

Fast fashion mobile applications: exploring the role of emotions on behavioural intention

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Summary

Using the foundations of the extended Unified Theory of Acceptance and Use of Technology (UTAUT2) and Stimulus – Organism – Response (SOR) model this exploratory study investigates the factors influencing emotions and behavioural intention to use fast fashion mobile applications.

A survey with a total of 216 respondents, analysed using PLS-SEM, confirms the direct and positive influence of effort expectancy, privacy awareness and social influence on consumer emotions; as well as the significant impact of emotions on behavioural intention. This amalgamation of factors suggests a complex interplay influencing consumer behaviour within the fast fashion mobile app landscape as factors like performance expectancy and hedonic motivation did not have a significant effect on emotion in the context of fast fashion mobile applications among UK consumers aged 18-35.

This research makes a valuable contribution to our theoretical understanding of the factors that influence consumers emotions and intention to use mobile shopping fast fashion apps.

Track: Marketing and Retail

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Introduction

In the past decade, smartphones have risen as a prevalent handheld device for numerous activities, with their most recent role being a platform for purchasing products through mobile apps (Pantelimon et al., 2020). There are 7.33 billion active mobile users in the world and this number is expected to grow up to 7.49 billion by 2025 (Statista, 2023a). Due to the increased use of smartphones & tablets, mobile app use is an innovation that has grown exponentially worldwide. Mobile applications are defined as “small programs that run on a mobile device and perform tasks ranging from gaming to banking to shopping & web browsing” (Tao & Edmunds, 2018, p.32). The widespread uptake of app usage is concomitant with consumers' expectations that their smartphones and tablets provide a variety of features and mobility to supplant the need for a desktop computer: instant connectivity, usable and useful apps, feature convergence, and multi-modal use not previously seen in desktop computing (Gerlich et al., 2015). As of 2023, time spent with non-voice activities on mobile phones are 4.6 hours (Statista, 2023b), out of which 80% of time on mobile was spent inside an app (Moon & Domina, 2015).

One of the key reasons for the popularity of mobile apps is their ability to engage users extensively due to various aspects including hedonic and utilitarian features (Tarute et al., 2017), and it is assumed that this engagement has a positive impact on consumers' perceptions of the sponsoring brand. Mobile apps are embraced as "useful," indicating that they might be among the most influential forms of advertising developed thus far (Kopalle et al., 2020).

Over the past decade, technology has dramatically transformed our way of life, and this digital revolution has left no industry untouched, including fashion. Digital sales have outpaced offline sales, with mobile commerce (m-commerce) accounting for 43.4% in 2023, up from 41.8% in 2022 (Taneja, 2021). According to (Mahapatra, 2017) mobile devices are becoming effective channels for shopping experiences due to the factors of convenience (search, evaluation, possession and post-purchase) (Omar et al., 2021). It has become a crucial connection between brands and consumers. Existing studies suggest that mobile apps offer one of the most emotionally engaging platforms for purchasing, creating an opportunity for brands to strengthen their relationship with customers (Parker & Henninger, 2018). Distribution of mobile clothing in fast fashion shoppers in the UK by device includes 84.6% android app users & 15.4% iOS app users (Statista, 2023c). In UK preferred methods for buying fashion online includes purchasing through smartphone mobile apps and it comes on 4th number as the most used medium for shopping (Statista, 2023d).

Yet, previous studies usually look at mobile apps in a general sense, without specifying the industry or type of app (Al-Adwan & Sammour, 2020; Islam et al., 2010). Therefore, this research focused on Fast Fashion (FF) mobile apps. This decision is driven by the fashion industry's growing importance and increasing customer engagement in the fast fashion industry through mobile apps. In 2023, the fashion sector was the biggest part of the global e-commerce market, generating a substantial revenue of 760 billion dollars (Statista, 2023e). In 2022, online sales of apparel, shoes, handbags & accessories would collectively account for close to a third of e-commerce revenue in the United Kingdom amounting to over 60 billion US dollars.

The integration of cutting-edge technologies mobile apps has provided customers with a shopping experience that transcends the limitations of individual channels, seamlessly connecting various distribution channels. With the rise of Augmented Reality (AR), virtual

avatars, and virtual dressing rooms, these mobile apps are no longer just shopping tools; they have become immersive experiences. These technologies make online shopping for fashion feel more like shopping in a real store, helping to meet the needs of a wide range of customers (Idrees et al., 2020).

Young adults (18 – 35), the primary online shopping audience in fast fashion industry, have played a significant role in driving this digital surge, particularly accelerated by the COVID-19 pandemic. In the fashion sector, the traditional physical stores were significantly impacted by the pandemic (Sari et al., 2023). The shopping habits of young adults, underwent notable changes due to the COVID-19 pandemic, as revealed in a survey by Wang (2021). Before the pandemic, these young adults were already active online shoppers. However, the study indicates that the pandemic further accelerated their shift towards digital channels, with 28% of young adults expressing a likelihood of increasing their online shopping through mobile apps compared to their pre-pandemic behaviour (Wang, 2021).

Past research primarily focused on mobile engagement, usage intention, and perceived value in mobile applications (Hsiao et al., 2016). However, there has been limited exploration of the intention to buy fast fashion via mobile apps and the link between emotions toward these apps and behavioural intention (Miller, 2013). With the unique approach of combining UTAUT2, SOR and Privacy Paradox this exploratory study delves into various facets of mobile app adoption in fast fashion, specifically examining their impact on behaviour, perceptions, and purchasing decisions of young adults in the UK. It aims to understand how mobile apps influence consumer emotions and decision-making, providing valuable insights for fast fashion businesses leveraging this technology's innovation to stay ahead.

Literature Review

The fast fashion industry has undergone significant changes in the last ten years, with the proliferation of smartphones and the rise of new shopping methods like mobile apps. These developments have led to transformations in fast fashion industry business models and shifts in consumer behaviours (Bhardwaj & Fairhurst, 2010). Our lifestyle has been largely revolutionized & digitalized and all thanks to technology. Sales generated through digital platforms is higher as compared to offline sales, m-commerce sales are accounted for 43.4% in 2023 as compared to 41.8% in 2022 (Niranjanamurthy et al., 2013). Different types of technologies have been introduced (Ahuja & Tabeck, 2023; Rhee & Lee, 2021), where different fast fashion brands are using these technologies to enhance customer journey and user experience.

As digital transformation takes over, companies are using technologies like augmented reality (AR) virtual reality (VR), seamless payment options, delivery options, etc, to improve the consumer journey in online and mobile retail. Augmented reality enables customers to virtually try on clothing and visualize how it looks on their bodies by using smartphones. Virtual fitting fashion apps are the latest trend in the fashion industry. This gives an opportunity to try on clothes & accessories in virtual settings, which includes online games, social media platforms & augmented reality applications. Customers can create their own avatars or can use virtual models to try their favourite fashion products online from their favourite brands. Past studies in the fast fashion industry have primarily concentrated on investigating mobile satisfaction

(Rodríguez-Torrico et al., 2019), mobile engagement (Parker & Kuo, 2022), intention to use (Chi, 2018), and perceived value (Murillo-Zegarra et al., 2020). There are three key dimensions characterizing attitudes toward online shopping: utilitarian, hedonic, and social elements. Utilitarian attributes pertain to the functional aspects and distinctive features of mobile apps, including personalization, usefulness, ease of use, localization, and convenience. Previous studies underscore the significance of utilitarian attributes in shaping consumer attitudes. (Parker & Kuo, 2022) highlight efficiency and timesaving as critical factors influencing m-commerce engagement, while others emphasize the impact of perceived usefulness and ease of use on consumer attitudes (Chi, 2018). Perceived usefulness, identified by various authors, is recognized as a strong predictor of the perceived value of fashion mobile apps (Sun & Chi, 2018; Murillo-Zegarra et al., 2020). Additionally, personalization is a crucial aspect of mobile apps, positively influencing the customer experience (McLean et al., 2018), although it may not directly relate to customer attitude (Murillo-Zegarra et al., 2020).

Some interesting research has been conducted on m-commerce shedding light on the upward trajectory of sales. (Wang et al., 2015) noted a yearly increase in mobile device orders, indicating the growing adoption of mobile shopping by customers. In the UK, total retail m-commerce sales reached £50.36 billion in 2019, with expectations to grow to £61.14 billion in 2020 and surpass £105 billion by 2024 (Omar et al., 2021).

