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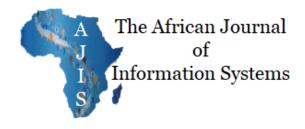
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Intention to Adopt E-Commerce: A Comparative Review Across Developed and Developing Economies

Research Paper

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ABSTRACT

The purpose of this study is to conduct a comprehensive literature review of online purchase intention and present a comparative case between developed and developing economies over a 20-year period to reveal insightful implications for academia and industry. Online purchase intention refers to the intended behavior of an individual to buy a product or service from an online store. Prior research has failed to present a review that compares an individual's online purchase intention across developed and developing economies in order to disclose the largest and smallest influencing factors, theories, and models in e-commerce. Our sample consists of 97 relevant articles focusing on online purchase intention retrieved from various quality databases, specifically from 53 peer-reviewed and validated journals. This research, in brief, will show different phases of analysis to better understand the current landscape of e-commerce behavioral intention and provide useful insights to researchers and professionals.

Keywords

E-commerce, adoption, review, developing economies.

INTRODUCTION

Due to its unique features, e-commerce has been gaining popularity among organizations in various industries. It can help organizations to provide a fast and easy access channel to different customer segments and promotes global existence. E-commerce term, which labels the process to buy or sell either products or services using the medium of the Internet, covers all types of e-commerce practices, including but not limited to social commerce, online banking, e-travel/auto insurance, and mobile commerce.

IS literature has shown plenty of research on the factors influencing individuals' online purchase intention across various contexts and provided some review studies tackling e-commerce adoption, such as the adoption of online shopping (Chang et al. 2005), SME's adoption to e-commerce (Abed et al. 2015), the adoption of social commerce (Friedrich, 2015), and the adoption of mobile commerce (Alfahl et al. 2012). While all these review studies have lacked to provide a comparative case between

developed and developing economies in regards to research maturity, factors used, and theories applied, other research studies have focused on e-commerce behavioral intention in a specific context (Kim & Gupta, 2009; Thatcher et al., 2012; Huang, 2012; Hong & Cha, 2013; 69. Ng, 2013; Shukla, 2014; Kaur et al., 2017; Ziaullah, 2017; Yu & Chen, 2018). Current literature does not appear to provide a sufficient scheme that highlights the differing nature of the developed and developing worlds and answers questions like, does the customer at both worlds share the same perspective or could be affected by the same factors when interacting with e-commerce platforms, and what theories or models that could be more applicable to what world context. It is crucial to understand the underlying theoretical frameworks that influence the intention of a potential customer to conduct online transactions; hence, we have attempted to provide a two-decade holistic outlook by conducting a literature review of e-commerce from 2000 to 2020 (inclusive). This review would help to find the factors that play a major role in shaping e-commerce and its various practices in both worlds. It also would help to have a quick grasp of the current landscape of traditional e-commerce (the broader context), mobile commerce, and social commerce (the specific context).

Customers' mindset towards online shopping in both developed and developing economies might not reflect the same maturity and so the factors employed may cluster around some specific categories across these contexts. Hence, exploring both worlds in the e-commerce sector can extend our understanding of the context of developing economies for greater advancement. This advancement is not only restricted to improve the online shopping experience but also, can indirectly affect entrepreneurial intention in the developing economies. When a better understanding of which factors affecting individuals' intention to buy online is achieved, it is most likely that more entrepreneurs will focus on launching digital business startups, which in turn will improve nations' economies. From research's point of view, the review studies conducted on e-commerce adoption (Chang et al. 2005; Abed et al. 2015; Friedrich, 2015; Alfahl et al. 2012) have been limited to provide a generic understanding of this phenomenon without distinguishing between developed and developing economies regardless of the context differences as well as do not provide a classification scheme for the similar factors. Therefore, we are motivated to enrich IS literature with this comparative e-commerce review, and to achieve this, we have raised two questions: what do we know about e-commerce behavioral intention (the current landscape)?, and what do we need to know about it (the future landscape)?

In sum, our study would seek to contribute to the literature by comprehending the current state of e-commerce behavioral intention among individuals across developed and developing economies over a 20-year period through adopting different phases of analysis and providing a classification scheme for the factors that share similar characteristics. This could bring new insights to advance the knowledge of the area of e-commerce as well as open new doors for future research. In a practical sense, this study would help practitioners to access a useful and easy-to-use source of e-commerce insights. This source can highlight the major factors influencing customers' online purchase intention and so increase practitioners' awareness and understanding about what matters most to customers to engage in e-commerce in a specific country context.

