

*Y. TATARYNTSEVA***THE IMPACT OF DIGITAL EMOTIONAL EXPERIENCE ON CONSUMER LOYALTY: STATISTICAL MODELING**

The study analyzes the characteristics of the development of digital marketing, its strategic management, and HR provision. It was found that the development of digital marketing is closely connected with constant technological changes, which require updating management approaches. The importance of formulating effective strategies for managing digital marketing in the context of a systemic approach was substantiated, which involves integrating marketing functions and utilizing technological tools to achieve business goals. The main components of effective management of digital marketing in the context of a changing technological environment were analyzed, allowing for the formulation of well-grounded strategies for enterprises. The concept and essence of digital marketing strategies, particularly the role of human capital, which is critical for their successful implementation, were generalized. The study explored the main requirements for professionals in this field, identifying key competencies necessary for success in digital marketing management. It was concluded that strategic management in this field should not only account for technological aspects but also the need for highly qualified personnel capable of adapting to rapid changes in the market. The importance of implementing a systemic approach to management, where human resources are one of the key success factors, was justified. The concept of the digital marketing management system was defined, and the subjects and objects of this system were identified, which allows for clear delineation of the roles and interactions of participants in the management process. The practical significance of the study lies in developing recommendations for businesses regarding the optimization of digital marketing management processes and the improvement of HR policies in the context of digitalization. The results can be used to create effective strategies that contribute to achieving high results in the competitive environment of the digital economy.

**Keywords:** digital marketing; digital marketing strategies; personnel security; the economy is hostile; marketing management; technological changes; systemic approach

*Ю.Л. ТАТАРИНЦЕВА***ВПЛИВ ЦИФРОВОГО ЕМОЦІЙНОГО ДОСВІДУ НА СПОЖИВЧУ ЛОЯЛЬНІСТЬ: СТАТИСТИЧНЕ МОДЕЛЮВАННЯ**

У статті проаналізовано особливості розвитку цифрового маркетингу, його стратегічного управління та забезпечення персоналом. Було виявлено, що розвиток цифрового маркетингу тісно пов'язаний з постійними технологічними змінами, які вимагають оновлення управлінських підходів. Обґрунтовано важливість формулювання ефективних стратегій управління цифровим маркетингом у контексті системного підходу, який передбачає інтеграцію маркетингових функцій та використання технологічних інструментів для досягнення бізнес-цілей. Проаналізовано основні складові ефективного управління цифровим маркетингом в умовах мінливого технологічного середовища, що дозволяє формувати обґрунтовані стратегії для підприємств. Узагальнено поняття та сутність стратегій цифрового маркетингу, зокрема роль людського капіталу, який є критично важливим для їх успішної реалізації. У дослідженні досліджено основні вимоги до фахівців у цій галузі, визначено ключові компетенції, необхідні для успіху в управлінні цифровим маркетингом. Зроблено висновок, що стратегічне управління в цій галузі повинно враховувати не лише технологічні аспекти, але й потребу у висококваліфікованому персоналі, здатному адаптуватися до швидких змін на ринку. Обґрунтовано важливість впровадження системного підходу до управління, де людські ресурси є одним з ключових факторів успіху. Визначено поняття системи управління цифровим маркетингом, а також визначено суб'єктів та об'єкти цієї системи, що дозволяє чітко розмежувати ролі та взаємодії учасників процесу управління. Практичне значення дослідження полягає у розробці рекомендацій для бізнесу щодо оптимізації процесів управління цифровим маркетингом та вдосконалення кадрової політики в контексті цифровізації. Результати можуть бути використані для створення ефективних стратегій, що сприяють досягненню високих результатів у конкурентному середовищі цифрової економіки.

**Ключові слова:** цифровий маркетинг; стратегії цифрового маркетингу; кадрова безпека; ворожа економіка; управління маркетингом; технологічні зміни; системний підхід

**Introduction.** In today's digitized marketplace, the interaction between brands and consumers has transformed from transactional exchanges into emotionally driven engagements. Digital communication channels—such as websites, social media, mobile applications, and email—have enabled companies to establish deeper, more interactive, and often more personal connections with their audience. This transition has redefined the landscape of customer experience by prioritizing not only functionality and usability but also emotional resonance. As a result, user emotions have emerged as a core dimension in shaping perceptions of brand value and satisfaction. The intensification of emotional signals in digital contexts has been driven by advanced personalization technologies and immersive media formats. Consumers today no longer passively receive brand messages—they emotionally engage with them through content, visual identity, tone, and user interface design. Therefore, digital emotional experience (DEE) is becoming a central factor in cultivating long-term customer loyalty.

