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THE IMPACT OF DIGITAL MARKETING TOOLS ON ENHANCING THE COMPETITIVENESS OF CONFECTIONERY ENTERPRISES: THE CASE OF UZBEKISTAN

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Abstract

In the context of the digital transformation of the economy, the use of digital marketing tools has become one of the key factors in enhancing enterprise competitiveness. This article examines the impact of digital marketing tools on the competitiveness of confectionery enterprises in Uzbekistan. Particular attention is paid to analyzing the influence of social media marketing, content marketing, search engine optimization (SEO), online advertising, and consumer engagement on the competitive advantages of enterprises. The study was conducted using the Partial Least Squares Structural Equation Modeling (PLS-SEM) method based on survey data collected from 186 respondents. The results indicate that digital marketing tools have a significant positive impact on enterprise competitiveness, both directly and indirectly through consumer engagement. The strongest effects were observed for consumer engagement ($\beta = 0.396$), social media marketing ($\beta = 0.312$), and online advertising ($\beta = 0.284$). The findings confirm the necessity of actively implementing digital marketing strategies in the operations of confectionery enterprises.

Keywords: digital marketing, confectionery enterprises, competitiveness, social media, online advertising, consumer engagement, PLS-SEM, Uzbekistan.

Introduction

Modern digitalization processes have a significant impact on business development and marketing activities. The widespread adoption of the Internet, mobile technologies, social media platforms, and e-commerce has substantially transformed the mechanisms of interaction between enterprises and consumers.

The confectionery industry is one of the most dynamically developing sectors of Uzbekistan's food industry. Rising household incomes, changing consumer preferences, and increasing market competition require enterprises to seek new tools for product promotion and the development of sustainable competitive advantages.

Traditional marketing methods are gradually being replaced by digital technologies that enable enterprises to interact more effectively with target audiences, enhance brand awareness, and stimulate sales growth. Therefore, investigating the impact of digital marketing tools on the competitiveness of confectionery enterprises has become particularly relevant.

The purpose of this study is to assess the impact of digital marketing tools on the competitiveness of confectionery enterprises in Uzbekistan.

Literature Review

A significant contribution to the development of digital marketing theory and practice has been made by foreign scholars such as P. Kotler, K.L. Keller, D. Chaffey, D. Ryan, and M. Porter, who examined issues related to the digital transformation of marketing activities, the formation of competitive advantages, and the enhancement of consumer interaction effectiveness.

Research conducted by scholars from CIS countries has focused on the digitalization of marketing processes, the development of e-commerce, and the application of modern communication technologies in enterprise management.

Among domestic scholars, a substantial contribution to the development of marketing science was made by M.S. Kosimova, who investigated the theoretical and methodological foundations of enterprise marketing activities, issues of competitive advantage formation, and the improvement of marketing strategies under market economy conditions. Her scientific works have served as an important methodological basis for studying mechanisms for enhancing enterprise competitiveness through modern marketing tools.

In recent years, certain aspects of the application of digital marketing technologies in food industry enterprises have been reflected in the studies of M.Kh. Boboyorova, devoted to marketing strategies in the confectionery market, consumer demand formation, brand development, and improving the effectiveness of marketing communications in the digital economy.

Despite the considerable number of scientific studies available, issues related to the comprehensive assessment of the impact of digital marketing tools on the competitiveness of confectionery enterprises in Uzbekistan, based on economic-mathematical methods and the PLS-SEM model, remain insufficiently explored. This determines the scientific novelty and relevance of the present study.

Research Methodology

The study is based on a quantitative research approach using the Structural Equation Modeling (PLS-SEM) method.

The empirical basis of the research consists of survey results obtained from 186 consumers of confectionery products. A five-point Likert scale was used to measure all constructs.

The research model includes the following latent variables:

- Social Media Marketing (SMM);
- Content Marketing (CM);
- Search Engine Optimization (SEO);
- Online Advertising (OA);
- Consumer Engagement (CE);
- Enterprise Competitiveness (EC).