E-COMMERCE

E-commerce platforms have invaded the business world with promising benefits. Those platforms can help organizations to transform their business model from a traditional marketplace to an electronic marketplace where faster access to different products and services is enabled. As part of strategic planning, many organizations have embraced this technological trend by developing online shops corresponding to their physical counterparts. These shops bring further accessibility for customers and

hence leads to staying competitive as well as generating more revenue. To provide more convenience and productivity to customers, the e-commerce sites have improved their reaching channels by developing a version of mobile commerce where customers can use their mobile devices (e.g. a smartphone or tablet) to conduct online transactions. Mobile commerce promotes the concept of BYOD or "bring your own device" in a rapidly advancing technology environment; therefore, it can be regarded as an emerging core requirement in the contemporary business world. While social commerce, another emerging practice, can be described as the utilization of social networking sites to conduct electronic transactions and to share related information about a product or service. It significantly depends on social media channels by exploiting several technologies that enhance the customer experience of online shopping through, for instance, Twitter and Facebook. Electronic word-of-mouth (e-WOM) in social commerce can complement traditional advertising channels; however, customers still trust e-commerce more than social commerce (Kim & Park, 2013). However, due to the advances in smart mobile devices and the availability of high-speed internet, mobile commerce, and social commerce have been well received by customers and there has been a remarkable increase in using them (Zhang et al., 2012).

Owing to the increasing use of e-commerce, including mobile commerce and social commerce, across industries at a global level, it would be important to further understand the current landscape of customers' online shopping intention especially in developed economies and their developing counterparts to help disclose future research outlets.

RESEARCH METHOD

Our literature search has spanned various online databases, for instance, Science Direct, Emerald, IEEE, Taylor & Francis, Wiley, etc., and used multiple combinations of keywords like "e-commerce purchase intention", "online purchase intention", "online shopping intention", "behavioral intention to buy online", "e-commerce adoption", etc. to extract relevant articles in the context of e-commerce. It is worth to mention that our approach to search for articles had been limited to e-commerce plain platforms such as intention to buy from a website, to purchase a movie ticket, to buy insurance online, etc. while articles reflecting other platforms like mobile banking were not included because there have been already review studies designated specifically for these platforms. In addition, e-commerce studies that investigated either "actual use" or "continuance intention" are not included in our review. Overall, we performed three steps to validate our articles sample. First, the hundreds of articles found were reviewed and filtered to reflect the particular context of this study. Second, only academic journal articles had been included in our sample because they are regarded as validated knowledge (Podsakoff et al., 2005). Third, only peer-reviewed and quality journals were selected through checking whether they exist in high-validated indexes like the Institute for Scientific Information (ISI), Australian Business Deans Council (ABDC), etc. This had helped to void journals run by questionable or for pure-profit organizations. We performed a descriptive analysis to help us in identifying any patterns in our articles sample.

The search yielded 97 articles from 53 journals for a 20-year period from 2000 to 2020. International Journal of Information Management ranked first with the highest number of articles focusing on online purchase intention, followed by Behaviour & Information Technology, Internet Research, Computers in Human Behavior, and Information & Management. We developed two tables and three charts; Table 1 shows the journals by frequency to indicate the most and least journals emphasizing the e-commerce research. Table 2 shows the distribution of the articles across developed and developing economies. We used the World Economic Situation Prospects report issued by United Nations for country classification

(United Nations, 2020). While the three charts present how the found articles are scattered across the 20-year period at the aggregate level and then separately for developed and developing economies.

Table 1Articles on E-Purchase Intention Across Various Journals from 2000 to 2020

