

Research Article

Presentation of a Brand Development Model: A Meta-analysis in the Online Clothing Industry

Zahra Hashemi¹ , Peiman Valipour¹ , Elham Fazeli Veisari^{2, *} 

¹Department of Textile and Apparel Engineering I.A., Islamic Azad University, Qaemshahr, Iran

²Department of Management and accounting, To.c., Islamic Azad University, Tonekabon, Iran

Abstract

Given the importance and necessity of branding in the clothing industry, this research was conducted with the aim of developing clothing brands in online businesses. This research is applied in terms of purpose and descriptive-survey in terms of method, and it has adopted a mixed (qualitative-quantitative) approach. In the first step of qualitative research, the method used was meta-analysis, and the statistical population included studies, books, and articles from 2014 to 2024 in the field of clothing brand development in online businesses, including works published in reputable scientific and promotional journals in this period. In the second step, the quantitative research method was used using confirmatory factor analysis and the statistical population included 238 senior and middle managers of clothing manufacturing companies in Mazandaran, of which a sample of 147 was determined using the Cochran formula. In the qualitative stage, meta-analysis was used, and in the quantitative stage, PLS structural equation modeling was used. The findings identify five main dimensions: brand strategy, design and visual variables, competitive advantage, content production and feedback, and communication, each of which includes specific components. The relationships between dimensions and components were verified through path analysis, validating the proposed model. The overall fit of the model, calculated using the GOF formula, indicates a strong fit. This study provides practical insights into the strategic development of apparel brands in online markets, enhancing brand competitiveness, and customer engagement.

Keywords

Brand Development, Online Business, Apparel Industry, Meta-Analysis

1. Introduction

In today's highly dynamic marketplace, companies are confronted with increasingly shorter product life cycles, accelerating technological advancements, and customers whose expectations are not only diverse but also constantly evolving. As a result, continuous innovation—particularly in clothing design and development—has become a critical determinant of long-term competitiveness and success for any business operating in the fashion industry [2]. The development of clothing involves the use of a set

of technologies to convert market opportunities into a product for sale [14]. But the important point here is that the development of new clothing is carried out based on different objectives. For example, the goal of developing new clothing can be to meet customer needs, adapt to market conditions, environmental changes, increase profits, attract customer satisfaction, and counter competitors' policies. At the same time, it is important to consider that in the process of developing a new product, the right product must be

*Corresponding author: elhamfv@iau.ac.ir (Elham Fazeli Veisari)

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introduced to the market at the right time [17]. Therefore, it can be concluded that changes in customer needs and desires, rapid technological advancements, increased market competition, and macroeconomic factors have led companies in various industries to engage in innovation and the introduction of new products with growing speed, efficiency, and quality. In fact, customers are in search of newer, more advanced, and better-fitting clothing that meets their needs, and companies, due to their presence in competitive markets, must offer products that meet the needs and expectations of customers. But the disappointing point following the previous statement is the high failure rate of new product development projects. Research results indicate that depending on the type of industry, the failure rate of new products has fluctuated between 50% and 95% [24]. For this reason, researchers in recent years have been striving to propose solutions to reduce this rate. In this context, the clothing industry, in addition to being an undeniable necessity, is also considered a strategic industry in every country. Because various aspects of cultural elements and social beliefs will be manifested in the clothing style of individuals in a society [1]. The clothing industry in any country is recognized as one of the key industries, whether in terms of consolidating and stabilizing cultural and social elements, creating employment and income, or generating dynamism in the environment [9]. Creating a positive brand image will be emphasized as essential elements for successful business activities in the textile and apparel industry [25].

Despite the increasing importance of social media entrepreneurship, there is a significant gap in research that comprehensively examines the impact of social media entrepreneurship on individuals' income. Understanding this impact is very important for policymakers, academics, and professionals to design effective interventions and support mechanisms that can empower individuals economically and socially. Considering the research conducted in the past, each factor has been examined separately, and this has not been observed in any study comparing the factors. Simultaneous and independent examination of consumer and customer preferences is essential for conducting this research. On the other hand, considering social changes, living conditions and income levels, the further expansion of the internet, the creation and development of online shopping culture and non-face-to-face services, etc., all these factors have made the importance and necessity of conducting this research even more pronounced. Therefore, considering the aforementioned points in this research, the following question has been raised? How is the clothing brand development model in online businesses?

2. Theoretical Foundations

2.1. Brand Development

Brand development includes various stages that are crucial for creating and enhancing the identity and value of a brand. This includes creating a brand vision, defining the characteristics of a brand, positioning it in the market, managing its

assets, and fostering an organizational culture that supports strategic management [20]. In the current global economic backdrop, companies are facing a rapidly changing business environment. To seize opportunities and tackle challenges, companies must change their core marketing approach and seek out innovative marketing methods, developing them further. The quality of a strong brand relationship can promote companies' marketing activities and consequently impact their performance. Research shows that building a strong relationship with the brand is very important for businesses, as it can significantly impact their marketing activities and overall performance. Brand economy, which emphasizes the importance of brands in promoting economic development, highlights the central role of brand development in influencing consumer behavior and market dynamics. A strong relationship with a brand not only increases consumer loyalty but also contributes to the economic power and competitiveness of a country or region on a global scale [13].

2.2. Understanding Brand Development and Consumer Perception

The brand development process involves expanding the reach and influence of a successful brand to introduce a new product that may belong to a similar or different category. This strategy, as highlighted, is very important for companies looking to leverage existing business value to launch new offerings [18]. Consumer perception plays a crucial role in evaluating brand development. A positive consumer attitude towards brand extension can increase the overall brand value. Conversely, negative consumer evaluations of brand development efforts can pose a threat to the brand's unique value proposition and potentially lead to its deterioration [8].

