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E-commerce and Fashion Retail Industry: An Empirical Investigation On the Online Retail Sector in the Gulf Cooperation Council (GCC) Countries

(Full Paper)

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ABSTRACT

The aim of this study is to examine the digitalization factors affecting Ecommerce in the fashion retail industry and propose an expanded model for a behavioral intention to use the e-commerce shopping channel that incorporates the Theory of Reasoned Action (TRA) and its extensions of Technology Acceptance Model (TAM) and Theory of Planned Behavior (TPB). A data of 872 respondents was collected, who were fashion retail customers in Gulf Cooperation Council Countries of United Arab Emirates (UAE), The Kingdom of Saudi Arabia (KSA), Oman, Kuwait, Bahrain and Qatar. Structural Equation Modeling using AMOS and Sequential Mediation Analysis using Process Macro were used to validate the proposed conceptual framework. Furthermore, a comprehensive demographic analysis was conducted using ANOVA at the respondent's country level. Findings include age and university education of the consumer did moderate the relationship between the study constructs, whereas gender, income level and work location did not moderate. Trust and perceived utility of e-commerce channels acts as sequential mediators between perceived ease of use, subjective norms and behavioral intention to use respectively. Future studies will need the behavior models to be extended to incorporate the fundamental changes in consumer behavior to the pandemic. This research builds on the existing studies on online shopping intentions by including a comprehensive model incorporating all the constructs affecting online shopping continuance. It is one of the few comprehensive studies in the GCC region which is the stronghold of Brick & Mortar (B&M) shopping.

Keywords: E-commerce, Retail Fashion, GCC, Technology Acceptance Model, Theory of Reasoned Action, Theory of Planned Behavior

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INTRODUCTION

Ecommerce is the business of selling, buying, logistics, or other transactions via the internet and it relates to technology mediated exchanges between parties (individuals and/or organizations) (Zwass, 1996). The global retail landscape is facing a significant shift in the retail value chain as new retail business models and competitors are emerging, and traditional brick-and-mortar store-based retailers are facing threats from all directions. This is primarily due to the emergence of ecommerce under the rising influence of digitalization and the overall effect is downward pressure on revenues and profits for the brick and mortar retailers. In 2017, the ecommerce industry made a significant impact when it crossed 10% of all global retail sales. (*E-commerce in MENA: Opportunity Beyond the Hype*, 2019). Today, ecommerce market share is \$2.2 trillion, and it is growing at a compounded annual growth rate (CAGR) of 24%, compared to the global retail sector growth as a whole, this is at-least four times faster. Ecommerce is seen now as the key growth engine for global retail, its share has grown from 7% in 2012 to 39% in 2017, and is expected to cross 50% by 2020. In developed economies of the West, ecommerce is growing at a CAGR of 20%. The proportion of ecommerce retail to the Gross Domestic Product (GDP) for Western Europe is in double digits for many countries. The annual fashion sales revenue in the Middle East's Gulf Cooperation Council (GCC) countries of United Arab Emirates (UAE), The Kingdom of Saudi Arabia (KSA), Oman, Kuwait, Bahrain and Qatar total approximately to \$50 billion, reflecting the region's significant market for retail fashion. Approximately one third of the ecommerce spends are in the fashion retail category. It is safe to conclude that the retail industry in the Middle East and North Africa (MENA) inclusive of the GCC is on the verge of a decisive shift (The State of fashion 2020, 2020). Ecommerce is a reality, remapping the customers' path to purchase, reinventing customer experiences, disrupting legacy business models, and fostering new growth opportunities for retailers across all sizes, as well as for an emerging generation of pure play ecommerce companies like Noon and Jumia. The GCC consumers are also becoming increasingly connected, with digitalization solutions and adoption on the uptrend. As shoppers migrate into online, corporations typically follow suit, fostering a gradual and irreversible development of the digital environment in areas such as media and ecommerce (Lin, 2007). Corporations started to see digitalization taking a more crucial role in business strategy post 2010, with media leading from the front. Within the duration of just five years, the portion of digital media shot up from less than 10% in 2012 to more than 30% by 2017. Internet penetration is very high in the UAE and KSA at 99% and 89% respectively, compared to this China is just at 57%. Dubai in

