in appealing to diverse consumer

segments and fostering brand loyalty. Market focus strategy involves targeting a delimited market niche, offering specialized products or services with restricted geographic coverage, catering to specific customer needs[29][30].

V. THE METHODOLOGY AND MODEL

This study adopted quantitative research methods. The research is developed from the collection of data on the basis of a reviewing the related literatures. The quantitative research was conducted with the instrument as questionnaire developed based on review of literature, concepts and related research in chapter 2. The data analysis was done by the descriptive statistics which were frequency, percentage, mean, standard deviation, skewness, kurtosis and reliability analysis were analyzed the empirical data. Moreover including inferential statistics to analysis following the Structural Equation Model(SEM) and AMOS program, Furthermore, the results are summarized and discussed, as well as, given suggestions base on information obtained from the open-ended questionnaires.

VI. THE CONCEPTUAL FRAMEWORK

Based on the review of related literature, it can be summarized into the conceptual framework and assumption for this research as follow:

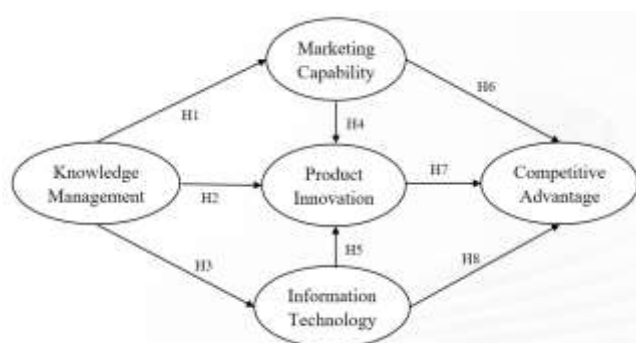


Figure 1 The research conceptual framework

VII. CONCLUSION

In the era of digital economy, SMEs are facing increasingly fierce market competition. A single technological approach is no longer enough to ensure sustained competitive advantage. Therefore, strengthening business model management of SMEs is crucial for the clothing industry. Moreover, strengthening knowledge management will enable clothing SMEs to play a role in marketing capability, product innovation and information technology, thereby achieving competitive advantages. This is the key to success. In the future, SMEs should further improve business model to better respond to the changing market environment and achieve sustainable development of the enterprise.

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