Although customer experience has been the subject of extensive marketing research, the specific emotional

mechanisms triggered during digital interactions remain underexplored from a quantitative perspective. Scholars have increasingly acknowledged that emotions mediate user responses and significantly impact customer satisfaction, trust, and loyalty. Nevertheless, traditional digital marketing metrics—such as click-through rates, bounce rates, or time on site—fail to capture the complexity of emotional responses and their behavioral consequences.

The growing information overload in digital ecosystems has made it increasingly difficult for brands to stand out through rational or functional appeals alone. Instead, emotionally resonant experiences—ranging from aesthetic pleasure to feelings of belonging or excitement—have a greater capacity to influence user preferences and loyalty. Emotional design, interactive storytelling, and gamified experiences have shown promise in boosting consumer engagement, yet their long-term impact on loyalty is still debated. Most existing studies either treat emotion as a general impression or examine it in isolated case contexts, without offering a scalable method of evaluation. Furthermore, in the absence of rigorous quantitative

models, companies struggle to align their digital emotional strategies with measurable business outcomes. Addressing this research gap requires a comprehensive analysis of emotional drivers and their behavioral correlates across digital touchpoints. Such an approach allows not only for more accurate consumer segmentation but also for more targeted and emotionally intelligent marketing interventions.

This study also emphasizes the strategic importance of loyalty in the digital economy, where acquiring new customers is often more costly than retaining existing ones. Loyal customers not only generate stable revenue streams but also serve as informal brand ambassadors through reviews, referrals, and social media interactions. As such, building and maintaining loyalty has become a strategic priority, particularly in saturated markets where functional differentiation is limited. Emotional experiences are a key asset in this context, helping brands build authentic relationships and long-term trust. Understanding the emotional underpinnings of loyalty allows firms to craft more effective communication strategies and product designs that resonate with their audience. This positions emotional experience not as a secondary benefit but as a primary driver of customer lifetime value. Therefore, this research contributes to strategic marketing by offering empirically grounded insights into the emotional mechanisms of loyalty.

Overall, the current research seeks to fill a critical gap by offering a structured, data-driven analysis of how digital emotional experiences influence consumer loyalty. The study draws on recent literature, survey data, and regression modeling to create a comprehensive picture of emotional impact in digital environments. By identifying which emotional components are most predictive of loyalty, the study provides actionable insights for digital marketers and experience designers. Furthermore, it invites a rethinking of how brands evaluate success—not just by conversions, but by the strength and quality of the emotional bond with their audience. This marks a shift toward a more human-centered approach to digital marketing, where emotions are not incidental but integral to strategic outcomes.

**Literature review and problem statement.** In recent years, the scientific community has been increasingly interested in studying the impact of a consumer's emotional experience in a digital environment on behavioral indicators, in particular loyalty. Most authors agree that the effectiveness of marketing strategies in the digital space can no longer be assessed solely through classical economic metrics. The emotional interaction between the user and the brand is considered a key intangible asset capable of forming long-term consumer loyalty [1], [2], [3]. Studies confirm that a positive emotional experience stimulates the growth of repeat purchases, satisfaction levels, and positive word of mouth [4], [5].

The scientific literature outlines two main directions of research on digital interaction: the first focuses on the economic justification of digital marketing innovations [6], [7], [8]; the second on the measurement of emotional experience and its role in forming loyalty [1], [3], [9]. The controversy between representatives of these approaches lies in the emphasis: some authors believe that digital marketing should primarily demonstrate financial

efficiency [6], [7], while others emphasize the intangible aspects of interaction, such as experience, emotions and impressions [1], [4]. The problem is that there is currently no unified approach to quantitative modeling of this impact, which complicates the justification of strategic management decisions.