Previously hedonic aspects of apps, encompassing entertainment, enjoyment, visual appeal, and fun, were identified as crucial predictors of consumers' favourable attitudes and their intention to reuse an app (Lee & Kim, 2019). The social dimension reflects how the opinions of others influence an individual's intent to use and make purchases through fast fashion mobile apps. While third-party opinions can impact consumers' purchase intention (Sun & Chi, 2018), some researchers found no significant influence (Soni et al., 2019). With the rise of digitalization and online purchasing trends, online reviews and consumer opinions play an increasingly significant role in decision-making, potentially influencing consumers' attitudes (Doh & Hwang, 2009).

Fast fashion brands innovate by offering various features that enhance mobile shopping, ensuring convenience, personalization, and entertainment for consumers. These attributes redefine retail, creating an omni-channel marketplace that meets modern consumer demands. Within the Digital Innovation Analysis Framework (adapted from Pinto et al., 2017), these attributes are key drivers influencing user adoption and sustained app utilization. They are integral to fast fashion brands' digital innovation strategy, sustaining their competitive edge and meeting the expectations of digital-savvy consumers.

As online shopping becomes more convenient and enjoyable, people are doing it more often. But this growth in online activity that involves sensitive information like money and personal data seems strange because it raises concerns about privacy and security (Zhou, 2020). Many new services collect user data, sometimes without their knowledge. However, most people may not fully understand what happens with their data or the potential consequences, and regulations haven't caught up with these new services yet. So, the future of services like mobile commerce not only depends on the features but researchers need to look at the emotional and privacy side of mobile applications in the fast fashion industry.

Consumers' reactions to stimuli, such as their intention to make a purchase, are shaped by their emotions (Ha & Lennon, 2010). Numerous research studies have provided evidence that

emotions play a significant role in influencing how consumers behave (Ramadania et al., 2022; Cachero-Martínez & Vázquez-Casielles, 2021; Le et al., 2020; Yoo & Kim, 2014). Brand initiatives like Zara, H&M are using different technologies (AR/VR) in the mobile apps, which serve as stimulus & they are evolving the ways consumers traditionally interact with fashion. The immersive experiences range from social engagements, like virtual try-ons, to task-based interactions like outfit customization. The interactivity spectrum includes information-based actions, like AR-driven product views, entertainment-oriented experiences, such as personalization, and reward-driven interactions, typified by accruing virtual points. Given these arguments, emotions are likely to play a role in consumer use of mobile apps within fashion.

Theoretical Underpinnings

Our study is built on the foundations of The Unified Theory of Acceptance and Use of Technology 2 (UTAUT2), Stimulus-Organism-Response (SOR) model and privacy. UTAUT2 is a framework designed to explore the factors that drive the acceptance and usage of technology (Singh & Matsui, 2017). Since mobile apps are a relatively new technology, it's crucial to understand how people adopt them. Several studies have found that this model is missing social influence and privacy aspects. (Gil-Cordero, 2022) looked at acceptance factors of Zara's shopping app and suggested that other people's recommendations and user-generated content could impact app engagement and use. (Soni, 2019) who conducted research about factors affecting the adoption of fashion mobile, using UTAUT & extension of UTAUT 2 model, found that this model was missing factors like social influence & privacy.

In our research, we have excluded 'Habit' 'Facilitating conditions', and 'Price value' to focus on intrinsic factors that directly impact user behaviour in mobile commerce. This is consistent with the findings of (Sharififard et al., 2016) and An et al. (2016), both underscoring that the consideration of "Price value" is frequently neglected in research pertaining to the adoption of cost-free technologies, like mobile apps and social networks. Based on these discoveries, this study centres its attention on factors related to the adoption of mobile applications, presuming that the technology is readily available or does not incur costs. Facilitating conditions from UTAUT2 have been found to be an indirect construct impacting behavioural motivation (Kumar & Bervell, 2019; Raman & Rathakrishnan, 2020) highlighting that facilitating conditions tend to mask the relationship between behavioural motivation and user. Therefore, in this study, facilitating conditions tends to be less influential and this inclusion would complicate the model without adding meaningful insights.

Various studies have been using SOR (Stimulus-Organism-Response) approach to analyse consumer emotions and behaviour while shopping through mobile apps (Pop et al., 2023; Lim et al., 2022; Chen & Yao, 2018). This model explains how consumers make decisions. It has three parts: stimuli, organism, and response. Stimuli are the things that influence a person's internal state and their thoughts and feelings and come from consumer's experiences in the novel environmental context (Kim & Lennon, 2013). The organism represents an individual's internal processes that mediate between the stimuli and the person's responses. Response is what happens as a result of being exposed to stimuli and how the person feels on the inside (Pop et al., 2023). In this research model, stimulus would be interactivity with fast fashion mobile app, which would lead towards emotions, whether emotions are positive or negative depends on your experience with the mobile app. Finally, response would be

dependent on your stimulus and emotions and then one would decide if you continued using fashion mobile apps or not.

The SOR provides valuable insights into understanding users' emotional responses, especially in the context of mobile apps, where sensory and visual experiences are heightened (Peng & Kim, 2014). Analysing emotional responses can offer valuable insights into user engagement and satisfaction. It also helps us understand how these emotions may affect user perceptions of privacy and their willingness to use technology.

The concept of the Privacy Paradox suggests that although users may express concerns about their privacy, their actual behavior, such as sharing personal information, may not align with these concerns (Sutanto et al., 2013). In the context of mobile apps, where users often need to share more personal data and adapt to different digital settings, it's crucial to strike a balance between perceived risks and trust. This approach offers valuable insights into why individuals may, at times, prioritize privacy protection while, in other instances, they may not. It also provides guidance for developing safer and more privacy-conscious technologies and services. Trust and risk are closely related; if trust issues exist in mobile shopping, the risk factor cannot be disregarded (Chopdar, 2018). Consequently, both these elements have been integrated into the model as the privacy variable rather than being separately examined.

As previously discussed, UTAUT2 encompasses seven variables, including performance expectancy, effort expectancy, social influence, and facilitating conditions. Privacy Paradox introduces two critical variables, risks and trust, which contribute to both behavioral motivations and disclosure behavior, addressing the privacy aspects of the research. Meanwhile, the S-O-R (Stimulus-Organism-Response) model is instrumental in identifying consumers' emotional responses when making purchase decisions. These elements form the structure of the research model, placing the utilitarian, social, and hedonic aspects as triggers, considering the attitude towards fast fashion mobile apps as the entity, and purchase intention as the outcome.

Amalgamating the **UTAUT2**, **Privacy Paradox**, and **S-O-R models** is crucial as it offers a holistic understanding of consumer behavior within fast fashion mobile apps. These models individually address technology adoption, privacy concerns, and emotional responses, providing a comprehensive view that considers the interconnected influences of technological, privacy-related, and emotional factors. Combining them allows exploration of how variables from each model interact, predicting consumer behavior more accurately, offering contextual insights tailored to this specific environment, and providing strategic guidance for businesses in designing apps, crafting marketing strategies, and addressing privacy concerns effectively. This integration goes beyond theoretical merging; it creates a robust framework reflecting the intricate nature of consumer behavior in the fast fashion mobile app domain.

This model considers emotional responses, privacy concerns, and essential app elements, offering scholars a comprehensive view of user behavior. It underscores the importance of balancing enjoyable app experiences with user privacy, crucial for creating apps that truly resonate with consumers' emotions and concerns.

Conceptual Model Development and Hypotheses

Effort expectancy is the belief that using new technology will be easy and convenient (Venkatesh et al., 2012). It involves three aspects: perceived ease of use, actual ease of use, and the complexity of using the technology. The actual convenience or difficulty of using the technology can be assessed by comparing perceived ease of use with actual ease of use. In the context of Fashion Mobile Shopping Apps (FMSA), effort expectancy means how effortlessly a person can use the app to browse and shop for fashion items.

While, using mobile apps payment is one of the crucial steps to complete your purchase online. Consumers use mobile devices to pay for services and digital or physical goods without the need for cash, checks or credit cards (Liao & Yang, 2020). Different types of payment options are offered to customers to enhance their user experience in their purchase journey through mobile apps. Debit card with 66% and online payment services (like Amazon Pay & PayPal) with 58% are the most common online payment types in the UK in 2023 (Statista, 2024a). Digital wallet market share is 50% (Statista, 2024b) and shoppers say that payment choice is a top driver of loyalty for them (Zhang et al., 2023). Given these arguments, effort expectancy is likely to affect consumer use of mobile apps within fashion.

