

Understanding the determinants of digital shopping features: The role of promo code on customer behavioral intention

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ABSTRACT

This paper empirically identifies the predictors influencing the use of promo code in Jordan. This research extended TAM and TBP models with perceived enjoyment and brand image in the context of digital shopping features. The study utilized 379 surveys distributed in Jordan and analyzed the data using SEM. Findings of this study confirmed the proposed model, where brand image, perceived enjoyment, perceived behavior control and social influence significantly predict customers behavioral intention to use promo code with an $R^2 = 59\%$. The model of this study also supported the role of perceived ease of use and social influence in predicting brand image. Discussion and conclusion are depicted at the end of this paper.

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1. Introduction

The widespread use of electronic commerce along with the massive use of mobile commerce applications (hereafter: apps) have prompted business firms to provide shopping assisted services and tools to improve customers shopping experience (Hammouri et al., 2021c; Mensah et al., 2021). Promo code is one of the most popular shopping assisted tools used by customers for many purposes, and better financial discount topping all of them (Neslin & Jiao, 2021). Promo code is considered as an effective feature of shopping apps influencing customers to revisit online stores to benefit from a price discount (Ho, 2019). Moreover, promo code is a marketing strategy evolved with the emergence of digital shopping. Such strategy provided by retailers to online customers who can use it to get a discounted price (Sun et al., 2021). Utilizing promo code for commerce is new for retailers and for customers as well. The evolution from offering old-fashioned coupons, to digital discount through promo codes changed the marketing strategies and how firms compete (Nayal & Pandey, 2020). Still, most previous research focused on digital shopping, where transactions are conducted online, but not on features of digital shopping like promo code. Based on that, retailers tried to benefit from shopping apps features to improve customer retention, to reach new potential customers and to enhance brand image. In Jordan, there is a lack of studies focused on the determinants driving customers' behavior toward using the promo code. As such, this study aims to identify customers' attitudes toward using promo codes under the umbrella of digital shopping apps features provided by retailers. This study is expected to fill the gap in the literature of shopping apps features and enhance our understanding of how customers perceive such features. Also, this study suggests a set of constructs that explain the attitudes toward promo code.

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This study adopts the technology acceptance model (TAM) and the theory of planned behavior (TPB) for the purpose of shopping apps features. The proposed model extended the TAM and TPB with perceived enjoyment to investigate the customers' intention toward using promo code in Jordan. This research study aims at answering the following research question:

RQ: What are the factors influencing customers' intention to use promo code?

The paper is organized as follows. The following section presents the relevant literature and provides a conceptual view of related work, followed by hypotheses development and the study model. Section 3 covers the research method, and section 4 presents data analysis and results. Finally, discussion and conclusion are depicted at the end of the paper.

2. Literature Review

Most of previous empirical studies were focused on exploring the major factors influencing customers to use digital shopping (Abu-Shamaa & Abu-Shanab, 2015; Alkailani & Abu-Shanab, 2021; Hammouri & Abu-Shanab, 2017a; Moh'd Al-Dwairi et al., 2018; Rabaa'i, in press; Usman & Kumar, 2021). Still, there is a lack of studies that focused on understanding the attitudes of customers toward using digital shopping features like promo code. Therefore, this research aims at investigating the context of digital shopping features, especially promo code, by adopting TAM and TPB as its theoretical base, and extending both theories with some amendments.

2.1 Promo Code

Promo code refers to a series of numbers, letters and special characters entered by a customer to benefit from a discount available on the digital market. The-type of promos provided by retailers include public, private and secret codes. Public code is a type of promo that is provided to customers as a whole, and such type of promo is used to attract new customers and to convince former customers to return (Alamsyah et al., 2018). Private code refers to a code that is accessible by a specific group of customers. This type of promos could be used to reward more loyal customers and to gain new potential customers (Widyatama et al., 2020). The final type of promos, called secret code, is often offered to a single customer as an apology or compensation strategy for an irregular event which has occurred, such as a delay in order (Basak et al., 2022).

2.2 Theoretical Background

Several models and theories were used by scholars to measure behavioral psychology toward technology. Such theories and models were utilized to measure the attitudes of how customers are adopting a certain technology. Theory of Reasoned Action (TRA) is one of the oldest theories utilized in such a domain (Fishbein & Ajzen, 1975). After that, several theories were founded starting from Social Cognitive Theory (SCT) developed by (Bandura in 1982), Diffusion of Innovation Theory (DoI) founded by (Rogers in 1983), Technology Acceptance Model developed by (Davis in 1989), and Theory of Planned Behavior that was developed by (Ajzen in 1991).

In Jordan, most of previous studies comprised perceived usefulness and perceived ease of use to measure the attitudes of customers in the digital shopping area (Ahmad et al., 2018; Alsoud & bin Lebai Othman, 2018; Eneizan et al., 2020; Lutfi et al., 2021). The current study adopted TAM to measure the influence of perceived ease of use on brand image of retailers who provided promo code. Furthermore, social influence and perceived behavioral control, adopted from TPB, where social influence will be utilized to measure the influence on brand image and behavioral intention. The final phase is to include a major predictor, which was not used in previously reported models or theories - perceived enjoyment. Prior studies highlighted the role of perceived enjoyment on digital shopping Apps.

This research included four constructs from TAM and TPB. Such theories were addressed before the inception of digital shopping. Furthermore, we also extended the proposed model with two additional predictors adopted from previous literature - brand image and perceived enjoyment.