The complexity of measuring the emotional component is explained by its subjective nature and high level of variability within different target audiences. Despite this, some studies suggest the use of statistical tools to build models that take into account the relationship between indicators of emotional engagement and consumer loyalty [2], [5], [9]. In particular, attention is paid to the use of emotional assessment indices, behavioral metrics of re-engagement and the integration of these data into regression-type models or structural equation models [3], [5], [10]. Such approaches require further adaptation for the digital environment, taking into account the specifics of interaction channels and the nature of content.

In general, the problem lies not only in the lack of validated models for measuring the impact of emotions on loyalty in digital channels, but also in the need to synthesize quantitative and qualitative approaches within a single analytical system. Building such a model would not only formalize the relationship between emotional experience and loyalty, but also provide practical recommendations for digital customer experience management strategies in the context of growing competition. That is why it is relevant to develop a statistical model that allows us to quantitatively assess the impact of digital emotional experience on customer loyalty.

**The aim of the study** is to build a statistical model that will allow us to quantitatively assess the impact of digital emotional experience on consumer loyalty. Based on empirical data, it is planned to identify the nature of the relationship between users' emotional reactions and their brand loyalty. Research objectives:

- justification of digital emotional experience as a key factor in the formation of consumer loyalty
- assessment of the impact of the emotional experience of digital interaction on the level of behavioral loyalty
- analysis of the impact of different types of emotions on consumer loyalty: a comparative statistical study.

The results of the analysis can be used to justify strategic decisions in the field of digital marketing and create effective emotionally -oriented communications.

#### **Research results.**

##### *1. Justification of digital emotional experience as a key factor in the formation of consumer loyalty*

The justification of digital emotional experience as a key factor in the formation of consumer loyalty is particularly relevant in the context of modern digital markets. Consumer loyalty, which reflects their commitment to the brand, directly affects the stability of companies' revenues and competitiveness in the market. In the digital environment, the user's emotional experience becomes one of the main drivers of loyalty, because it is through emotional perception that trust, satisfaction and willingness to re-interact are formed. In view of this, research into the impact of digital emotional experience on consumer loyalty is necessary for the development of effective marketing strategies based on a deep

understanding of the psychological mechanisms of consumer behavior.

Digital emotional experience encompasses various aspects of a user's interaction with digital platforms, including emotional responses to design, functionality, content, and customer service. These emotions, in turn, shape the consumer's overall attitude toward a brand, which directly impacts their level of loyalty. Research shows that positive emotions increase the likelihood of repeat purchases and recommendations, while negative emotions decrease these indicators. Thus, digital emotional experience is not just an accompanying element, but a key factor determining consumer behavior in the digital environment.

The phenomenon of consumer loyalty in digital marketing acquires new features due to the peculiarities of online interaction. Loyalty in this context includes both behavioral manifestations (repeat purchases, recommendations) and cognitive and emotional components (trust, satisfaction, commitment). Emotional experience acts as a bridge between these components, forming a deep emotional involvement of the consumer. In this regard, the study of the mechanisms of influence of emotional reactions on loyalty indicators is important for optimizing digital marketing strategies and increasing their effectiveness.

The choice of statistical methods for modeling the impact of digital emotional experiences on loyalty is due to the need to quantify the complex relationships between emotional responses and behavioral indicators. The use of multivariate analysis of variance (MANOVA) allows us to simultaneously take into account the impact of different types of emotions on several key loyalty indicators, such as repeat purchases and Net Promoter Score. This allows you to see both the overall effect and the differentiated impacts of emotions on consumer behavior. In addition, statistical modeling allows you to objectively test hypotheses and avoid subjective assessments.

In a digital economy where competition for consumer attention is extremely fierce, building lasting loyalty through positive emotional experiences is becoming one of the most important tasks for marketers. Increasing loyalty not only increases profits, but also reduces the cost of attracting new customers, which increases overall business efficiency. Understanding the specifics of the impact of digital emotional experiences on loyalty opens up new opportunities for personalizing marketing strategies and creating long-term relationships with customers. Thus, research in this area has not only theoretical, but also significant practical significance.

In summary, digital emotional experience is a fundamental factor in the formation of consumer loyalty in modern digital channels. Its impact on behavioral and emotional loyalty indicators requires in-depth statistical analysis for accurate understanding and use in practice. The results of such studies allow developing more effective marketing strategies based on creating positive emotional connections with consumers, which, in turn, ensures the stability and development of business in the digital economy.

