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The impact of experiential marketing on product trust in e-commerce: The mediating role of user experience in Saudi Arabia

Abstract

Research background and purpose: The exponential growth of e-commerce, each globally and inside Saudi Arabia, highlights the importance of fostering consumer trust. This study pursuits to observe the connection among experiential advertising and customer self-belief in the e-trade area, with person experience serving as a mediating factor.

Design/methodology/approach: A quantitative research method was hired, using a survey tool to collect facts from 415 purchasers in the Northern Borders location of Saudi Arabia. The questionnaire was designed to evaluate client perceptions of experiential advertising and their self-belief degrees in e-trade. Statistical analysis become performed the usage of SPSS and AMOS to discover the relationships among variables.

Findings: The findings suggest an instantaneous correlation among experiential advertising and product confidence, in addition to a fantastic affiliation between experiential marketing and user revel in. Additionally, the results show that experiential advertising and marketing substantially complements purchaser confidence in e-trade services, with person enjoy gambling a critical mediating function.

Value added and limitations: This research offers valuable insights for e-commerce entities to develop effective strategies that enhance user engagement and foster strong consumer relationships, contributing to success in a competitive online marketplace. However, the study's cross-sectional design limits the ability to establish causal relationships among the examined variables.

Keywords: *experiential marketing, sensory engagement, personalization, user experience, product confidence*

JEL

Classification: M31, L81, D83

Received: 2025-01-23; **Revised:** 2025-04-15; **Accepted:** 2025-04-28

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1. Introduction

The internet has become integral to nearly all aspects of daily life (Kurniawan et al., 2022), and the method of electronic shopping is continually evolving. Despite its numerous advantages and advancements (Murdiana & Hajaoui, 2020), challenges persist within the realm of e-commerce. The increasing number of e-commerce sites has intensified competition, making it increasingly difficult for consumers to navigate the vast array of options available (Gu et al., 2021). Unlike traditional shopping, where buyers can physically feel, taste (Bruce et al., 2023), smell, examine, or try products, online shopping limits these sensory experiences (He & Harris, 2020). The rise of e-commerce has significantly reduced opportunities for personal sales interactions between sellers and buyers (Al Tamer, 2021), as it often lacks the social and personalized interaction that traditional marketing offers (Ma & Gu, 2024).

Globally, the growth of e-commerce has accelerated, with virtual stores becoming more accessible (Chen et al., 2021). Shopping has transformed into a digital experience, with the promotion of products being an essential part of marketing strategies (Jain et al., 2021). E-commerce relies heavily on advancements in technology, computers (Pacsi & Szabó, 2018), and the internet, making online shopping one of the most successful sectors in recent years (Xu et al., 2024). This development has created a compelling environment that encourages acceptance of online shopping among individuals and society (Franzolini, 2020/2021). Perhaps most importantly, there is an urgent need for approaches that emphasize speed and ease of access, providing consumers with products that meet their needs, preferences, and aspirations (Prestini & Sebastiani, 2021).

This study contributes to existing literature by providing empirical evidence on how experiential marketing strategies can bridge the gap between consumer expectations and the limitations of online shopping, thereby fostering trust and loyalty in e-commerce platforms.

Background of the Study

Sellers must actively engage in sales promotion to attract interest and foster loyalty (Chi & Qu, 2008). In e-commerce, the presentation of products plays a vital role in distinguishing brands and appealing to consumers. However, many customers abandon purchases due to various factors (Wu & Ma, 2022). The demand for convenience has led to the emergence of a new marketing concept known as experiential marketing (Cuthbertson et al., 2023).

E-commerce has proven to be a significant success in modern retail (Taher, 2021). It is no longer solely about offering attractive prices (Porter, 2008) or promotional deals; it aims to build intimacy and strengthen relationships between suppliers and customers (Seppenwoolde, 2019). Given the plethora of products that differ only in aesthetics,

pricing, performance, and quality, customers require trust and satisfaction, necessitating the creation of valuable and unique experiences (Ramanathan et al., 2020). Trust is a crucial factor in business transactions (Akoglu & Özbek, 2022). For e-commerce companies, maintaining customer trust is essential for encouraging repeat purchases and sustaining demand (Høgevold et al., 2020).

Research Gap and Rationale

The rise of the internet and e-commerce has transformed customer interactions. With many platforms available, competition is intense, as thousands vie for consumer attention (Yang & Lin, 2022). E-commerce mechanisms that engage users are crucial for attracting customers and fostering brand loyalty. Trust in online products goes beyond the platform; it is influenced by users' feelings during their interactions. Aligning the shopping experience with positive emotions is vital for gaining consumer approval, shaped by trust and loyalty toward the site and its offerings.