Creating a strong brand is essential for establishing a strong brand identity. Emphasizes that the development of the product brand represents the brand's growth trajectory and indicates its evolution and presence in the market [11]. A clear and distinct position in the minds of consumers creates positive perceptions and thoughts about the brand. This clarity transforms the brand into a transparent corporate asset, as highlighted and enhances consumer trust and brand loyalty [16]. In the modern era of digital connectivity and social influence, individuals from all walks of life—including celebrities, politicians, artists, CEOs, athletes, bloggers, and even everyday consumers—can become effective brand ambassadors. By authentically representing a brand's identity and values, these people play a crucial role in shaping public perception and strengthening emotional connections between brands and their audiences [6]. Their association with a brand can shape how others perceive them and turn them into unique brand entities. Brands develop and expand their credibility and trust in the minds of external audiences. This process, is crucial for creating strong consumer-brand relationships that can have positive effects such as brand love or negative aspects like brand hate or brand sabotage [13]. Consumer rela-

tionships with brands can vary in intensity and nature, ranging from strong positive emotions like brand love to negative emotions such as brand hate or brand sabotage [15].

2.3. Online Business

Online commerce, also known as e-commerce, involves the buying and selling of goods or services through electronic systems such as the internet. These technologies include mobile commerce, online payment systems, and internet marketing. Online businesses use the internet for transactions, making it a vital component of e-commerce operations [25].

2.4. Challenges of Online Business in Developing Countries

In contrast, developing countries often face challenges in fully adopting e-commerce due to factors such as limited

access to technology and knowledge gaps. The lack of infrastructure, digital literacy, and resources can hinder the widespread adoption of e-commerce practices in these regions and limit their potential economic benefits.

The digital divide between developed and developing countries exacerbates the disparity in e-commerce adoption rates, with the latter struggling to keep pace with technological advancements and global market trends. This disparity can widen the economic gap between countries and hinder progress towards sustainable development goals [7].

While developed countries have benefited from online business, developing countries have faced challenges in adopting this technology due to limitations in infrastructure and technological knowledge. This digital divide has hindered the full potential of e-commerce in advancing growth and economic development in these regions [12]. The domestic and foreign research conducted is briefly summarized in Table 1.

Table 1. Domestic and Foreign Research.

Row	Researcher/Year	Title	Result
1	[23]	The model of new product development in the Iranian fashion and apparel industry	The seven-stage model of new product development in the fashion and apparel industry includes the stages: design, product engineering, material sourcing, production, marketing, market launch, and product success monitoring.
2	[18]	Identifying the dimensions and components of digital marketing tools in startups active in the fashion and apparel industry in Iran	In order to successfully implement digital marketing in Iranian fashion and apparel startups and achieve success, organizational factors, innovation - competitive advantage, business factors - profitability, and also 12 extracted components are of high importance.
3	[3]	A review of sustainability and development factors in Iran's textile and apparel industry	Raising awareness among fashion designers and manufacturers about sustainable development, which plays an important role in the application of sustainable development principles in the country. One of the strategies that can be offered in this regard is the optimal use of clothing in the best possible way. Buying clothes that are of high quality and durability can be the best solution.
4	[4]	Identification and ranking of components for creating sustainable development in the clothing industry of Shahr-e Kord city	The factor of technology and information technology infrastructure received the highest rank, while the factor of social commitment received the lowest rank. Based on the obtained result, to achieve organizational productivity, managers should pay attention to the sustainable development factor in the sustainable development of the apparel industry.
5	[3]	Infrastructure factors influencing the future management and development of Iran's clothing industry	Three components and 22 sub-components were prioritized as follows: a) reforming existing structures b) completing the apparel industry chain c) promoting behavioural patterns: infrastructure, apparel industry. Text to translate: Textiles, future management, development
6	[24]	Research on the current status and development trends of adaptive clothing demand	Clothing companies in some countries, including the United States, the United Kingdom, Australia, Russia, and others... With a complete range of clothing and regular production and sales, they have developed and formed. The systematic development and research of adaptive clothing for the care of disabled groups, promoting social harmony, opening up potential clothing markets, creating economic benefits, and improving the happiness index of people are of great importance.

Row	Researcher/Year	Title	Result
7	[10]	The state of art in the relationship between sustainability, the fashion industry, and sustainable business models	Many technologies, best practices, and innovations exist with the aim of making the fashion industry less impactful and, most importantly, circular. Therefore, some key findings for each of the three areas under review are examined in depth, considering that the companies and sectors involved sometimes have unique characteristics and features, so results cannot be uniformly applied to every business model.
8	[21]	The impact of information and communication technology on the retail industry: changes in online clothing shopping	Determining the changes in the impact of such demographic and economic factors on the online shopping behaviour of European consumers for clothing, such as gender, age, education level, employment status, disposable income, consumer spending, and online clothing purchases. The results obtained from the conducted study are useful for describing the change in behaviour and attitude towards online clothing shopping in the European Union.
9	[22]	The impact of social media entrepreneurship on sustainable development: Evidence from online clothing stores in Bangladesh	Bangladesh is capable of creating job opportunities for rural women through ICT initiatives. Consistently, this study also proves that entrepreneurship on social media increases women's share of their family's income.
10	[19]	An experimental study on consumer preferences for an online custom clothing platform.	Unlike traditional offline shopping experiences, customers who engage in online shopping are not able to physically interact with the products they intend to purchase. As a result, a comprehensive and accurate display of product information plays a key role in facilitating the online shopping experience in fashion.
11	[5]	Identifying the dimensions and components of digital marketing tools in startups active in the fashion and apparel industry in Iran	In order to successfully implement digital marketing in Iranian fashion and apparel startups and achieve success, organizational factors, innovation - competitive advantage, business factors - profitability, and also 12 extracted components are of high importance