2.3 Technology Acceptance Model

TAM is one of the most utilized models to examine the attitudes and beliefs of people toward the acceptance of new technology (Hammouri et al., 2021a; Rabaa'I, 2021; Zahid et al., 2022). Such a model is widely used because it has been tested and validated in different areas (Al-Gahtani et al., 2008; Hammouri et al., 2020; Hammouri & Abu-Shanab, 2017b). The TAM is a development of TRA, which provides a perception of how the external variables influence an individual's attitudes toward using the technology (Malhotra & Galletta, 1999). Two main constructs are used to measure the behavior intention: perceived ease of use (PEOU) and perceived usefulness (PU). Perceived ease of use is used to measure an individual's beliefs that using a certain technology would be easy and free of effort. Perceived usefulness refers to the extent to which an individual's thoughts that using a specific technology will be beneficial.

In the context of digital shopping features, most prior studies approved that digital shopping features have substantial benefits on both users and retailers (Al-Gasawneh et al., 2022; Jiang et al., 2020; Malik, 2022). However, this research will shed light on the perceptions of online customers who used promo code toward the brand image of retailers who provided such codes in

terms of perceived ease of use. The concept of PEOU is the extent to which an individual believes that using digital shopping features, like promo code, is easy to be located and entered, and enable an individual to complete the task without much mental effort (Aparicio et al., 2021; Ho, 2019; Pratama et al., 2019). Such online features like promo code should be supported with adequate information (e.g. the discount percentage, code expiration date, original price before discount, and the number of beneficiaries of the discount). Therefore, it could be posited that:

H1: There is a positive and direct impact of perceived ease of use on brand image of retailers that provided a promo code.

2.4 Theory of Planned Behavior

The TPB developed by (Ajzen in 1985) combined a set of social and psychological terms in order to understand and explore people's behavioral intentions toward a specific situation. TPB was developed based on the Theory of Reasoned Action (TRA); it also includes four main constructs: behavioral intentions, attitudes, subjective norms or social influence, and perceived behavior control (Almajali & Hammouri, 2021; Schifter & Ajzen, 1985). Empirical research demonstrated that TPB is one of the best theories utilized to predict behavioral intentions (Qasim & Abu-Shanab, 2016; Sardanelli et al., 2020; Sutisna & Handra, 2022). Additionally, 39% of the variances of both TPB constructs (intentions and behaviors) were used as predictors in different technological contexts (Dionysis et al., 2022). Ajzen (1991) reported that TPB could be extended through adding new predictors to enhance the predictive findings. As such, scholars combined TPB with other theories like Technology Acceptance Model (TAM), the Diffusion of Innovation Theory (DoI), Social Cognitive Theory (SCT), Unified Theory of Acceptance and Use of Technology (UTUAT).

2.4.1 Social Influence

Social influence is one of the major constructs of TPB (Ajzen, 1991). Such a construct was developed after 10 years by Venkatesh et al., (2003) in the UTAUT model. Also, it is widely used to measure the acceptance of a new technology (Graf-Vlachy et al., 2018). The term social influence is used to examine the perceptions of an individual toward their peers, colleagues and friends who use a new technology (Wallace-Williams et al., 2022). Several empirical studies demonstrated that social influence has a positive significant impact on customers' behavioral intentions to adopt and use digital shopping (Abu-Shanab, 2011; Hammouri et al., 2021b; Hammouri & Abu-Shanab, 2017a; Wijaya, 2022).

In a digital shopping environment, social influence refers to the degree to which a customer thinks that their peers should use digital shopping features like promo code. Such description is frequently true where most customers are likely to recommend digital shopping features when they meet their expectations (Vrain et al., 2022). Moreover, social commerce has increased the importance of social influence, where most social networking sites enable customers to post their experiences and review others (Book et al., 2018; Risselada et al., 2018). As such, it is rational to argue that social influence will impact both – brand image and behavioral intention. Consequently, this study posited the following hypotheses:

H2: There is a positive and direct impact of social influence on behavioral intention to use promo code.

H3: There is a positive and direct impact of social influence on brand image of retailers that provided a promo code.

2.4.2 Perceived Behavior Control

Perceived behavior control is one of the main determinants of customer attitudes (Giles & Cairns, 1995; Kashif et al., 2018). It also used to identify customers' perception of the ease or difficulty in doing a certain behavior (Zolait, 2014). The concept refers to the perception of people toward a specific behavior. In this study, perceived behavior control is used to measure the perception of customers toward their control over a certain digital shopping feature like promo code. The intention of customers to use a digital market is influenced by the behavior of others toward using digital shopping features (Lim & Weissmann, 2021; Sun et al., 2020). The current research aims to investigate the ability to influence the intention of customers toward using digital shopping features. Thus, a positive and direct impact of digital shopping features on behavioral intention to use promo code is proposed in this study:

H4: There is a positive and direct impact of perceived behavioral control on behavioral intention of customers to use promo code.

2.5 Perceived Enjoyment

Perceived enjoyment is a type of intrinsic motivation that is widely used to measure the perception of people toward accepting and using digital shopping features (Gharaibeh & Gharaibeh, 2021; Kauschinger et al., 2022; Tandon & Ertz, 2022). It is also utilized to examine the pleasure levels of people who are using such features like promo code (So et al., 2021). Prior empirical studies reported that perceived enjoyment has a high correlation value with people's intentions toward digital shopping features (Al-Zoubi & Ali, 2019; Gharaibeh & Gharaibeh, 2022; Mashal & Shuhaiber, 2019). Such explanation means that when customers find a feature to be pleasurable, then it will motivate them to use this feature (Widiandita & Ketut, 2020). Moreover,

perceived enjoyment is a predictor of a customer's intention to use digital shopping websites, where such websites are implemented to be entertainment-oriented (Kumar, V., & Ayodeji, 2021; Sütütemiz, N., & Saygılı, 2020). Therefore:

H5: There is a positive and direct impact of perceived enjoyment on behavioral intention of customers to use promo code.