Enjoyment in shopping encompasses the fun and relaxation aspects, which go beyond utilitarian purposes and cater to consumers' desire for a pleasurable experience. Perceived enjoyment measures how much people find using technology enjoyable. Even when consumers use m-commerce for practical reasons, they still seek enjoyment, especially when shopping for enjoyable products like fashion items. Consequently, both hedonic (enjoyment-driven) and utilitarian (purpose-driven) motivations coexist in m-commerce (Hu et al., 2023). The concept of hedonic pertains more to the value linked to the overall experience rather than just the emotions and the product itself, and consumers are more inclined to buy a product when they have a relatively enjoyable experience and find it entertaining, as noted by some researchers (Kaur et al., 2020).

Hedonic motivation primarily revolves around the enjoyment and pleasure derived from using a technology. It encompasses the non-functional, enjoyable aspects of technology usage (Tamilmani et al., 2019). When users find a technology enjoyable, independently of any performance-related outcomes or practical utility, they are more inclined to adopt and use it. In the UTAUT2 context, hedonic motivation assesses how pleasant or satisfying technology use is on an intrinsic level. The SOR model is rooted in environmental psychology. Within this model, the 'Organism' component specifically addresses consumers' internal emotional responses. Emotions in the SOR model encompass a wide range of affective states that emerge in response to stimuli, such as store environments or digital interfaces (Buxbaum, 2016). These emotions encompass various feelings, from positive ones like joy and excitement to negative ones like anger and frustration. They play a vital role in shaping the subsequent behaviours or responses of consumers, distinguishing this construct from hedonic motivation within our model.

The concept of privacy suggests that although users may express concerns about their privacy, their actual behaviour, such as sharing personal information, may not align with these concerns (Sutanto et al., 2013). In the context of mobile apps, where users often need to share more personal data and adapt to different digital settings, it's crucial to understand how privacy awareness can impact emotions. Research has shown that consumers' perceptions are

influenced by the privacy concerns they have about using mobile applications (Shaw & Sergueeva, 2019), and this perception influences behavioural intention (Ooi & Tan, 2016). Existing studies have demonstrated that consumers perceived privacy impacts their intention to utilise and adopt mobile applications (Wottrich et al, 2008; Luo et al, 2010).

Previous research has demonstrated that perceived privacy and security are distinct but can influence each other (Balapour et al, 2020; Smith et al., 2011). Given the clear causal relationship between these concepts in the literature, we propose that privacy risks and security are interconnected. When users perceive a higher level of security in fast fashion apps, they tend to be more content with the choices they make when purchasing (Rodríguez-Torrico et al., 2019). Additionally, minimal worries about security and privacy issues instil trust among consumers when it comes to embracing mobile commerce for apparel (Sun and Chi, 2018). Given these arguments, privacy is likely to affect consumers' emotion towards and use of mobile apps within fashion.

Performance Expectancy is described as the extent to which using a technology will offer advantages to consumers when engaging in specific activities (Venkatesh et al., 2012), referring to individuals using the technology in a personal or non-organizational context, rather than within an organizational setting.

Utilitarian attributes encompass the practical functionalities and distinctive features of mobile applications, including customization, practicality, user-friendliness, localization, and convenience. Performance Expectancy in UTAUT2 model is referred to utilitarian performance that use of technology provides.

Previous studies have emphasized the significance of these utilitarian attributes in shaping consumer attitudes. For instance, Parker and Kuo (2022) have highlighted the importance of efficiency and timesaving in driving consumer engagement with mobile commerce. Others have underscored the influential role of perceived usefulness and ease of use in shaping consumer attitudes (Chi, 2018). Perceived usefulness has garnered attention from various authors, with some asserting that it is the primary predictor of how consumers perceive the value of fashion mobile apps, (Chi, 2018; Murillo-Zegarra et al., 2020). Furthermore, personalization represents another crucial attribute of mobile apps. Personalized services have a positive impact on the customer experience when using mobile apps (McLean et al., 2018).

Several fast fashion brands have introduced AR & VR equipped mobile apps to increase the engagement rate which aligns with concept of Performance Expectancy from UTAUT2 where using a technology is expected to provide benefits to users in performing specific tasks efficiently. Augmented reality enables customers to virtually try on clothing and visualize how it looks on their bodies by using smartphones. By 2027, the global market for AR technology in the fashion industry is projected to expand by USD 100 billion (Rhee & Lee, 2021). According to Statista, the user base for mobile AR is expected to reach 1.4 billion (Statista, 2023f). 66% of the shoppers who use AR are less likely to return their purchases as the experience itself is satisfying and convenient (Alimamy & Gnoth, 2022).

Previous research has demonstrated that Performance Expectancy significantly influences consumers' behavioural motivations in the context of mobile commerce (Chong, 2013) and mobile internet usage (Venkatesh et al., 2012). Smartphones have developed to fulfil

consumer needs through one device in order to improve performance. Given these arguments, performance expectancy is likely to affect consumer sus of mobile apps within fashion.

Social influence means that what other people think or say can affect whether someone decides to use a technology. For example, if someone's friends or people they know like a particular technology, it can make that person more likely to want to use it too. Some research shows that what other people say can strongly influence whether someone wants to buy something, while other studies do not find a clear link (Pop et al., 2023). Also, when people hear what others think about an app, it can affect how useful they think the app is. 31% of people prefer to read 6 reviews online before making a purchase (Statista, 2023a). Since people often see shopping as something they do with others, they tend to trust recommendations from friends or people they know when they are deciding what to buy (Pop et al., 2023).

Certain research indicates that what other people think can influence whether someone decides to buy something (Sun & Chi, 2018). However, other studies do not find a strong connection between what others say and an individual's decision to purchase (Soni et al., 2019). Additionally, when people hear what others think about an app, it can affect how useful they believe the app is (Sun & Chi, 2018). Since people often see shopping as a social activity, they are open to relying on recommendations from friends or people they know when they are deciding what to purchase (Kim et al., 2017).

Shein dominated the fast fashion app market, amassing 200 million downloads in 2022, surpassing H&M and Zara in valuation (Jin, 2023). Its success stems from micro influencer marketing and customer reviews, a unique approach leveraging lesser-known influencers who provide detailed product feedback in exchange for referral commissions. This strategy has significantly elevated sales and established Shein's global reputation in online retail, highlighting the impactful role of social influence on mobile app use in fashion.

In light of the above, the following hypotheses are proposed:

H1 Effort Expectancy has a significant impact on consumer emotions towards fast fashion mobile apps.

H2 Hedonic Motivation has a significant impact on consumer emotions towards fast fashion mobile apps.

H3 Privacy Awareness has a significant impact on consumer emotions towards fast fashion mobile apps.

H4 Performance Expectancy has a significant impact on consumer emotions towards fast fashion mobile apps.

H5 Social Influence has a significant impact on consumer emotions towards fast fashion mobile apps.

H6 Emotions significantly impact behavioural intention to use fast fashion mobile apps.

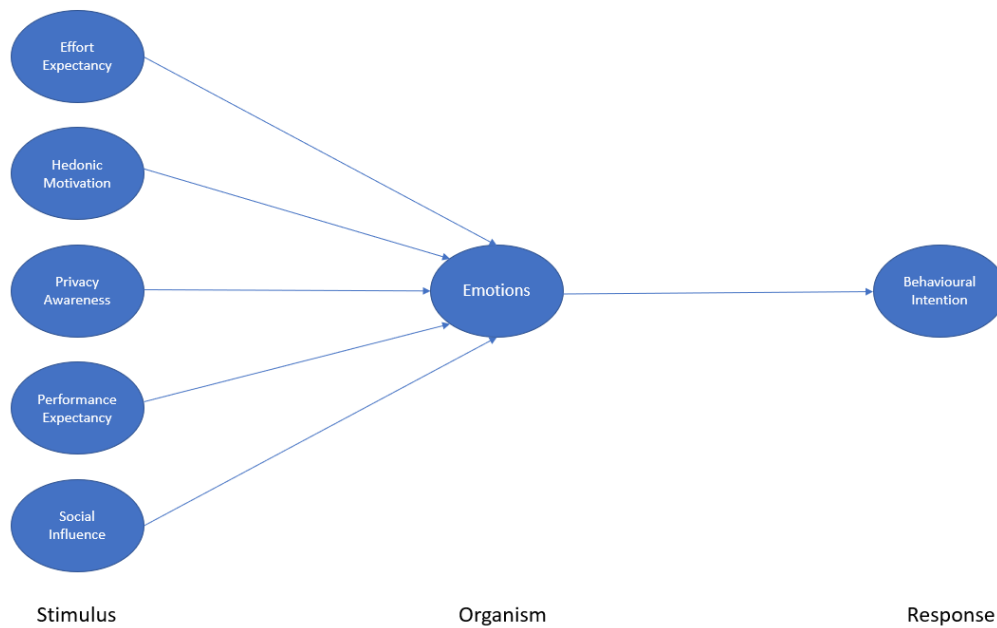


Figure 1 – **Conceptual Model**

Methodology

Our data collection occurred on the JISC platform (<https://www.jisc.ac.uk/>). We gathered data from 216 participants, all aged between 18 and 35 and residing in the UK.