3. Research Method

Considering that the goal of this research is the development of clothing brands in online businesses; therefore, the research method is applied based on the objective, mixed (qualitative-quantitative) based on the type of data, cross-sectional based on the time of data collection, and descriptive-survey based on the data collection method and the nature and method of the research. The statistical population in the qualitative section includes books and articles from the years 2014 to 2024 in the field of clothing brand development in online businesses. Additionally, studies published in reputable scientific research and promotional journals from 2014 to 2024, focusing on the development of clothing brands in online businesses, are also considered as part of the research population. The statistical population in the quantitative section consists of 238 senior and middle managers of clothing manufacturing companies in Mazandaran, which was determined to be 147 using the Cochran formula. Which were selected in sufficient numbers and completely randomly using the Cochran formula. The data collection tools for the re-

search include two categories: the qualitative section, which involves gathering information in the qualitative section using the meta-analysis method. Data collection is carried out by extracting information from articles, scientific books, and scientific lectures related to the topic. The quantitative section, based on the model extracted in the qualitative section, has been designed using a researcher-made questionnaire and provided to the statistical sample. The questionnaire was reviewed by several professors from the Textile and Apparel Engineering Department to assess its validity. Their feedback was sought regarding the relevance, clarity, and comprehensibility of the questions, as well as whether these questions measure the variables included in the model used in this research. Necessary revisions were made to the questionnaire based on their input. In the qualitative section, meta-analysis was used for qualitative analysis, while in the quantitative section, structural equation modeling was employed as the analytical tool using the PLS software.

4. Research Findings

To analyze the data collected from the relevant studies, af-

ter coding, the Comprehensive Meta-Analysis program was used to perform the statistical calculations of the meta-analysis; specifically, the statistical tests used in the hypotheses of the reviewed articles were converted into effect sizes using the formulas provided by Wolf, and then the effect sizes were analyzed using the Hunter and Schmidt method. Additionally, Cohen's table was used to interpret the effect size. In Table 2, the distribution of effect size categories based on the estimation of statistics is shown.

Table 2. Distribution of Effect Size Categories Based on Statistical Estimates.

The meaning of effect size	Amount of r	Amount of d
Small effect size	Less than 0.3	Less than 0.5
Medium effect size	From 0.3 to 0.5	From 0.5 to 0.8
Large effect size	More than 0.5	More than 0.8

In Table 3, the number and percentage of independent variables in the reviewed studies are shown.

Based on the results reported in Table 3, the variables obtained for creating a clothing brand development in online businesses have been classified into five categories: brand strategy variables, design and visuals, competitive advantage, content creation, and feedback and communications. In the

category of brand strategy variables, a strong and effective marketing strategy with 81.25% frequency was the most frequently mentioned in the reviewed studies. Similarly, in the variables of design and visuals, attractive and high-quality packaging design with 87.50%; in the variables of competitive advantage, the variable of providing a distinct and superior customer experience compared to competitors with 68.75%; in the variables of content production, formulating a strong and targeted content strategy with 87.50%; and in the variables of feedback and communication, the variable of continuous analysis of customer feedback with 65.62% had the highest frequency in the reviewed studies.

To continue the analysis of the obtained indices, the effect sizes were calculated, combined, and analyzed based on the correlation index. The results of Table 4 of the Chi-square test indicate that there is a difference in the frequency of the intensity of the effect size r in the studies.

Table 5 also shows that the Q statistic results indicate significant heterogeneity between the meta-analysis studies, and the effect size is also significant in several studies. The findings of Table 5 show the effect sizes of the factors influencing the development of clothing brand presentation in online businesses. The relationship of all these variables with the provision of clothing brand development in online businesses was based on Pearson correlation, which, along with the sample size and the direction of the relationship, were entered into the comprehensive meta-analysis software. The findings related to the effect size were extracted as output, and the results are presented in Table 6 below.

Table 3. Number and percentage of independent variables in the reviewed studies.

Categorization of variables	Obtained variables	Number	Percentage of 32 studies (%)
Brand strategy	Determining brand identity and personality	19	59/37
	Target market determination	21	65/62
	Strong and effective marketing strategy	26	81/25
	Proper brand segmentation	18	56/25
	Brand management and sustainability	20	62/50
Design and visuals	Creating a unique and recognizable logo	25	Dec-78
	Website and user interface design	24	75
	Use of advertisements and animated graphics	26	81/25
	Attractive and high-quality packaging design	28	87/50
	Using appropriate images on social media	24	75
Competitive advantage	Personalized customer services	18	56/25
	Quick response	16	50
	A simple and secure online shopping experience	14	43/75
	Offering unique and innovative products	21	65/62

Categorization of variables	Obtained variables	Number	Percentage of 32 studies (%)
Content creation	Providing a distinct and superior customer experience compared to competitors	22	68/75
	Developing a strong and targeted content strategy	28	87/50
	Creating valuable content	19	59/37
	Content diversity	13	40/62
	Using social sharing features	8	25
	Continuous and timely updates of content in line with events	25	Dec-78
Feedback and communications	Continuous communication with customers	17	Dec-53
	Holding competitions and events	10	31/25
	Sharing discounts and special offers	16	50
	Continuous analysis of customer feedback	21	65/62
	Sensitivity to customer needs and problems	16	50

Table 4. Frequency of Effect Size Categories of Variables.

Effect size magnitude	Effect size magnitude				Chi-square	Significance percentage
	Under 0.1	Under 0.3	Between 3.0 and 5.0	Between 3.0 and 5.0		
	Without impact	Less	Average	A lot		
Abundance	0	1	7	24	231/65	0/001**

Table 5. Average Impact of Influential Factors on Clothing Brand Development in Online Businesses.

	Effect size r	Lower bound	Upper bound	Z value	Q statistic	Degrees of freedom	P value
Permanent effect	0/29	0/30	0/42	282/34	1523/08	31	0/001
Random effect	0/41	0/36	0/51	18/91			

Table 6. The magnitude of the effects of factors influencing the development of clothing brand presentation in online businesses.