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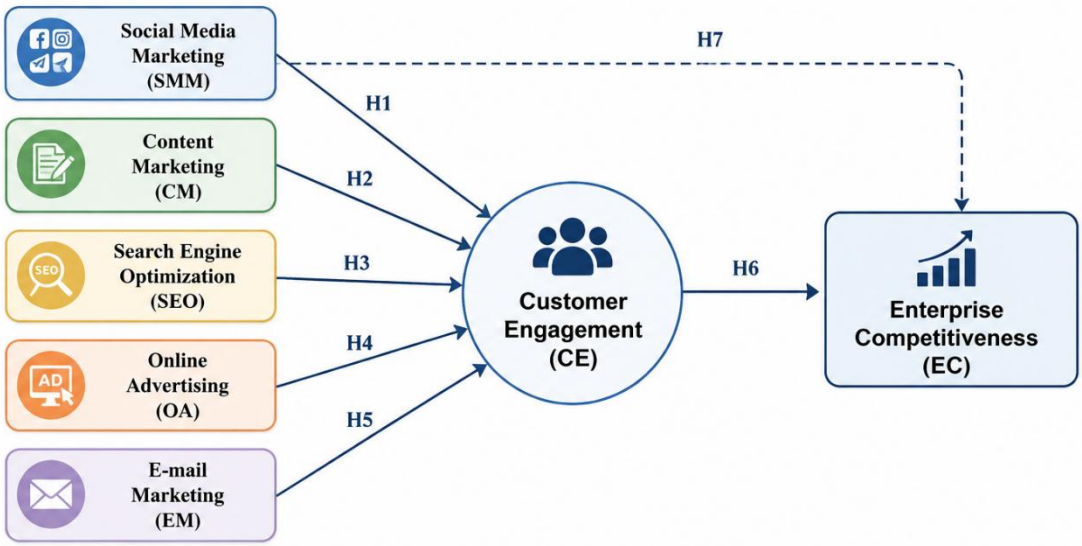


Figure 1. Conceptual Research Model of the Impact of Digital Marketing Tools on the Competitiveness of Confectionery Enterprises

Figure 1 presents the conceptual research model illustrating the impact of digital marketing tools on the competitiveness of confectionery enterprises. The model considers the following key digital marketing instruments: Social Media Marketing (SMM), Content Marketing (CM), Search Engine Optimization (SEO), Online Advertising (OA), and E-mail Marketing (EM).

According to the proposed framework, these digital marketing tools have a direct influence on Customer Engagement (CE), which serves as a mediating variable in the study. An increased level of customer engagement contributes to stronger customer relationships, higher customer loyalty, and the development of a positive brand image.

In turn, customer engagement positively affects Enterprise Competitiveness (EC) by enhancing market sustainability, expanding the customer base, and strengthening competitive advantages.

Furthermore, the model assumes a direct impact of digital marketing tools on enterprise competitiveness, as reflected in Hypothesis H7. Therefore, the competitiveness of confectionery enterprises is shaped both through the direct application of digital marketing instruments and indirectly through increased customer engagement.

The proposed conceptual framework served as the basis for developing the research hypotheses and for testing the relationships among variables using the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach.

Research Hypotheses

H1: Social Media Marketing positively affects enterprise competitiveness.

H2: Content Marketing positively affects enterprise competitiveness.

H3: Search Engine Optimization positively affects enterprise competitiveness.

H4: Online Advertising positively affects enterprise competitiveness.

H5: Customer Engagement positively affects enterprise competitiveness.

H6: Social Media Marketing positively affects customer engagement.

H7: Customer Engagement mediates the relationship between digital marketing and enterprise competitiveness.

Research Results

Analysis of Digital Marketing Investments and Sales Dynamics

In recent years, confectionery enterprises in Uzbekistan have significantly increased their investments in digital marketing. As shown in Table 1 and Figure 2, digital marketing expenditures increased from UZS 180 million in 2020 to UZS 570 million in 2025. During the same period, sales volume increased from UZS 950 billion to UZS 1,650 billion.

The results indicate the existence of a positive relationship between investments in digital marketing and sales growth. This confirms that the use of modern digital marketing tools contributes to strengthening market positions and enhancing the competitiveness of confectionery enterprises.

