

INNOVATIONS IN THE BUSINESS MODELS OF LOCAL FASHION BRANDS AMIDST THE RISE OF DIGITAL TECHNOLOGY

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ABSTRACT

Based on a review of previous studies, this paper establishes a theoretical framework for the fashion business model that integrates technology and applies a qualitative research method through case analysis and secondary data. This study aims to analyze how digital technology influences business model innovation among Vietnamese local fashion brands. The research results show that local fashion brands are actively innovating their business models in various aspects. First, they are vigorously expanding diverse distribution channels such as e-commerce, live-stream selling, and a combination of physical stores and digital platforms to better reach consumers. Second, technology is being applied to design and production, notably through artificial intelligence, 3D printing, and modern design software, which help shorten the time to launch new products. Third, businesses are shifting toward digital marketing strategies, using KOLs and social media platforms to enhance brand visibility. Finally, supply chains and inventory management are being optimized through automation technologies and data analytics. Thus, the study not only clarifies the operational transformations of the local fashion industry but also provides strategic direction for businesses to develop appropriately in the digital era. The study also proposes a conceptual framework linking digital technology with four dimensions of business model innovation.

Keywords: Digital technology, fashion brand, business model innovation, digital transformation, e-commerce.

1. INTRODUCTION

In recent years, Vietnam's fashion industry has made significant strides, contributing positively to economic growth and shaping the consumption styles of Vietnamese people. According to Statista [1], revenue from the fashion sector in Vietnam is projected to exceed USD 5 billion by 2025, with an estimated annual growth rate of around 8.5%. Many Vietnamese local fashion brands, such as IVY Moda, Elise, NEM Fashion, and CANIFA, have not only expanded their business scale but have also gradually enhanced professionalism in design, production, and supply chain management.

However, alongside the rapid advancement of digital technology and the acceleration of digital transformation in the retail sector, the fashion industry is facing both unprecedented opportunities and significant challenges. The emergence of e-commerce, artificial intelligence (AI), big data, augmented reality (AR), cloud computing, and social media platforms has fundamentally transformed consumer purchasing behavior, compelling fashion enterprises to redesign their traditional business models. According to McKinsey & Company [2], digital channels have become the primary touchpoints throughout consumers' purchasing journeys,

with an increasing proportion of customers searching for, comparing, and purchasing fashion products through online platforms rather than physical stores.

In this context, Vietnamese local fashion brands are under growing pressure to accelerate digital transformation in order to improve operational efficiency, strengthen customer engagement, and enhance competitiveness. Nevertheless, many enterprises continue to face considerable constraints related to financial resources, technological capabilities, human resources, and digital infrastructure. Consequently, business model innovation has become a strategic necessity rather than merely a technological option.

Although previous reports and market analyses have highlighted the rapid development of e-commerce and changes in consumer purchasing behavior [3], [4], existing academic research has primarily examined these issues independently or from a general business perspective. Limited attention has been devoted to systematically explaining how digital technology reshapes business model innovation among Vietnamese local fashion brands.

Addressing this gap requires a more comprehensive framework capable of explaining how digital technologies reshape multiple dimensions of business model innovation within the context of Vietnamese local fashion brands.

Therefore, this study aims to analyze how digital technology influences business model innovation among Vietnamese local fashion brands by developing an integrated conceptual framework and synthesizing evidence from representative business practices.

To achieve this objective, the study addresses the following research questions:

- RQ1: How do Vietnamese local fashion brands innovate their business models in response to digital transformation?
- RQ2: What are the major dimensions of business model innovation driven by digital technology?
- RQ3: How do these innovations contribute to improving firms' competitiveness and sustainable development?

By addressing these research questions, this study contributes to the literature by proposing an integrated conceptual framework linking digital technology with business model innovation in the Vietnamese fashion industry. Furthermore, the findings provide practical implications for local fashion enterprises in formulating digital transformation strategies and achieving sustainable competitive advantages.

2. LITERATURE REVIEW, THEORETICAL FRAMEWORK, AND RESEARCH METHODS

2.1. Literature review

Recent studies have increasingly emphasized the transformative role of digital technologies in reshaping business activities across various industries, particularly the retail and fashion sectors. Digital transformation has been widely recognized as a strategic approach that enables firms to improve operational efficiency, enhance customer engagement, and create sustainable competitive advantages through technological innovation [3].