Journal	Frequency	(%)
International Journal of Information Management	7	7.22
Behaviour & Information Technology	5	5.15
Internet Research	5	5.15
Computers in Human Behavior	5	5.15
Information & Management	5	5.15
Journal of Management Information Systems	4	4.12
Journal of Business Research	4	4.12
European Journal of Marketing	4	4.12
Electronic Commerce Research and Applications	3	3.09
Electronic Commerce Research	3	3.09
Journal of Services Marketing	3	3.09
Journal of Internet Commerce	3	3.09
International Journal of Electronic Commerce	2	2.06
Social Behavior and Personality	2	2.06
Industrial Management & Data Systems	2	2.06
Online Information Review	2	2.06
Journal of Fashion Marketing & Management	2	2.06
International Journal of Advertising	1	1.03
International Journal of Market Research	1	1.03
Journal of the Association for Information Systems	1	1.03
Journal of Interactive Marketing	1	1.03
Information Systems Research	1	1.03
Communication of the Association of for Information Systems	1	1.03
Journal of Computer Information Systems	1	1.03
IEEE Transactions On Engineering Management	1	1.03
MIS Quarterly	1	1.03
International Journal of Hospitality Management	1	1.03
Decision Support Systems	1	1.03
Management Science	1	1.03
Psychology & Marketing	1	1.03
Tourism Management	1	1.03
International Journal of Business and Information	1	1.03
European Journal of Information Systems	1	1.03
Journal of Risk Research	1	1.03
Frontiers in Psychology	1	1.03

Journal	Frequency	(%)
Journal of Retailing and Consumer Services	1	1.03
International Marketing Review	1	1.03
Management Research Review	1	1.03
Journal of International Technology and Information Management	1	1.03
International Journal of Management	1	1.03
Electronic Markets	1	1.03
Journal of Marketing Theory and Practice	1	1.03
Asia Pacific Management Review	1	1.03
Journal of Marketing	1	1.03
IEEE Transactions on Systems, Man, and Cybernetics	1	1.03
Journal of Information Systems and Technology Management	1	1.03
e-Service Journal	1	1.03
Information Technology and Management	1	1.103
Journal of Science and Technology Policy Management	1	1.03
Information Technology and People	1	1.03
Review of International Business and Strategy	1	1.03
Economic Analysis and Policy	1	1.03
Total	97	100

 Table 2

 Distribution of the Articles Across Developed and Developing Economies

Developed Economies	No. of Articles	Developing Economies	No. of Articles
USA	24	Taiwan	19
South Korea	9	China	7
Spain	5	India	3
UK	4	Jordan	1
Germany	3	Vietnam	1
Singapore	3	Thailand	2
Italy	2	Chile	2
Netherlands	2	Turkey	2
Finland	1	Bangladesh	1
New Zealand	1	Oman	1
Australia	1	Indonesia	1
Croatia	1		
Canada	1		
Total	57		40

Yearly Distribution of the Articles **Developed Economies Developing Economies**

Figure 1

Distribution of the Articles by Year from 2000 – 2020

RESULTS

The studies included in our review as shown in Table 3 below shed light on the landscape of individuals' purchase intention via an e-commerce channel. This table provides a thorough list of the significant direct and indirect influences on e-purchasing intention with the associated directions and theoretical frameworks applied.

As per Table 1 above, of the 53 journals included in our sample, one-third of the articles were extracted from 6 peer-reviewed journals. International Journal of Information Management had the majority of publications on the adoption of e-commerce (7.22% of the articles), followed by Behaviour & Information Technology, Internet Research, Computers in Human Behavior, and Information & Management (5.15% each). 36 journals (37.08%) published only one article on e-purchase intention across the 20-year period.

As per Table 2 above, of the 97 articles included in the review, around 60 percent (58 studies) had been conducted in developed economies headed by the USA and South Korea and 40 percent (39 studies) had been conducted in developing economies headed by Taiwan and China.

Figure 1 above shows that more than 50 percent of the articles were published in the period from 2009 to 2014 (6-year period). Interestingly, the years of 2000, 2004, and 2016 had been associated with only one published article while no article had been found in 2015. In general, there was an increasing trend for publications across the 20-year period, but it dropped dramatically after 2014 especially in the next three years.

From a comparison point of view, developed economies show a fluctuating publication period of the articles from 2000 to 2007, but after that, the publication increases gradually until 2013 where it drops significantly afterward. While developing economies show no publications from 2000 to 2004, then start with two fluctuating periods; the small period from 2005 to 2011 and the large period from 2012 to 2020. However, it seems that the overall gradual increase in e-commerce publications has been derived from developing economies' research.

As per Table 3 below, purchase intention was mostly investigated through traditional e-commerce (80 studies), followed by social commerce (10 studies), and then mobile commerce (7 studies). For theories and models adapted in our analyzed articles sample, it appears that most of these studies had been investigated by the technology acceptance model (TAM - 23 times) as a theoretical framework, followed by the theory of planned behavior (TPB - 13 times), and then the theory of reasoned actions (TRA) and stimulus-organism-response framework (S-O-R), 10 and 8 times, respectively. It is noteworthy to indicate that 25 of the studies used self-developed models incorporating various factors to explain an individual intention to buy online.