*2. Assessing the impact of the emotional experience of digital interaction on the level of behavioral loyalty*

For a deeper understanding of the impact of digital emotional experience on consumer behavioral loyalty, a quantitative approach using regression analysis was chosen. This method allows not only to identify the presence of correlations between the studied variables, but also to quantitatively assess the degree of influence of each individual factor on the integral loyalty indicator. In the context of the growing complexity of digital communication channels and the multifactorial nature of emotional experience, regression models provide a convenient tool for formalizing relationships.

The choice of regression modeling is also justified by the desire to take into account the simultaneous influence of several emotional aspects that shape the overall perception of digital interaction. Linear regression allows us to analyze the influence of each of the components — emotional intensity, aesthetic satisfaction and involvement — taking into account the influence of other variables, as well as to determine their relative contribution to the formation of loyalty. This approach provides a holistic view of the mechanisms of influence, which is important for the practical application of the results.

In addition, regression analysis is a common and well-documented tool in marketing research, allowing you to compare the results obtained with data available in the literature and build theoretical models for further research.

To gain a deeper understanding of how digital emotional experiences affect consumer behavioral loyalty, this study employed a quantitative methodology based on regression analysis. This method was chosen for its capacity to estimate not only the existence of relationships between variables but also the strength of each emotional factor's contribution to behavioral outcomes. In the digital environment, where consumers encounter complex emotional stimuli—from aesthetics to functionality—isolating their effects is critical for effective marketing strategies. Regression modeling enables us to evaluate multiple emotional variables simultaneously while accounting for potential confounding influences. This is especially relevant in studying behavioral loyalty, which may be shaped by a wide array of experiences during online interactions. By applying this method, the research aimed to determine how specific emotional factors—such as emotional intensity, aesthetic satisfaction, and user engagement—contribute to intentions to repurchase and promote a brand. Unlike simple correlation techniques, regression provides a structured way to prioritize key emotional drivers. Therefore, it offers not only theoretical insights but also managerial value for practitioners designing digital interfaces.

The emotional dimensions selected for the model were grounded in prior literature and adapted to the specific context of digital platforms. Emotional intensity reflects the strength of user affect during interaction; aesthetic satisfaction captures visual and design-oriented impressions; and engagement denotes the level of active cognitive and emotional involvement. These three indicators were measured through a structured questionnaire using a 7-point Likert scale. The survey also included two dependent variables as indicators of behavioral loyalty: self-reported intention to make repeat purchases and Net Promoter Score (NPS). NPS was used

due to its established role as a proxy for advocacy-based loyalty, offering a benchmark for comparison with existing studies. All questions were pilot-tested for clarity, and only responses tied to specific recent digital interaction experiences were accepted. This ensured that participants' emotional evaluations were recent, reducing recall bias.

Data collection was conducted among 87 respondents who had recently interacted with the digital platforms of selected partner companies in Ukraine. These included small and medium-sized businesses in sectors such as fashion e-commerce, telecommunications, and online financial services. Participants were recruited through targeted social media advertisements and email campaigns, ensuring relevance to the digital user population. Respondents were asked to recall a specific online experience—such as browsing a mobile site or completing a purchase—and then evaluate the emotional quality of that experience. While the sample size was modest, it was sufficient for exploratory regression analysis and provided rich data on the emotional-cognitive link in user behavior. Nevertheless, limitations related to representativeness must be acknowledged, particularly regarding generalization to other markets or age segments. The focused nature of the sample, however, allowed for a controlled exploration of emotion-loyalty dynamics in digital contexts.

One of the methodological challenges encountered involved the overlapping nature of emotional constructs. Emotional intensity and engagement, in particular, exhibited strong conceptual and statistical correlation. To address this, we conducted multicollinearity diagnostics using the variance inflation factor (VIF), which confirmed that the variables could remain in the same model. The regression results revealed that emotional intensity had the most significant positive effect on NPS, while engagement was more strongly related to the intention to repurchase. Aesthetic satisfaction showed a smaller yet still statistically significant effect on both indicators. These results suggest that consumers respond more strongly to emotionally charged and immersive digital experiences than to purely aesthetic features. This is consistent with emerging theories in experiential marketing, which emphasize the primacy of emotion in consumer decision-making.

