From Fun to Fear: Unpacking the Emotional Triggers of Cross-Border E-Commerce Repurchases

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ABSTRACT : This study explores how emotional triggers—specifically the interplay between perceived fun and fear—affect repurchase intentions on cross-border e-commerce platforms through the Unified Theory of Acceptance and Use of Technology (UTAUT) model. Additional variables, including online shopping fun and online shopping risk, are incorporated to provide a comprehensive analysis.

Data were collected through an online questionnaire survey, resulting in 270 valid responses. The study employed SmartPLS 4.0 to analyze the data, utilizing descriptive statistics, reliability analysis, validity tests, and structural equation modeling (SEM) to evaluate the research hypotheses.

Effort expectancy, facilitating conditions, and online shopping fun positively influence repurchase intention and behavior. However, performance expectancy and social influence do not significantly impact repurchase intention. Online shopping risk has a negative effect on repurchase intention, indicating that consumers' concerns about security and privacy reduce their likelihood of repurchasing.

Cross-border e-commerce platforms should prioritize improving usability and providing support features to enhance customer experiences. Incorporating engaging features and mitigating perceived risks can significantly encourage repeat purchases. These insights are critical for platform developers and marketers aiming to foster customer loyalty.

This study extends the UTAUT framework by incorporating shopping fun and risk as contextual variables, providing novel insights into consumer behavior on cross-border e-commerce platforms. The findings offer practical recommendations for enhancing user experience and addressing specific challenges in the e-commerce domain.

1. INTRODUCTION

Cross-border e-commerce has witnessed significant growth fueled by technological advancements and the emotional dynamics of consumer experiences. These experiences oscillate between the thrill and enjoyment of discovering unique products ("fun") and the apprehension of potential risks ("fear"), such as fraud, poor quality, or data breaches. Understanding how these opposing emotional triggers influence repurchase intentions is critical for platforms striving to maintain a competitive edge.

The Unified Theory of Acceptance and Use of Technology (UTAUT), developed by Venkatesh et al. (2003), offers a comprehensive framework for understanding technology adoption and usage behaviors. UTAUT emphasizes constructs such as performance expectancy, effort expectancy, social influence, and facilitating conditions, which have been widely validated in various contexts, including e-commerce. However, the unique dynamics of CBEC—characterized by cultural differences, logistical complexities, and perceived risks—necessitate the integration of additional factors such as hedonic motivation and perceived risk (Lowry et al., 2012; Masoud, 2013).

This study explores the factors influencing repurchase intention on CBEC platforms by applying the UTAUT framework and extending it to include hedonic motivation ("fun") and perceived risk ("fear"). This research investigates how these factors collectively shape consumer behavior and decision-making through a quantitative approach. By addressing this gap, the study provides practical insights for CBEC platform operators to enhance user retention and competitive advantage.

2. LITERATURE REVIEW

2.1 Cross-Border E-Commerce and Consumer Behavior

Cross-border e-commerce (CBEC) has emerged as a transformative force in global retail markets, allowing consumers to access products from international sellers easily. The unique characteristics of CBEC—such as diverse product offerings, competitive pricing, and the convenience of online shopping—have been widely recognized as key factors driving its adoption (Cui et al., 2020). However, the challenges of logistical complexities, cultural differences, and perceived risks distinguish CBEC from domestic e-commerce environments (Xiao et al., 2019). These challenges necessitate a deeper understanding of factors influencing consumer behavior, particularly repurchase intention.

2.2 Unified Theory of Acceptance and Use of Technology (UTAUT)

The UTAUT model, developed by Venkatesh et al. (2003), is a comprehensive framework that integrates eight major technology acceptance models. It identifies four key constructs: performance expectancy, effort expectancy, social influence, and facilitating conditions, directly influencing behavioral intention and usage behavior. Studies applying UTAUT in e-commerce contexts have demonstrated its efficacy in explaining user behavior, particularly in online shopping environments (Celik, 2016; Lima et al., 2018). However, its application in CBEC is still evolving, with researchers emphasizing the need to incorporate additional factors specific to cross-border contexts, such as hedonic motivation and perceived risk (Lowry et al., 2012; Masoud, 2013).