This research is using convenience sampling in which members of the target population meet the certain criteria such as easy accessibility, geographical area, time availability & willingness to participate are included for the purpose of the study (Etikan et al., 2016). Convenience sampling is cost efficient, and it is also referred to the researching subjects of the population that are easily accessible to the researcher. The survey was distributed online through Jisc-generated links shared on platforms like university intranet, and social media, targeting a young audience accustomed to using social media for surveys. Online platforms were chosen for their accessibility and potential to gather numerous responses rapidly (Sue & Ritter, 2012). The questionnaire included qualifying questions about age and residency in the UK.

We used a 42-item survey with items derived from previous studies on UTAUT2 (Venkatesh et al., 2003), and SOR (Hewei & Youngsook, 2022) adapted for our study on fast fashion mobile applications. The survey utilised a 5-point Likert scale, and results were analysed using partial least squares structural equation modelling (PLS-SEM) with SmartPLS 3.2.6 software.

PLS-SEM is recommended for developing models, theory testing, theory development, and when dealing with a small sample size, allowing for exploratory analysis (Ringle et al., 2012). It's particularly useful for exploring relationships between constructs and assessing model performance (Gefen et al., 2011). PLS-SEM can handle multiple independent variables simultaneously (Sarstedt et al., 2014), making it suitable for our complex model. It predicts intricate models without distribution assumptions (Hair et al., 2012; Sosik et al., 2009). PLS-SEM does not rely on normality assumptions and works well with smaller sample sizes (Hair et al., 2019). It employs resampling methods for analysing indirect effects. In contrast, Covariance-Based Structural Equation Modelling (CB-SEM) fits well-established models (Kline, 2023; Reinartz et al., 2009). PLS – SEM is a two-step analysis: first, it assesses the

measurement model, which includes the validity and reliability of the constructs in the model and examines the connections between constructs and their corresponding items (Kock, 2014). On the other hand, when assessing the structural model, we are primarily concerned with investigating the causal relationships between constructs and testing hypotheses for the examination of construct relationships (Ali et al., 2018).

Data Analysis

Twenty-four percent of the respondents were male, and 63% of the sample was younger than 30 years old. Among all respondents, 96% reported that they engage in online shopping, and 94% have used a mobile app for fast fashion shopping.

Figure 2 displays the measurement model. Before presenting the PLS-SEM results, we assessed the model's reliability and validity using AVE-SV comparison (Fornell & Larcker, 1981) and the heterotrait-monotrait (HTMT) matrix (Henseler et al., 2015). Results illustrated in Table 1 confirm the model's high reliability and validity at both the indicator and construct levels. This is evidenced by Cronbach's alpha (CA) exceeding the threshold of 0.70 (Hair Jr et al., 2021), Composite Reliability (CR) surpassing the critical value of 0.70 (Hair Jr et al., 2021), and Average Variance Extracted (AVE) exceeding the benchmark of 0.50 (Fornell & Larcker, 1981) for all constructs. Furthermore, the conceptual model's discriminant validity was supported by all ratios being smaller than 0.85 (Henseler et al., 2015).

Table 1. Results of discriminant validity of measures and correlation matrix.

Constructs	CA	CR	AVE	1	2	3	4	5	6
1. BI	0.875	0.922	0.798						
2. EE	0.831	0.897	0.743	0.462					
3. HM	0.965	0.977	0.935	0.673	0.472				
4. ORGANISM	0.911	0.944	0.848	0.604	0.530	0.397			
5. PA	0.862	0.916	0.785	0.561	0.347	0.316	0.540		
6. PE	0.905	0.940	0.840	0.552	0.668	0.544	0.453	0.291	
7. SI	0.900	0.937	0.833	0.669	0.527	0.576	0.669	0.361	0.476

Notes. CR: Composite Reliability; CA: Cronbach's Alpha; AVE: Average Variance Extracted.

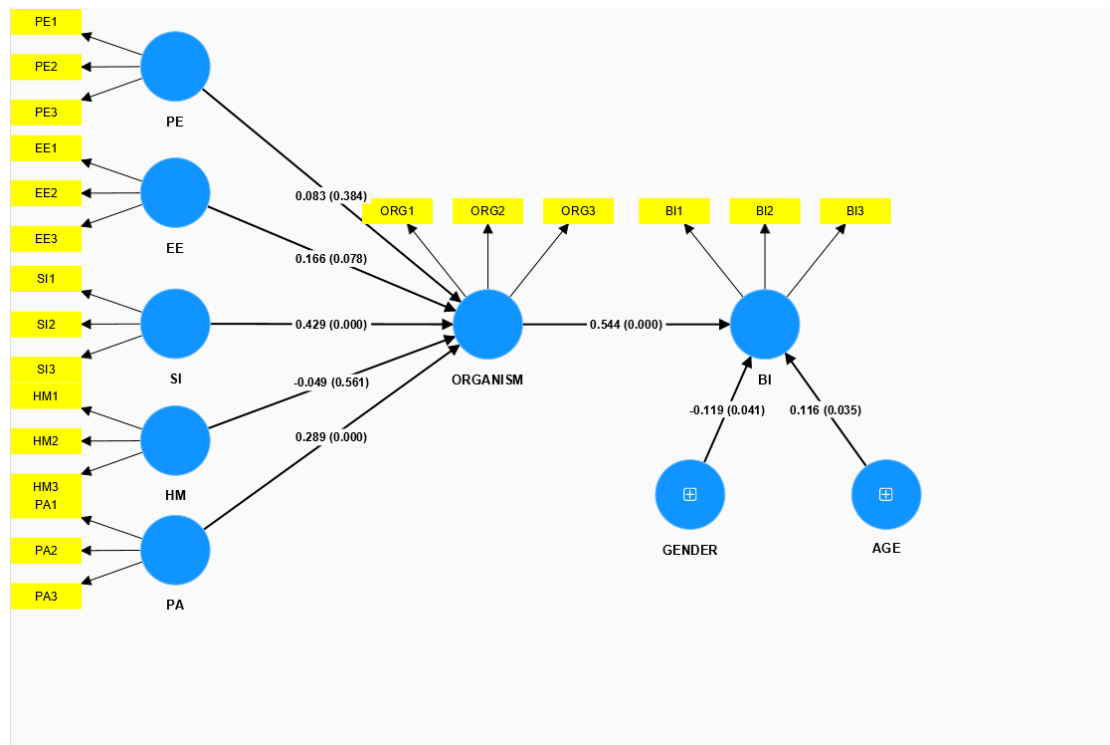


Figure 2: **Measurement** Model.

In assessing the collinearity among predictors, the variance inflation factor (VIF) serves as a critical diagnostic tool. According to (Hair et al., 2019), a VIF value below 3 is indicative of an acceptable level of collinearity. The data presented in Table 2 corroborate the absence of multicollinearity within this study, as evidenced by VIF values remaining below the threshold of 3 across all predictors.

Table 2. Multicollinearity test.