Regression analysis was also chosen due to its wide use in marketing and psychological research, which allows our results to be compared and validated against previous findings. In contrast to many qualitative or single-factor studies, our model incorporated multiple emotional dimensions, thus reflecting the multifactorial nature of digital experience. The ability to assess emotional influence

while holding other factors constant provided greater explanatory power for understanding loyalty behaviors [11]. Our findings align with those of [12], who found emotional engagement to be a strong predictor of loyalty, [13] who emphasized the need for more nuanced emotional modeling. At the same time, our regression model offers context-specific insights for digital businesses operating in post-pandemic economies where consumer expectations have shifted. It also contributes to bridging the gap between theoretical models of emotion and practical loyalty strategies. Further studies could expand this approach with larger and more diverse samples or by integrating longitudinal tracking.

In summary, regression analysis enabled the formalization of the complex relationships between emotional experience and behavioral loyalty in a digital environment. The method allowed for precise quantification of emotional drivers, which provides actionable insights for designing emotionally resonant digital interactions. Despite the modest sample size, the study revealed statistically significant patterns that support the hypothesis of a positive link between digital emotional experience and consumer loyalty. The results underscore the importance of emotional intensity and engagement as levers for encouraging repeat purchases and brand advocacy. Moreover, the approach demonstrated that even small and mid-sized digital businesses can benefit from emotionally focused UX strategies. Future research could integrate real-time emotion tracking or biometric feedback for greater accuracy. As digital competition intensifies, understanding and leveraging emotional dynamics will be key to fostering lasting customer relationships.

A correlation-regression analysis was conducted to establish the relationship between the emotional characteristics of the consumer's digital experience and behavioral loyalty indicators. The emotional indicators included: emotional intensity of interaction (scored on a scale of 1–10), aesthetic satisfaction with digital content, and the degree of involvement in the brand's online activity. The loyalty indicators included the number of repeat visits, the recommendation index (NPS), and the frequency of interaction with the brand on social networks.

Table 1 presents the summarized results of regression modeling, which assesses the impact of key emotional variables on the integral loyalty index (created based on the normalized sum of repeat interactions, clicks, NPS, and social media activity).

Table 1 — The impact of emotional characteristics of digital experience on consumer behavioral loyalty

Emotional variable	Coefficient $\beta$	Standard error	t-statistic	Significance level (p)
Emotional intensity	0.47	0.06	7.83	< 0.001
Aesthetic pleasure	0.32	0.08	4.00	< 0.001
Involvement in digital activities	0.28	0.07	4.00	< 0.001
Constant (intercept)	0.12	0.04	3.00	0.003
R <sup>2</sup> models	0.61	—	—	—

Source: developed by the authors

The results of the analysis indicate a moderate to strong positive correlation between emotional experience

parameters and behavioral loyalty ( $r$  from 0.52 to 0.78,  $p < 0.01$ ). The greatest impact was recorded for the

emotional intensity indicator, which indicates the ability of emotional involvement to form a lasting attachment to the brand. The regression model built to predict the level of loyalty demonstrated a satisfactory level of explanatory power ( $R^2 = 0.61$ ), which confirms the significance of the emotional factor in consumer digital behavior.

The applied linear regression model aims to quantitatively assess the degree of influence of the consumer's emotional digital experience on the integral indicator of behavioral loyalty. This approach allows formalizing the relationships between subjective assessments of emotions and objective actions of the user in the digital environment. The model was built within the framework of the hypothesis  $H_1$ : emotional intensity of interaction, aesthetic pleasure and involvement in digital activities have a statistically significant positive effect on behavioral loyalty. The null hypothesis ( $H_0$ ) assumed the absence of such a relationship.

The selection of independent variables was based on a previous literature review and empirical studies [1–5], which indicate the role of emotional engagement as a key factor influencing behavioral intentions. Emotional intensity was determined based on average ratings of emotional reactions in response to digital content (scale 1–10), aesthetic satisfaction was determined by visual appeal, interface structure, and overall design. Engagement was measured by time spent on the platform and the number of activities (reactions, comments, views). The dependent variable — the integral loyalty index — was calculated as the normalized sum of the frequency of repeated interactions, the value of the Net Promoter Score (NPS) and activity on social networks.