2.3 Hedonic Motivation and Online Shopping Fun

Hedonic motivation, often called the "fun" aspect of online shopping, is pivotal in shaping consumer engagement and satisfaction. In CBEC, platforms that evoke enjoyment through gamification, interactive features, or personalized recommendations enhance consumer experiences and build emotional connections. These hedonic values counterbalance the perceived risks of cross-border transactions and foster a sense of trust and loyalty among users (Picot-Coupey et al., 2021; Shang et al., 2020).

2.4 Perceived Risk in Cross-Border E-Commerce

Perceived risk, representing the "fear" dimension of cross-border e-commerce, encompasses financial fraud, privacy breaches, and product quality inconsistencies. These fears often serve as significant barriers to consumer engagement, particularly in cross-border contexts where logistical and regulatory complexities amplify uncertainty (Masoud, 2013; Rouibah et al., 2016). Addressing these fears through transparent operations and trust-building mechanisms is essential for fostering consumer confidence and promoting repurchase behavior.

2.5 Research Gap and Contribution

While existing literature has extensively explored the UTAUT framework in domestic e-commerce contexts, its application in CBEC remains under-researched. Furthermore, integrating hedonic motivation and perceived risk into the UTAUT framework provides a novel perspective for understanding consumer behavior in CBEC. By addressing these gaps, this study aims to contribute to the theoretical and practical understanding of factors influencing repurchase intention on CBEC platforms.

3. METHODOLOGY

3.1 Research Design

This study adopts a quantitative research approach using an online survey to explore the factors influencing repurchase intentions on cross-border e-commerce platforms. The research model is based on the Unified Theory of Acceptance and Use of Technology (UTAUT), extended with two additional constructs: online shopping fun and online shopping risk.

The survey measured the relationships between performance expectancy, effort expectancy, social influence, facilitating conditions, online shopping fun, risk, repurchase intention, and repurchase behavior. The relationships between these variables were evaluated using Partial Least Squares Structural Equation Modeling (PLS-SEM).

3.2 Research Framework and Hypotheses

The research framework is illustrated in Figure 1, highlighting the core constructs and hypothesized relationships. The study proposes the following hypotheses:

H1: Performance expectancy has a positive effect on repurchase intention.

H2: Effort expectancy has a positive effect on repurchase intention.

H3: Social influence has a positive effect on repurchase intention.

H4: Facilitating conditions have a positive effect on repurchase behavior.

H5: Online shopping fun has a positive effect on repurchase intention.

H6: Online shopping risk has a negative effect on repurchase intention.

H7: Repurchase intention has a positive effect on repurchase behavior.

3.3 Survey Instrument

The survey instrument was developed based on validated scales from prior research. A 7-point Likert scale was used for all constructs, ranging from 1 ("Strongly Disagree") to 7 ("Strongly Agree"). The constructs and their respective measurement items are detailed below:

1. Performance Expectancy (PE): Adapted from Venkatesh et al. (2003).

2. Effort Expectancy (EE): Adapted from Venkatesh et al. (2003).

3. Social Influence (SI): Adapted from Venkatesh et al. (2003).

4. Facilitating Conditions (FC): Adapted from Venkatesh et al. (2003).

5. Online Shopping Fun (OSF): Adapted from Lowry et al. (2012).

6. Online Shopping Risk (OSR): Adapted from Masoud (2013).

7. Repurchase Intention (RI): Adapted from Venkatesh et al. (2003).

8. Repurchase Behavior (RB): Adapted from Venkatesh et al. (2003).

3.4 Data Collection

This study collected 270 valid responses through an online questionnaire distributed across social media platforms, including Facebook and Line groups. The sample comprises 77% female and 23% male respondents. The age distribution shows that the majority (39.3%) of respondents are between 21 and 30 years old, followed by 20.4% aged 41 to 50. Regarding online shopping experience, 33.7% of respondents reported using cross-border e-commerce platforms for over two years and 27.8% for one to two years. When asked about recent usage frequency, 34.4% used such platforms once per month, while 27.0% used them twice to four times. The most frequently viewed product categories include clothing and accessories (50.7%) and electronics (24.7%), with mobile devices being the dominant shopping medium (50.7%).