Table 3The 97-Articles Included in the Study Review

No	Indirect Effect ^a	Direct Effect ^b	Model	Context	Reference	Country	Variance Explained ^c
1	PP (-), PR (-)	PV (+)	MAT, IPT	Online store	Kim & Gupta (2009)	South Korea	45%
2	WBQ (+), SGC (+)	PPQ (+)	ST	E-commerce	Wells et al. (2011)	USA	43%
3	AE (+)	US (+), AE (+) SPL (+)	-	Online store	Christophersen & Konradt (2012)	Germany	47%
4	PU (+), PEU (+)	AT (+), COSB (+)	TAM	E-commerce	Hernández et al. (2010)	Spain	43%
5	RR (-), PSR (-)	PSR (-), FR (-), OPR (-), TR (+)	TPB, TRA	Online business	Hong & Cha (2013)	South Korea	29%
6	REP (+), FSZ (+), IQ (+), TSS (+), CMM (+), WOMRC (+)	TR (+)	TRA	Social commerce	Kim & Park (2013)	South Korea	33.2%
7	INTR (+),CHGE (+), NOV (+)	FL (+), PPR (+)	FT	Social commerce	Liu & Shiue (2014)	Taiwan	58.2%
8	PU (+), PEU (+)	SAT (+)	TAM	E-commerce	Green & Pearson (2011)	USA	18%
9	CL (+), FAM (+)	CL (+), FAM (+), TR (+)	TTT, HSF	Social commerce	Ng (2013)	Taiwan	33%
10	PRQ (+)	TR (+)	-	Online store	Everard & Galletta (2005)	USA	51%
11	PRT (+), PEU (+), OPRM (+)	TR (+), PU (+), PAQ (+)	TAM	E-commerce	Benlian et al. (2012)	Germany	33.6%

No	Indirect Effect ^a	Direct Effect ^b	Model	Context	Reference	Country	Variance Explained ^c
12	PU (+), PEU (+), WOMQ (+)	TR (+)	SLT, TAM	E-commerce	Awad & Ragowsky (2008)	USA	20.8%
13	PEU (+), TR (+), SAT (+), REP (-)	TR (+), PU (+), PR (-), REP (+)	TRA, TAM	E-commerce	Pavlou (2003)	USA	64%
14	TITI (+), TIM (+)	VTR (+), TW (+)	TF	E-commerce	Thatcher et al. (2012)	USA	S1: 34% S2: 51%
15	SQ (+), IQ (+), SY (+)	SQ (+), IQ (+), SY (+), SAT (+)	ISSM	Online shopping	Chen & Cheng (2009)	Taiwan	72%
16	INK (+), RKP (+)	IP (+) PR (-)	-	E-commerce	Lopez-Nicolas & Molina- Castillo (2008)	Spain	NR
17	PRC (-), VSA (+), ORF (+), ABE (-), BI (+), SEC (+)	SAT (+), TR (+), PR (-), PRC (-)	-	Online context	Shukla (2014)	UK	NR
18	ACC (+), RCOMM (+), SCID (+)	AI (+), FL (+), CI (+)	S-O-R	Online context	Huang (2012)	Taiwan	44%
19	RVC (+)	DPR (+), RA (+)	-	Online shopping	Jiménez & Mendoza (2013)	USA	NR
20	PRT (+), BAW (+)	AT (+)	TRA, TPB	Online shopping	Lu et al. (2014)	Taiwan	27.4%
21	-	REP (+) (+), ORB (+)	-	Online retailing	Chu et al. (2005)	South Korea	NR
22	INF (+), ENT (+), CRD (+)	UX (+), PVA (+), TR (-), SN (+), AT (+)	EVT	Social media (e commerce)	Dao et al. (2014)	Vietnam	13.2%
23	TR (+), INY (+), BNV (+)	TR (+), ATL (+)	TRA	E-marketplace	Hong & Cho (2011)	South Korea	NR
24	-	VLR (+)	-	E-commerce	Mauria & Minazzi (2013)	Italy	NR
25	PE (+), PU (+), PRF (-)	ESE (+), PV (+)	VAM	Online content services	Wang et al. (2013)	Taiwan	27.2%
26	-	PU (+), PE (+), PNS (+), PEU (+), AVB (+)	UTAU T	Social virtual worlds	Mäntymäki & Salo (2013)	Finland	38.8%
27	-	RAP (+)	-	Mobile commerce	Yeh & Lin (2010)	Taiwan	NR
28	ACC (+), PRT (+)	CI (+), AI (+)	S-O-R	E-commerce	Jiang et al. (2010)	Singapore	NR
29	RVQY (+)	PRE (+), RVQY (+)	TRA	E-commerce	Lee & Shin. (2014)	South Korea	NR
30	BAPP (+), BAPS (+), ENB (+),	AT (+), SN (+),	TPB,	E-commerce	Song & Zahedi	USA	65%