2.6 Brand Image

Brand image refers to the relationship between the brand and the perceptions of customers' minds reflected from that brand (Plumeyer et al., 2019). Moreover, brand image is used to understand the perception of customers about certain brands (Elshwikh, 2017; Mohammed & Rashid, 2018). Such perceptions are developed according to the brand features like uniqueness, strength and personality (Lee et al., 2014). Brand image is considered as one of the most effective marketing tools utilized to develop long-term brand equity (Faircloth et al., 2001). However, brand image could be achieved when a customer reflects a positive perception toward a brand, which in turn leads to great benefits for the firms, such as improving market share, sustainability and increasing their revenues (Bashir et al., 2020). Empirical studies demonstrated that there is a strong correlation between brand image and customer attitudes (Islam & Hussain, 2022; Lingceng et al., 2022; Ogba & Tan, 2009; Zhang, 2015). Also, previous studies confirmed that brand image is considered as a predictor of customer intention and positively influences customer attitudes (Al-Dmour et al., 2021; Alfandi & Marco, 2022). Therefore:

H6: There is a positive and direct impact of brand image on behavioral intention of customers to use promo code.

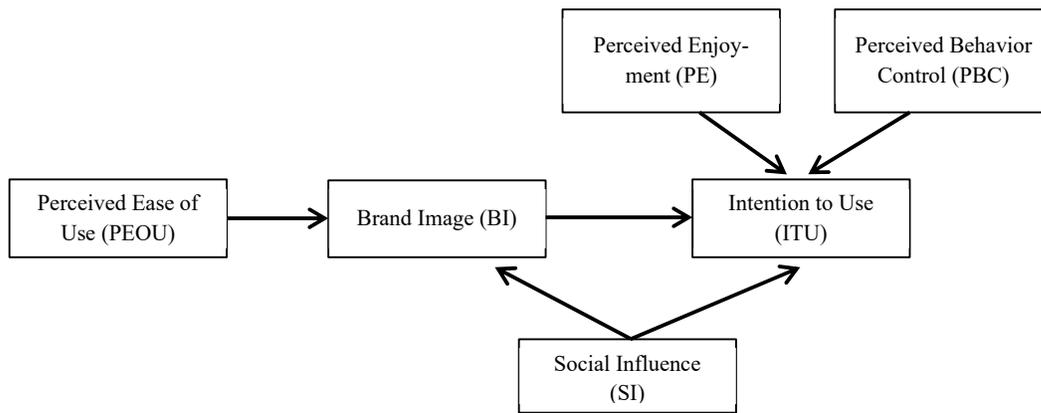


Fig. 1. Research Model

3. Research Methodology and Design

The primary objective of this research is to explore the predictors influencing customer behavioral intentions to use promo code. A quantitative cross-sectional design was utilized to test the research model. The population of this study was users with digital shopping experiences in Jordan. A self-administered questionnaire with a five-point Likert-scale was used as the main instrument for the data collection.

Research constructs were measured using 28 items adopted from previous literature with some changes to fit the study context. The four items used to measure perceived ease of use were adopted from Hammouri et al., (2021). The six items of brand image were selected and reworded from the work of Nusairat et al., (2021). The items used to measure perceived behavior control (5 items), social influence (5 items), intention to use (5 items) were adopted from Ho and Shafiq (2021). The three items of perceived enjoyment were selected from Winaron et al., (2021). Data was collected electronically from 379 online users. The data was entered and analyzed using SPSS version 20.0 and Smart PLS 3.0. The structural equation model (SEM) was used to identify the relationships between the variables.

3.1 Data Analysis

Fig. 2 shows the demographic analysis of the sample. The results demonstrated that 53% of respondents were female and 47% were male. The majority age group was formed by respondents between 26 and 33 years (40.4%). In term of education, the largest education group of respondents hold a bachelor' degree were 242 (63.9%), postgraduate were 78 (20.6%), and other were 59 (15.5%). PLS-SEM is one of the most powerful analysis techniques utilized to measure the overall structural model concurrently (Chin, 1998). In this research, PLS was used to conduct the data analysis in two steps according to the recommendations of Anderson and Gerbing (1988). The reliability and validity will be tested in the first step using the measurement model, and the structural model (testing the relationship among the variables) will be tested in the second step.

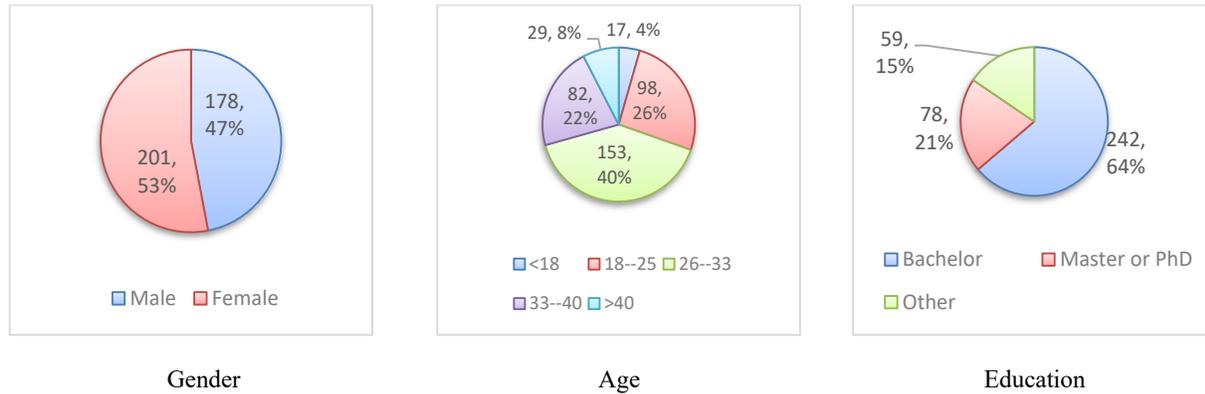


Fig. 2. Personal characteristics of the participants

3.2 Measurement Model

The validity and reliability tests for the measurement model were examined. In terms of reliability, Cronbach's alpha is one of the methods used to measure the reliability and internal consistency. Hair et al (2006) noted that the value of Cronbach's alpha should be more than the threshold value of 0.70. Table 2 demonstrated a high percentage of internal consistency of scale where the value of Cronbach's alpha for each construct exceeded the recommended value (0.70).