UAE is the GCC region's retail fashion shopping capital, but other GCC markets are growing fast, with KSA taking a place at the top of the table. Dubai is the flagbearer and benchmark for retail fashion and will continue to play the leading role as the GCC's window to the fashion world, supported by modern world-class malls offering a top-end consumer experience. The GCC fashion companies are therefore required to adapt to the changing social reforms, with fashion designers, social platforms, social media stars and influencers, and local style trends starting to feature consistently and significantly more in the global fashion platforms and narratives. The GCC is experiencing a tectonic shift from being a traditional importer of fashion trends to an emerging exporter. In the GCC, the shopping mall with the Brick and Mortar (B&M) stores are a part of the shopping and family entertainment culture but even in the GCC the effects of digitalization are revolutionizing the way the consumers shop (*Retail Disruption - What's the outlook for the ME*, 2017). A spate of new online portals, acquisitions, marketplace explosions into the GCC ecommerce space, improved mobile technology, explosion of digital content and increased confidence in transacting online has contributed to this growth. The top two online spenders in the GCC are consumers in the UAE and the KSA. It's clear that ecommerce is a fast-growing business in UAE and KSA, market supply is dominated by cross-border players and pure-play platforms. According to a report (*E-commerce in MENA: Opportunity Beyond the Hype*, 2019) the market size for ecommerce is expected to reach AED 32 billion and AED 36 billion in UAE and KSA by 2022 with the CAGR in excess of 30%. For fashion categories the penetration for ecommerce is estimated to range between 10 to 13% for UAE and KSA by 2022.

Impact of covid-19

B&M retail sector is currently going into a tailspin because of the coronavirus pandemic and the resulting lockdown worldwide of retail outlets. The sharpest drops in the initial months of lockdown were at fashion retailers, electronics stores, furniture stores and restaurants. Consumers are going to ecommerce retailers for groceries, cleaning products, fashion, cosmetics, home decor, fitness equipment and other products. A long-standing migration of consumers towards ecommerce is accelerating (Kim, 2020). The coronavirus pandemic has changed the way we consume and relate to the world around us. A metamorphosis in consumption trends had been underway even before the health crisis - the pandemic merely sped some of these up. In this aspect, corporations have been inclined to make substantial changes to their business processes. Overnight, operations and processes of many companies had to go virtual. It is uncertain whether and how many consumers will return to traditional means of shopping after the pandemic ends. Some transformations may be long-lasting even after the pandemic situation eases (Shetty *et al.*, 2020). Digitalization is an obvious play and retailers had been turning to online platforms even before COVID-19, the only difference was that it was not a matter of life and death, which could possibly be the case now, given that most people are still staying indoors. Researchers have examined the effects of the pandemic causing a structural change in consumption and accelerating the digital transformation in the marketplace. Retailers may acclimatize to the digital transformation in the marketplace to recover or even use this to grow further after COVID-19 (Kim, 2020). COVID - 19 has disrupted consumer lives from all the fronts. Corporations and global commerce will embrace new processes once the world recovers post COVID - 19. Multiple new developments in retail like Direct to Consumer Model (D2C), Omni-Channel (OC) Fulfillment, etc. would materialize in the retailers of tomorrow. Retailers that identify these shifts proactively will be the winners in the post COVID-19 era. Some scholars have analyzed these multifaceted scenarios in Fast Moving Consumer Goods (FMCG) and retail companies of India, and have enumerated developments in these markets and potential policies companies must implement in order to recover in the post pandemic phase (Shetty *et al.*, 2020). Mobile phones have become a new mask, almost, enabling people to socially connect without the risk of catching the virus, and that has fueled a lot of new consumption habits. In a global consumer insights survey (PWC, 2020), it has been highlighted that the use of mobile payments by Middle Eastern respondents had increased from 25% in 2018 to 45% – a bigger increase than any other region. Unlike the Western world, mobile shopping is a growing trend here in the GCC. It therefore appears certain that digital engagement by Middle East shoppers will become stronger and more widespread, even after the lifting of current social distancing measures.