Constructs	VIF
EE → ORGANISM	1.684
HM → ORGANISM	1.642
ORGANISM → BI	1.029
PA → ORGANISM	1.170
PE → ORGANISM	1.734
SI → ORGANISM	1.596

Table 3 summarizes the results of the hypothesis testing conducted through PLS-SEM analysis. The findings reveal positive relationships of social influence → organism, privacy awareness → organism, and organism → behavioural intention, with all p -values smaller than 0.001. Effort expectancy was also found to positively affect organism, though at a marginally significant level ($p = 0.078$). However, the analysis indicated a non-significant relationship between performance expectancy and organism, as well as between hedonic motivation and organism ($ps > 0.05$). Control variables, including age and gender, were significant in this model ($p < 0.05$), suggesting that females and those closer to 35 are more inclined to use mobile apps for fast fashion shopping.

Table 3. Structural estimates (N = 216).

Hypothesis	Relationship	β	T statistics	p-value	support
H1	EE $\rightarrow$ ORGANISM	0.166	1.763	0.078 [†]	Yes
H2	HM $\rightarrow$ ORGANISM	-0.049	0.582	0.561	No
H3	PA $\rightarrow$ ORGANISM	0.289	4.466	0.000***	Yes
H4	PE $\rightarrow$ ORGANISM	0.083	0.870	0.384	No
H5	SI $\rightarrow$ ORGANISM	0.429	4.939	0.000***	Yes
H6	ORGANISM $\rightarrow$ BI	0.544	8.283	0.000***	Yes

(* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; [†] marginally significant, ns not significant)

Discussion

This study found that there was a marginally significant effect of effort expectancy on emotions in the context of fast fashion mobile applications within the UK. The findings are consistent with previous research, which has established a positive connection between effort expectancy and behaviour within fashion industry. This is consistent with prior technology acceptance studies and models (Venkatesh et al., 2012; Chong, 2013) in FMSA. The extent to which an app is used depends on its simplicity or complexity thus we have found that the effort needed to use a fast fashion mobile app has an effect on consumers emotions. Consistent with this, various earlier studies have drawn similar conclusions (Al-Gahtani et al., 2007; Arenas-Gaitán et al., 2016), and current research supports this perspective as well (Rudhumbu, 2022).

Literature has pointed out that hedonic and utilitarian motivation coexist in m-commerce (Hu et al., 2023). Our results (H2) indicate that hedonic motivation does not have a significant influence on consumers emotions. This finding aligns with the conclusions drawn by (Harsono & Suryana, 2014), suggesting that the inclusion of fun and entertainment aspects in FMSA does not contribute significantly to its adoption. Results of this study perfectly align with the results of study by (Novela et al., 2020) who found out that the presence of hedonic motivation, whether high or low, does not have a substantial impact on the attitude of users engaged in online shopping, the level of hedonic motivation among online shopping users does not lead to significant changes in their overall attitude towards the online shopping experience.

Low privacy and security concerns lead to a positive attitude when consumers are using an app. Therefore, app users are more confident when they are aware about privacy and security issues, as an app can collect data without sending a notification to the user or others to access their private information. Previous authors found that low privacy and security issues lead to satisfaction (Rodríguez-Torrico et al., 2019) and enhance trust among consumers regarding the adoption of apparel mobile commerce (Sun and Chi, 2018; Rodríguez-Torrico et al., 2019). According to (Wang et al., 2021), consumer behaviour is dependent on how service providers control their data and how their shared data is used by the provider. Customers' views on privacy violation and manipulation can significantly impact their brand identification, satisfaction, and loyalty, thus our results extend these findings, adding the positive impact of privacy awareness on consumers' attitude towards using fast fashion apps (H3).

This study's results indicate that performance expectancy does not have a significant impact on consumer emotions in the context of using fast fashion mobile applications (H4). Prior research has emphasized that the effectiveness of a retailer's mobile app primarily hinges on its practical advantages, which constitute the most significant factors propelling customers to

utilize a mobile application (Rauschnabel et al., 2019) and to purchase fashion items in particular (Parker & Wang, 2016). Unexpectedly our findings deviated from expectations, aligning with a study on mobile payment services in Cambodia (Do Nam Hung et al., 2019). Similarly, a study by (Moghavvemi et al., 2017) found that the influence of performance expectancy on the intention to adopt IT innovation among entrepreneurs yielded non-significant results in Malaysia.

Social influence was found to significantly impact emotions when utilising fast fashion mobile applications (H5). The results are in coherence with the past research, exemplified by the work of (Maziriri et al., 2020), which indicates that individuals' viewpoints influence the acceptance of mobile apps and should be taken into account when devising a fashion brand communication strategy. Other studies have gone a step further to examine its moderating influence and non-direct effects on usage intentions, as shown in the research by (Yang et al., 2022), exploring its potential interactions with other variables. According to (Sun & Chi, 2018) when people hear what others think about an app, it can affect how useful they believe the app is. The noteworthy influence of social influence on behavioural intention, as noted by (Hew et al., 2015) implies that the beliefs, emotions and actions of users of fast fashion mobile shopping apps can be influenced by their social networks.

Furthermore, the positive relationship between performance expectancy and consumer affective experience suggests that, when shopping a fashion product, consumers with utilitarian/functional considerations are likely to form sensational judgements using the retailer's mobile application and are likely to form a favourable affective experience towards this experience. (McLean et al., 2018) & (Rauschnabel et al., 2019) also found this result and concluded that utilitarian factors (ease of use, convenience, effortlessness) stimulate the level of emotional responses experienced by a customer when using a retailer's mobile application.

Mobile app which is the stimulus in this case plays the significant role in determining positive or negative emotions of consumers (organism). In this sense, (Kakar, 2017) stated that a failure in the utilitarian features generates negative emotions in the user that are more significant than the positive emotions felt with the existence of these features. (Pop et al., 2023) used SOR approach to analyse and understand the emotional involvement of consumers while shopping through mobile apps. Many research investigations have presented proof that emotions have a substantial impact on shaping consumer behaviour (Yoo & Kim, 2014). Customers content with an app, perceiving it as effective, convenient, useful, and perceived positively by their peers are more inclined to utilise fast fashion mobile applications.

Conclusion

Using the foundations of UTAUT2 and SOR this study investigates the factors influencing emotions and behavioural intention to use fast fashion mobile applications. This research introduces innovation by delving into the relatively niche but growing area of mobile applications from a marketing perspective and incorporating various dimensions within the fast fashion retail context (Pop et al., 2023). The unique aspect of this study is that it brings together UTAUT2, SOR and privacy factors which have not been previously integrated, distinguishing it from all previous studies. Control variables, including age and gender, were significant in this model ($p < 0.05$), suggesting that females and those who are closer to the 35-year age are more inclined to use mobile apps for fast fashion shopping.

The study confirms the direct and positive influence of effort expectancy, privacy awareness and social influence on behavioural intention. This amalgamation of factors suggests a complex interplay influencing consumer behaviour within the fast fashion mobile app landscape as factors like performance expectancy and hedonic motivation did not appear significant in the context of fast fashion mobile applications among UK consumers aged 18-35.

This study aimed to delve into the impact of fashion mobile apps on consumer emotion and behavioural intention. It scrutinized how these apps influenced consumer emotions, and choices within the fashion realm. Additionally, it critically examined the role of social influence in shaping purchase decisions via mobile apps and evaluated the significance of privacy awareness in the fast fashion industry's mobile app landscape.

Theoretical & Managerial Implications

This research makes a valuable contribution to our theoretical understanding of the factors that influence consumers emotions and their intention to use mobile shopping (m-shopping) fast fashion apps. Our study was based on three foundations (UTAUT2, SOR and privacy) that have not been integrated together to analyse consumer emotions in the fast fashion industry. The current research offers several meaningful contributions to the field. It aims to advance our understanding of customer experiences within the domain of m-commerce, specifically within fast fashion mobile applications. While customer experience has been thoroughly explored in an e-commerce context, this study brings a new angle by focusing on m-commerce specifically in the fast fashion industry (Huang, 2012; Rose et al., 2012; Mclean & Wilson, 2016). In the context of mobile applications, many studies have constrained their scope to factors that motivate customers to download and utilize these apps (Tang, 2019; Kang *et al.*, 2015; Kim *et al.*, 2017; Tam *et al.*, 2020). This study adds value to prior research by uncovering how facets of fast fashion mobile applications impact consumer emotions and thus their intention to use the mobile applications.

It is essential for the application to be practical, and marketers should enhance its speed, performance, and functionality to ensure a superior customer experience during the decision-making process. If consumers perceive the app as unhelpful or not conducive to efficient shopping, they are likely to switch to an alternative sales channel. This research has given a new managerial perspective to people out there that how privacy and emotions cannot be ignored or eliminated while conducting research about m-commerce regardless of industry. This analysis strongly emphasises the complex nature of influential factors on emotions when and utilising technology.