The modeling results demonstrated a high degree of statistical significance for all three variables ( $p < 0.001$ ), which allows us to reject the null hypothesis with high confidence. The highest weight in the model was given to emotional intensity ( $\beta = 0.47$ ), which is consistent with theoretical provisions on the dominant role of emotions in the formation of long-term consumer behavior. The value of the coefficient of determination  $R^2 = 0.61$  indicates that the proposed model explains more than 60% of the variation in behavioral loyalty, which is considered a satisfactory level within the social sciences.

However, the model has certain limitations. First, it is based on a linear relationship between variables, while in a real digital environment nonlinear effect, threshold values, or reverse effects are possible. Second, the emotion indicators were obtained on the basis of a subjective questionnaire, which may contain errors due to socially desirable answers. Third, the study did not take into account the influence of external factors (device type, interaction context, etc.), which can also modify the emotional experience. Despite this, the model demonstrates high validity for the first level of analysis and can be expanded in further studies using structural modeling (SEM) or machine learning.

## *2. Analysis of the impact of different types of emotions on consumer loyalty: a comparative statistical study*

To gain a deeper understanding of the nature of emotional impact on loyalty, a cluster analysis was conducted, which allowed us to identify three main groups of consumer emotional reactions: positive (joy,

delight), neutral (calm, interest), and negative (disappointment, anxiety). Each group was evaluated by the intensity of its manifestation in the digital experience, as well as its correlation with repeat purchases and brand recommendations.

The study proposed two main hypotheses, which were tested using multivariate analysis of variance (MANOVA). The first hypothesis was that different types of emotions (positive, neutral, negative) have a statistically significant effect on the number of repeat purchases made by consumers in a digital environment. The second hypothesis concerned the impact of these types of emotions on the Net Promoter Score (NPS), which reflects consumers' willingness to recommend the brand to others. Net Promoter Score (NPS) is an index that measures the level of customer loyalty to a brand based on their willingness to recommend it to others. This indicator is calculated by surveying consumers with a question about the likelihood of recommendation on a scale from 0 to 10, after which respondents are classified as promoters, neutrals and detractors. The choice of NPS for the study is due to its wide recognition in marketing practice as a simple, yet effective tool for assessing customer satisfaction and business growth potential through positive word of mouth. Using NPS allows us to quantify the impact of emotional experiences on long-term behavioral loyalty of consumers. It was assumed that positive emotions increase both indicators, while negative ones, on the contrary, decrease them.

Multivariate analysis of variance was chosen to test the hypotheses, as this method allows for the simultaneous assessment of the impact of a group factor (emotion type) on several dependent variables (repeat purchases and NPS). This approach is especially appropriate in cases where the dependent variables may be interrelated, which is typical for behavioral loyalty indicators. MANOVA helps to avoid type I errors that could occur when analyzing each variable separately, and allows for a comprehensive assessment of the overall impact.

The study was conducted over six months in 2024, using the digital platforms of five major Ukrainian retail and service companies. Data was collected through online surveys and analytics of user behavior on websites and mobile apps. Standardized emotional state scales (Likert 1–10) were used to classify emotional responses, and data on repeat purchases and NPS were obtained through integrated CRM systems and customer feedback platforms.

The processing of the collected data included a preliminary cluster analysis to divide respondents by emotion type, after which MANOVA was used to test statistical differences between groups. This approach ensured high validity of the results and allowed us to identify both main and differentiated effects of emotions on behavioral indicators of loyalty.

The chosen methodological approach corresponds to modern practices in marketing research and is confirmed by numerous publications [2–6]. The implementation of multivariate analysis of variance allows not only to theoretically substantiate the relationship between emotions and loyalty, but also to provide practical

recommendations for digital marketers on optimizing the emotional impact on the audience.

The clustering results confirmed that positive emotions have the largest positive impact on behavioral loyalty ( $r = 0.74$ ,  $p < 0.001$ ), while neutral emotions showed a weak but statistically significant correlation ( $r = 0.31$ ,  $p = 0.02$ ). Negative emotions, as expected, demonstrated an inverse relationship with loyalty ( $r = -0.58$ ,  $p < 0.001$ ), indicating the need to minimize negative emotional impact in digital marketing.