Composite reliability (CR) and the average variance extracted (AVE) tests were used to measure the convergent validity. Fronell and Larcker suggested that the value of CR and AVE should sustain the recommended value, where the recommended value for CR and AVE is greater than 0.70 and 0.50 respectively. The results in Table 1 show that the values of CR and AVE for all constructs are above the threshold values. Also, the analysis demonstrated that all indicators for each factor are significant where the standardization path loadings were above the acceptable value of (0.50).

Table 1
Summary Results for Reliability and Validity

Construct	Codes	FL	AVE	CR	Cronbach α
PEOU	PEOU1	0.791	0.711	0.895	0.876
	PEOU2	0.844			
	PEOU3	0.829			
	PEOU4	0.801			
BI	BI1	0.859	0.629	0.912	0.897
	BI2	0.841			
	BI3	0.819			
	BI4	0.832			
	BI5	0.774			
	BI6	0.795			
SI	SI1	0.911	0.731	0.945	0.926
	SI2	0.889			
	SI3	0.821			
	SI4	0.931			
	SI5	0.897			
PBC	PBC1	0.664	0.597	0.843	0.814
	PBC2	0.785			
	PBC3	0.621			
	PBC4	0.812			
	PBC5	0.752			
PE	PE1	0.915	0.842	0.951	0.939
	PE2	0.884			
	PE3	0.912			
ITU	ITU1	0.897	0.813	0.946	0.931
	ITU2	0.945			
	ITU3	0.921			
	ITU4	0.927			
	ITU5	0.891			

In addition, discriminant validity test was also assessed in accordance with the analysis of Fronell-Larcker criterion. Such a test is achieved when the square root value of the AVE for each construct is higher than the inter-factor correlations among constructs. Table 3 demonstrates that the square root values of all the AVEs (diagonal bold values) were greater than other correlations values between the constructs, thus confirming discriminant validity.

Table 3
Discriminant Validity

Construct	PEOU	BI	SI	PBC	PE	ITU
PEOU	0.7521					
BI	0.1327	0.7269				
SI	0.4378	0.3348	0.7816			
PBC	0.2562	0.2171	0.2544	0.7299		
PE	0.1957	0.1844	0.2193	0.2071	0.7614	
ITU	0.3107	0.2981	0.3429	0.1957	0.3351	0.7325

3.3 Structural Model

The structural model was assessed after testing the validity of the measurement model. The results demonstrated that the value of R^2 is 59%; such value means that the proposed model showed that 59% of the variance of intention to use promo code was explained. Moreover, the value of R^2 exceeded the acceptable value of 25% according to Hair et al., (2016). The results of this research showed that all of the proposed hypotheses are statistically supported according to the t-values and p-values depicted in Table 4. The findings revealed that PEOU of promo code ($\beta = 0.241$, $p < 0.001$) has a direct significant influence on brand image of retailers, thus supporting H1. Moreover, the results also demonstrated that SI is a major predictor influencing customers intentions and brand image of retailers when using promo code ($\beta = 0.611$, $p < 0.001$) and ($\beta = 0.142$, $p < 0.01$) respectively, thereby supporting H2 and H3. In addition, PBC was statistically significant in describing customers' intention to use promo code ($\beta = 0.219$, $p < 0.05$), thus confirming H4. Furthermore, as proposed in H5, perceived enjoyment (PE) was found to be one of the main antecedents of customers' intention to use promo code ($\beta = 0.310$, $p < 0.05$). Finally, the analysis also found that BI has a positive significant impact on online users' intention to use promo code ($\beta = 0.239$, $p < 0.001$), thereby confirming H6.

Table 4
Hypotheses Testing

Hypotheses	Beta (β)	T-value	P-value	Significance
H1: PEOU \rightarrow BI	0.241	2.072***	0.000	Supported
H2: SI \rightarrow ITU	0.611	6.974***	0.000	Supported
H3: SI \rightarrow BI	0.142	7.815**	0.003	Supported
H4: PBC \rightarrow ITU	0.219	2.115*	0.043	Supported
H5: PE \rightarrow ITU	0.310	2.815*	0.011	Supported
H6: BI \rightarrow ITU	0.239	2.354***	0.000	Supported

Note: Explained variance proposition R^2 of behavior intention to use promo code = 0.59;
* significant ≤ 0.05 ; ** significant ≤ 0.01 ; *** significant ≤ 0.001

4. Discussion

This paper adopted and extended TAM and TPB to understand the factors influencing customers' intentions to digital shopping features like promo code. It was empirically validated that brand image, social influence, perceived behavior control, and perceived enjoyment were significant in predicting the intention to use promo code in a digital shopping environment. Consistent with prior brand image literature, the results of this research confirmed the significance of PEOU in predicting customers' intentions (Hammouri et al., 2021a; Zahid et al., 2022). Digital shopping features need to be easy to use to encourage customers to use them, and previous studies in the context of digital shopping have confirmed the role of ease of use in enhancing brand image (Aparicio et al., 2021; Pratama et al., 2019). The use of digital shopping features by the online consumers necessitates the ease of use condition, where complexity might hinder the use of such features and negatively influence brand image. This finding implies that retailers must provide user-friendly digital shopping tools with interactive and customized interfaces. Customers would perceive a good brand image when digital shopping tools are easy to use. Additionally, customers' intentions toward using promo codes will be enhanced if such tools are real in their functions, simple in terms of their design and layout, flexible to interact with, and their details are clear and understandable.