E-commerce sites strive to enhance their brand image by linking product quality to platform strength, ultimately improving user experience and trust. Consumers' willingness to shop online largely hinges on their trust in the platform, especially in a globalized market. Differentiation among online stores often relies on varied marketing strategies, including promotions and discounts, to attract buyers. The role of advertising and virtual shelves allows companies to expand beyond traditional storefronts (Raji et al., 2024). However, constant advertising can lead to browsing without purchases (Agusiady et al., 2024). E-commerce sites that focus on improving the shopping experience, streamlining purchases, and creating a comfortable online environment are more likely to succeed.

However, while prior studies have investigated the effect of trust and user experience on e-commerce, there is no study that has investigated how particular experiential marketing strategies such as interactivity, sensory engagement, personalization, and gamification can help in building consumer trust (Kaushik & Gokhale, 2022). The reviewed literature focuses mainly on conventional marketing strategies or the general user experience, thus not capturing how the experiential marketing sub variables affect consumer trust in online platforms specifically. This study fills this gap by examining the direct and indirect effects of experiential marketing sub variables on consumer trust, with emphasis on the mediating role of user experience. This way, it offers a more precise view of how experiential marketing can be used to improve trust and loyalty in e-commerce platforms and, therefore, provides useful insights for both academics and practitioners.

Research Objectives

This study aims to examine the impact of experiential marketing sub variables – interactivity, sensory engagement, personalization, and gamification – on consumer

trust in products within the context of e-marketing. Additionally, the research will examine the mediating role of user experience in the relationship between experiential marketing and consumer trust. Using a field study approach, the researchers will explore these dynamics within the Northern Borders region of Saudi Arabia, and provide context-specific insights. The study also seeks to provide practical recommendations for e-commerce companies on how to effectively use experiential marketing strategies to enhance consumer trust and improve the overall user experience. The significance of this subject matter is multifaceted. For e-commerce agencies, understanding how experiential marketing impacts consumer acceptance is crucial to formulating effective techniques to draw and keep customers within the digital market. By identifying the mediating role of consumer experience, organizations can design and optimize on-line platforms to supply attractive and personalized studies that decorate trust. From an academic attitude, this look at contributes to the existing literature by way of addressing experiential marketing sub variables and their direct and indirect consequences on client acceptance – an area that has received inadequate interest in preceding research.

2. Literature review

Numerous studies have explored the broader effects of experiential marketing on consumer behavior and decision-making. Innovations such as virtual product demonstrations and augmented reality integrations have been shown to influence online purchasing patterns and overall satisfaction levels (Kumar et al., 2023). However, the field remains ripe for deeper exploration, particularly regarding how these experiential elements translate into tangible confidence in products. This question continues to intrigue both academics and industry practitioners. Additionally, research highlights the crucial role of user experience in shaping consumer perceptions and behaviors in the digital realm (Huang & Benyoucef, 2013).

Despite these advancements, there is a notable gap in understanding how specific experiential marketing strategies – sensory engagement, personalization, and gamification – contribute to building consumer trust in e-commerce platforms. Existing literature has primarily focused on general user experience or traditional marketing strategies (Chen et al., 2021), leaving a gap in understanding the nuanced effects of experiential marketing sub variables on consumer trust.

In this context, this study aims to investigate the intricate interactions between these variables within the unique framework of the Northern Border region of the Kingdom of Saudi Arabia. This distinctive social and cultural environment may yield insights into consumer behavior that challenge broader generalizations from more homogeneous research settings (Levy & Guterman, 2021).

2.1. Experiential Marketing and Its Relationship to Trust in E-Commerce Products

Experiential marketing—encompassing sensory engagement, personalization, and gamification—is crucial for enhancing consumer experiences and brand interactions. It creates immersive experiences that engage consumers across sensory, affective, cognitive, physical, and social dimensions (Schmitt, 2000), strengthening consumer attitudes and behaviors toward brands (Pine & Gilmore, 2011). The integration of interactivity and gamification has become a significant trend, offering innovative ways to immerse customers and boost engagement (Hamari et al., 2014). Research shows that gamification positively influences brand evaluation, evokes emotional responses, and enhances consumer participation in branded activities (Deterding et al., 2011).

Understanding the relationship between these elements is vital for companies seeking to create memorable brand experiences. In e-commerce, experiential marketing significantly impacts product trust. For example, models like Secure Trust Monitoring KNN (STRUMKNN) enhance customer trust by analyzing feedback to identify reliable sellers (Zhang et al., 2014). Studies on in-app shopping highlight the importance of visual and textual cues in product presentation for building trust and increasing purchase intentions across diverse cultures (Kim & Lennon, 2013).

Additionally, addressing biases in online marketplace experiments through designs like budget-split can enhance research validity, impacting product trust and decision-making in the tech industry (Liu et al., 2021). By leveraging experiential marketing strategies and overcoming methodological challenges, e-commerce platforms can effectively enhance product trust and consumer confidence.