Categorization of variables	Obtained variables	Number	Fixed combined effects	Confidence interval of fixed effects	Random effects	Confidence interval of random effects	Homogeneity test
Brand strategy variables	Determining brand identity and personality	19	0/60*	0/60 - 0/70	0/77*	0/70 - 0/80	29/20*
	Target market determination	21	0/65*	0/60 - 0/70	0/80*	0/70 - 0/80	83/11*
	Strong and effective marketing strategy	26	0/77*	0/70 - 0/80	0/85*	0/80 - 0/90	96/36*
	Proper brand differentiation	18	0/59*	0/50 - 0/60	0/75*	0/70 - 0/80	97/02*

Categorization of variables	Obtained variables	Number	Fixed combined effects	Confidence interval of fixed effects	Random effects	Confidence interval of random effects	Homogeneity test
Design and visual variables	Brand management and sustainability	20	0/62*	0/60 - 0/70	0/79*	0/70 - 0/80	121/15*
	Creating a unique and recognizable logo	25	0/71*	0/70 - 0/80	0/65*	0/60 - 0/70	69/47*
	Website and user interface design	24	0/68*	0/60 - 0/70	0/60*	0/60 - 0/70	91/09*
	Use of advertisements and animated graphics	26	0/75*	0/70 - 0/80	0/67*	0/60 - 0/70	86/31*
	Attractive and high-quality packaging design	28	0/79*	0/70 - 0/80	0/69*	0/60 - 0/70	66/01*
	Using appropriate images on social media	24	0/67*	0/60 - 0/70	0/61*	0/60 - 0/70	93/91*
Competitive advantage variables	Personalized customer services	18	0/62*	0/60 - 0/70	0/69*	0/60 - 0/70	78/05*
	Quick response	16	0/60*	0/60 - 0/70	0/66*	0/60 - 0/70	96/61*
	A simple and secure online shopping experience	14	0/59*	0/50 - 0/60	0/61*	0/60 - 0/70	86/31*
	Offering unique and innovative products	21	0/65*	0/60 - 0/70	0/70*	0/60 - 0/70	66/45*
	Providing a distinct and superior customer experience compared to competitors	22	0/67*	0/60 - 0/70	0/72*	0/70 - 0/80	21/19*
Content production variables	Developing a strong and targeted content strategy	28	0/81*	0/80 - 0/90	0/85*	0/80 - 0/90	96/30*
	Creating valuable content	19	0/73*	0/70 - 0/80	0/69*	0/60 - 0/70	75/34*
	Content diversity	13	0/68*	0/60 - 0/70	0/63*	0/60 - 0/70	91/04*
	Using social sharing features	8	0/30*	0/20 - 0/30	0/33*	0/30 - 0/40	85/66*
	Continuous and timely updates of content with events	25	0/79*	0/70 - 0/80	0/76*	0/70 - 0/80	52/13*
Feedback and communication variables	Continuous communication with customers	17	0/65*	0/60 - 0/70	0/67*	0/60 - 0/70	57/18*
	Holding competitions and events	10	0/44*	0/30 - 0/40	0/35*	0/30 - 0/40	80/31*
	Sharing discounts and special offers	16	0/63*	0/60 - 0/70	0/68*	0/60 - 0/70	94/25*
	Feedback and communication variables	21	0/67*	0/60 - 0/70	0/70*	0/60 - 0/70	98/34*
	Sensitivity to customer needs and problems	16	0/63*	0/60 - 0/70	0/67*	0/60 - 0/70	100/08*

In the category of brand strategy variables, all variables including brand identity and personality determination, target market identification, strong and effective marketing strategy, appropriate brand differentiation, and brand management and

sustainability have the greatest impact on the development of clothing brands in online businesses. In the examined variables, the results of the heterogeneity test indicate the significance of this test, showing that the studies are largely heter-

ogeneous. Combining them with a fixed effects model is not justified, and a random effects model should be used to combine the results. In fact, these tests indicate that the studies related to the relationship between these variables and the development of clothing brands in online businesses are significantly different in terms of the characteristics and features of the studies. Therefore, the findings of the random effects size have been used for the review. The findings of the random effects indicate that the relationship between brand identity and personality with the provision of clothing brand development in online businesses in 19 reviewed studies is equivalent to 0.60, which indicates a positive and significant effect. According to Cohen's affect size interpretation table, this effect size is large. Similarly, the relationship between target market determination and the provision of clothing brand development in online businesses in the 21 reviewed studies is equivalent to 0.65, indicating a positive and significant relationship. According to Cohen's affect size interpretation table, this effect size is large. Additionally, the relationship between a strong and effective marketing strategy and the development of clothing brands in online businesses in the 26 reviewed studies is equivalent to 0.77, indicating a positive and significant relationship. According to Cohen's affect size interpretation table, this effect size is large. Similarly, the relationship between brand differentiation and the appropriate presentation of clothing brand development in online businesses in 18 reviewed studies is equivalent to 0.59, indicating a positive and significant relationship. According to Cohen's affect size interpretation table, this effect size is large. Ultimately, the relationship between management and brand sustainability with the provision of clothing brand development in online businesses in 20 reviewed studies is equivalent to 0.62, indicating a positive and significant relationship. According to Cohen's affect size interpretation table, this effect size is large.

In the category of design and visual variables, all variables including creating a unique and recognizable logo, website and user interface design, using advertisements and animated graphics, designing attractive and high-quality packaging, and using appropriate images on social media have the most impact on the development of clothing brand presentation in online businesses. The findings of the random effects indicate that the relationship between creating a unique and recognizable logo and the development of clothing brand presentation in online businesses, based on 25 reviewed studies, is equivalent to 0.71, which indicates a positive and significant effect. According to Cohen's affect size interpretation table, this effect size is large. Similarly, the relationship between website design and user interface with the development of clothing brand presentation in online businesses in 24 reviewed studies is equivalent to 0.68, indicating a positive and significant relationship. According to Cohen's affect size interpretation table, this effect size is large. Additionally, the relationship between the use of advertisements and animated graphics with the development of clothing brand presentation in online businesses in 26 reviewed studies is equivalent to

0.75, indicating a positive and significant relationship. According to Cohen's affect size interpretation table, this effect size is large. Similarly, the relationship between attractive and high-quality packaging design and the development of clothing brand presentation in online businesses in 28 reviewed studies is equivalent to 0.79, indicating a positive and significant relationship. According to Cohen's affect size interpretation table, this effect size is large. Ultimately, the relationship between the use of appropriate images on social media and the development of clothing brand presentation in online businesses in 24 reviewed studies is equivalent to 0.67, indicating a positive and significant relationship. According to Cohen's affect size interpretation table, this effect size is large.