THEORETICAL BACKGROUND AND CONCEPTUAL FRAMEWORK

The theoretical models to explain behavioral intention to use the ecommerce channel have measures relating to user acceptance, user behavior and adoption of technology. The models also address hedonic and utilitarian motivation. Hedonic Motivation relates to adventure, social norms and gratification needs from channel use, whereas Utilitarian Motivation relates to efficiency of transactions and value from use of the channel. The most commonly used conceptual theories for examining behavioral intention in technological studies were the Technology Acceptance Model (TAM; Davis *et al.*, 1989), Theory of Planned Behavior (TPB; Ajzen;1991) and Theory of Reasoned Action (TRA) by Fishbein and Ajzen in (1975). Rouibah, Lowry, and Hwang (2016) compared the three models TRA, TPB and TAM for e-banking adoption in Malaysia. Amresh (2016) applied a five-factor e-shopping adoption model based on TAM with addition of an additional construct of trust. Kim *et al.* (2009) used the models of TAM and TRA to explore the impact of ease of use, usefulness, and enjoyment, and subjective norm regarding the intention to use mobile channel technology for shopping. By using a composite integrated model of TPB and TAM, these studies examined the associations between attitude, subjective norm, perceived behavior control, Perceived Utility (PU) and Perceived Ease of Use (PEU) towards intention and ecommerce purchasing behavior (Lin, 2007; Yayla & Hu, 2007; Sentosa &

Mat, 2012). Brosdahl and Moudi (2013) used the Extended Ecommerce Technology Acceptance Model and examined what customers from both KSA and the United States (U.S) perceived about using technology for ecommerce shopping as well as their perceptions of the online shopping risk. In the GCC, there are still significant gaps in terms of a comprehensive evaluation of all the variables affecting ecommerce, hence there is a requirement for a comprehensive analysis of the consumer behavior activity on choice of the shopping channel when all the digitalization related variables are taken together. The current behavior models like the TRA and TAM do not cover all the constructs leading to shopping intention in the GCC. Constructs and attributes relating to local laws/regulations, customer experience, Omni channel capability, infrastructure and GCC social norms are not covered in existing studies. In the GCC, the aspects of the shopping culture and use of malls as family entertainment centers needs to be studied. The effect of the demographic diversity on ecommerce adoption must be studied critically. External variables included in PU include the effect of the nascent legal/tax/government regulations framework in this region and its effect on ecommerce.