While these studies highlight the importance of experiential marketing, there is limited research examining how these strategies specifically influence consumer trust in e-commerce products. This study addresses this gap by exploring the direct effects of sensory engagement, personalization, and gamification on product trust.

From the above, the following hypothesis emerges clearly:

H1: The use of experiential marketing positively affects the level of product trust.

Three sub-hypotheses fall under it:

H1₁: The use of sensory engagement positively affects the level of confidence in the product trust .

H1₂: The use of personalization positively affects the level of product trust.

H1₃: Using gamification positively affects the level of product trust.

2.2. Experiential marketing is instrumental in shaping user experience

Research demonstrates that experiential marketing strategies—particularly those emphasizing interactive experiences—positively influence audience perceptions, notably in educational institutions (Huang & Benyoucef, 2013). In the context of live-streaming marketing, user experience significantly impacts customer trust and purchase intentions, underscoring the importance of creating engaging experiences for consumers (Zhang et al., 2014).

Destination Marketing Organizations (DMOs) utilize experiential marketing on their websites to enhance pre-travel online experiences, highlighting the role of holistic user experiences in inspiring travel decisions (Baker & Crompton, 2000). Furthermore, design choices in user interface (UI) and user experience (UX) are critical in fostering relationships between internet users and brands through experiential marketing. These design elements illustrate how sensory and emotional factors create meaningful connections with consumers (Kumar & Reinartz, 2016).

Overall, the evolving landscape of experiential marketing underscores its pivotal role in shaping user experiences and influencing consumer behaviors across diverse sectors.

Despite these findings, there is a lack of research examining how experiential marketing strategies specifically shape user experience in e-commerce platforms. This study addresses this gap by investigating the effects of sensory engagement, personalization, and gamification on user experience.

From the above, the following hypothesis becomes clear to us.

H2: The use of experiential marketing positively affects User Experience.

Three sub-hypotheses fall under it:

H2₁: The use of sensory engagement positively affects User Experience.

H2₂: The use of personalization positively effects of the User Experience.

H2₃: Using gamification positively affects User Experience.

2.3. User Experience and Its Relationship to Product Trust in E-Commerce Stores:

User experience (UX) is vital in establishing product trust within e-commerce stores. Research indicates that a positive user experience significantly enhances trust in online platforms (Endarwati et al,2024). E-commerce platforms that prioritize improving UX through effective user interface (UI) design and process analysis tend to attract more customers and foster a loyal user base (Sundar et al., 2015). Additionally, trust is recognized as a crucial predictor of purchase intention among online consumers,

highlighting the necessity of implementing trust-building strategies in e-commerce settings (Gefen, 2002).

Models such as Secure Trust Monitoring KNN (STRUMKNN) can further bolster trust by delivering reliable seller information based on feedback and ratings. This approach not only improves the overall user experience but also enhances consumer confidence in e-commerce applications (Zhang et al., 2014; Chen et al., 2021).

The mediating role of user experience in the relationship between experiential marketing and product trust remains underexplored. This study addresses this gap by examining how user experience mediates the effects of experiential marketing on product trust

H3: User experience mediates the relationship between experiential marketing and product trust within the study sample.

3. Methods

3.1. Research Design

This study uses a quantitative research design to examine the relationships between experiential marketing techniques, product trust, and user experience. The study uses a survey-based field study approach.

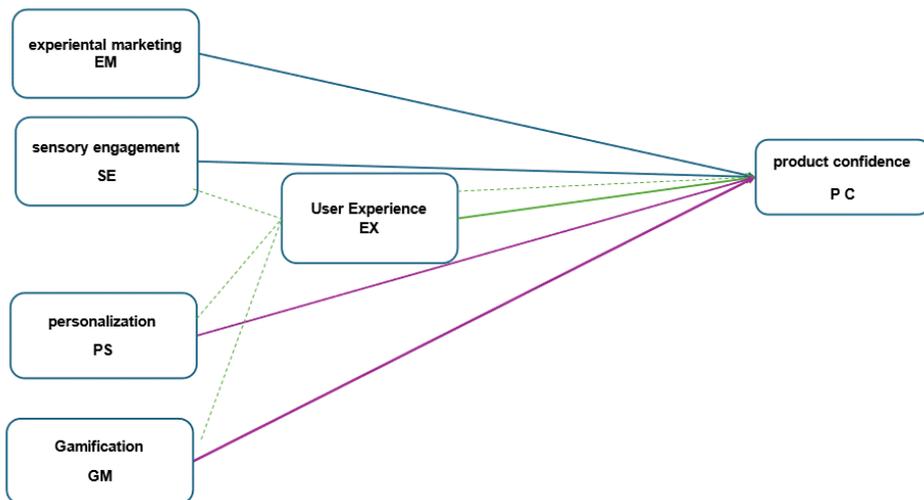


Figure 1. Study structure design

Source: own study

3.2. Data Collection Methods

A structured questionnaire was developed to collect data on key variables, including experiential marketing techniques, product trust, and user experience. The questionnaire used established measures from literature, with modifications as needed for the context.