3.5 Data Analysis Tools

Data were analyzed using SmartPLS 4.0 to evaluate both the measurement and structural models (Hair et al., 2016; Chin, 1998). Convergent validity was evaluated through AVE > 0.5 (Fornell & Larcker, 1981). The following statistical techniques were applied:

1. Descriptive Statistics: To summarize the demographic characteristics of the respondents.

2. Reliability Analysis: Cronbach's alpha and Composite Reliability (CR) were used to assess internal consistency, with a threshold of 0.7 for acceptable reliability.

3. Validity Analysis: Convergent validity was evaluated through Average Variance Extracted (AVE > 0.5), and discriminant validity was assessed using Fornell-Larcker criteria and HTMT ratios.

4. Structural Model Testing: Hypotheses were tested using path coefficients, t-values, and p-values. R^2 and f^2 were used to evaluate the model's explanatory power and effect sizes.

3.6 Ethical Considerations

The study adhered to ethical research practices, ensuring participant anonymity and data confidentiality. Informed consent was obtained before survey participation, and respondents could withdraw without penalty.

4. RESULTS

This section presents the study's findings, including sample characteristics, descriptive statistics, and hypothesis testing results based on structural equation modeling (SEM).

4.1 Sample Characteristics

The study analyzed 270 valid responses. Most participants were female (77%) and aged between 21 and 30 (39.3%). Most had over two years of cross-border e-commerce shopping experience (33.7%), primarily using mobile devices (50.7%) as their shopping tool. Respondents generally shopped once per month (34.4%), with clothing items being the most frequently purchased category.

4.2 Descriptive Statistics

Descriptive statistics for the constructs are summarized in Table 1. The mean scores ranged from 3.8 (Online Shopping Risk) to 4.6 (Online Shopping Enjoyment), indicating generally favorable perceptions of cross-border e-commerce platforms. Standard deviations were relatively low, reflecting consistency in responses.

Table 1. Descriptive Statistics of Constructs

Construct	Mean (M)	Standard Deviation (SD)
Performance Expectancy	4.2	0.65
Effort Expectancy	4.3	0.72
Social Influence	3.9	0.68
Facilitating Conditions	4.1	0.66
Online Shopping Enjoyment	4.6	0.58
Online Shopping Risk	3.8	0.75
Repurchase Intention	4.4	0.63
Repurchase Behavior	4.3	0.69

4.3 Hypothesis Testing

Structural equation modeling (SEM) was conducted to examine the relationships between constructs. Path coefficients, t-values, and p-values are summarized in Table 2. The results indicate that most hypotheses were supported, except for the relationships between Performance Expectancy and Repurchase Intention (H1) and Social Influence and Repurchase Intention (H3).

Table 2. Hypothesis Testing Results

Hypothesis	Path Coefficient (β)	t-value	p-value	Result
H1: Performance Expectancy → Repurchase Intention	0.052	0.610	0.542	Not Supported
H2: Effort Expectancy → Repurchase Intention	0.166	3.040	0.002	Supported
H3: Social Influence → Repurchase Intention	-0.042	0.863	0.388	Not Supported
H4: Facilitating Conditions → Repurchase Behavior	0.245	4.323	<0.001	Supported
H5: Online Shopping Enjoyment → Repurchase Intention	0.407	6.182	<0.001	Supported
H6: Online Shopping Risk → Repurchase Intention	-0.265	4.842	<0.001	Supported
H7: Repurchase Intention → Repurchase Behavior	0.378	6.535	<0.001	Supported

4.4 Summary of Findings

The key findings from the analysis are as follows:

1. Effort Expectancy significantly influences purchase intention ($\beta = 0.166$, $p < 0.01$), indicating that the ease of using a platform drives repeat purchase intentions.

2. Facilitating Conditions positively impact Repurchase Behavior ($\beta = 0.245$, $p < 0.001$), suggesting that technical support and resources enhance consumer loyalty.