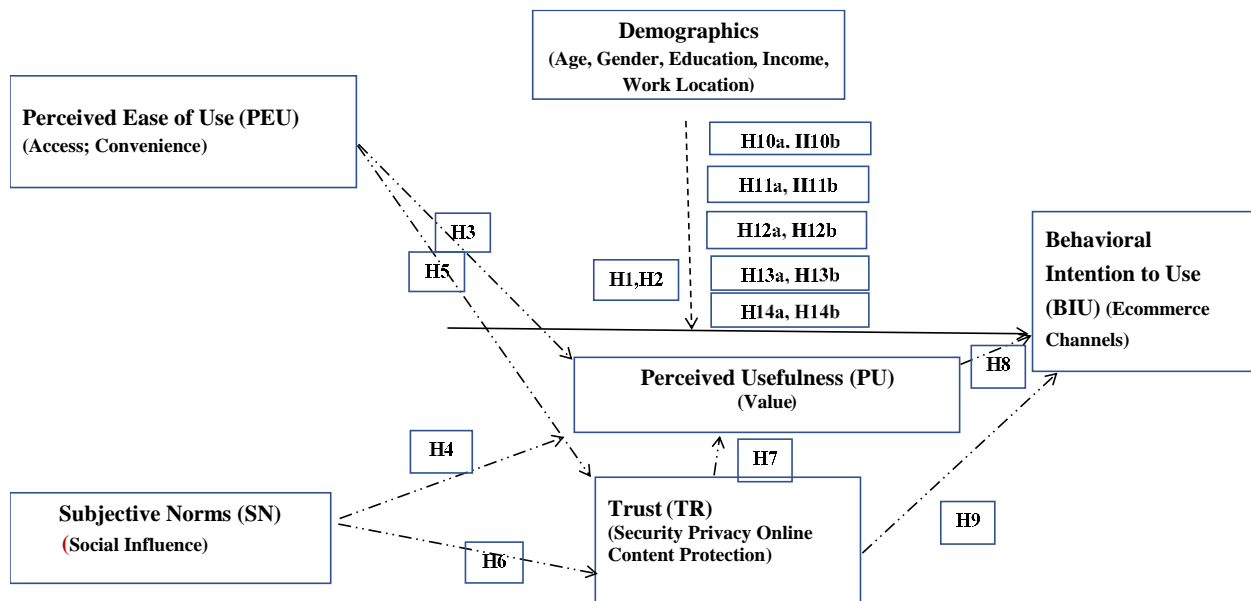


Figure 1: Proposed Hypothesized Framework

RESEARCH METHODOLOGY

The research was conducted for the Fashion Retail Industry (Apparel, Footwear, Accessories) in the Gulf Cooperation Council (GCC) countries. Stratified random sampling and convenience sampling techniques was used to select the participants for the study (Chin 1998; Hair *et al.* 2017). A quantitative technique was applied involving an online survey being administered randomly to 1274 residents of GCC countries. Of those approached, 891 completed the questionnaire and therefore, formed the research sample. Structural Equation Modelling and Sequential Mediation Analysis were used to validate the proposed research framework. Considering the measurement model, the psychometric properties of the construct measures in terms of its internal consistency reliability, convergent validity and discriminant validity was assessed. Furthermore, the study has tested for the moderating effects of the demographic variables such as Gender, Age, Educational level and Monthly Income in the formation of e-commerce behavioral intention to use. A multisampling analysis was performed to create a multi group result of casual relationships, by making the entire dataset into four sub samples each for the four demographic characteristics considered. In order to ensure that all the study constructs were perceived by all the categories of consumer demographics in a similar way, factorial invariance and structural invariance was measured using the Lagrange Multiplier (LM) test (Lee & Strazicich, 2004). The test compares the chi-square improvements values and their p-values of all the casual relationships among the four demographic categories. The presence of factorial invariance is confirmed when study results indicate a non-significant chi-square improvement and vice-versa for the presence of structural invariance. Table 1 shows the basic descriptive measures such as Mean, Standard Deviation and Inter-construct correlations of all the latent constructs given in the model.

Table 1: Descriptive Statistics

Constructs	Mean	SD	PEUEC	SNEC	TREC	PUEC	BIUEC
PEUEC	4.06	0.89	0.88				
SNEC	2.77	1.004	0.26**	0.86			
TREC	3.41	0.85	0.56**	0.45**	0.92		
PUEC	3.56	0.88	0.51**	0.32**	0.59**	0.82	
BIUEC	3.75	0.89	0.58**	0.33**	0.64**	0.62**	0.78

A correlation matrix (shown in table 2) is computed among all the latent constructs and the demographic variables. It is observed that Gender is negatively correlated in call cases, Age is only positively correlated with Perceived Ease of use and Non-GCC retails consumers have negative association with only Perceived Usefulness.

Table 2: Correlation Matrix

Constructs/Demographics	Gender	Age	Education	Income	GCC	Non-GCC
PEUEC	-0.12	0.09	0.21	0.14	0.05	0.12
SNEC	-0.09	-0.11	-0.06	-0.1	0.18	0.19
TREC	-0.06	-0.14	-0.15	-0.32	0.23	0.05
PUEC	-0.14	-0.17	0.17	0.25	-0.11	-0.28
BIUEC	-0.19	-0.08	0.12	-0.22	-0.16	0.16

The presence of common method bias was evaluated via Harman's single-factor test and achieved a single un rotated factor resulted in a less than 50% variance explained. In order to evaluate the significant differences among the retails consumer of GCC on the various predictors of the behavioral intension to use ecommerce channels, the study has looked into their dependence on the demographic variables such as Age, Gender, Education, Monthly Income levels and home country (GCC and Non-GCC). The results in table 3 have revealed that significant difference existed in the way men and women perceived PEUEC (mean men= 4.35 vs. mean woman= 4.08; $F = 2.63$, p -value <0.05), SNEC (mean men= 2.89 vs. mean woman= 2.67; $F = 11.35$, p -value <0.05), TREC (mean men= 3.46 vs. mean woman= 3.37; $F = 2.35$, p -value <0.05), PUEC (mean men= 3.54 vs. mean woman= 3.39; $F = 3.62$, p -value <0.05) and BIUEC (mean men= 3.78 vs. mean woman= 3.43; $F = 2.43$, p -value <0.05). It appears that men perceived significantly better than women with respect to all the constructs.