The survey was conducted on a sample of 415 consumers in the Northern Borders region of Saudi Arabia through online and offline channels.

3.3. Sampling Technique

A combination of convenience and purposive sampling was used to select survey participants. The target population consists of consumers in the Northern Borders region of Saudi Arabia who have experience purchasing in e-commerce stores. The target sample size for this research was set at 415 individuals, achieved through a power analysis.

Statistical power analysis is a statistical tool that determines the minimum sample size required to obtain statistically significant results (Cohen, 1988). In this case, the following equation was used to calculate the minimum sample size:

$$n = (Z^2 * p * (1-p)) / e^2$$

Where:

n = minimum sample size

Z = standard value corresponding to the desired confidence level (in this case 95%, i.e. Z = 1.96)

p = percentage of the property's availability in the population (0.5 was assumed as a conservative value)

e = allowable error (assumed at 5%)

By applying this equation, the minimum required sample size of 415 individuals was obtained. This size will ensure sufficient statistical power for the quantitative analysis planned in this study.

3.4. Data Analysis Techniques

Descriptive statistics were used to summarize the characteristics of the sample.

Correlation and multiple regression analysis will be used to examine the relationships between experiential marketing, product trust, and user experience

using SPSS. structural equation modeling (SEM) was conducted using AMOS software to investigate the mediating role of user experience in the relationship between experiential marketing and product trust. The quantitative analysis provided empirical insights into the relationships between key variables and the role of user experience as a mediator. The findings from this study will contribute to understanding the impact of experiential marketing on product trust in the context of e-commerce (Hair et al., 2019).

3.5. Measurement of Variables

To ensure the validity and reliability of the study, each variable was measured using well-established items from previous literature. Below is a detailed description of the items used to measure the key variables, Also this scale uses a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree).

Experiential marketing was measured using three sub variables: sensory engagement, personalization, and gamification. The items for each sub variable were adapted from previous studies.

Sensory Engagement: Measured using 5 items adapted from Schmitt (2000) and Pine & Gilmore (2011). Personalization: Measured using 4 items adapted from Chandra & Balqiah. (2023). Gamification: Measured using 5 items adapted from Hamari et al. (2014).

User experience was measured using items that capture the ease of use, interactivity, and satisfaction with the platform. The items were adapted from Huang & Benyoucef (2013) and Sundar et al. (2015).

Product trust was measured using items that assess the reliability, credibility, and confidence in the products offered on the platform. The items were adapted from Gefen (2002) and Zhang et al. (2014).

4. Results

4.1. Reliability Analysis

Table 1 shows that all variables had Cronbach's alpha values greater than 0.8, indicating good to excellent internal consistency reliability for the measurement scales used in this study (Tavakol & Dennick, 2011). This strong reliability suggests that the results are well suited for empirical research.) (Bonett & Wright, 2015).

Table 1. Reliability Questionnaire Test

variable	N	Cronbach's Alpha value
EM	13	0.943
SE	4	0.887
PS	4	0.954
GM	5	0.875
EX	5	0.914
P C	7	0.954

Source: own elaboration based on SPSS Outputs

4.2. Test of Normality

Table 2 shows the Kolmogorov-Smirnov check facts for every variable. For all variables (EM, SE, PS, GM, EX, and PC), the p-values are extra than the 0.05 significance degree, indicating that those variables do now not violate the assumption of normality (Ghasemi & Zahediasl, 2012; Razali & Wah, 2011). Normality of facts is an important assumption for plenty statistical analyses, inclusive of regression and structural equation modeling (Field, 2024; George & Mallery, 2010). The results of the Kolmogorov-Smirnov test indicate that all variables in the study (EM, SE, PS, GM, EX, and PC) can be considered to be normally distributed, indicating that parametric statistical techniques can be used to analyze the data (Lonati et al., 2024).

Table 2. Kolmogorov-Smirnova

	Kolmogorov-Smirnova		
	Statistic	df	Sig.
EM	,096	415	,067
SE	,098	415	,163
PS	,114	415	,281
GM	,116	415	,071
EX	,098	415	,184
P C	,057	415	,058

Source: own elaboration based on SPSS Outputs

4.3. Descriptive Statistics

The mean values for all variables are remarkably high, ranging from 4.237 (user experience - EX) to 4.864 (sensory interaction - SE), indicating that respondents generally rated these variables positively. The standard deviation (SD) values are relatively low, ranging from 0.562 (SE) to 0.825 (EX), indicating that data points are closely clustered around their respective means, with moderate variance. A high standard deviation indicates greater variance (Field, 2024). Low standard deviation values can enhance the reliability of conclusions drawn from the data, as they reflect consistent measurements across samples (George & Mallery, 2010). Low standard deviations and high mean values indicate that measurement scales have good internal consistency and reliability, which are critical to establishing construct validity.