From a managerial perspective, our findings hold significance for marketers and retailers, offering crucial insights into the factors influencing behavioural intentions through fast fashion mobile apps. The results emphasize the particular importance of social influence and privacy awareness on fast fashion mobile application use. Therefore, marketers and fashion retailers should prioritize addressing consumer privacy awareness as a point of priority. The significance of social influence suggest that a focus should also be on addressing consumer social networks and facilitating that group aspect of utilising apps – perhaps through things such as competitions and challenges that are focused on group rather than individual.

Limitations & Future Research

The present study has also some limitations. Not all constructs from UTAUT2 were used, which may be able to add more depth to the study. Mobile shopping activity is still at a nascent stage, and it hasn't progressed to the point where it could become a routine or habitual behaviour (Hanif et al., 2022), thus future studies may want to include habit. Additionally, privacy concerns, trust and risk were also not addressed. Adding these constructs to the model could help to understand the complex nature of emotions when utilising fast fashion applications. Risk and trust are essential in safeguarding digital environments, as it provides insights into why people may sometimes take privacy-protective measures and at other times overlook them, offering guidance for creating safer and more privacy-respectful technologies and services. Moreover, trust and risk are parallel to each other and if one individual has trust issues in mobile shopping then risk factor cannot be ignored (Chopdar, 2018). Researchers should also delve deeper into investigating various aspects of perceived risk and trust to gain a more comprehensive understanding of the underlying mechanisms at play.

Another limitation is the sample, as using the UK population of 18–35-year-olds means that the data cannot be generalised to other populations. Additionally, a larger sample size would encourage more robust results.

Future research directions could encompass upcoming developments, like the incorporation of virtual reality (VR) and augmented reality (AR) within mobile apps. These enhancements are aimed at enhancing the user experience, and thus, their influence should be taken into account in upcoming research endeavours. Additionally, there is potential for further research to pinpoint fresh moderating variables, such as generational factors, and delve into generational distinctions within the fast fashion mobile app context. Future studies can incorporate gender, age, income, or frequency of online purchase as moderators and can test how these factors can impact consumer engagement. Given that age and gender were significant this is also an area that can be further researched. The emotion construct did not take into account negative emotions – thus a deeper analysis into differing types of emotions would further increase understanding around the role of emotions in utilising mobile applications.

The predominant approach in researching mobile apps has involved the use of questionnaire surveys in methodology. However, cross-sectional surveys come with limitations, including a lack of long-term perspective and potential discrepancies between perceptual responses and real behaviour. Future researchers might enhance their studies by incorporating diverse data collection methods, such as conducting experimental research alongside focus groups for increased triangulation and validity. The academic community could also benefit from empirical insights derived from longitudinal observational data. Digital footprints, encompassing user-shared information on social media profiles like age, residence details, texts, images, and videos, stand out as a credible source for such observational longitudinal data, enabling the examination of actual behaviour rather than intended behaviour (Tang, 2019).

References

- Ahuja, V., & Tabeck, P. S. (2023). Role of social media to enhance brand engagement and brand perception in the textile, apparel, and fashion industry. Social media and online consumer decision making in the fashion industry (pp. 230-242). IGI Global.
- Al-Adwan, A. S., & Sammour, G. (2020). What makes consumers purchase mobile apps: Evidence from Jordan. *Journal of Theoretical and Applied Electronic Commerce Research*, 16(3), pp. 562-583.
- Al-Gahtani, S. S., Hubona, G. S., & Wang, J. (2007). Information technology (IT) in Saudi Arabia: Culture and the acceptance and use of IT. *Information & Management*, 44(8), pp. 681-691.
- Ali, F., Rasoolimanesh, S. M., Sarstedt, M., Ringle, C. M., & Ryu, K. (2018). An assessment of the use of partial least squares structural equation modeling (PLS-SEM) in hospitality research. *International Journal of Contemporary Hospitality Management*, 30(1), pp. 514-538.
- Alimamy, S., & Gnoth, J. (2022). I want it my way! the effect of perceptions of personalization through augmented reality and online shopping on customer intentions to co-create value. *Computers in Human Behavior*, 128, 107105.
- Arenas Gaitán, J., Peral Peral, B., & Villarejo Ramos, Á F. (2016). Grupos de mayores en la banca electrónica. segmentación de clases latentes con PLS-POS. Paper presented at the XVIII Congreso De Marketing AEMARK (2016), pp. 611-626.
- Balapour, A., Nikkhah, H. R., & Sabherwal, R. (2020). Mobile application security: Role of perceived privacy as the predictor of security perceptions. *International Journal of Information Management*, 52, 102063.
- Bhardwaj, V., & Fairhurst, A. (2010). Fast fashion: Response to changes in the fashion industry. *The International Review of Retail, Distribution and Consumer Research*, 20(1), pp. 165-173.
- Buxbaum, O. (2016). The sor-model. Key Insights into Basic Mechanisms of Mental Activity, Springer.
- Chen, C. C., & Yao, J. Y. (2018). What drives impulse buying behaviors in a mobile auction? The perspective of the Stimulus-Organism-Response model. *Telematics and informatics*, 35(5), pp. 1249-1262.
- Chi, T. (2018). Understanding Chinese consumer adoption of apparel mobile commerce: An extended TAM approach. *Journal of Retailing and Consumer Services*, 44, pp. 274-284.
- Chong, A. Y. (2013). Predicting m-commerce adoption determinants: A neural network approach. *Expert Systems with Applications*, 40(2), pp. 523-530.
- Chopdar, P. K., Korfiatis, N., Sivakumar, V. J., & Lytras, M. D. (2018). Mobile shopping apps adoption and perceived risks: A cross-country perspective utilizing the unified theory of acceptance and use of technology. *Computers in Human Behavior*, 86, pp. 109-128.

Do Nam Hung, J. T., Azam, S. F., & Khatibi, A. A. (2019). An empirical analysis of perceived transaction convenience, performance expectancy, effort expectancy and behavior intention to mobile payment of Cambodian users. *International Journal of Marketing Studies*, 11(4), pp. 77-90.

Doh, S., & Hwang, J. (2009). How consumers evaluate eWOM (electronic word-of-mouth) messages. *Cyberpsychology & Behavior*, 12(2), pp. 193-197.

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), pp. 1-4.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), pp. 39-50.

Gefen, D., Rigdon, E. E., & Straub, D. (2011). Editor's comments: An update and extension to SEM guidelines for administrative and social science research. *MIS Quarterly*, 35(2), pp. 3-14.

Gerlich, R. N., Drumheller, K., Babb, J., & De'Armond, D. (2015). App consumption: An exploratory analysis of the uses & gratifications of mobile apps. *Academy of Marketing Studies Journal*, 19(1), pp. 69.

Gil-Cordero, E., Ledesma-Chaves, P. and Baena-Luna, P., (2023). Acceptance factors of Zara's shopping app among fashion consumers during COVID-19. *Journal of Consumer Behaviour*. 22(4), pp. 955-970.

Ha, Y., & Lennon, S. J. (2010). Effects of site design on consumer emotions: Role of product involvement. *Journal of Research in Interactive Marketing*, 4(2), pp 80-96.

Hair Jr, J., Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). A primer on partial least squares structural equation modeling (PLS-SEM): Sage publications.

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), pp. 2-24.

Hair, J. F., Sarstedt, M., Pieper, T. M., & Ringle, C. M. (2012). The use of partial least squares structural equation modeling in strategic management research: A review of past practices and recommendations for future applications. *Long Range Planning*, 45(5-6), pp. 320-340.

Hanif, M. S., Wang, M., Mumtaz, M. U., Ahmed, Z., & Zaki, W. (2022). What attracts me or prevents me from mobile shopping? an adapted UTAUT2 model empirical research on behavioral intentions of aspirant young consumers in Pakistan. *Asia Pacific Journal of Marketing and Logistics*, 34(5), pp. 1031-1059.

Harsono, L. D., & Suryana, L. A. (2014). (2014). Factors affecting the use behavior of social media using UTAUT 2 model. Paper presented at the Proceedings of the First Asia-Pacific Conference on Global Business, Economics, Finance and Social Sciences, pp. 1-14.

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), pp. 115-135.