Within the Vietnamese context, existing studies have mainly focused on several independent aspects of digital transformation. Previous studies have highlighted the growing need for enterprises to adapt their business models and operations to technological change and evolving consumer demands. These studies emphasize the strategic importance of digital technologies in improving organizational competitiveness, operational performance, and long-term business sustainability [5].

Another stream of research has examined the role of digital platforms and social media in influencing business activities and consumer behavior. Previous research has demonstrated that social media has become an essential marketing and communication channel for enterprises, particularly in promoting customer interaction and supporting online business activities. These findings suggest that digital platforms have fundamentally transformed firms' approaches to customer relationship management and digital marketing [6].

Previous studies have emphasized that digital transformation encourages enterprises to redesign their business models by creating new value propositions, strengthening customer relationships, and integrating digital technologies into business operations [7]. Furthermore, digital transformation has been recognized as an important driver for improving competitiveness, operational efficiency, and production performance, particularly in the textile and garment industry [8]. These findings indicate that digital technologies have substantially reshaped consumer purchasing behavior and marketing strategies within the fashion industry.

From the perspective of the fashion industry, previous studies have discussed both the opportunities and challenges arising from digital transformation. In the Vietnamese retail context, the continued growth of e-commerce, social commerce, and technology-enabled retail operations highlights the increasing importance of digital technologies for enterprises seeking to respond to changing consumer demands [9]. These developments are also reflected in the growing use of digital technologies for inventory management, demand forecasting, and improving retail efficiency [9].

Although previous studies have provided valuable insights into digital transformation, e-commerce, livestream commerce, social media marketing, and digital business practices, most have examined these issues independently or from a general business perspective. Relatively limited attention has been devoted to explaining how digital technologies collectively reshape business model innovation among Vietnamese local fashion brands. More importantly, existing studies have not established an integrated analytical framework linking digital technology with the key dimensions of business model innovation, including distribution channels, design and production, marketing, and supply chain management.

Therefore, this study extends the existing literature by synthesizing previous findings and proposing a conceptual framework that explains how digital technology drives business model innovation among Vietnamese local fashion brands. This framework serves as the theoretical foundation for the subsequent analysis and discussion.

2.2. Theoretical framework

The concept of a business model has been widely discussed in the strategic management and innovation literature. According to Osterwalder and Pigneur [7], a business model describes how an enterprise creates, delivers, and captures value for its customers. In today's highly competitive business environment, business model innovation has become an essential strategy that enables firms to respond to technological changes, evolving consumer demands, and dynamic market conditions. Rather than simply adopting new technologies, business model innovation requires organizations to redesign value creation processes, customer relationships, operational activities, and revenue generation mechanisms.

Digital technology has emerged as one of the most influential drivers of business model innovation across industries. Technologies such as artificial intelligence (AI), big data analytics, the Internet of Things (IoT), cloud computing, social commerce, and digital platforms have fundamentally transformed the fashion industry by enabling firms to redesign product development, customer engagement, marketing activities, and supply chain management [2], [5]. As digital technologies continue to evolve, fashion enterprises are increasingly shifting from traditional linear business models toward digitally integrated and customer-centric business ecosystems.

In the fashion industry, digital transformation extends beyond the adoption of online sales channels. It encompasses the integration of digital technologies throughout the entire value chain, including product design, manufacturing, distribution, marketing, customer relationship management, and supply chain coordination. Marketing 5.0 proposed by Kotler et al. [6] emphasizes that digital technologies should be employed to create personalized customer experiences by combining human-centered marketing with technological capabilities. Likewise, Deloitte [5] highlights that digital transformation and emerging technologies are reshaping consumer businesses by increasing the need for organizational flexibility, data-driven decision-making, and responsiveness to changing consumer demand.

From the perspective of business model innovation, previous studies have argued that disruptive digital technologies encourage firms to develop new business models capable of creating competitive advantages in rapidly changing markets [11], [12]. Rather than merely improving existing business processes, enterprises need to redesign their organizational structures, resource allocation mechanisms, and value propositions to fully exploit technological opportunities. This perspective is particularly relevant for local fashion brands that are undergoing digital transformation while facing increasing competition from both domestic and international markets.

Based on the above theoretical perspectives and previous empirical studies, this research conceptualizes digital technology as the primary driving force of business model innovation. The study proposes that digital technology influences four key dimensions of business model innovation, namely (1) distribution channels, (2) design and production, (3) marketing activities, and (4) supply chain and inventory management. Improvements across these four dimensions collectively contribute to business model transformation and strengthen firms' competitive advantage in the digital economy.