Furthermore, retail consumers with different age groups rated their intention to e-commerce adoption in different ways such as PEUEC (mean 18-50 years= 3.96 vs. mean > 50 years =3.32; $F = 4.18$, p -value <0.05), SNEC (mean 18-50 years= 2.56 vs. mean > 50 years = 2.71; $F = 3.91$, p -value <0.05), PUEC (mean 18-50 years= 3.68 vs. mean > 50 years = 3.19; $F = 2.63$, p -value <0.05). TREC (mean 18-50 years= 3.52 vs. mean > 50 years =2.40; $F = 2.45$, p -value > 0.05), BIUEC (mean 18-50 years= 3.72 vs. mean > 50 years=3.03; $F = 2.17$, p -value > 0.05). It can be concluded that significant differences can be seen in the way consumers perceived usefulness, perceived ease of use and subjective norms. And, there is no significant differences observed the ways consumer evaluated trust and behavioral Intention to use constructs. All in all, consumers within the age bracket of 18-50 are better motivated to using ecommerce services.

The study has classified the education level of the consumers into two different groups such as university and non-university. Consumers rated the constructs as PEUEC (mean university= 4.05 vs. mean non-university = 3.29; $F = 2.98$, p -value <0.05), SNEC (mean university= 3.10 vs. mean non-university = 2.83; $F = 6.7$, p -value <0.05), TREC (mean university= 3.51 vs. mean non-university = 3.14; $F = 2.2$, p -value <0.05), PUEC (mean university= 3.58 vs. mean non-university = 3.19; $F = 2.9$, p -value <0.05) and BIUEC (mean university= 3.73 vs. mean non-university = 3.22; $F = 3.45$, p -value <0.05). There is a significant difference between the consumers with and without university education and the consumers with university education have better motivation and less doubtful towards consumer ecommerce resources. Next, consumers with diverse income groups ($\leq 20K$ & $>20K$ AED) and work location (GCC & Non GCC) have also been studied. The results show that there is a significant difference between the motivation to consumers based on their income groups and work location. Consumers with more than AED 20K disposable income rated the ecommerce option better than the other channels and

consumers whose work location is in NON-GCC areas have rated high on ecommerce channels when compared to their counterparts in GCC.

Table 3: ANOVA Results

Variable	Categories	N	PEUEC		SNEC		TREC		PUEC		BIUEC	
			Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Gender	Men	541	4.35	0.95	2.89	1.03	3.46	0.88	3.54	0.93	3.78	0.92
	Women	349	4.08	0.84	2.67	0.96	3.37	0.82	3.39	0.83	3.43	0.85
	F-stat	-	2.63*	-	11.35*	-	2.35**	-	3.62*	-	2.43**	-
Age	18-50	794	3.96	1.97	2.56	1.50	3.52	1.73	3.68	1.73	3.72	2.08
	>50	96	3.32	0.92	2.71	0.94	2.40	0.88	3.19	0.89	3.03	0.93
	F-stat	-	4.18*	-	3.91*	-	2.45	-	2.63*	-	2.17	-
Educational Level	University	628	4.05	0.91	3.10	1.07	3.51	0.90	3.58	0.89	3.73	0.96
	Non-University	262	3.29	1.00	2.83	1.05	3.14	0.94	3.19	0.96	3.22	0.88
	F-stat	-	2.98**	-	6.7*	-	2.2*	-	2.9*	-	3.45**	-
Income	<= 20000 AED	594	3.82	0.90	2.28	0.99	3.62	0.84	3.58	0.83	3.75	0.91
	> 20000 AED	296	4.05	0.95	3.24	1.04	3.27	0.88	3.55	0.98	3.83	0.87
	F-stat	-	2.34**	-	11.56*	-	4.36*	-	1.87**	-	3.68*	-
Work Location	GCC	376	4.04	0.73	2.36	0.68	3.23	0.61	3.64	0.66	3.77	0.71
	Non-GCC	514	4.73	0.31	2.56	0.19	3.42	0.29	4.00	0.67	4.33	0.58
	F-stat	-	1.62*	-	2.51*	-	2.42*	-	2.31*	-	1.58*	-