Hewei, T., & Youngsook, L. (2022). Factors affecting continuous purchase intention of fashion products on social E-commerce: SOR model and the mediating effect. *Entertainment Computing*, 41, pp. 100474.

Hsiao, C., Chang, J., & Tang, K. (2016). Exploring the influential factors in continuance usage of mobile social apps: Satisfaction, habit, and customer value perspectives. *Telematics and Informatics*, 33(2), pp. 342-355.

Hu, L., Filieri, R., Acikgoz, F., Zollo, L., & Rialti, R. (2023). The effect of utilitarian and hedonic motivations on mobile shopping outcomes. A cross-cultural analysis. *International Journal of Consumer Studies*, 47(2), pp. 751-766.

Huang, K., Zhang, C., Ma, X., & Chen, G. (2012). Predicting mobile application usage using contextual information. Paper presented at the Proceedings of the 2012 ACM Conference on Ubiquitous Computing, pp. 1059-1065.

Idrees, S., Vignali, G., & Gill, S. (2020). Technological advancement in fashion online retailing: A comparative study of Pakistan and UK fashion e-commerce. *International Journal of Economics and Management Engineering*, 14(4), pp. 313-328.

Islam, R., Islam, R., & Mazumder, T. (2010). Mobile application and its global impact. *International Journal of Engineering & Technology*, 10(6), pp. 72-78.

Jin, Y. (2023). SHEIN: How does the most mysterious 10-billion-dollar company in china achieve overseas growth? Innovation of digital economy: Cases from china (pp. 361-373). Springer.

Kakar, A. K. S. (2017). Why do users prefer the hedonic but choose the utilitarian? investigating user dilemma of hedonic utilitarian choice. *International Journal of Human-Computer Studies*, 108(C), pp. 50-61.

Kang, J. M., Mun, J. M., & Johnson, K. K. (2015). In-store mobile usage: Downloading and usage intention toward mobile location-based retail apps. *Computers in Human Behavior*, 46, pp. 210-217.

Kaur, K., Osman, S., Bakar, E. A., & bin Sabri, M. F. (2020). Development of theoretical framework for adoption of omni-channel retailing by omni-shoppers for fashion apparels: UTAUT2 and the role of personal innovativeness, brand image and fashion involvement. *International Journal of Business Economics Law*, 21(11), pp. 90-100.

Kim, J., & Lennon, S. J. (2013). Effects of reputation and website quality on online consumers' emotion, perceived risk and purchase intention: Based on the stimulus-organism-response model. *Journal of Research in Interactive Marketing*, 7(1), pp. 33-56

Kim, M., Kim, J., Choi, J., & Trivedi, M. (2017). Mobile shopping through applications: Understanding application possession and mobile purchase. *Journal of Interactive Marketing*, 39, pp. 55-68.

Kline, R. B. (2023). Principles and Practice of Structural Equation Modeling. Guilford Publications.

Kock, N. (2014). Advanced mediating effects tests, multi-group analyses, and measurement model assessments in PLS-based SEM. *International Journal of E-Collaboration*, 10(1), pp. 1-13.

Kopalle, P. K., Kumar, V., & Subramaniam, M. (2020). How legacy firms can embrace the digital ecosystem via digital customer orientation. *Journal of the Academy of Marketing Science*, 48, pp. 114-131.

Kumar, J. A., & Bervell, B. (2019). Google classroom for mobile learning in higher education: Modelling the initial perceptions of students. *Education and Information Technologies*, 24, pp. 1793-1817.

Liao, S., & Yang, L. (2020). Mobile payment and online to offline retail business models. *Journal of Retailing and Consumer Services*, 57, 102230.

Lim, Y. V., Ng, S. L., Oh, W. L., Tan, W. Y., Too, Y. Z., Loh, X. M., & Tan, G. W. H. (2022). A stimulus-organism-response paradigm to word-of-mouth and continuance intention of mobile application. In *International Conference on Emerging Technologies and Intelligent Systems* (pp. 192-204). Cham: Springer International Publishing.

Luo, X., Li, H., Zhang, J., & Shim, J. P. (2010). Examining multi-dimensional trust and multi-faceted risk in initial acceptance of emerging technologies: An empirical study of mobile banking services. *Decision Support Systems*, 49(2), pp. 222–234.

Mahapatra, S. (2017). Mobile shopping among young consumers: An empirical study in an emerging market. *International Journal of Retail & Distribution Management*, 45(9), pp. 930-949.

Maziriri, E., Mapuranga, M., Mushwana, J., & Madinga, N. (2020). Antecedents that influence the intention to use the uber mobile application: Customer perspectives in south Africa, pp.76-96.

McLean, G., & Wilson, A. (2016). Evolving the online customer experience... is there a role for online customer support? *Computers in Human Behavior*, 60, pp. 602-610.

McLean, G., Al-Nabhani, K., & Wilson, A. (2018). Developing a mobile applications customer experience model (MACE)-implications for retailers. *Journal of Business Research*, 85, pp. 325-336.

Miller, K. (2013). Hedonic customer responses to fast fashion and replicas. *Journal of Fashion Marketing and Management: An International Journal*, 17(2), pp. 160-174.

Moghavvemi, S., Mei, T. X., Phoong, S. W., & Phoong, S. Y. (2021). Drivers and barriers of mobile payment adoption: Malaysian merchants' perspective. *Journal of Retailing and Consumer Services*, 59, 102364.

Moon, E., & Domina, T. (2015). Willingness to use fashion mobile applications to purchase fashion products: A comparison between the United States and south korea. *Journal of Textile and Apparel, Technology and Management*, 9(3).

Murillo-Zegarra, M., Ruiz-Mafe, C., & Sanz-Blas, S. (2020). The effects of mobile advertising alerts and perceived value on continuance intention for branded mobile apps. *Sustainability*, 12(17), 6753.

Niranjanamurthy, M., Kavyashree, N., Jagannath, S., & Chahar, D. (2013). Analysis of e-commerce and m-commerce: Advantages, limitations and security issues. *International*

Journal of Advanced Research in Computer and Communication Engineering, 2(6), pp. 2360-2370.

Novela, S., Sihombing, Y. O., Caroline, E., & Octavia, R. (2020). The effects of hedonic and utilitarian motivation toward online purchase intention with attitude as intervening variable. Paper presented at the 2020 International Conference on Information Management and Technology (ICIMTech), pp. 75-80.

Omar, S., Mohsen, K., Tsimonis, G., Oozeerally, A., & Hsu, J. (2021). M-commerce: The nexus between mobile shopping service quality and loyalty. *Journal of Retailing and Consumer Services*, 60, 102468.

Ooi, K., & Tan, G. W. (2016). Mobile technology acceptance model: An investigation using mobile users to explore smartphone credit card. *Expert Systems with Applications*, 59, pp. 33–46.

Pantelimon, F., Georgescu, T., & Posedaru, B. (2020). The impact of mobile e-commerce on GDP: A comparative analysis between Romania and Germany and how covid-19 influences the e-commerce activity worldwide. *Informatica Economica*, 24(2), pp. 27-41.

Parker, C. J., & Henninger, C. E. (2018). Enabling sustainable behaviours through M-commerce app design: Focus on the fast fashion industry. *Eco-friendly and fair* (pp. 69-79). Routledge.

Parker, C. J., & Kuo, H. (2022). What drives generation-y women to buy fashion items online? *Journal of Marketing Theory and Practice*, 30(3), pp. 279-294.

Parker, C. J., & Wang, H. (2016). Examining hedonic and utilitarian motivations for m-commerce fashion retail app engagement. *Journal of Fashion Marketing and Management: An International Journal*, 20(4), pp. 487-506.

Peng, C., & Kim, Y. G. (2014). Application of the stimuli-organism-response (SOR) framework to online shopping behavior. *Journal of Internet Commerce*, 13(3-4), pp. 159-176.

Pinto, G. L., Dell'Era, C., Verganti, R., & Bellini, E. (2017). Innovation strategies in retail services: Solutions, experiences and meanings. *European Journal of Innovation Management*, 20(2), pp. 190-209.

Pop, R. A., Hlédik, E., & Dabija, D. C. (2023). Predicting consumers' purchase intention through fast fashion mobile apps: The mediating role of attitude and the moderating role of COVID-19. *Technological Forecasting and Social Change*, 186, 122111.