Social influence was the second construct influencing customer intentions to adopt promo code. It was the most significant factor influencing customer intentions with the highest beta value ($\beta = 0.611$). In the context of this study, -Jordanian people tend to listen and accept the recommendations of their peers, relatives and friends in using digital shopping features such as promo code. This finding is aligned with previous studies (Almajali et al., 2021; Hammouri et al., 2021b; Wijaya, 2022). In addition, the research findings confirmed the positive impact of social influence on the brand image. Such results means that electronic word of mouth (comments, likes and reviews) among peers in online market has a substantial impact on brand image (Majali, 2018). The finding also implies that the positive recommendations among online customers reflect a good brand image. The findings of this research have shown a significant relationship between the perceived behavior control and the intention to use promo code. This result indicates the need for adequate skills for using digital shopping features. The perceived behavior control of customers positively affects the confidence of people when their peers adopt the digital shopping features. Empirically, several studies demonstrated the PBC have a significant influence on customers' intentions in a digital shopping area, where such findings stressed the role of technical experience (Sun et al., 2020).

The third construct that predicts customer intention in the study is perceived enjoyment. The significance of this association is confirmed in previous empirical studies (Al-Zoubi & Ali, 2019; Gharaibeh & Gharaibeh, 2022), where enjoyable use of digital shopping features is connected to strong motivation for customers to use the different features like promo code. Therefore, the addition of a strong theoretical base for the role of perceived enjoyment in predicting consumer intention is one of the primary theoretical contributions in a digital shopping context.

Finally, this study also confirmed the relationship between the brand image and customers intention to use promo code. The term of brand image has been widely used to create a unique brand image using customers' perception. The main goals of digital shopping features such as promo code are to retain customers and attract new ones. Retailers look for more marketing strategies to enhance their brand image through utilizing digital shopping features like promo code. Moreover, the finding also implies that retailers should move beyond the traditional promotion tools. They should focus on building a strong brand image that fosters customer behavioral intention.

5. Conclusion

Promo code is one of the new features emerging in digital shopping environments. This study enhances existing literature in digital shopping features especially the promo code, where few empirical research were conducted to understand the determinants of such a feature. The current research aims to explore the main factors influencing customers' intention to use promo code in Jordan. The findings could support our understanding of the predictors related to the acceptance of promo code. This research investigated the perceptions of customers regarding the predictors' affects their intentions to accept and use promo code. The findings confirmed that all of the proposed hypotheses were statistically supported. PEOU and SI were significant determinants of brand image, whereas PBC, PE and SI were significant predictors of intention to use. The findings also confirmed our examination of TAM and TPB, where the analysis approved the significance of the proposed constructs. The study model demonstrated an acceptable level of prediction of intention to use promo codes where the value of R^2 was 0.59.

6. Contributions and Recommendations

Most of the previous empirical studies focused on exploring factors that influence customers' intention to use and accept digital shopping. Due to the lack of studies that investigate the predictors of customer intention to use digital shopping features, this study was conducted to examine the intention of Jordanian customers to use promo codes. The second contribution of this study is to recognize the main predictors influencing customers' intention through the significant extension of both TAM and TBP in the technology adoption environment. Thirdly, this research enriched our perceptions of the relationships between the proposed constructs through an adequate explanation reported in the discussion section.

The findings of this research focused on the role of social influence, where online users are highly influenced with the electronic word of mouth of their peers, thus significantly influencing brand image. In addition, the significance of PEOU requires developers to provide digital shopping features that are easily accessible, navigated and used. The study also confirmed the role of enjoyment, where developers should take into consideration the enjoyment factor when implementing digital shopping features. Finally, online users' who accept and adopt digital shopping features such as promo codes have relied on themselves to learn more details about the brand. Such finding implies that promo code users have personal control beliefs in performing digital shopping transactions.

7. Limitations and Future Work

This paper has a number of limitations which could be considered in future research. First, the findings of the current study reflect the views of online customers toward a promo code in general, and it not limited to specific brands. The second limitation is the lack of classification of promo codes, where there are different types of promo code that can be provided by retailers for different purposes. Finally, the results of the current study are limited to Jordanian online users, but other decision makers from developing countries might benefit from the findings of such research. Future research could understand the perceptions of online users toward a specific type of promo code (public, private, and restricted) in a specific marketing area such as foods, fashion, tourism and others.

References

- Abu-Shamaa, R., & Abu-Shanab, E. (2015, February). Factors influencing the intention to buy from online stores: An empirical study in Jordan. In *2015 IEEE 8th GCC Conference & Exhibition* (pp. 1-6). IEEE.
- Abu-Shanab, E. A. (2011, March). Education level as a technology adoption moderator. In *2011 3rd International Conference on Computer Research and Development* (Vol. 1, pp. 324-328). IEEE.
- Ahmad, K., Ayyash, M. M., & Al-Qudah, O. M. A. (2018). The effect of culture values on consumer intention to use Arabic e-commerce websites in Jordan: an empirical investigation. *International Journal of Business Information Systems*, *29*(2), 155-182.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179–211. doi:10.1016/0749-5978(91)90020-T