3. Online Shopping Enjoyment strongly affects Repurchase Intention ($\beta = 0.407$, $p < 0.001$), emphasizing the importance of creating engaging shopping experiences.

4. Online Shopping Risk negatively affects Repurchase Intention ($\beta = -0.265$, $p < 0.001$), highlighting that addressing security and privacy concerns is critical.

5. Repurchase Intention significantly drives Repurchase Behavior (β = 0.378, p < 0.001), confirming its role in fostering consumer loyalty.

These findings provide critical insights for cross-border e-commerce platforms, emphasizing the importance of usability, enjoyment, and security in influencing repurchase decisions.

5. DISCUSSION

This section interprets the findings in light of the research objectives and theoretical framework, discussing their implications and contributions to cross-border e-commerce. The results are also compared with prior studies to highlight similarities and discrepancies.

5.1 Key Findings and Interpretation

Performance Expectancy and Repurchase Intention

The study found that Performance Expectancy did not significantly impact Repurchase Intention (H1 not supported). This contrasts with prior research (e.g., Lima et al., 2018; Celik, 2016), which indicated a positive relationship. One possible explanation is that consumers view cross-border e-commerce platforms as essential functional tools and may take their usefulness for granted. For instance, the perceived utility of these platforms may no longer serve as a differentiator, as most platforms already offer similar features, such as efficient payment systems and product variety.

Effort Expectancy and Repurchase Intention

Effort Expectancy significantly positively affected Repurchase Intention (H2 supported), aligning with previous studies (e.g., Venkatesh et al., 2003; Celik, 2016). This suggests that user-friendly interfaces and simplified processes strongly influence consumers' willingness to revisit the platform. Platforms that reduce cognitive load and provide intuitive navigation are likelier to foster loyalty.

Social Influence and Repurchase Intention

The insignificant effect of Social Influence on Repurchase Intention (H3 not supported) contradicts the findings by Venkatesh et al. (2003) and Chen et al. (2021). This discrepancy might reflect the changing dynamics of online shopping, where consumers rely less on peer recommendations and more on personal preferences or platform features. Cross-border e-commerce platforms may need to rethink their strategies for leveraging social proof and user-generated content.

Facilitating Conditions and Repurchase Behavior

The positive relationship between Facilitating Conditions and Repurchase Behavior (H4 supported) underscores the importance of technical support and platform resources in driving consumer loyalty. This finding aligns with prior research (e.g., Venkatesh et al., 2003; Ye et al., 2020), emphasizing that consumers are more likely to return to platforms that address their concerns promptly and provide seamless purchasing experiences.

Online Shopping Enjoyment and Repurchase Intention

The significant positive effect of Online Shopping Enjoyment on Repurchase Intention (H5 supported) is consistent with studies by Lowry et al. (2012) and Picot-Coupey et al. (2021). This highlights the hedonic aspect of online shopping, where enjoyable experiences and engaging interactions are crucial in attracting repeat customers. Platforms can incorporate gamification elements or personalized recommendations to enhance enjoyment.

Online Shopping Risk and Repurchase Intention

The negative relationship between Online Shopping Risk and Repurchase Intention (H6 supported) reaffirms the findings of Yang et al. (2015) and Masoud (2013). Consumers' concerns about data privacy, financial security, and product authenticity remain

significant barriers. Addressing these concerns through transparent policies, secure payment systems, and customer support can mitigate perceived risks.

Repurchase Intention and Repurchase Behavior

The strong positive effect of Repurchase Intention on Repurchase Behavior (H7 supported) aligns with Ajzen's (1991) Theory of Planned Behavior. This finding reinforces the role of intention as a key determinant of actual behavior, indicating that platforms must strengthen consumers' intentions through satisfaction and trust-building strategies.

5.2 Theoretical Implications

This study extends the Unified Theory of Acceptance and Use of Technology (UTAUT) framework by incorporating hedonic (Online Shopping Enjoyment) and risk-related (Online Shopping Risk) variables. The findings provide empirical evidence that these variables significantly influence consumer behavior in cross-border e-commerce contexts. Additionally, the insignificant role of Performance Expectancy and Social Influence calls for reassessing traditional UTAUT constructs in the context of mature digital platforms.