The study used the Lagrange Multiplier (LM) test in order to test the moderating role of the demographic characteristics such as age, gender, income level, education level and work location. The results of the LM test provided the chi-square differences and their corresponding significance values of all the five demographic characteristics such as gender ($\chi^2_{diff} = 2.83$; p -value >0.05), age ($\chi^2_{diff} = 3.68$; p -value <0.05), university education ($\chi^2_{diff} = 2.27$; p -value <0.05), income ($\chi^2_{diff} = 4.35$; p -value >0.05) and Work Location ($\chi^2_{diff} = 4.17$; p -value >0.05). It can be concluded that, age and university education of the consumer did moderate the relationship (H10a, H10b, H12a, H12b) between the study constructs, whereas gender, income level and work location did not moderate. Thus, the hypotheses were not supported (H11a, H11b, H13a, H13b, H14a, H14b). Next, an evaluation of Average Variance Extracted (AVE) was computed using factor loadings to check the convergent validity of the construct measures. It was observed that Composite Reliability is more than 0.7, and the AVE values are more than 0.50, which indicate that convergent validity is observed to be accomplished and the measurement items had a good fit to the respective variables (Fornell and Larcker 1981; Hair *et al.* 2017). Discriminant validity was also inspected by comparing the shared variance between factors with the square root of the AVE values as per Fornell Larcker criteria, which states that square root of AVE of each of these correlations should more than inter-item correlation values in that respective column (Fornell and Larcker 1981). Table 4 confirms that the first was lower than the latter. Thus, discriminant validity was achieved.

Table 4: Discriminant & Convergent Validity

Constructs	AVE	CR	PEUEC	TREC	PUEC	BIUEC	SNEC
PEUEC	0.53	0.92	0.72				
TREC	0.56	0.91	<i>0.56**</i>	0.74			
PUEC	0.65	0.92	<i>0.51**</i>	<i>0.59**</i>	0.81		
BIUEC	0.57	0.82	<i>0.58**</i>	<i>0.64**</i>	<i>0.62**</i>	0.75	
SNEC	0.61	0.86	<i>0.26**</i>	<i>0.45**</i>	<i>0.32**</i>	<i>0.33**</i>	0.78

Note: Bold values are AVE square root values and Italicized are total inter-item correlation values. * $p < 0.05$, ** $p < 0.01$

The study used a two stage approach of Structural Equation Modeling (SEM) using Amos 20 to validate the proposed research framework.