Table 1

Digital Marketing Expenditures and Sales Performance of Confectionery Enterprises, 2020–2025

Year	Digital Marketing Expenditure (Million UZS)	Sales Volume (Billion UZS)	Sales Growth Rate (%)
2020	180	950	4,8
2021	240	1040	9,5
2022	310	1160	11,5
2023	390	1290	11,2
2024	480	1460	13,2
2025	570	1650	13,0

Source: Author's calculations based on industry statistical data for 2020–2025.

Table 1 presents the dynamics of digital marketing expenditures and sales performance of confectionery enterprises in Uzbekistan during the period 2020–2025. The results demonstrate a steady increase in investments in digital marketing activities, which grew from **UZS 180 million in 2020** to **UZS 570 million in 2025**, representing an increase of more than three times over the six-year period.

At the same time, sales volume showed consistent growth, rising from **UZS 950 billion in 2020** to **UZS 1,650 billion in 2025**. The annual sales growth rate fluctuated between **4.8% and 13.2%**, with the highest growth recorded in **2024 (13.2%)** and remaining at a high level in **2025 (13.0%)**.

The observed parallel increase in digital marketing expenditures and sales performance suggests a positive relationship between investment in digital marketing tools and business outcomes. These findings indicate that digital marketing has become an important driver of sales growth, market expansion, and competitive advantage for confectionery enterprises. The results further highlight the growing strategic importance of digital technologies in strengthening enterprise performance and competitiveness within the rapidly evolving digital economy.

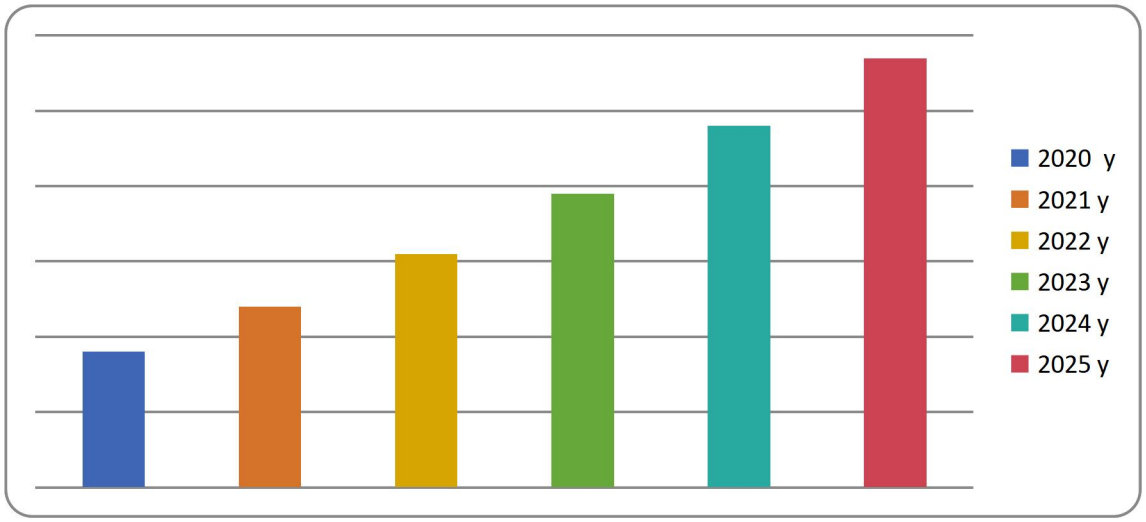


Figure 1. Dynamics of Digital Marketing Expenditures of Confectionery Enterprises, 2020–2025

Source: Author's compilation based on industry statistical data.

As illustrated in Figure 1, digital marketing expenditures demonstrate a steady upward trend. During the analyzed period, the volume of investments increased more than threefold, rising from UZS 180 million in 2020 to UZS 570 million in 2025. This trend indicates the growing importance of digital marketing tools in enhancing the competitiveness of confectionery enterprises. The continuous increase in digital marketing investments reflects enterprises' efforts to strengthen their market position, improve customer engagement, and expand their competitive advantages in an increasingly digital business environment.