The conceptual framework of this study is illustrated in Figure 1. Digital technology acts as the key enabling factor that drives innovation across the four dimensions of business model innovation. These dimensions interact to facilitate overall business model transformation, thereby enhancing firms' competitiveness and supporting sustainable development in the digital era.

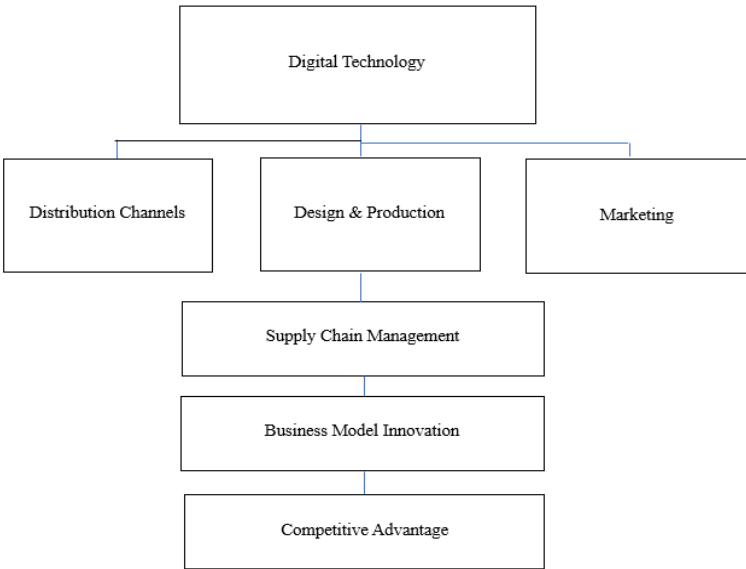


Figure 1. Conceptual framework of business model innovation under digital transformation
Source: Author's synthesis

2.3. Research methods

This study adopts a qualitative research approach based on secondary data analysis to examine business model innovation among Vietnamese local fashion brands in the context of digital transformation. The research process consists of three stages: secondary data collection, data synthesis and analysis, and comparative analysis.

Secondary data were collected from reliable sources, including industry reports published by recognized organizations such as Statista, NielsenIQ Vietnam, Payments and Commerce Market Intelligence, and the Vietnam Chamber of Commerce and Industry (VCCI); peer-reviewed journal articles, books, conference proceedings, and previous studies related to business models, digital transformation, and the fashion industry. Publicly available information from representative Vietnamese local fashion brands, including IVY Moda, NEM Fashion, CANIFA, Coolmate, YODY, and Routine, was also reviewed to illustrate current business practices in digital transformation. These brands were selected because they are widely recognized in the Vietnamese fashion market and provide publicly accessible information on their digital business activities. All online sources cited in this study were accessed between March and May 2026, and complete bibliographic information, including URLs or DOIs where available, is provided in the reference list.

After data collection, the information was synthesized and analyzed according to four analytical dimensions derived from the proposed conceptual framework: (1) distribution channels, (2) design and production, (3) marketing, and (4) supply chain and inventory management. The analysis focused on identifying how digital technologies, including e-commerce, artificial intelligence (AI), big data analytics, livestream commerce, and digital management systems, have influenced business model innovation among Vietnamese local fashion brands.

Finally, comparative analysis was employed to identify common patterns and differences in digital transformation practices across representative Vietnamese local fashion brands. The findings were then interpreted to explain how digital technologies contribute to business model innovation and to support the conceptual framework proposed in Figure 1.

3. RESULTS AND DISCUSSION

3.1. Innovation of distribution channels (omnichannel sales, e-commerce, and livestream selling)

As illustrated in Figure 1, innovation in distribution channels represents one of the four key dimensions of business model innovation driven by digital technology. The rapid development of digital technologies has encouraged Vietnamese local fashion brands to expand beyond traditional retail models and develop digital sales channels, including e-commerce platforms and social commerce. This transformation enables firms to improve customer accessibility, enhance shopping experiences, and respond more effectively to changing consumer behavior. According to Payments and Commerce Market Intelligence (PCMI) [4], Vietnam's total e-commerce market exceeded US\$24 billion in 2024 and is projected to reach US\$44 billion by 2027, with e-commerce expected to grow at a compound annual growth rate of 23% during 2024–2027. Fashion and sports products are also among the major categories purchased online by Vietnamese consumers, indicating the growing importance of digital channels for the retail sector [4].