In the category of competitive advantage variables, all variables including personalized customer service, quick responsiveness, simple and secure online shopping experience, offering unique and innovative products, and providing a distinct and superior customer experience compared to competitors have the greatest impact on the development of clothing brands in online businesses. The findings of the random effects indicate that the relationship between personalized customer services and the development of clothing brands in online businesses, across 18 reviewed studies, is equivalent to 0.62, which indicates a positive and significant effect. According to Cohen's affect size interpretation table, this effect size is large. Similarly, the relationship between quick response and the development of clothing brand offerings in online businesses in the 16 reviewed studies is equivalent to 0.60, indicating a positive and significant relationship. According to Cohen's affect size interpretation table, this effect size is large. Additionally, the relationship between a simple and secure online shopping experience and the development of clothing brand offerings in online businesses in 14 reviewed studies is equivalent to 0.59, indicating a positive and significant relationship. According to Cohen's affect size interpretation table, this effect size is large. Similarly, the relationship between offering unique and innovative products and the development of clothing brands in online businesses in 21 reviewed studies is equivalent to 0.65, indicating a positive and significant relationship. According to Cohen's affect size interpretation table, this effect size is large. Ultimately, the relationship between providing a distinct and superior customer experience compared to competitors and offering clothing brand development in online businesses in 22 reviewed studies is equivalent to 0.67, indicating a positive and significant relationship. According to Cohen's effect size interpretation table, this effect size is large.

In the category of content production variables, all variables, including the formulation of a strong and targeted content strategy, the production of valuable content, content diversity, the use of social sharing capabilities, and the continuous and timely updating of content with events, have the greatest impact on the development of clothing brand presentation in online businesses. The findings of the random

effects indicate that the relationship between formulating a strong and targeted content strategy and the development of clothing brand presentation in online businesses, across 28 reviewed studies, is equivalent to 0.81, which indicates a positive and significant correlation. According to Cohen's effect size interpretation table, this effect size is large. Similarly, the relationship between producing valuable content and offering clothing brand development in online businesses in the 19 reviewed studies is equivalent to 0.73, indicating a positive and significant relationship. According to Cohen's effect size interpretation table, this effect size is large. Additionally, the relationship between content diversity and the development of clothing brand offerings in online businesses in 13 reviewed studies is equivalent to 0.68, indicating a positive and significant relationship. According to Cohen's effect size interpretation table, this effect size is large. Similarly, the relationship between the use of social sharing capabilities and the development of clothing brand offerings in online businesses in the 8 reviewed studies is equivalent to 0.30, indicating a positive and significant relationship. According to Cohen's effect size interpretation table, this effect size is small. Finally, the relationship between continuous and appropriate content updates with events and the development of clothing brands in online businesses in the 25 reviewed studies is equivalent to 0.79, indicating a positive and significant relationship. According to Cohen's effect size interpretation table, this effect size is large.

In the category of feedback and communication variables, all variables including continuous communication with customers, holding competitions and events,

Sharing discounts and special offers, continuously analyzing customer feedback, and being sensitive to customer needs

and problems have the greatest impact on the development of clothing brands in online businesses. The findings of the random effects indicate that the relationship between continuous customer engagement and the development of clothing brand offerings in online businesses, across 17 reviewed studies, is equivalent to 0.65, which indicates a positive and significant correlation. According to Cohen's effect size interpretation table, this effect size is large. Similarly, the relationship between holding competitions and events with the development of clothing brand offerings in online businesses in the 10 reviewed studies is equivalent to 0.44, indicating a positive and significant relationship. According to Cohen's effect size interpretation table, this effect size is moderate. Additionally, the relationship between sharing discounts and special offers and the development of clothing brand presentation in online businesses in 16 reviewed studies is equivalent to 0.63, indicating a positive and significant relationship. According to Cohen's effect size interpretation table, this effect size is large. Similarly, the continuous analysis of customer feedback in relation to the development of clothing brands in online businesses across 21 reviewed studies is equivalent to 0.67, indicating a positive and significant relationship. According to Cohen's effect size interpretation table, this effect size is large. Finally, the relationship between sensitivity to customer needs and problems with the provision of clothing brand development in online businesses in the 16 reviewed studies is equivalent to 0.63, indicating a positive and significant relationship. According to Cohen's effect size interpretation table, this effect size is large.

In Table 7, the results of the effect size for each of the research variables are shown.

Table 7. Results of the effect size for each of the research variables.

Categorization of variables	Obtained variables	Random effects	Effect size
Brand strategy variables	Determining brand identity and personality	0/60*	A lot
	Target market determination	0/65*	A lot
	Strong and effective marketing strategy	0/77*	A lot
	Proper brand segmentation	0/59*	A lot
	Brand management and sustainability	0/62*	A lot
Design and visual variables	Creating a unique and recognizable logo	0/71*	A lot
	Website and user interface design	0/68*	A lot
	Use of advertisements and animated graphics	0/75*	A lot
	Attractive and high-quality packaging design	0/79*	A lot
Competitive advantage variables	Using appropriate images on social media	0/67*	A lot
	Personalized customer services	0/62*	A lot
	Quick response	0/60*	A lot

Categorization of variables	Obtained variables	Random effects	Effect size
Content production variables	A simple and secure online shopping experience	0/59*	A lot
	Offering unique and innovative products	0/65*	A lot
	Providing a distinct and superior customer experience compared to competitors	0/67*	A lot
	Developing a strong and targeted content strategy	0/81*	A lot
	Creating valuable content	0/73*	A lot
	Content diversity	0/68*	A lot
	Using social sharing features	0/30*	Average
	Continuous and timely updates of content in line with events	0/79*	A lot
Feedback and communication variables	Continuous communication with customers	0/65*	A lot
	Holding competitions and events	0/44*	A lot
	Sharing discounts and special offers	0/63*	A lot
	Continuous analysis of customer feedback	0/67*	A lot
	Sensitivity to customer needs and problems	0/63*	A lot

Figure 1 depicts the model obtained from the results. In this model, two categories of variables with high effect sizes and medium effect sizes have been used.