Table 3. Descriptive Statistics

variable	Min	Max	Mean	St. Dev
EM	3,3	5	4.345	0,065
SE	2.8	5	4.864	0,187
PS	3.5	5	4.346	0,373
GM	2.7	5	4,293	0,235
EX	2.6	5	4,237	0,693
P C	2.9	5	4.359	0,262
N	415			

Source: own elaboration based on SPSS Outputs

4.4. Testing the first hypothesis

H1: The use of experiential marketing positively affects the level of product Trust.

Three sub-hypotheses fall under it:

H1₁: The use of sensory engagement positively affects the level of confidence in the product trust.

H1₂: The use of personalization positively affects the level of product trust.

H1₃: Using gamification positively affects the level of product trust.

Table 4. Correlations between variables

		SE	PS	GM	EM	PC
SE	Pearson Correlation	1	,622**	,482**	,803**	,570**
	Sig. (1-tailed)		,000	,000	,000	,000
PS	Pearson Correlation	,622**	1	,740**	,914**	,455**
	Sig. (1-tailed)	,000		,000	,000	,000
GM	Pearson Correlation	,482**	,740**	1	,868**	,321**
	Sig. (1-tailed)	,000	,000		,000	,000
EM	Pearson Correlation	,803**	,914**	,868**	1	,515**
	Sig. (1-tailed)	,000	,000	,000		,000

** Correlation is significant at the 0.01 level (1-tailed)

Source: own elaboration based on SPSS Outputs

Sensory engagement: $r = 0.570$ (large), personalization: $r = 0.455$ (medium), play: $r = 0.321$ (medium), experiential marketing: $r = 0.515$ (medium to large)

Sensory engagement shows a strong positive association with product trust, while personalization and experiential marketing show moderate to strong associations. In contrast, play has a moderate association with product trust.

Research suggests that sensory engagement, especially among children, directly influences parents' purchasing decisions, which are mediated by parental attitudes (Hagtveit & Brassell, 2017). A multisensory marketing approach that integrates different senses enhances customer satisfaction and perceived product quality (Krishna, 2012). Personalized experiences foster emotional connections, leading to increased consumer satisfaction and loyalty (Payne & Gilmore, 2009). Tailored sensory marketing strategies can significantly enhance the overall consumer experience (Spence & Piqueras-Fizman, 2014). The interplay between sensory engagement, personalization, and experiential marketing is vital to shaping consumer trust and engagement (Brakus et al., 2009). Sensory marketing fosters emotional connections, while personalized experiences deepen consumer relationships, leading to brand loyalty (Alexiadou, 2013).

Table 5. **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,515a	,265	,264	,95072

a. Predictors: (Constant), EM

Source: own elaboration based on SPSS Outputs

Table 5 shows that the analysis of the relationship between experiential marketing (EM) and product trust (PC) reveals a significant positive correlation, as indicated by a multiple correlation coefficient (R) of 0.515. This suggests that changes in EM are associated with changes in PC (Field, 2024). The R-squared value of 0.265 indicates that EM explains approximately 26.5% of the variance in PC, suggesting a reasonable model fit (Hair et al., 2019), although other factors likely influence PC as well (Cohen, 1988). The adjusted R-squared value of 0.264 confirms that the addition of EM does not significantly alter the model's fit. The standard error of 0.95072 indicates a moderate level of prediction accuracy.

Table 6. **ANOVA_a**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	305,430	3	101,810	125,577	,000b
	Residual	585,352	722	,811		
	Total	890,782	725			

a. Dependent Variable: PC

b. Predictors: (Constant), SE, PS, GM

Source: own elaboration based on SPSS Outputs

The ANOVA regression results indicate that the model predicting product trust, based on sensory engagement, personalization, and gamification, is statistically significant. The F statistic of 125.577 reflects the ratio of the mean square of the regression to the mean square of the residual, underscoring the model's overall significance. With a p-value of 0.000, well below the 0.05 threshold, we conclude that at least one independent variable significantly correlates with product trust. This suggests that the combined effects of sensory engagement, personalization, and gamification explain a considerable portion of the variance in product trust. Therefore, these three variables are crucial for understanding and predicting

consumer trust, highlighting the need for sensory and personalized marketing strategies to enhance consumer confidence (Helmefalk, 2023).