No	Indirect Effect ^a	Direct Effect ^b	Model	Context	Reference	Country	Variance Explained ^c
	BARF (+)	PBC (+)	BRM		(2005)		
31	ESIM (+)	UTV (+), HDV (+)	-	Online store	Chang & Tseng (2013)	Taiwan	29%
32	IQ (+), SY (+)	PTR (+), COT (+)	TAM	Online auto insurance	Lime et al. (2009)	South Korea	NR
33	VTR (+)	AT (+)	TRA	E-commerce	Pennington et al. (2003)	USA	NR
34	PRPC (+), OSE (+)	SN (+), AT (+), PR (-)	TPB	E-commerce	Crespo & Bosque (2010)	Spain	45.5%
35	TR (-), DRV (+, -), TRP (+)	PR (-), PB (+), TR (+), EX (+), FAM (+)	VF, ECT	E-commerce	Kim et al. (2009)	USA	45.7%
36	IGI (+), PRSM (+), TRP (+)	IGI (+), TMIB (+), TW (+)	-	E-commerce	Lu et al. (2010)	China	35%
37	PEU (+), PU (+)	PEU (+), PU (+), IS (+)	TAM	E-commerce	Lin & Chan (2009)	Singapore	37%
38	PU (+), PE (+)	PU (+), PE (+), AT (+), SN (+)	TPB, TAM	Social commerce	Shin (2013)	South Korea	54%
39	VPE (+)	VPE (+), CIF (+), CEX (+)	-	Online store	Li & Meshkova (2013)	Netherlands	50%
40	PU (+)	PR (-), PC (-), PBC (+), SN (+), AT (+), PEU (+), CMP (+), TR (+), PE (+)	TAM, TPB, IDT	Mobile commerce	Zhang et al. (2012)	China	NR
41	SCM (+)	TR (+), PU (+)	TAM	Social commerce	Hajli (2014)	UK	36.4%
42	-	PRT (+), PCH (+), GEN(+)	-	Internet Shopping	Brown et al. (2003)	USA	NR
43	MOS (+)	PE (+), PU (+), COM (+), AX (-)	SCT, TAM	Mobile commerce	Lu & Yu-Jen Su (2009)	Taiwan	56%
44	PRQ (+), ORB (+, -), TRP (+), PR (-)	TR (+), PR (-)	S-O-R	Online shopping	Hsin Chang & Wen Chen (2008)	Taiwan	50%
45	-	SEC (+)	TAM	Internet commerce	Salisbury et al. (2001)	USA	19%
46	MOD (+)	MOD (+), PR (-), PRPR (+)	-	E-shopping behavior	Park et al. (2005)	USA	NR
47	PU (+), PLF (+), PP (-)	PV (+)	VIF, TAM	Online music purchase	Chu & Lu (2007)	Taiwan	72%
48	-	PRT (+), INV (+)	HSF	Online shopping	Moon et al. (2008)	New Zealand	NR
49	AE (+)	AE (+), PLF (+), SSIE (+)	CVT	Social networking community	Kim et al. (2011)	South Korea	40%