In response to this trend, many Vietnamese local fashion brands have expanded their distribution channels by participating in major e-commerce marketplaces such as Shopee, Lazada, and Tiki, while simultaneously investing in their own e-commerce platforms. These digital channels can be integrated with customer relationship management (CRM) systems and

other digital technologies to enhance service quality, improve operational efficiency, and strengthen customer engagement. In addition, some Vietnamese fashion brands have adopted omnichannel retail strategies that integrate online and offline sales channels, enabling better coordination of customer interactions, inventory, and order management across multiple touchpoints. This integrated approach contributes to a more seamless shopping experience while supporting operational efficiency [8].

Alongside the rapid expansion of e-commerce, livestream commerce has emerged as an increasingly important digital retail channel in Vietnam. According to PCMI [4], the live e-commerce market in Vietnam is estimated to reach US\$11 billion by 2026, while seven out of ten Vietnamese internet users have watched livestreams and half of these viewers have made a purchase during or after a livestream. PCMI also reports that TikTok Shop accounted for 24% of the share among the highest-revenue e-commerce platforms, further indicating the growing role of social and livestream-based commerce in Vietnam's digital retail landscape [4]. In response to this trend, livestream commerce provides Vietnamese fashion retailers with opportunities to introduce products, engage directly with customers, and implement interactive promotional activities that can encourage immediate purchasing decisions.

Overall, the findings indicate that innovation in distribution channels extends beyond the simple adoption of online sales platforms. Vietnamese local fashion brands are gradually developing more integrated distribution ecosystems that combine physical retail stores, e-commerce platforms, and social commerce to enhance customer value creation and strengthen business competitiveness. This finding is consistent with previous perspectives emphasizing that digital technologies and customer-oriented platforms can contribute to the transformation of business models in the digital economy [7]. The comparison between traditional and digitally transformed distribution models is further summarized in Table 1.

3.2. Application of technology in design and production (AI, 3D printing, design software)

As illustrated in Figure 1, the application of digital technology in design and production represents another important dimension of business model innovation among Vietnamese local fashion brands. Digital technologies are increasingly integrated into product development processes to improve creativity, shorten product development cycles, enhance production efficiency, and better satisfy rapidly changing consumer demands.

Artificial intelligence (AI) has become an important technological tool for analyzing consumer preferences, forecasting fashion trends, and supporting product development. Rather than relying solely on designers' experience, fashion enterprises increasingly utilize customer data and market information to make more informed design decisions. Previous studies have shown that AI contributes to faster product development, demand forecasting, and inventory optimization, thereby improving operational efficiency throughout the fashion value chain [6].

In addition to AI, 3D printing technology has gradually attracted attention within the Vietnamese fashion industry, particularly in prototype development and customized fashion products. Compared with conventional prototyping methods, 3D printing enables designers to test product ideas more efficiently while reducing material consumption and product development time. Previous studies have reported that the application of 3D printing technology can reduce product development lead time and accelerate the commercialization of new products, thereby improving manufacturing flexibility and supporting product customization [12].

Meanwhile, digital fashion design software such as CLO 3D, Adobe Illustrator, and Marvelous Designer has become increasingly popular among Vietnamese fashion enterprises and design studios. These technologies enable designers to create virtual garment prototypes, simulate fabric behavior, evaluate garment fit, and modify designs before

physical production. The adoption of virtual design technologies not only supports more efficient product development but also provides opportunities for greater flexibility in design and production [5].

Overall, the integration of AI, 3D printing, and digital design software demonstrates that technological innovation is reshaping product development processes in the Vietnamese fashion industry. These technologies not only improve operational efficiency but also strengthen firms' innovation capabilities and responsiveness to market changes. As summarized in Table 1, technology adoption has transformed design and production activities from traditional manual processes into more digitalized and data-driven systems, thereby contributing significantly to business model innovation.

3.3. Transformation of the marketing model (digital marketing, KOLs and social commerce)

As illustrated in Figure 1, marketing transformation constitutes another important dimension of business model innovation driven by digital technology. The rapid development of digital platforms has encouraged Vietnamese local fashion brands to shift from traditional marketing approaches toward integrated digital marketing strategies that emphasize customer engagement, personalization, and real-time interaction.