- Alamsyah, A., Rizkika, W., Nugroho, D. D. A., Renaldi, F., & Saadah, S. (2018, May). Dynamic large scale data on twitter using sentiment analysis and topic modeling. In *2018 6th International Conference on Information and Communication Technology (ICoICT)* (pp. 254-258). IEEE.
- Al-Dmour, H., Aloqaily, A., Al-Qaimari, R., & Al-Hassan, M. (2021). The effect of the electronic word of mouth on purchase intention via the brand image as a mediating factor: an empirical study. *International Journal of Networking and Virtual Organisations*, *24*(2), 182-199.
- Alfandi, A. M., & Marco, V. (2022). Electronic Word of Mouth Effects on Middle East Destination Overall Image and Behavioral Intention: An Empirical Study in Jordan. In *New Governance and Management in Touristic Destinations* (pp. 134-151). IGI Global.
- Al-Gahtani, S. S. (2008). Testing for the applicability of the TAM model in the Arabic context: Exploring an extended TAM with three moderating factors. *Information Resources Management Journal (IRMJ)*, *21*(4), 1-26.
- Al-Gasawneh, J. A., Al Khoja, B., Al-Qeed, M. A., Nusairat, N. M., Hammouri, Q., & Anuar, M. M. (2022). Mobile-customer relationship management and its effect on post-purchase behavior: The moderating of perceived ease of use and perceived usefulness. *International Journal of Data and Network Science*, *6*(2), 439-448
- Alkailani, L., & Abu-Shanab, E. A. (2021). Factors Influencing Online Purchase Intention in Qatar. *International Journal of E-Business Research (IJEER)*, *17*(3), 1-21.
- Almajali, D. A., & Hammouri, Q. (2021). Predictors of Online Shopping During Covid-19 Pandemic in Developing Country: Qualitative Analysis. *Annals of the Romanian Society for Cell Biology*, *25*(6), 12970-12977.
- Almajali, D., Hammouri, Q., Majali, T., Al-Gasawneh, J., & Dahalin, Z. (2021). Antecedents of consumers' adoption of electronic commerce in developing countries. *International Journal of Data and Network Science*, *5*(4), 681-690.
- Alsoud, M. A., & bin Lebai Othman, I. (2018). Factors Influencing Online Shopping Intention in Jordan: An Empirical Study Based on the Tam Model. *International Journal of Current Innovations in Advanced Research*, *1*(6), 1-13.
- Al-Zoubi, S. I., & Ali, M. (2019). E-mobile Acceptance Using Unified Theory of Acceptance and Use of Technology (UTAUT): Research on Universities in Jordan. *Annals of Emerging Technologies in Computing (AETiC)*, *Print ISSN*, 2516-0281.
- Anderson, J.C., & Gerbing, D.W. (1988), "Structural equation modeling in practice: a review and recommended two-step approach", *Psychological Bulletin*, Vol. 103 No. 3, pp. 411-423.
- Aparicio, M., Costa, C. J., & Moises, R. (2021). Gamification and reputation: key determinants of e-commerce usage and repurchase intention. *Helijon*, *7*(3), e06383.
- Bandura, A. (1982). Self-Efficacy Mechanism in Human Agency. *Computer Journal of American Psychologist*, *37*(2), 122-147.
- Basak, R. K., Chatterjee, R., Dutta, P., & Dasgupta, K. (2022). Steganography in Color Animated Image Sequence for Secret Data Sharing Using Secure Hash Algorithm. *Wireless Personal Communications*, *122*(2), 1891-1920.
- Bashir, S., Khwaja, M. G., Rashid, Y., Turi, J. A., & Waheed, T. (2020). Green brand benefits and brand outcomes: The mediating role of green brand image. *Sage Open*, *10*(3), 2158244020953156.
- Book, L. A., Tanford, S., Montgomery, R., & Love, C. (2018). Online traveler reviews as social influence: Price is no longer king. *Journal of Hospitality & Tourism Research*, *42*(3), 445-475.
- Chin, W.W. (1998), "The partial least squares approach to structural equation modeling", *Mod. Methods Bus. Res*, Vol. 295 No. 2, pp. 295-336.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, *35*(8), 982-1003. doi:10.1287/mnsc.35.8.982
- Dionysis, S., Chesney, T., & McAuley, D. (2022). Examining the influential factors of consumer purchase intentions for blockchain traceable coffee using the theory of planned behaviour. *British Food Journal*.
- Elshwikh, Y. (2017). A trust and reputation model for quality assessment of online content. *International Journal of Advanced Computer Science and Applications*, *8*(3), 58-61.
- Eneizan, B. I. L. A. L., Alsaad, A. B. D. A. L. L. A. H., Abdelbaset Alkhalwaldeh, H. N., & Rawash, O. E. (2020). E-wom, trust, usefulness, ease of use, and online shopping via websites: the moderating role of online shopping experience. *Journal of Theoretical and Applied Information Technology*, *98*(13), 2554-2565.
- Faircloth, J. B., Capella, L. M., & Alford, B. L. (2001). The effect of brand attitude and brand image on brand equity. *Journal of marketing theory and practice*, *9*(3), 61-75.
- Fishbein, M., Ajzen, I., & Belief, A. (1975). Intention and Behavior: An introduction to theory and research.
- Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *18*(1), 39-50, available at: <https://doi.org/10.1177/002224378101800104>
- Gharaibeh, M. K., & Gharaibeh, N. K. (2021). Understanding Adoption Intention of Mobile Shopping Applications: Empirical Assessment From IDT-Perceived Risk and Enjoyment. *International Journal of Sociotechnology and Knowledge Development (IJSKD)*, *13*(2), 31-47.
- Gharaibeh, M. K., & Gharaibeh, N. K. (2022). A Conceptual Framework for Intention to Use Travel Apps: A Study From Emerging Markets. *International Journal of Service Science, Management, Engineering, and Technology (IJSSMET)*, *13*(1), 1-16.
- Giles, M., & Cairns, E. (1995). Blood donation and Ajzen's theory of planned behaviour: an examination of perceived behavioural control. *British Journal of Social Psychology*, *34*(2), 173-188.