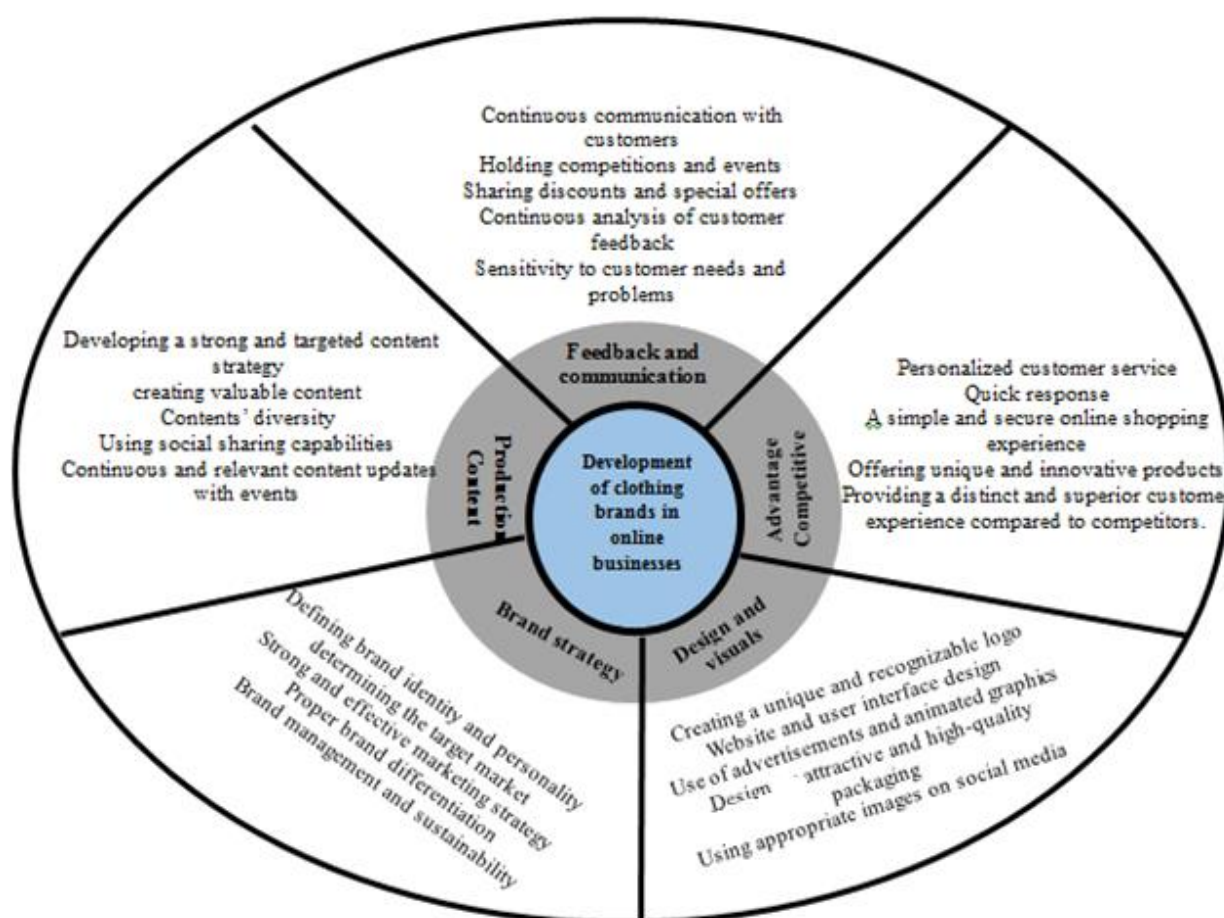


Figure 1. Modeling from research findings.

The validity of the model.

Descriptive statistics of the quantitative section.

In Table 8, descriptive statistics in the quantitative section are presented.

According to Table 4, participants in the age group of 31 to 40 years had the highest frequency. In terms of gender, more men (96 individuals) participated than women. In terms of education, 63 individuals at the master's level had a higher

frequency than those at other levels.

Examining the composite reliability of each of the constructs.

Next to each construct, its number and credibility are written. In this case, numbers higher than 0.7 indicate the composite reliability of the constructs. The extracted AVE values pertain to the constructs, and acceptable values indicate the appropriate validity of the measurement tools.

Table 8. Descriptive Statistics.

	Abundance	Percentage
Age		
20 to 30	43	29/25
31 to 40	55	37/41
41 to 50	29	19/73
51 and above	20	13/61
Total	147	00/100
Gender		
Man	96	65/31
Woman	51	34/69
Total	147	100
Education		
Bachelor's degree	46	31/29
Master's degree	63	42/86
PhD	38	25/85
Total	147	00/100

Table 9. Structures under Study.

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Development of clothing brands in online businesses	0/966	0/966	0/968	0/551
Brand strategy variables	0/844	0/844	0/889	0/616
Feedback and communication variables	0/858	0/858	0/898	0/637
Content production variables	0/844	0/844	0/889	0/615
Design and visual variables	0/847	0/848	0/891	0/621
Competitive advantage variables	0/858	0/858	0/898	0/638

According to Table 9, the reliability of the constructs is greater than 0.7, indicating the questionnaire's reliability.

Additionally, convergent validity has also been confirmed as the AVE for each construct is greater than 0.5 and the CR for

each construct is greater than 0.7.

Examining the relationships between the research variables

Figures 2 and 3 display the output of the PLS software in confirmatory factor analysis. In the results of the confirmatory factor analysis, standardized coefficients and significance coefficients are presented. In general, the strength of the relationship between the factor (latent variable) and the ob-

servable variable is indicated by the factor loading. The factor loading is a value between zero and one. If the factor loading is less than 0.3, the relationship is considered weak; a factor loading between 0.4 and 0.6 is acceptable, and if it is greater than 0.6, it is considered desirable.

The examination of the relationships between the research variables is presented in Table 10.

Table 10. Relationships of Research Dimensions and Components.