No	Indirect Effect ^a	Direct Effect ^b	Model	Context	Reference	Country	Variance Explained ^c
50	-	PEX (+), EEX (+), INO (+)	UTAU T	Rural accommodation website	Martín & Herrero (2012)	Spain	40%
51	PDJ (+), DSJ (+), INJ (+)	PDJ (+), DSJ (+), INJ (+), REP (+)	JF, ET	Online shopping	Ziaullah et al. (2017)	China	44%
52	FAM (+), REP (+), OLP (+)	TR (+), AT (+)	S-O-R, TRA	Online shopping	Kaur et al. (2017)	India	NR
53	AT (+), BAT (+), REP (+), PR (-)	AT (+), OPI (+)	TPB, TAM	E- commerce	Chu et al. (2017)	Taiwan	67%
54	PEU (+), PR (-)	AT (+)	TAM	E- commerce	Van der Heijden et al. (2003)	Netherlands	55%
55	TEL (+)	CCV (+), UEG (+)	3DVM	Online retailer site	Algharabat (2018)	Jordan	22%
56		TTF (+), NVE (+), REP (+)	TTF	E-commerce	Chen & Huang (2017)	Taiwan	43%
57	PRQ (+)	PRQ (+), PCNC (+)	TAM and TPR	Fruit e-commerce	Wei et al. (2018)	China	NR
58	TR (-), OUN (+), PCF (-)	TSC (-), TR (+), OUN (-), PCF (+)	TCT	Online travel insurance	Yu & Chen (2018)	Taiwan	NR
59	FAM (+), TR (+), PEU (+)	PU (+), STP (+)	TAM	Online stores of travel agent	Chen & Teng (2013)	Taiwan	40%
60	PRPF (+), TR (+)	RTD (+), PRPF (+), TR (+)	JF, ST	Internet retailers	Pei et al. (2014)	USA	76.5%
61	TR (+), EXS (+), INS (+)	PU (+), PE (+), TR (+)	S-O-R	Online movie ticket	Fu et al. (2018)	China	49.6%
62	OSE (+)	PRK (-), OSE (+)	TPR	Online shopping	Dai et al. (2014)	USA	NR
63	EDU (-)	GEN (-), TSC (+), INP (+), INE (+), NBC	-	Online shopping	Young Kim & Kim (2004)	USA	NR
64	AD (+)	LY (+), AD (+)	-	Mobile commerce	Balakrishnan & Griffiths (2018)	India	27%
65	VTR (+)	BTR (+), VTR (+)	СТ	Internet shopping	Becerra & Korgaonkar (2011)	USA	NR
66	PR (-)	AT (+), TR (+)	TRA	Online purchasing	Fastoso et al. (2012)	Chile	NR
67	-	PLF (+), PU (+), TR (+)	TAM, TPB, UTAU T	E-commerce	Bonera (2011)	Italy	NR
68	NFC (-), NEU (-),	AI (+), NFC (-), NEU (-), OP (+),	3M	Online purchasing	Bosnjak et al.	Croatia	35%

No	Indirect Effect ^a	Direct Effect ^b	Model	Context	Reference	Country	Variance Explained ^c
	NFMR	AG (-)			(2007)		
69	-	CSE (-), PR (-), INO (+)	TAM	E-commerce	Boyle & Ruppel (2006)	USA	NR
70	TR (+), PU (+), PE (+)	AT (+)	TAM	E-shopping	Çelik & Yilmaz (2011)	Turkey	77%
71	CMP (+), PU (+), PEU (+)	AT (+)	TAM, IDT	E-commerce	Chen et al. (2002)	USA	NR
72	-	IN (+), RSA (+)	-	E-commerce	Wen-Jung & Lee (2005)	Taiwan	NR
73	PPB (-), ITB (+)	AT (+)	TPB	Internet purchasing	George (2002)	USA	5%
74	-	HO (+), EC (+), LSO (-), PRT (-), AGE (-), GEN (-), INE (+)	-	Internet shopping	Vijayasarathy (2003)	USA	27.6%
75	-	INO (+), IOP (+), IN (+)	-	Internet shopping	Goldsmith (2002)	USA	NR
76	-	REP (+), SEC (+), PRR (+), ASD (+)	-	Online shopping	Goode & Harris (2007)	UK	67.8%
77	PV (+), PRQ (+)	PRQ (+), PV (+), SAT (+)	-	Online purchasing	Hackman et al. (2006)	Australia	34%
78	PIP (+), BI (+), SUF (+), UP (+)	BATT (+), AT (+)	S-O-R	Mobile commerce	Liu et al. (2018)	Taiwan	27.4%
79	SEC (+), LF (+), AE (+)	TR (+)	OSF	Online shopping	Harris & Goode (2010)	UK	NR
80	PEU (+), PU (+)	AT (+)	TAM	Online shopping	Hernández et al. (2011)	Spain	NR
81	AVA (+), AVE (+)	CRTA (+), LKTA (+)	-	Online shopping	Holzwarth et al. (2006)	Germany	NR
82	TW (+, -), VTR (+, -), TRGM (+, -), TRAI (-)	PR (-), AT (+)	TRA	Online shopping	Hsu et al. (2014)	Taiwan	32%
83	-	PR (-), FR (-)	S-O-R	Online shopping	Kim & Lennon, (2010)	USA	NR
84	-	SN (+), PBC (+)	TPB	Online shopping	Taylor & Laohapensang (2009)	Thailand	39%
85	PEU (+), PR (-), ECK (+)	TR (+)	TAM	Online shopping	Li et al. (2007)	China	37%
86	-	PEX (+), SCI (+), USB (-), VAB (-), PR (-), TDB (-	UTAU T, IRT	Online shopping	Lian & Yen (2014)	Taiwan	59%