- Graf-Vlachy, L., Buhtz, K., & König, A. (2018). Social influence in technology adoption: taking stock and moving forward. *Management Review Quarterly*, 68(1), 37-76.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E. and Tatham, R.L. (2006), *Multivariate Data Analysis*, 6th ed., Prentice Hall, NJ.
- Hair, J.F., Jr, Hult, G.T.M., Ringle, C. and Sarstedt, M. (2016), *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, Sage publications
- Hammouri, Q. M., Abu-Shanab, E. A., & Nusairat, N. M. (2021a). Attitudes Toward Implementing E-Government in Health Insurance Administration. *International Journal of Electronic Government Research (IJEGR)*, 17(2), 1-18.
- Hammouri, Q., & Abu-Shanab, E. (2017a, May). The antecedents of trust in social commerce. In *2017 8th International Conference on Information Technology (ICIT)* (pp. 648-652). IEEE.
- Hammouri, Q., & Abu-Shanab, E. (2017b). Exploring the factors influencing employees' satisfaction toward e-tax systems. *International Journal of Public Sector Performance Management*, 3(2), 169-190.
- Hammouri, Q., Al-Gasawneh, J. A., Nusairat, N. M., Hanandeh, A., & Barakat, S. (2021b). The Determinants of Trust and its Influence on Online Buying Intention: An Empirical Study on Social Commerce in Jordan. *Annals of the Romanian Society for Cell Biology*, 4522-4539.
- Hammouri, Q., Al-Gasawneh, J., Abu-Shanab, E., Nusairat, N., & Akhoshaidah, H. (2021c). Determinants of the continuous use of mobile apps: The mediating role of users awareness and the moderating role of customer focus. *International Journal of Data and Network Science*, 5(4), 667-680.
- Hammouri, Q., Almajali, D. A., Nusairat, N., & Sarairoh, S. (2020). Determinants of Users' Satisfaction with Mobile Apps. *International Journal of Advanced Science and Technology*, 29(3), 14613-14624.
- Ho, R. C. (2019, June). The outcome expectations of promocode in mobile shopping apps: an integrative behavioral and social cognitive perspective. In *Proceedings of the 2019 3rd International Conference on E-commerce, E-Business and E-Government* (pp. 74-79).
- Islam, T., & Hussain, M. (2022). How consumer uncertainty intervene country of origin image and consumer purchase intention? The moderating role of brand image. *International Journal of Emerging Markets*.
- Jiang, Y., Kim, J., Choi, J., & Kang, M. Y. (2020). From clicks to bricks: The impact of product launches in offline stores for digital retailers. *Journal of Business Research*, 120, 302-311.
- Kashif, M., Zarkada, A., & Ramayah, T. (2018). The impact of attitude, subjective norms, and perceived behavioural control on managers' intentions to behave ethically. *Total Quality Management & Business Excellence*, 29(5-6), 481-501.
- Kauschinger, M., Letner, A., Schreieck, M., Urbach, N., Böhm, M., & Krcmar, H. (2022). Individual Enterprise Social Network Adoption: The Influence of Perceived Network Externalities and Perceived Social Capital Advantage.
- Kumar, V., & Ayodeji, O. G. (2021). E-retail factors for customer activation and retention: An empirical study from Indian e-commerce customers. *Journal of Retailing and Consumer Services*, 59, 102399.
- Lee, J. L., James, J. D., & Kim, Y. K. (2014). A reconceptualization of brand image. *International Journal of Business Administration*, 5(4), 1.
- Lim, W. M., & Weissmann, M. A. (2021). Toward a theory of behavioral control. *Journal of Strategic Marketing*, 1-27.
- Lingceng, W. U., Yi, Q. U., Shuo, Z. H. A. O., & Shu, Z. H. O. U. (2022). The Impact of Brand Image on Laptop Purchasing Intention—The Moderating Role of Consumer Ethnocentrism. *International Journal of Business, Economics and Management*, 9(1), 1-19.
- Lutfi, A., Al-Okaily, M., Alshirah, M. H., Alshira'h, A. F., Abutaber, T. A., & Almarashdah, M. A. (2021). Digital financial inclusion sustainability in Jordanian context. *Sustainability*, 13(11), 6312.
- Majali, T. E. (2018). Electronic word of mouth determinants through facebook: Intangible benefits perspective. *Advanced Science Letters*, 24(6), 4102-4105.
- Malhotra, Y., & Galletta, D. F. (1999, January). Extending the technology acceptance model to account for social influence: Theoretical bases and empirical validation. In *Proceedings of the 32nd Annual Hawaii International Conference on Systems Sciences. 1999. HICSS-32. Abstracts and CD-ROM of Full Papers* (pp. 14-pp). IEEE.
- Malik, R. (2022). Retail and Internet of Things: A Digital Transformation. In *Advancing Smarter and More Secure Industrial Applications Using AI, IoT, and Blockchain Technology* (pp. 251-260). IGI Global.
- Mashal, I., & Shuhaiber, A. (2019). What makes Jordanian residents buy smart home devices? A factorial investigation using PLS-SEM. *Kybernetes*.
- Mensah, I. K., Wang, R., Gui, L., & Wang, J. (2021). Exploring the Elements Influencing the Behavioral Adoption of E-Commerce by Chinese Small and Medium Enterprises (SMEs). *Information Development*, 02666669211048486.
- Mohammed, A., & Rashid, B. (2018). A conceptual model of corporate social responsibility dimensions, brand image, and customer satisfaction in Malaysian hotel industry. *Kasetsart Journal of social sciences*, 39(2), 358-364.
- Moh'd Al-Dwairi, R., Al-Shraideh, L. M., & Abu-Shanab, E. A. (2018). Mobile commerce adoption from consumers perspective: the case of Jordan. *International Journal of Information Systems and Social Change (IJISSC)*, 9(2), 12-27.
- Nayal, P., & Pandey, N. (2020). Framework for measuring usage intention of digital coupons: A SPADM approach. *Journal of Strategic Marketing*, 1-21.
- Neslin, S., & Jiao, W. (2021). The Antecedents and Consequences of Promo Code Redemptions. Available at SSRN 3930720.
- Nusairat, N. M., Alroale, M. A., Al Qeed, M., Al-Gasawneh, J. A., Hammouri, Q., Ahmad, A., & Abdellatif, H. (2021). USER-GENERATED CONTENT-CONSUMER BUYING INTENTIONS NEXUS: THE MEDIATING ROLE OF BRAND IMAGE. *Academy of Strategic Management Journal*, 20(4), 1-12.