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ((O/STDEV))	P Values	Status
Development of clothing brands in online businesses -> Brand strategy variables	0.942	0.942	0.005	180.286	0	Approved
Developing a clothing brand in online businesses -> Feedback and communication variables	0.944	0.944	0.005	192.28	0	Approved
Developing a clothing brand in online businesses -> Content production variables	0.933	0.933	0.006	153.664	0	Approved
Development of clothing brands in online businesses -> Design and visual variables	0.931	0.931	0.006	154.255	0	Approved
Developing a clothing brand in online businesses -> Competitive advantage variables	0.941	0.941	0.005	181.357	0	Approved

According to Table 10, the p_value for all relationships has been obtained as less than 0.05, and a significance greater than 1.96 ($p_value > 1.96$) has been obtained, indicating the significance of the relationships between the independent and dependent variables.

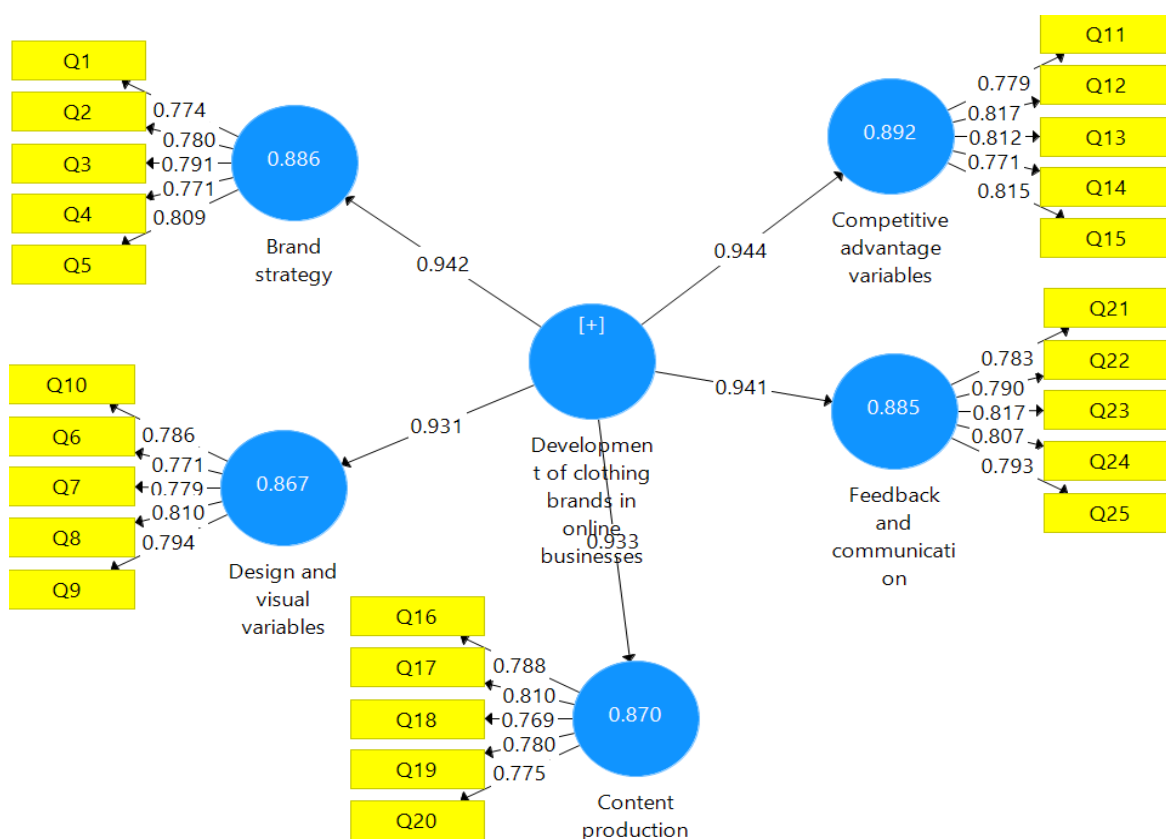


Figure 2. Factor loadings of the questionnaire.