Raman, A., & Rathakrishnan, M. (2020). Blended learning via google classroom: English language students experience based on UTAUT model and flow theory. *Hamdard Islamicus*, 43(1&2), pp. 94-108.

Rauschnabel, P. A., Felix, R., & Hinsch, C. (2019). Augmented reality marketing: How mobile AR-apps can improve brands through inspiration. *Journal of Retailing and Consumer Services*, 49, pp. 43-53.

- Reinartz, W., Haenlein, M., & Henseler, J. (2009). An empirical comparison of the efficacy of covariance-based and variance-based SEM. *International Journal of Research in Marketing*, 26(4), pp. 332-344.
- Rhee, H., & Lee, K. (2021). Enhancing the sneakers shopping experience through virtual fitting using augmented reality. *Sustainability*, 13(11), pp. 6336.
- Ringle, C. M., Sarstedt, M., & Straub, D. W. (2012). Editor's comments: A critical look at the use of PLS-SEM in "MIS quarterly". *MIS Quarterly*, 36(1), pp. 3-14.
- Rodríguez-Torrico, P., San-Martín, S., & San José-Cabezudo, R. (2019). What drives M-shoppers to continue using mobile devices to buy? *Journal of Marketing Theory and Practice*, 27(1), pp. 83-102.
- Rose, S., Clark, M., Samouel, P., & Hair, N. (2012). Online customer experience in e-retailing: An empirical model of antecedents and outcomes. *Journal of Retailing*, 88(2), pp. 308-322.
- Rudhumbu, N. (2022). Applying the UTAUT2 to predict the acceptance of blended learning by university students. *Asian Association of Open Universities Journal*, 17(1), pp. 15-36.
- Sari, P. B., Ginting, P., Lubis, A. N., & Situmorang, S. H. (2023). Social interactive engagement for generation Z: A proposed conceptualization. From industry 4.0 to industry 5.0: Mapping the transitions (pp. 427-435). Springer.
- Sarstedt, M., Ringle, C. M., Smith, D., Reams, R., & Hair Jr, J. F. (2014). Partial least squares structural equation modeling (PLS-SEM): A useful tool for family business researchers. *Journal of Family Business Strategy*, 5(1), pp. 105-115.
- Sharififard, S., Tamam, E., Hj Hassan, M. S., Waheed, M., & Zaremohzzabieh, Z. 2016. Factors affecting Malaysian university students' purchase intention in social networking sites. *Cogent Business & Management*, 3(1), 1182612.
- Shaw, N., & Sergueeva, K. (2019). The non-monetary benefits of mobile commerce: Extending UTAUT2 with perceived value. *International Journal of Information Management*, 45, pp. 44-55.
- Singh, M., & Matsui, Y. (2017). How long tail and trust affect online shopping behavior: An extension to UTAUT2 framework. *Pacific Asia Journal of the Association for Information Systems*, 9(4), pp. 2.
- Smith, H. J., Dinev, T., & Xu, H. (2011). Information privacy research: An inter-disciplinary review. *MIS Quarterly*, 35(4), pp. 989-1016.
- Soni, M., Jain, K., & Kumar, B. (2019). Factors affecting the adoption of fashion mobile shopping applications. *Journal of Global Fashion Marketing*, 10(4), pp. 358-376.
- Sosik, J. J., Kahai, S. S., & Piovoso, M. J. (2009). Silver bullet or voodoo statistics? A primer for using the partial least squares data analytic technique in group and organization research. *Group & Organization Management*, 34(1), pp. 5-36.

Statista (2023e). Fashion Worldwide. Available at:
<https://www.statista.com/outlook/emo/fashion/worldwide#:~:text=Revenue%20in%20the%20Fashion%20Market,US%241%2C016.00bn%20by%202028>

Statista (2023f). Augmented reality (AR) - statistics & facts. Available at:
<https://www.statista.com/topics/3286/augmented-reality-ar/>

Statista (2024a). Digital Payment types in the United Kingdom (UK). Available at:
<https://www.statista.com/study/32665/digital-payment-types-in-the-united-kingdom-uk/>

Statista (2024b). Transaction value and market share of payment methods in total e-commerce transaction value worldwide in 2023, with a forecast for 2027. Available at :
<https://www.statista.com/statistics/1111233/payment-method-usage-transaction-volume-share-worldwide/>

Statista. (2023a). Forecast number of mobile users worldwide from 2020 to 2025.
<https://www.statista.com/statistics/218984/number-of-global-mobile-users-since-2010/>

Statista. (2023b). Time spent with nonvoice activities on mobile phones every day in the United States from 2019 to 2024. Available at :
<https://www.statista.com/statistics/1045353/mobile-device-daily-usage-time-in-the-us/>

Statista. (2023c). Distribution of mobile clothing shoppers in the United Kingdom (UK) as of March 2023, by device. Available at: <https://www.statista.com/statistics/1329384/uk-mobile-clothing-shoppers-by-device/>

Statista. (2023d). Leading fashion & beauty shopping apps in the United Kingdom (UK) in august 2023, by number of downloads. Available at:
<https://www.statista.com/statistics/1292963/most-downloaded-fashion-shopping-apps-uk/>

Sue, V. M., & Ritter, L. A. (2012). Conducting online surveys. Sage.

Sun, J., & Chi, T. (2018). Key factors influencing the adoption of apparel mobile commerce: An empirical study of Chinese consumers. *The Journal of the Textile Institute*, 109(6), pp. 785-797.

Sutanto, J., Palme, E., Tan, C., & Phang, C. W. (2013). Addressing the personalization-privacy paradox: An empirical assessment from a field experiment on smartphone users. *MIS Quarterly*, pp. 1141-1164.

Tam, C., Santos, D., & Oliveira, T. (2020). Exploring the influential factors of continuance intention to use mobile apps: Extending the expectation confirmation model. *Information Systems Frontiers*, 22, pp. 243-257.

Tamilmani, K., Rana, N. P., Prakasam, N., & Dwivedi, Y. K. (2019). The battle of brain vs. heart: A literature review and meta-analysis of “hedonic motivation” use in UTAUT2. *International Journal of Information Management*, 46, pp. 222-235.

Taneja, B. (2021). The digital edge for M-commerce to replace E-commerce. Emerging challenges, solutions, and best practices for digital enterprise transformation (pp. 299-318). IGI Global.

- Tang, A. K. (2019). A systematic literature review and analysis on mobile apps in m-commerce: Implications for future research. *Electronic Commerce Research and Applications*, 37, 100885.
- Tao, K., & Edmunds, P. (2018). Mobile APPs and global markets. *Theoretical Economics Letters*, 8(08), 1510.
- Tarute, A., Nikou, S., & Gatautis, R. (2017). Mobile application driven consumer engagement. *Telematics and Informatics*, 34(4), pp. 145-156.
- Venkatesh, V., Morris, M. G., Davis, G. B. and Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27, pp.425–478.
- Venkatesh, V., Thong, J. Y., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *MIS Quarterly*, pp. 157-178.
- Wang, R. J., Malthouse, E. C., & Krishnamurthi, L. (2015). On the go: How mobile shopping affects customer purchase behavior. *Journal of Retailing*, 91(2), pp. 217-234.
- Wang, W. (2021). How has the fashion industry reacted to gen z's completely different consumption concepts and shopping habits. *Academic Journal of Humanities & Social Sciences*, 4(10), pp. 72-80.
- Wottrich, V. M., van Reijmersdal, E. A., & Smit, E. G. (2018). The privacy trade-off for mobile app downloads: The roles of app value, intrusiveness, and privacy concerns. *Decision Support Systems*, 106, pp. 44–52.
- Yang, Z., Zhou, Q., Chiu, D. K., & Wang, Y. (2022). Exploring the factors influencing continuous usage intention of academic social network sites. *Online Information Review*, 46(7), pp. 1225-1241.
- Yoo, J., & Kim, M. (2014). The effects of online product presentation on consumer responses: A mental imagery perspective. *Journal of Business Research*, 67(11), pp. 2464-2472.
- Yoo, J., & Kim, M. (2014). The effects of online product presentation on consumer responses: A mental imagery perspective. *Journal of Business Research*, 67(11), pp. 2464-2472.
- Zhang, Q., Ariffin, S. K., Richardson, C., & Wang, Y. (2023). Influencing factors of customer loyalty in mobile payment: A consumption value perspective and the role of alternative attractiveness. *Journal of Retailing and Consumer Services*, 73, 103302.