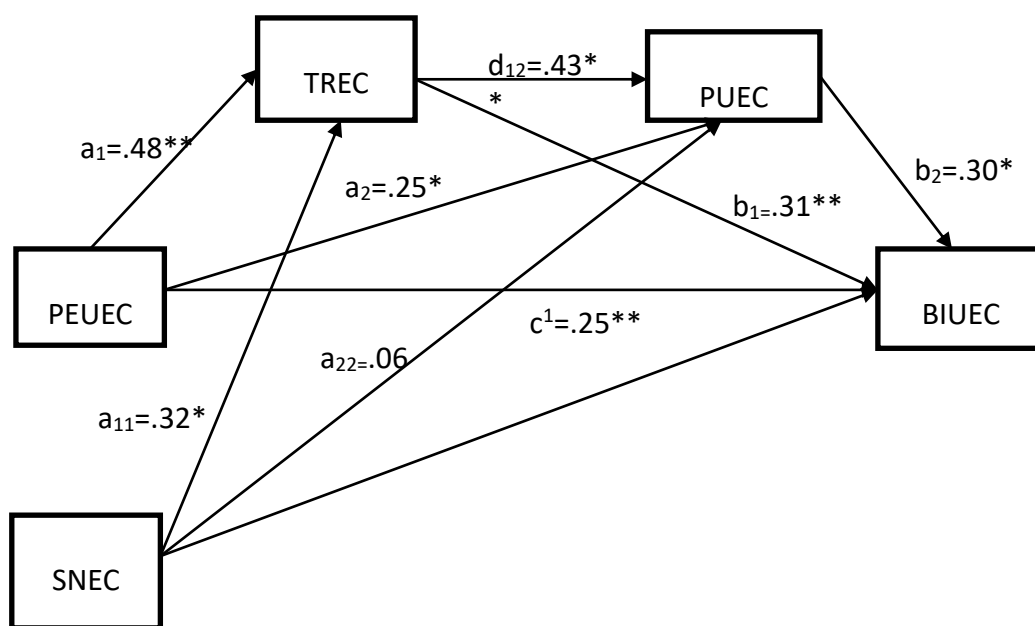


Fig 2: Structural Model

Confirmatory Factor Analysis (CFA) was carried out with all the latent constructs and the results revealed that the non-centrality value (χ^2/df) is 4.3 is significant at $p < 0.01$ and the other fit indexes such as NFI (0.92), SRMR (0.07), GFI (0.93), AGFI (0.91) have exceeded the recommended limits, thereby indicating good model fit (Hair et al, 2010). Furthermore, the results of the structural model also showed an acceptable fit to the data (Chi-square =589.3, $df = 125$, $p < 0.01$; $NC = 4.7$; CFI= 0.91; NFI = 0.88; SRMR = 0.07; AGFI = 0.93). The values of the fit indices show an adequate fit of the structural model with the data and all the parameters are within acceptable limits (Hair et al., 2010).

The study has conducted sequential mediation analysis twice to predict the Behavioral Intention to Use the e-commerce channels with PEUEC, TREC, PUEC as one set of predictors (table no 5) and SNEC, TREC and PUEC as the second set (table no). Model 6 of Hayes Process macro was used to perform the analysis (Hayes, 2013). The overall regression model predicting Behavioral Intention to Use the e-commerce channels from PEUEC, TREC and PUEC was found to be significant with $F(887) = 355.95$, $p < 0.01$ and 54% of variance explained (see table). The indirect path from PEUEC to BIUEC through TREC ($\beta = 0.15$, $SE = .07$, $LLCI - 0.083$, $ULCI - 0.324$) and PUEC ($\beta = 0.08$, $SE = .04$, $LLCI - 0.065$, $ULCI - 0.318$) was found to be significant. The direct relationship between TREC and BIUEC ($b_1 = .31$, $SE = .05$, $LLCI-0.357$, $ULCI-0.726$, $p < 0.01$) and between PUEC and BIUEC ($b_2 = .30$, $SE = .04$, $LLCI-0.313$, $ULCI-0.429$, $p < 0.01$) were found to be significant. The confidence intervals of the indirect paths from PEUEC to BIUEC through PUEC (coefficient = 0.08, $SE = 0.04$, $LLCI-0.412$, $ULCI-0.728$) and from PEUEC to BIUEC through both TREC and PUEC (indirect effect coefficient = 0.03, $SE = 0.02$, $LLCI-0.361$, $ULCI-0.527$) did not contain zero. The total effect of PEUEC on BIUEC was found to be statistically significant ($c = .46$, $SE = .06$, $LLCI- 0.622$, $ULCI-0.915$, $p < 0.01$), after controlling for TREC and SNEC, this relationship has reduced but remained significant ($c^1 = .25$, $SE = .04$, $LLCI- 0.269$, $ULCI-0.403$, $p < 0.01$), indicating partial mediation.

Table 5: Results of Mediation Analysis (a)

Antecedent	Consequent								
	TREC			PUEC			BIUEC		
	Coeff.	SE	<i>p</i>	Coeff.	SE	<i>p</i>	Coeff.	SE	<i>p</i>
PEUEC	0.48	0.02	<0.01	0.25	0.03	<0.05	0.25	0.02	<0.05
TREC	-	-	-	0.43	0.03	<0.01	0.31	0.32	<0.01
PUEC	-	-	-	-	-	-	0.30	0.02	<0.01
	R2= 0.32			R2= 0.39			R2= 0.54		
	F(889)= 419.56, p<0.001			F(888)= 295.09, p<0.001			F(887)= 355.95, p<0.001		

The overall regression model predicting Behavioral Intention to Use the e-commerce channels from SNEC, TREC and PUEC was found to be significant with $F(887) = 303.3$, p -value < 0.01 and 51% of variance explained (see table 6). The indirect path from SNEC to BIUEC through TREC ($\beta = 0.11$, $SE = .07$, $LLCI - 0.078$, $ULCI - 0.147$) and PUEC ($\beta = 0.02$, $SE = .04$, $LLCI - 0.259$, $ULCI - 0.415$) was found to be significant. The direct relationship between TREC and BIUEC ($b_1 = .31$, $SE = .05$, $LLCI - 0.357$, $ULCI - 0.726$, $p < 0.01$) and between PUEC and BIUEC ($b_2 = .30$, $SE = .04$, $LLCI - 0.313$, $ULCI - 0.429$, $p < 0.01$) were found to be significant. The confidence intervals of the indirect paths from SNEC to BIUEC through PUEC (coefficient = 0.02, $SE = 0.04$, $LLCI - 0.307$, $ULCI - 0.547$) and from SNEC to BIUEC through both TREC and PUEC (coefficient = 0.04, $SE = 0.03$, $LLCI - 0.581$, $ULCI - 0.963$) did not contain zero. The total effect of SNEC on BIUEC was found to be statistically significant ($c = .42$, $SE = .08$, $LLCI - 0.072$, $ULCI - 0.327$, $p < 0.01$), after controlling for TREC and SNEC, this relationship has reduced but remained significant ($c^{11} = .02$, $SE = .16$, $LLCI - 0.762$, $ULCI - 1.205$, $p < 0.05$), indicating partial mediation.