Digital marketing has become a core component of the business strategies adopted by many local fashion brands. The widespread use of platforms such as Facebook, Instagram, TikTok, and YouTube has enabled enterprises to promote products through targeted advertising, short-form video content, livestream selling, and interactive brand communication. Compared with conventional marketing methods, digital marketing allows firms to reach larger audiences while collecting customer data that can be utilized to optimize promotional activities and improve customer relationship management [5].

At the same time, the growing influence of Key Opinion Leaders (KOLs) and social media influencers has significantly reshaped fashion marketing practices. Rather than relying solely on traditional advertising channels, many Vietnamese local fashion brands collaborate with influencers whose personal image and lifestyle align with their target customer segments. This strategy enhances brand credibility, strengthens consumer engagement, and increases purchase intention through authentic product recommendations, highlighting the increasing importance of influencer marketing within the digital economy [6].

In addition, social commerce has emerged as an increasingly important component of Vietnam's digital retail landscape. The integration of e-commerce with social media and livestream-based shopping provides retailers with new opportunities to interact with consumers and support online purchasing [9].

Overall, the findings suggest that the transformation of marketing activities extends beyond the digitalization of promotional tools. Instead, Vietnamese local fashion brands are gradually establishing integrated digital marketing ecosystems that combine social media, influencer marketing, content creation, and social commerce to create stronger customer relationships and enhance brand competitiveness. As summarized in Table 1, marketing has evolved from conventional offline promotion toward data-driven and customer-centered digital communication, representing a key dimension of business model innovation in the digital era.

3.4. Optimization of the supply chain and inventory management using technology

As illustrated in Figure 1, supply chain and inventory management constitute the fourth dimension of business model innovation driven by digital technology. The integration of digital technologies into supply chain operations enables Vietnamese fashion enterprises to improve inventory control, enhance operational efficiency, and respond more effectively to changing market demands.

Enterprise Resource Planning (ERP) systems have become an important digital solution for integrating business operations across the fashion value chain. By connecting activities such as product development, production planning, inventory management, sales, and distribution within a unified information system, ERP can improve data transparency and support more efficient managerial decision-making. Digital transformation solutions applied across the textile and garment value chain also demonstrate the growing importance of integrated digital systems for coordinating production, sales, and inventory activities [8].

In addition to ERP systems, digital technologies such as the Internet of Things (IoT), big data analytics, and smart warehouse management systems are increasingly being adopted to improve inventory management and logistics operations. IoT-enabled warehouse systems can support real-time tracking and monitoring of warehouse activities, improve inventory accuracy, optimize the use of warehouse space, and automate inventory and asset tracking processes [10]. These applications can contribute to greater operational efficiency and improved visibility across supply chain operations.

Furthermore, data-driven technologies have become increasingly important for supply chain planning and decision-making. By analyzing sales data, customer information, and market trends, fashion enterprises can obtain a stronger basis for planning and adjusting business strategies in response to changing consumer demand. According to the Vietnam Chamber of Commerce and Industry (VCCI) [8], digital transformation solutions in the textile and garment industry can support the management of production, product development, sales, inventory, and the analysis of customer and market data. These applications can contribute to more efficient operations and strengthen the competitiveness of Vietnamese textile and garment enterprises [8].

Overall, the findings indicate that technology-enabled supply chain and inventory management has become an important component of business model innovation among Vietnamese local fashion brands. The integration of digital systems, IoT technologies, and data-driven management practices can improve operational efficiency, inventory visibility, and organizational responsiveness. Together with the findings presented in Sections 3.1–3.3, these results demonstrate that digital transformation has reshaped four core dimensions of business model innovation, including distribution channels, design and production, marketing, and supply chain management. To provide a clearer comparison between traditional and digitally transformed business models, the major characteristics of these four dimensions are summarized in Table 1.

Table 1. Comparison of business models before and after digital transformation

Business Dimension	Traditional Business Model	Digitally Transformed Business Model
Distribution channels	Physical retail stores	Omnichannel retailing, e-commerce platforms, livestream commerce
Design and production	Manual design and conventional production	AI-assisted design, 3D printing, digital design software, virtual prototyping
Marketing	Offline promotion and mass advertising	Digital marketing, social media, KOLs, influencers, social commerce
Supply chain and inventory management	Manual inventory control and conventional logistics	ERP systems, IoT, Big Data analytics, real-time inventory management

Source: Developed by the author based on the literature review and comparative case analysis.