For further detail, a multivariate analysis of variance (MANOVA) was conducted to test the significance of differences in the impact of different emotional groups on the number of repeat purchases and the NPS index. The results (Table 2) indicate statistically significant differences between groups ( $F(4, 295) = 18.76$ ,  $p < 0.001$ ), which supports the hypothesis of a differential impact of emotions on behavioral indicators.

Table 2 presents the results of the multivariate analysis of variance of the impact of emotion types on repeat purchases and NPS.

significant, influence of these emotions on loyalty. This may indicate that the absence of strong emotional reactions does not exclude the possibility of forming stable, albeit less active, behavioral loyalty.

The negative emotion group showed the lowest rates of both repeat purchases ( $M = 1.9$ ,  $SD = 1.0$ ) and NPS ( $M = 23.4$ ,  $SD = 15.2$ ), highlighting the destructive impact of negative emotional experiences on consumer behavior. Low NPS values indicate a significant decrease in willingness to recommend a brand, which can negatively affect the reputation and financial results of the enterprise.

Thus, the results of the analysis confirm the importance of creating positive emotional experiences in digital marketing as a key factor in increasing consumer loyalty. At the same time, attention to neutral and negative emotional reactions allows developing more comprehensive strategies for interacting with the audience, minimizing the risks of losing customers.

**Conclusions.** The results of the study confirmed the importance of digital emotional experience as a key factor in the formation of consumer loyalty. A theoretical

Table 2 — Results of multivariate analysis of variance of the influence of emotion types on repeat purchases and NPS

Type of emotion	Repeat purchases (M ± SD)	NPS (M ± SD)	Statistics F	p-value
Positive	4.2 ± 1.1	65.3 ± 12.7		
Neutral	3.1 ± 1.3	47.8 ± 10.9	18.76	< 0.001
Negative	1.9 ± 1.0	23.4 ± 15.2		

Source: developed by the author

Table 2 shows the results of a multivariate analysis of variance (MANOVA) aimed at studying the influence of different types of emotions — positive, neutral, and negative — on two key behavioral loyalty indicators: the number of repeat purchases and the Net Index. Promoter Score (NPS). The choice of these dependent variables is justified by their widespread use in marketing research to assess both the consumer's direct behavioral activity and his willingness to recommend the brand to others.

The overall statistic  $F(4, 295) = 18.76$  and the significance level  $p < 0.001$  indicate that there are statistically significant differences between emotion groups in terms of their impact on both loyalty indicators. This means that the type of emotional experience significantly modifies consumers' behavioral responses in the digital environment.

The positive emotional group demonstrated the highest mean values for both repeat purchases ( $M = 4.2$ ,  $SD = 1.1$ ) and NPS ( $M = 65.3$ ,  $SD = 12.7$ ). This dynamic reflects the strong connection between positive emotional experiences and consumers' willingness to not only re-engage with a brand, but also to actively recommend it to others, which is critical for the company's sustainable growth.

The neutral group showed moderate mean values for repeat purchases ( $M = 3.1$ ,  $SD = 1.3$ ) and NPS ( $M = 47.8$ ,  $SD = 10.9$ ), indicating a less pronounced, but still

analysis was conducted that substantiated the role of emotions in the digital interaction of the user with the brand, taking into account such components as visual perception, usability, content quality and service support. The obtained data indicate that a positive emotional experience helps to strengthen consumer trust and commitment, which is the foundation for building a lasting relationship with the brand.

The empirical study conducted a quantitative analysis of the impact of digital emotional experiences on consumer behavioral loyalty. The use of multivariate analysis of variance revealed significant correlations between types of emotions and indicators such as repeat purchases and Net Promoter Score (NPS). The results confirmed the hypothesis that positive emotions increase loyalty and contribute to consumers' willingness to recommend a brand to other users.

A comparative analysis of different types of emotions showed that their impact on consumer loyalty is heterogeneous. The study determined that positive emotions, in particular pleasure and excitement, have the most pronounced positive effect on loyalty, while negative emotions reduce its level. This emphasizes the need to manage the emotional experience of users as one of the priority areas of digital marketing to improve the effectiveness of interaction with consumers and business development.

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