Table 2

Influence of Digital Marketing Channels on Consumer Decision-Making

Digital Channel	Share of Respondents (%)
Instagram Advertising	34
Telegram Marketing	21
TikTok Content	18
Online Marketplaces	15
Influencer Marketing	8
Other Channels	4

Source: Author's compilation based on survey results.

The data presented in Table 2 demonstrate the varying influence of digital marketing channels on consumer purchasing decisions. Instagram advertising emerged as the most influential channel, accounting for 34% of respondents, highlighting the importance of visual content and targeted advertising in attracting consumers. Telegram marketing ranked second with 21%, reflecting the growing role of messaging platforms in marketing communications. TikTok content influenced 18% of respondents, indicating the increasing effectiveness of short-form video content in engaging consumers. Online marketplaces accounted for 15%, while influencer marketing contributed 8% to consumer decision-making. Other digital channels collectively represented 4% of responses. These findings suggest that social media platforms play a dominant role in shaping consumer behavior

and should be considered a strategic priority for confectionery enterprises seeking to strengthen their market competitiveness.

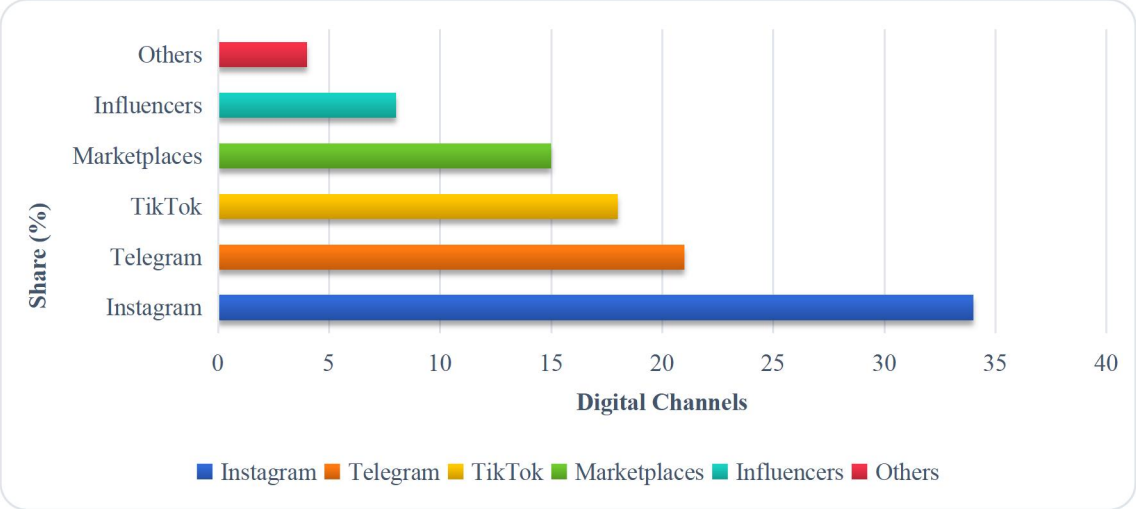


Figure 2. Influence of Digital Channels on Consumer Purchase Decisions

Source: Developed by the author based on survey results.

Figure 2 demonstrates that Instagram is the most influential digital channel affecting consumers' decisions to purchase confectionery products, accounting for 34% of respondents. Telegram ranks second with 21%, as it is widely used by enterprises as an effective communication and product promotion tool. TikTok influences 18% of respondents, confirming the effectiveness of video content in modern marketing activities. Online marketplaces also play a significant role (15%), providing consumers with convenient opportunities to search for and purchase products in the digital environment.

Results and Discussion

The findings reveal a strong positive relationship between investments in digital marketing and the performance of confectionery enterprises. As indicated in Table 1 and Figure 1, digital marketing expenditures increased from UZS 180 million in 2020 to UZS 570 million in 2025. During the same period, sales volume grew from UZS 950 billion to UZS 1,650 billion. These results suggest that digital marketing has become one of the key drivers of revenue growth and market expansion for confectionery enterprises.