3.5. Discussion

The findings of this study demonstrate that digital technology has become a fundamental driver of business model innovation among Vietnamese local fashion brands. Rather than simply adopting isolated digital tools, many enterprises have gradually transformed multiple aspects of their business operations, including distribution channels, design and production, marketing activities, and supply chain management. As illustrated in Figure 1 and summarized in Table 1, these four dimensions are closely interconnected and collectively contribute to business model innovation and enhanced competitive advantage.

The transformation identified in this study is consistent with previous research emphasizing that digital transformation extends beyond the adoption of individual technologies and involves changes in how businesses create, deliver, and capture value [5], [7]. While earlier studies often examined individual aspects of digital transformation, such as e-commerce adoption, social media marketing, or digital product development, this study integrates these dimensions into a unified conceptual framework that provides a more comprehensive understanding of business model innovation in the Vietnamese fashion industry.

From an international perspective, the findings are generally consistent with perspectives presented by McKinsey & Company [2], Deloitte [5], and Kotler et al. [6], which emphasize the importance of adapting business models, technologies, and customer-oriented strategies to a rapidly changing digital environment. However, compared with global fashion enterprises, Vietnamese local fashion brands remain at an earlier stage of digital transformation. Most businesses have successfully adopted digital sales channels and digital marketing strategies, whereas more advanced applications, such as AI-driven demand forecasting, digital twins, predictive analytics, and fully integrated smart supply chain systems, are still developing. This indicates that digital transformation should be regarded as a long-term strategic process rather than a short-term technological investment.

An important theoretical contribution of this study is the development of a conceptual framework linking digital technology with four major dimensions of business model innovation, namely distribution channels, design and production, marketing, and supply chain and inventory management. The framework provides a systematic perspective for explaining how technological applications reshape business models in the fashion industry and may serve as a useful reference for future studies on digital transformation in other manufacturing and retail sectors.

From a practical perspective, the findings suggest that Vietnamese local fashion enterprises should adopt a more integrated approach to digital transformation instead of implementing isolated technological solutions. Investment in digital infrastructure should be accompanied by organizational capability development, data-driven decision-making, workforce digital competencies, and long-term innovation strategies. Such an integrated approach would enable firms not only to improve operational efficiency but also to strengthen customer value creation and enhance sustainable competitive advantage in an increasingly digital business environment.

Overall, this study confirms that business model innovation is a multidimensional process driven by digital technology. The proposed conceptual framework, together with the empirical evidence synthesized from representative Vietnamese local fashion brands, provides both theoretical insights and practical implications for understanding the ongoing digital transformation of the fashion industry. These findings establish a foundation for the conclusions and recommendations presented in the following section.

4. CONCLUSION AND RESEARCH IMPLICATIONS

In the context of the rapid and continuous development of digital technology, local fashion brands in Vietnam have undergone significant transformations in their business models. The application of digital platforms such as e-commerce, social media, artificial intelligence, and big data analytics has not only improved operational efficiency but also enabled firms to expand their market reach and better engage with target customers. Many brands have actively shifted from traditional business models to omnichannel approaches, focusing on enhancing customer experience, personalizing services, and optimizing supply chain operations through the integration of advanced technologies. These transformations demonstrate that adaptability and innovation are essential factors for survival and growth in the digital era.

This study provides a clearer understanding of how digital technology reshapes the business models of Vietnamese local fashion brands, offering a comprehensive perspective on changes in managerial thinking and strategic orientation. By identifying four key dimensions of business model innovation—distribution channels, design and production, marketing, and supply chain management, the study highlights the core areas where digital transformation has the most significant impact. The findings further confirm that business model innovation is not a fragmented process but rather a systematic transformation across multiple organizational functions.

This study distinguishes between theoretical contributions and practical implications. From a theoretical perspective, it proposes an integrated framework linking digital technology and business model innovation. The study extends existing literature by systematizing key dimensions of innovation within the fashion industry context, particularly in emerging markets such as Vietnam. From a practical perspective, it provides strategic recommendations for fashion brands, emphasizing the importance of investing in digital platforms, adopting data-driven decision-making, and developing flexible and customer-centric business models to enhance competitiveness in a rapidly changing environment.

Despite its contributions, this study still has certain limitations. The research mainly relies on secondary data and qualitative analysis, which may limit the generalizability of the findings. Future studies are therefore encouraged to incorporate primary data collection methods, such as surveys or in-depth interviews, and to develop quantitative models to further validate the proposed framework. Additionally, comparative studies across different countries or regions could provide deeper insights into the role of digital transformation in shaping business model innovation in the global fashion industry.

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