Table 7. **Coefficients_a**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,328	,201		1,629	,004
	SE	,691	,057	,470	12,184	,000
	PS	,289	,070	,206	4,098	,000
	GM	-,077	,060	-,058	-1,287	,198

Source: own elaboration based on SPSS Outputs

Table 7 presents the regression coefficients for the unbiased variables predicting product trust. Sensory engagement is the most powerful predictor, with an unstandardized coefficient of 0.691 and a standardized coefficient (beta) of 0.470, indicating that a one-unit boom in sensory engagement is associated with a 0.691 boom in product consider. Personalization additionally has a high-quality effect, displaying an unstandardized coefficient of zero.289 and a standardized coefficient of zero.206, in evaluation, gamification has an unstandardized coefficient of -0.077 and a standardized coefficient of -zero.058, indicating a slight lower in product believe with gamification, despite the fact that this relationship is not statistically widespread (p-cost = zero.198). Overall, the results display that sensory engagement and personalization are positively and considerably related to product trust (Mignon, 2024), even as gamification does not notably impact consider tiers. Thus, improving sensory engagement and personalization efforts may want to increase customer consider, highlighting their significance in marketing techniques (Ranjan & Read, 2016).

4.5. Testing the second hypothesis

H2: The use of experiential marketing positively affects the User Experience.

Three sub-hypotheses fall under it:

H2₁: The use of sensory engagement positively effects of the User Experience.

H2₂: The use of personalization positively effects of the User Experience.

H2₃: Using gamification positively effects of the User Experience.

Table 8. Correlations between variables

		SE	PS	GM	EM	ex
SE	Pearson Correlation	1	,622**	,482**	,803**	,721**
	Sig. (2-tailed)		,000	,000	,000	,000
PS	Pearson Correlation	,622**	1	,740**	,914**	,697**
	Sig. (2-tailed)	,000		,000	,000	,000
GM	Pearson Correlation	,482**	,740**	1	,868**	,507**
	Sig. (2-tailed)	,000	,000		,000	,000
EM	Pearson Correlation	,803**	,914**	,868**	1	,740**
	Sig. (2-tailed)	,000	,000	,000		,000
ex	Pearson Correlation	,721**	,697**	,507**	,740**	1
	Sig. (2-tailed)	,000	,000	,000	,000	

** Correlation is significant at the 0.01 level (2-tailed)

Source: own elaboration based on SPSS Outputs

Table 8 displays the Pearson correlation coefficient values, indicating the strength of the linear relationship between user experience (EX) and each of the predictor variables: sensory engagement, personalization, gamification, and experiential marketing. The values range from -1 to 1, with higher values indicating a stronger relationship. For instance, a correlation value of 0.7 between user experience and sensory engagement signifies a significant positive relationship between these two variables (Cohen, 1988).

The relationship between the predictor variables and user experience is underscored by the significance of p-values in statistical analysis. A low p-value indicates a strong association, suggesting that these predictor variables significantly impact user experience (Field, 2024).

Table 9. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,740a	,547	,546	,68792

a. Predictors: (Constant), EM

Source: own elaboration based on SPSS Outputs

Table 9 summarizes the model, showing a strong relationship between sensory engagement, personalization, gamification, and user experience. The R-value of 0.740 indicates a strong positive association between the predictors and the outcome variable, highlighting the model’s effectiveness (Cohen, 1988). The R-squared value of 0.547 means that approximately 54.7% of the variance in product trust can be explained by the model, which is significant in many research contexts (Field, 2024).

The adjusted R-squared coefficient of 0.546 confirms the model’s robustness after accounting for the number of predictors, indicating its effectiveness despite complexity. The standard error of the estimate, at 0.68792, reflects a moderate level of prediction error (Hair et al., 2019). Overall, these metrics suggest that the model effectively captures the dynamics between the independent variables and user experience, emphasizing the importance of sensory engagement and personalization in enhancing product trust.

Table 10. ANOVA_a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	470,659	3	156,886	396,435	,000b
	Residual	285,726	722	,396		
	Total	756,385	725			

a. Dependent Variable: Ex

b. Predictors: (Constant), se, ps, gm

Source: own elaboration based on SPSS Outputs

Table 10 offers the outcomes of the multiple regression evaluation with “User Experience” as the dependent variable and “Sensory Engagement,” “Personalization,” and “Gamification” as unbiased variables. The regression cost of 470.659 indicates the amount of variance in User Experience explained by way of those unbiased variables, highlighting their collective effect (Field, 2024). The F statistic of 396.435 serves as the F ratio, trying out the general importance of the regression version. A excessive F fee suggests that the model is statistically substantial. Additionally, the related p-fee of zero.000 is properly underneath the conventional significance threshold of 0.05, confirming that the overall regression model is statistically enormous (Cohen, 1988). This shows that the aggregate of sensory engagement, personalization, and gamification notably affects User Experience, reinforcing the importance of those factors in improving patron interactions.