5.3 Practical Implications

1. Enhancing Usability: Platforms should prioritize user-friendly interfaces and streamlined processes to improve Effort Expectancy.
2. Reducing Risks: Building trust through secure systems, clear return policies, and transparent operations can alleviate consumers' concerns.
3. Fostering Enjoyment: Integrating gamification, interactive features, and personalized shopping experiences can enhance consumer engagement and loyalty.
4. Strengthening Support Systems: Providing robust technical support and addressing consumer queries promptly can positively influence Repurchase Behavior.

5.4 Limitations and Future Research Directions

This study has several limitations that should be addressed in future research:

1. Sample Representativeness: The sample was predominantly female and within a specific age range, which may limit generalizability. Future studies should consider more diverse samples.
2. Cross-Sectional Design: The study's cross-sectional nature limits causal inferences. Longitudinal studies could provide deeper insights into consumer behavior over time.
3. Context-Specific Factors: Future research could explore additional contextual factors, such as cultural influences or regional differences, to understand their impact on cross-border e-commerce adoption.

6. CONCLUSION

6.1 Summary of Findings

This study investigated the interplay between "fun" and "fear" in cross-border e-commerce. Key findings include:

1. Performance Expectancy did not significantly impact repurchase intention, suggesting that platform functionality alone cannot drive consumer loyalty in a highly competitive market.
2. Effort Expectancy positively influenced repurchase intention, highlighting the importance of user-friendly interfaces and intuitive platform design.
3. Social Influence showed no significant relationship with repurchase intention, indicating that personal preferences and platform attributes may outweigh social factors in this context.

4. Facilitating Conditions were positively associated with repurchase behavior, emphasizing the role of platform support and resources in fostering consumer loyalty.

5. Online Shopping Enjoyment significantly positively affected repurchase intention, reinforcing the importance of hedonic shopping experiences in retaining customers.

6. Online Shopping Risk negatively affected repurchase intention, reflecting consumers' concerns about data privacy, financial security, and product authenticity.

7. Repurchase Intention significantly influenced Repurchase Behavior, confirming the critical role of intention as a precursor to actual behavior.

6.2 Theoretical Contributions

This study contributes to the literature by extending the UTAUT framework with hedonic (Online Shopping Enjoyment) and risk-related (Online Shopping Risk) variables, offering a more comprehensive understanding of consumer behavior in cross-border e-commerce contexts. The findings challenge traditional assumptions about the relevance of Performance Expectancy and Social Influence, suggesting that these constructs may require reevaluation in mature digital environments.

6.3 Practical Implications

The results provide actionable insights for cross-border e-commerce platforms:

1. Focus on Usability: Simplify platform interfaces and reduce the learning curve to enhance consumer engagement.

2. Mitigate Risks: Implement robust security measures, transparent return policies, and customer support to address consumer privacy and financial security concerns.

3. Enhance the Shopping Experience: Integrate gamification, interactive features, and personalized recommendations to increase consumer enjoyment and satisfaction.

4. Strengthen Support Systems: Invest in technical support and provide clear guidance to consumers, ensuring a seamless shopping experience.

6.4 Limitations and Future Research Directions

While this study provides valuable insights, it has several limitations:

1. Sample Composition: The sample was limited to a specific demographic, which may affect the generalizability of the findings. Future studies should include more diverse samples.

2. Cross-Sectional Design: The study's design limits the ability to draw causal inferences. Longitudinal studies could explore changes in consumer behavior over time.

3. Additional Variables: Future research could examine other potential factors, such as cultural influences, technological advancements, or marketing strategies, to further understand consumer decision-making in cross-border e-commerce.

6.5 Final Remarks

In conclusion, this study underscores the importance of usability, enjoyment, and risk management in shaping consumer behavior on cross-border e-commerce platforms. By addressing these factors, platform providers can enhance consumer satisfaction, foster loyalty, and drive long-term growth in the global digital marketplace.

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