- Ogba, I. E., & Tan, Z. (2009). Exploring the impact of brand image on customer loyalty and commitment in China. *Journal of Technology Management in China*.
- Plumeyer, A., Kottemann, P., Böger, D., & Decker, R. (2019). Measuring brand image: a systematic review, practical guidance, and future research directions. *Review of Managerial Science*, 13(2), 227-265.
- Pratama, R. I., Megadini, D. D., & Kusriandini, T. (2019). Effect of perceived ease of use, word-of-mouth communication, and brand image on decision to use Lazada E-commerce services. *International Journal of Multicultural and Multireligious Understanding*, 6(1), 173-186.
- Qasim, H., & Abu-Shanab, E. (2016). Drivers of mobile payment acceptance: The impact of network externalities. *Information Systems Frontiers*, 18(5), 1021-1034.
- Rabaa'i, A. A. (2021). An investigation into the acceptance of mobile wallets in the FinTech era: An empirical study from Kuwait. *International Journal of Business Information Systems*.
- Rabaa'i, A. A. (in press). Factors Affecting the Adoption of Mobile Grocery Delivery Applications. *International Journal of Business Information Systems*.
- Risselada, H., de Vries, L., & Verstappen, M. (2018). The impact of social influence on the perceived helpfulness of online consumer reviews. *European Journal of Marketing*, 52(3/4), 619-636.
- Rogers, M. (1983). *The Diffusion of Innovations*. Free Press.
- Sardanelli, D., Vollero, A., Siano, A., & Bottoni, G. (2019). Lowering the pirate flag: a TPB study of the factors influencing the intention to pay for movie streaming services. *Electronic Commerce Research*, 19(3), 549-574.
- Schifter, D. E., & Ajzen, I. (1985). Intention, perceived control, and weight loss: an application of the theory of planned behavior. *Journal of personality and social psychology*, 49(3), 843.
- So, K. K. F., Kim, H., & Oh, H. (2021). What makes Airbnb experiences enjoyable? The effects of environmental stimuli on perceived enjoyment and repurchase intention. *Journal of Travel Research*, 60(5), 1018-1038.
- Sun, S., Law, R., & Schuckert, M. (2020). Mediating effects of attitude, subjective norms and perceived behavioural control for mobile payment-based hotel reservations. *International Journal of Hospitality Management*, 84, 102331.
- Sun, T., Viswanathan, S., Huang, N., & Zheleva, E. (2021). DESIGNING PROMOTIONAL INCENTIVES TO EMBRACE SOCIAL SHARING: EVIDENCE FROM FIELD AND ONLINE EXPERIMENTS. *MIS Quarterly*, 45(2).
- Sutisna, F., & Handra, T. (2022). The Theory of Planned Behavior Influences Online Shopping Behavior. *APTISI Transactions on Management (ATM)*, 6(1), 52-61.
- Sütütemiz, N., & Saygılı, M. (2020). The effects of hedonic and utilitarian shopping motivations on online purchasing intentions: a Turkish case study. *The Retail and Marketing Review*, 16(1), 61-83.
- Tandon, U., & Ertz, M. (2022). Customer Satisfaction Towards Online Shopping by Empirical Validation of Self-Determination Theory. In *Handbook of Research on the Platform Economy and the Evolution of E-Commerce* (pp. 177-203). IGI Global.
- Usman, M. U., & Kumar, P. (2021). Factors influencing consumer intention to shop online in Nigeria: A conceptual study. *Vision*, 25(4), 407-414.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS quarterly*, 425-478.
- Vrain, E., Wilson, C., Kerr, L., & Wilson, M. (2022). Social influence in the adoption of digital consumer innovations for climate change. *Energy Policy*, 162, 112800.
- Wallace-Williams, D. M., Tiu Wright, L., & Dandis, A. O. (2022). Social norms, cues and improved communication to influence behaviour change of smokers. *Journal of Marketing Communications*, 1-26.
- Widiandita, B. K., & Ketut, G. I. A. (2020). The effect of perceived brand leadership towards consumer satisfaction and repurchase intention on e-commerce website. *Russian Journal of Agricultural and Socio-Economic Sciences*, 97(1).
- Widyatama, G. W., Chelliah, S., Kai, Y., Yingxing, Y., Tien, Y. C., Mey, W. C., & Sin, L. G. (2020). Grab marketing strategy, research & development. *International journal of Tourism and hospitality in Asia Pasific (IJTHAP)*, 3(2), 97-104.
- Wijaya, I. W. R. (2022). Development of conceptual model to increase customer interest using recommendation system in e-commerce. *Procedia Computer Science*, 197, 727-733.
- WINARNO, W. A., MAS'UD, I., & PALUPI, T. W. (2021). Perceived Enjoyment, Application Self-efficacy, and Subjective Norms as Determinants of Behavior Intention in Using OVO Applications. *The Journal of Asian Finance, Economics, and Business*, 8(2), 1189-1200.
- Zahid, H., Ali, S., Abu-Shanab, E., & Javed, H. M. U. (2022). Determinants of Intention to use E-Government Services: An Integrated Marketing Relation View. *Telematics and Informatics*, 101778.
- Zhang, Y. (2015). The impact of brand image on consumer behavior: A literature review. *Open journal of business and management*, 3(01), 58.
- Zolait, A. H. S. (2014). The nature and components of perceived behavioural control as an element of theory of planned behaviour. *Behaviour & Information Technology*, 33(1), 65-85.