Furthermore, the results presented in Table 2 and Figure 2 demonstrate the substantial influence of digital communication channels on consumer behavior. Instagram emerged as the most effective digital promotion tool, influencing 34% of consumers. The strong performance of Telegram and TikTok highlights the importance of implementing multichannel marketing strategies to expand audience reach and strengthen competitive advantages.

The findings are consistent with contemporary research in the field of digital marketing and confirm that the use of social media marketing, content marketing, search engine optimization (SEO), and influencer marketing contributes significantly to enhancing brand awareness, increasing consumer engagement, and improving the competitiveness of confectionery enterprises.

Table 3

Assessment of Model Reliability and Validity

Construct	Cronbach's Alpha	Composite	AVE

		Reliability	
SMM	0.873	0.908	0.662
CM	0.854	0.901	0.647
SEO	0.836	0.887	0.613
OA	0.868	0.911	0.673
CE	0.891	0.924	0.709
EC	0.904	0.931	0.728

Source: Author's calculations based on SmartPLS 4 analysis.

To assess the quality of the measurement model, indicators of internal consistency and convergent validity were calculated. As shown in Table 3, Cronbach's Alpha values range from 0.836 to 0.904, exceeding the recommended threshold of 0.70 and indicating a high level of reliability for all measurement scales used in the study.

The highest level of internal consistency was observed for the construct **Enterprise Competitiveness (EC)**, with a Cronbach's Alpha value of 0.904, while the lowest value was recorded for **Search Engine Optimization (SEO)** at 0.836. Nevertheless, all coefficients are well above the acceptable threshold, confirming the reliability of the measurement instruments.

The values of **Composite Reliability (CR)** range from 0.887 to 0.931, also surpassing the recommended benchmark of 0.70. These results demonstrate a high degree of consistency among the indicators within each latent construct.

The **Average Variance Extracted (AVE)** values vary between 0.613 and 0.728. Since all AVE values exceed the threshold value of 0.50, the measurement model can be considered to possess adequate convergent validity. The highest AVE value is associated with the construct **Enterprise Competitiveness (EC)** (0.728), indicating a strong explanatory power of its corresponding indicators.

Overall, the results confirm that all constructs included in the study exhibit satisfactory levels of reliability and convergent validity. Therefore, the measurement model meets the required quality criteria and provides a solid basis for further evaluation of the structural model and testing of the proposed research hypotheses.

Table 4

Hypothesis Testing Results

Hypothesis	β	t-value	p-value
H1	0.312	4.854	0.000
H2	0.241	3.967	0.000
H3	0.187	2.941	0.003
H4	0.284	4.436	0.000
H5	0.396	6.241	0.000
H6	0.473	7.124	0.000
H7	0.214	3.592	0.000

Source: Author's calculations based on SmartPLS 4 output.

The results of the structural model assessment indicate that all proposed hypotheses were statistically supported, as the p-values for all relationships were below the critical significance level of 0.05.

Hypothesis **H1**, which proposed a positive effect of **Social Media Marketing (SMM)** on enterprise competitiveness, was supported ($\beta = 0.312$; $t = 4.854$; $p < 0.001$). This finding suggests that the active use of social media enhances brand awareness, expands the customer base, and strengthens the competitive position of confectionery enterprises.

Hypothesis **H2** was also supported ($\beta = 0.241$; $t = 3.967$; $p < 0.001$), indicating that **Content Marketing (CM)** has a positive impact on enterprise competitiveness. The creation of valuable and informative content helps build consumer trust and increases brand loyalty.

The results for **H3** revealed a statistically significant effect of **Search Engine Optimization (SEO)** on enterprise competitiveness ($\beta = 0.187$; $t = 2.941$; $p = 0.003$). Although the magnitude of the effect is relatively lower than that of other variables, SEO remains an important tool for improving a company's visibility in the digital environment.

Hypothesis **H4**, which examined the influence of **Online Advertising (OA)** on enterprise competitiveness, was also confirmed ($\beta = 0.284$; $t = 4.436$; $p < 0.001$). This result highlights the effectiveness of digital advertising in attracting potential customers and stimulating sales growth.