Table 11. **Coefficients**_a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,950	,141		6,751	,000
	SE	,637	,040	,471	16,097	,000
	PS	,565	,049	,437	11,473	,000
	GM	,053	,042	,043	1,267	,001

a. Dependent Variable: ex

Source: own elaboration based on SPSS Outputs

Table 11 presents the results of a regression analysis with “User Experience” as the dependent variable and “sensory engagement,” “personalization,” and “gamification” as independent variables. The standardized coefficients (Beta) indicate the change in User Experience associated with a one-unit change in each independent variable, holding others constant:

Sensory Engagement: 0.471; Personalization: 0.437; Gamification: 0.043

These coefficients measure the relative importance of each variable, with higher Beta values indicating stronger effects on User Experience.

All independent variables show statistically significant t-values ($p < 0.05$), except for gamification ($p = 0.001$). This indicates that sensory engagement and personalization have a statistically significant positive impact on User Experience, while the effect of gamification is not significant.

4.6. Testing the third hypothesis:

H3: The mediating effect of user experience -between experiential marketing and product trust

at sample of study.

Table 12. **Probability level**

			Estimate	S.E.	C.R.	P	Label
ex	<---	SE	,637	,031	20,619	***	par_1
ex	<---	PS	,565	,030	19,128	***	par_2
ex	<---	GM	-,053	,028	-1,888	,059	par_3
PC	<---	SE	,691	,044	15,606	***	par_4
PC	<---	GM	-,077	,040	-1,918	,055	par_5
PC	<---	PS	,289	,042	6,833	***	par_6

Source: own elaboration based on AMOS Outputs

Table 12 presents the results indicating that Sensory Engagement (SE) and Personalization (PS) have statistically significant positive effects on User Experience (EX), as shown by their respective p-values (***). In contrast, Gamification (GM) has a statistically insignificant negative effect on User Experience, with a p-value of 0.059 (Field, 2024).

Both Sensory Engagement and Personalization also demonstrate significant positive effects on Product Trust (PC), while Gamification again shows an insignificant negative effect on Product Trust. These findings suggest that Sensory Engagement and Personalization are the key factors influencing User Experience, whereas Gamification does not significantly affect it (Enderwati et al., 2024). The analysis also hints at relationships between independent variables and Product Trust.

Table 13. **Result(model fit indices for different structural equation models)**

Model	RMR	GFI	AGFI	PGFI
Default model	,000	,993	,950	,998
Saturated model	,000	1,000	,980	,994
Independence model	,001	,976	,948	,916
Zero model	,001	,994	,957	,961

Source: own elaboration based on AMOS Outputs

Table 13 shows the model fit indices for structural equation modeling analysis. The indices given in the table indicate that the hypothesized model has an excellent fit, with

the RMR, GFI, and AGFI values indicating a very good representation of the data (Arel-Bundock, 2022). The PGFI value also indicates that the model achieves a good balance between fit and

Table 14. Model Fit Statistics for Structural Equation Modeling

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	11	1305,264	4	,354	2,316
Saturated model	15	,000	0		
Independence model	5	2315,481	10	,759	1,548

Source: own elaboration based on AMOS Outputs

Table 14 presents model fit statistics that indicate varying degrees of model performance in structural equation modeling. The default model shows a CMIN of 1305.264 with 11 degrees of freedom, yielding a CMIN/DF ratio of 2.316, indicating an acceptable fit by conventional thresholds. In contrast, the independence model, with a CMIN of 2315.481 and 5 degrees of freedom, yields a CMIN/DF ratio of 1.548, indicating a poor fit. The saturated model, although the CMIN/DF ratio is not provided, is considered to be a good fit. While the default model shows reasonable fit, the results from the independence model highlight the need for careful model selection and evaluation in structural equation modeling.

Table 15. Hypothesis Test Results

Hypothesis	Description	Result	β Value	p-Value	Interpretation
H1	Experiential Marketing \rightarrow PC	Accepted	0.470	0.000	Experiential marketing has a significant positive effect on product trust (PC).
H11	SE \rightarrow PC	Accepted	0.470	0.000	Sensory engagement (SE) significantly enhances product trust (PC).
H12	PS \rightarrow PC	Accepted	0.206	0.000	Personalization (PS) significantly enhances product trust (PC).
H13	GM \rightarrow PC	Rejected	-0.058	0.198	Gamification (GM) does not significantly affect product trust (PC).

H2	Experiential Marketing → ex	Accepted	0.471	0.000	Experiential marketing has a significant positive effect on user experience (ex).
H21	SE → ex	Accepted	0.471	0.000	Sensory engagement (SE) significantly enhances user experience (ex).
H22	PS → ex	Accepted	0.437	0.000	Personalization (PS) significantly enhances user experience (ex).
H23	GM → ex	Accepted	0.043	0.001	Gamification (GM) significantly enhances user experience (ex).
H3 (SE)	ex Mediates SE → PC	Accepted	0.637	0.000	User experience (ex) mediates the relationship between SE and PC.
H3 (PS)	ex Mediates PS → PC	Accepted	0.565	0.000	User experience (ex) mediates the relationship between PS and PC.
H3 (GM)	ex Mediates GM → PC	Rejected	-0.053	0.059	User experience (ex) does not mediate the relationship between GM and PC.