Table 6: Results of Mediation Analysis (b)

Antecedent	Consequent								
	TREC			PUEC			BIUEC		
	Coeff.	SE	<i>p</i>	Coeff.	SE	<i>p</i>	Coeff.	SE	<i>p</i>
SNEC	0.32	0.02	<0.001	0.06	0.02	<0.05	0.02	0.02	<0.001
TREC	-	-	-	0.43	0.03	<0.001	0.31	0.32	<0.001
PUEC	-	-	-	-	-	-	0.30	0.03	<0.001
	R2= 0.21			R2= 0.36			R2= 0.51		
	F(889)= 228.11, p<0.001			F(888)= 248.52, p<0.001			F(887)= 303.3, p<0.01		

CONCLUSION AND IMPLICATIONS

This paper offers a framework to understand and predict consumer behavior using ecommerce in the context of shopping for fashion goods. In addition, the present study contributes to academia by applying TAM, TPB and TRA to the technologically advanced retailing channel. This study provides an understanding of the consumer's attitude and behavioral intention to use the ecommerce channel for fashion retail industry. Our findings also suggest that the proposed research model was a very useful framework to test the effects of consumers' perceptions, attitudes and intention for using the ecommerce channel for shopping in the fashion retail industry. Results of the data analysis finds that perceived ease of use and subjective norm of e-commerce positively influence customer's behavioral intention to use (H1 and H2 supported). Perceived ease of use is also positively

influence perceived usefulness and trust towards e-commerce (H3 and H5 supported). Subjective norms of e-commerce positively influence perceived usefulness and trust towards e-commerce (H4 and H6 supported). Trust factor has a positive influence on perceived usefulness of e-commerce (H7 supported); both of them acts as sequential mediators between perceived ease of use – behavioral intention to use and subjective norms - behavioral intention to use (H8 and H9 supported). The outcomes of this study have both practical and theoretical implications. The most important contribution of this study is to illustrate the adoption process of the ecommerce channel through the PEU, SN constructs mediating through TR and PU by extending the TRA /TAM models. From a practical viewpoint, fashion retailers should enhance the construct related to ease of use aspects of technology related to access and convenience. Another focus area is the construct related to trust associated with safety and security related to using the ecommerce channel. Focusing on ease of use and trust will enhance the usefulness of using this channel leading to the BIU the channel. Thus, it is important for fashion retailers to build favorable consumer attitudes toward ecommerce, which furthermore influence their positive ecommerce behaviors. Future research may consider examining other industry verticals apart from fashion retail and also examine sustainability as one of the independent variables in the conceptual model. The COVID-19 pandemic is an external variable that has the potential to trigger a massive growth for the ecommerce channel and platforms. Future studies will need to incorporate this external variable in the conceptual model and study the effects thereof on the BIU the ecommerce channel. The complex emerging picture of the post-lockdown balance between B&M and ecommerce shopping in the Middle East, in a retail setting where COVID-19 is a continuing threat and social distancing measures remain in force can be incorporated as external variables in this model. Middle East retailers must respond to COVID-19's impact on consumer behavior by pursuing their customers both online and offline. Post-pandemic, consumer-facing businesses should keep a close watch on several trends that have accelerated since the pandemic has reached this region and can use this paper to advance the findings. Above all, the key watchwords for Middle East retailers following the pandemic will be agility and resilience. Coming out of lockdown, businesses that successfully pursue consumers who are increasingly at ease with online shopping will emerge as winners in a challenging market where customer loyalty cannot be taken for granted.

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