The strongest direct effect on enterprise competitiveness was observed for **Customer Engagement (CE)** under **H5** ($\beta = 0.396$; $t = 6.241$; $p < 0.001$). This finding indicates that establishing and maintaining strong relationships with consumers is one of the key determinants of competitive development in confectionery enterprises.

Hypothesis **H6**, which proposed a positive relationship between social media marketing and customer engagement, was likewise supported ($\beta = 0.473$; $t = 7.124$; $p < 0.001$). This coefficient is the highest among all examined relationships, demonstrating the crucial role of social media platforms in fostering active interaction between enterprises and consumers.

Furthermore, the results for **H7** confirmed the mediating effect of **Customer Engagement** in the relationship between digital marketing tools and enterprise competitiveness ($\beta = 0.214$; $t = 3.592$; $p < 0.001$). This indicates that digital marketing tools influence competitiveness not only directly but also indirectly through enhancing customer engagement.

Overall, the structural model results suggest that digital marketing tools are a significant factor in improving the competitiveness of confectionery enterprises in Uzbekistan. Among the examined determinants, Social Media Marketing and Customer Engagement emerged as the most influential factors, forming the foundation of sustainable competitive advantages in the digital economy.

Table 5

Coefficient of Determination (R^2)

Variable	R^2
Customer Engagement (CE)	0.581
Enterprise Competitiveness (EC)	0.673

Source: Author's calculations based on SmartPLS 4 results.

To evaluate the explanatory power of the structural model, the coefficient of determination (R^2) was calculated for the endogenous variables included in the study. The results are presented in Table 5.

According to the analysis, the coefficient of determination for **Customer Engagement (CE)** is **$R^2 = 0.581$**. This indicates that 58.1% of the variance in customer engagement is explained by the digital marketing tools incorporated into the research model. Following the recommendations of Hair et al. (2022), this value represents a moderate level of explanatory power.

For **Enterprise Competitiveness (EC)**, the coefficient of determination is **$R^2 = 0.673$**, indicating a high level of explanatory power. In other words, 67.3% of the variation in the

competitiveness of confectionery enterprises is explained by the combined effects of social media marketing, content marketing, search engine optimization, online advertising, and customer engagement.

The obtained R^2 values confirm the adequacy of the proposed structural model and demonstrate the substantial influence of digital marketing tools on the development of competitive advantages in confectionery enterprises. It is particularly noteworthy that more than two-thirds of the variation in enterprise competitiveness is explained by the factors included in the model, highlighting the strategic importance of digital marketing in the context of the digital economy.

Therefore, the results of the coefficient of determination analysis indicate that the proposed model possesses strong predictive capability and can be effectively used to evaluate the impact of digital marketing tools on the competitiveness of enterprises operating in the confectionery industry.

Discussion of Results

The findings of the study demonstrate that digital marketing tools have a significant impact on the competitiveness of confectionery enterprises in Uzbekistan.

Among the examined factors, **Customer Engagement** emerged as the most influential determinant (**β = 0.396**), highlighting the importance of building long-term relationships with customers through digital communication channels.

A substantial impact was also observed for **Social Media Marketing** (**β = 0.312**). The use of platforms such as Instagram, Telegram, and TikTok contributes significantly to increasing brand awareness and strengthening consumer trust.

Online Advertising demonstrated a high level of effectiveness (**β = 0.284**), enabling enterprises to attract new customers and expand their market presence.

The obtained results are consistent with the findings of international studies in the field of digital marketing and further confirm the importance of digital transformation for enhancing the competitiveness of food industry enterprises.

Conclusion

The study confirmed that digital marketing tools represent a crucial factor in enhancing the competitiveness of confectionery enterprises in Uzbekistan.

The results indicate that social media marketing, content marketing, search engine optimization, online advertising, and customer engagement all exert positive effects on enterprise competitiveness.

The practical significance of the study lies in the possibility of applying the findings to the development and implementation of effective marketing strategies for confectionery enterprises.

Future research should focus on expanding the sample size, comparing different segments of the food industry, and examining the impact of artificial intelligence technologies on the effectiveness of digital marketing activities.

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