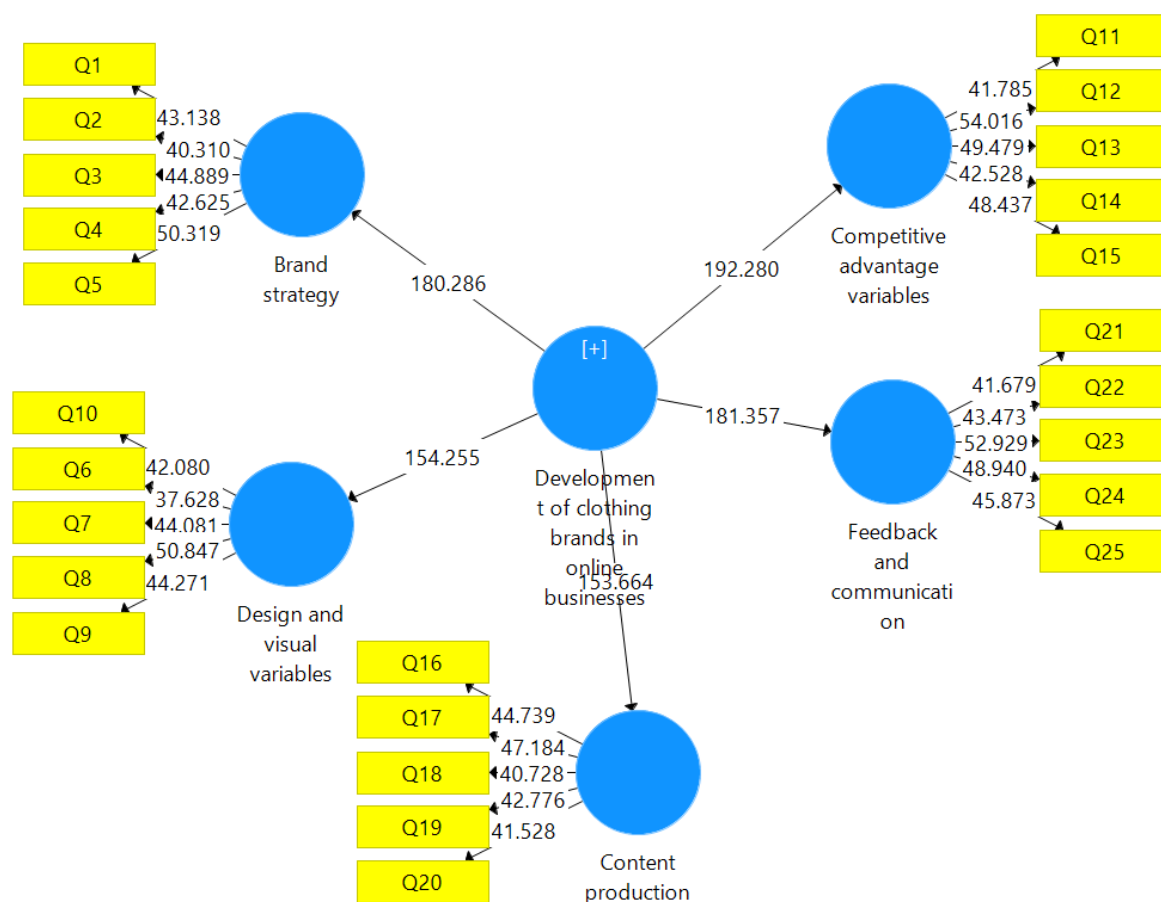


Figure 3. Significance Coefficients.

5. Discussion and Conclusion

The aim of this research is to develop clothing brands in online businesses. Based on the meta-analysis technique, five main dimensions have been extracted, which include brand strategy variables, design and visual variables, competitive advantage variables, content creation variables, and feedback and communication variables. The dimensions also include components. In this study, the provision of unique and innovative products as a competitive advantage and the determination of the target market have been identified. It can be stated that this research aligns with the study by Azimi titled "The New Product Development Model in the Iranian Fashion and Apparel Industry." In the study by Azimi, the reorganization of themes and the examination of the narrative flow, the seven-stage model of new product development in the fashion and apparel industry includes the stages: design, product engineering, material sourcing, production, marketing, market launch, and product success monitoring. This result is also in line with the study by Ng & Mok titled "Identifying the Dimensions and Components of Digital Marketing Tools in Startups Active in the Fashion and Apparel Industry in Iran." Ng & Mok found that in the modern world, to remain competitive, the use of digital marketing tools in various industries

is of great importance. The results of the research indicated that in order to properly implement digital marketing in Iranian fashion and apparel startups and achieve success, organizational factors, innovation-competitive advantage, business factors-profitability, and also 12 extracted components are of high importance.

Considering that brand management and sustainability have been identified in this research, it can be stated that this study is aligned with the research by Farhadi titled "Infra-structural Factors Affecting the Future Management and Development of the Iranian Apparel Industry." Farhadi found that three components and 22 sub-components were prioritized as follows: a) reforming existing structures, b) completing the apparel industry's supply chain, c) promoting behavioral patterns: infrastructure, apparel industry. Text to translate: Textiles, future management, development.

In this research, the continuous analysis of customer feedback and sensitivity to customer needs and problems has been identified. It can be said that the results of this research are in line with the study by Morsali titled "Analysis of Consumer Purchase Behavior Influenced by Awareness of Sustainability in the Fashion Industry (Case Study: Apparel Industry)." The results of Morsali briefly showed that knowledge and awareness (cognitive component), emotions and feelings (affective component), and purchase decision (behavioral component) as dimensions of attitude towards the concept of

sustainability, influence the purchasing behavior of consumers in the fashion industry in the clothing sector, and in this regard, gender plays the role of a moderating variable. Additionally, income level and employment status influence consumer purchasing behavior. Ultimately, it can be said that the actual level of knowledge about the concept of sustainability is lower than the claimed knowledge, and therefore, consumers should increase their awareness to protect themselves from fake advertisements on social media.

This result is also in line with the study by Zhe titled "Research on the Current Status and Development Trends of Adaptive Clothing Demand." Zhe found that the systematic development and research of adaptive clothing for the care of disabled groups, promoting social harmony, opening potential clothing markets, creating economic benefits, and improving people's happiness index are of great importance. In this study, the use of social sharing capabilities and continuous and event-appropriate content updates have been identified. It can be stated that this research aligns with the findings of Baabdullah in their study titled "The Impact of Social Media Marketing on the Purchase Intention of Adaptive Clothing during the COVID-19 Pandemic." The results of Baabdullah showed that social media marketing activities have a positive and significant impact on customers' purchase intentions. Conclusion: Ultimately, based on the results, it can be said that social media marketing is considered an important factor in this research regarding customers' purchase intentions. Additionally, this method can be utilized as a competitive advantage.

In this regard, practical suggestions are provided: 1) Designing and launching a website or online store: Creating a beautiful and efficient space on the internet to showcase and sell your products. 2) Use of social media: Active presence on social networks to enhance brand recognition and attract new customers. 3) Creating engaging content: Producing diverse and captivating materials about the brand, products, and events to attract the audience's attention. 4) Offering discounts and special offers: Encouraging customers to buy from you by providing discounts and special offers. 5) Collaborating with famous individuals and websites: Building relationships and collaborating with reputable personalities and websites to enhance brand credibility. 6) Presence in experiential marketing: Participating in exhibitions, promotional and sales events, and advertising in common locations. 7) Providing superior customer service: The importance of focusing on customer experience and satisfaction to maintain and expand the brand. 8) Monitoring and analyzing performance: Monitoring the brand's performance in the online space and conducting necessary analyses to improve activities.

Abbreviations

CEO	Chief Executive Officer
e-commerce	Electronic Commerce

Author Contributions

Zahra Hashemi: Data curation, Funding acquisition, Investigation, Project administration, Resources, Software, Validation, Writing – review & editing

Peiman Valipour: Formal Analysis, Project administration, Software, Validation, Visualization

Elham Fazeli Veisari: Conceptualization, Data curation, Methodology, Resources, Supervision, Writing – original draft, Writing – review & editing

Conflicts of Interest

The authors declare no conflicts of interest.

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