Source: Adapted by the researchers

5. Discussion and conclusion

The results of the variance regression analysis reveal that the model incorporating Sensory Engagement, Personalization, and Gamification significantly predicts Product Trust, as indicated by a high F-statistic and low p-value. This finding aligns with previous research, which emphasizes the importance of experiential marketing in building consumer trust (Schmitt, 2000; Pine & Gilmore, 2011). Below, we discuss the implications of these findings in detail.

The importance of Sensory Engagement effect on product trust is also understood which leads to the fact that e-commerce platforms should be designed to attract the consumer's senses. This result is in line with the work of Chandra et al. (2022) who established that sensory interactions increase consumers' confidence in online platforms. For instance, Chandra et al. (2022) say, "The visual and the interactive features of the e-commerce platforms have a direct impact on the trust of the consumer and their purchase intention". In the same way, the benefits of Personalization on trust are evidence of the worth of personalized interactions in increasing users' happiness and commitment (Huang & Benyoucef, 2013). According to Huang and Benyoucef (2013), "It is essential to understand the consumer preferences in order to develop long term trust in the digital environment through personalization." However, the role

of Sensory Engagement in building trust remains underrepresented, as opposed to gamified content, Sensory Engagement may have negative effects if the gamification is overdone (Hamari et al., 2014). Hamari et al. (2014) explain that “Over-Sensory Engagement may be overwhelming for the users and may lead to reduced engagement and trust”.

Our findings have supported the fact that User Experience acts as a mediator between experiential marketing and product trust. This is consistent with the study by Sundar et al. (2015) who established that positive user experiences increase trust in online marketplaces. According to the research done by Sundar et al. (2015), “A smooth and pleasant user experience is one of the major factors that build trust in e-commerce sites”. However, the study also highlights potential drawbacks, such as the privacy concerns which are associated with personalized marketing, which can have a negative effect on the user experience and therefore trust. These findings indicate that while the use of experiential marketing strategies is helpful in building trust, they have to be used properly so as not to have the opposite effect. For example, Zhang et al. (2014) point out that “Privacy issues can reverse the effectiveness of personalization, thus decreasing trust and satisfaction of the users”.

5.1. Key Findings and Contributions

The study highlights the significant impact of experimental marketing on increasing product trust among e-commerce consumers. Engaging and interactive marketing strategies are shown to lead to higher consumer confidence in products. Furthermore, user experience serves as a critical mediator in the relationship between experimental marketing and product trust; positive user experiences enhance the effectiveness of marketing efforts, further boosting trust levels.

Consumers in the Northern Border Region of Saudi Arabia responded positively to experimental marketing techniques, indicating cultural acceptance and effectiveness within this demographic. The research found that interactive marketing strategies not only foster higher levels of consumer engagement but also contribute to increased trust in e-commerce products.

5.2. Contributions

Theoretical Advancement: This study contributes to marketing theory by emphasizing the importance of experimental marketing and user experience as key drivers of product trust in e-commerce.

Practical Implications: E-commerce organizations can enhance product trust by investing in experimental marketing strategies and improving user experiences, particularly for businesses targeting the Northern Border Region of Saudi Arabia.

Cultural Insights: The findings provide treasured insights into consumer conduct within a specific cultural context, offering marketers critical records to tailor their techniques to local choices..

5.3. Limitations and Future Research

As a result of the current study, several limitations were observed. The first one is that the sample was confined to the Northern Borders region of Saudi Arabia, which may restrict the generalizability of the findings. This study should be replicated in other cultural contexts to confirm the results. Second, the study examined three sub variables of experiential marketing; however, future research could expand on other variables, such as perceived value and brand association, to build on product trust dynamics.

For instance, Hu et al. (2023) explained that future studies should investigate the role of the perceived value in the mediation process of experiential marketing and trust.

Framework for Future Research: This study establishes a framework for examining the interaction between marketing strategies and user experience in building product trust, paving the way for further research across different regions and industries.

Acknowledgement

The authors extend their appreciation to the Deanship of Scientific Research at Northern Border University, Arar, KSA for funding this research work “ through the project number “NBU-FFR-2025-141-01

Authors' contribution

S.A.E.: article conception, research methods applied, data collection; **J.A.A.:** article conception, research methods applied, conducting the research, analysis and interpretation of results; **N.A.H.:** theoretical content of the article, research methods applied, data collection, analysis and interpretation of results; **I.H.E.:** research methods applied, data collection, analysis and interpretation of results; **R.T.A.:** conducting the research, analysis and interpretation of results, draft manuscript preparation.

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