No	Indirect Effect ^a	Direct Effect ^b	Model	Context	Reference	Country	Variance Explained ^c
87	-), CLCP (-), SEC (-), PP (-), VDQ (+), IEDU (+), INU (+)	-	E-shopping	Liao & Cheung (2001)	Singapore	90%
88	INO (+), PCO (+)	SN (+), AT (+), PCO (+), PBC (+), INO (+)	TPB	E-commerce	Limayem et al. (2000)	USA	53.6%
89	INF (+), EFV (+,-), AT (+), IN (+), ENT (+)	INF (+), IN (+), AT (+)	S-O-R	Online consumer behavior	Mazaheri et al. (2012)	Canada	NR
90	SAT (+)	EAA (+), AC (+), RPR (+), SAT (+)	-	E-retailers	Kalia et al. (2016)	India	26.2%
91	-	TR (+), PV (+), eWOM (+)	-	Social commerce	Alonso-Dos- Santos et al., (2019)	Chile	80.9%
92	ERO (+), TR (+), PU (+)	TR (+), PU (+), PEU (+)	TAM	Mobile commerce	Pipitwanichakar n & Wongtada (2019)	Thailand	64.2%
93	NFU (+), OP (+), SLM (+), BIM (+)	HCM (+), SLM (+), UNM (+)	PTM	Social commerce	Aydın (2019)	Turkey	40.2%
94	AX (+), SEC (+), PRC (+), PTV (+), EEX (+), TR (+), PP (+)	TR (+), OPP (+),	-	E-commerce	Shareef et al. (2019)	Bangladesh	87.9%
95	-	IQ (+), HBT (+), PEX (+), TR (+), HCM (+), SQ (+), PP (+), FCN (+)	UTAU T2 & ISSM	Mobile commerce	Tarhini et al. (2019)	Oman	65.5%
96	INO (+), SEF (+), PU (+)	SEF (+), PU (+), AT (+)	TAM, TPB, TRA, IDT	E-commerce	Lestari (2019)	Indonesia	55.8%
97	PRD (+),	AI (+), EGI (+), SLI (+)	CIT	E-commerce	Mou et al. (2020)	China	72%

Note. TAM: Technology Acceptance Model (23); TPB: Theory of Planned Behavior (13); TRA: Theory of Reasoned Action (10); S-O-R: Stimulus-Organism-Response Framework (8); UTAUT: Unified Theory of Acceptance and Use of Technology (5); IDT: Innovation Diffusion Theory (3); IRT: Innovation Resistance Theory (1); OSF: Online Servicescape Framework (1); 3M: The 3M Model of Motivation and Personality (1); CT: Congruity Theory(1); JF: Justice Framework (2); ST: Signaling Theory (2); TPR: Theory of Perceived Risk (2); TTF: Technology Task Fit (1); 3DVM: 3D Virtual Model (1); VIF: Value-Intention Framework (1); ET: Equity Theory (1); HSF: Hofstede's Framework (2); TTT: Trust Transference Theory (1); TCT: Transaction Cost Theory (1); CVT: Customer Value Theory (1); SCT: Social Cognitive Theory (1); BRM: Belief

No	Indirect Effect ^a	Direct Effect ^b	Model	Context	Reference	Country	Variance
							Explained ^c

Reinforcement Model (1); VAM: Value-based Adoption Model (1); ISSM: IS Success Model (2); TF: Trust Framework; SLT: Sociolinguistic Theory (1); FT: Flow Theory (1); MAT: Mental Accounting Theory (1); IPT: Information Processing Theory (1); PTM: Personality Traits Model (1); CIT: Commitment-Involvement Theory (1).

Main Factors and Theories

Table 4 below shows a classification scheme for the factors that share similar characteristics or from the same family and how they are distributed across developed and developing economies. As noted, trust and its associated factors have been applied in 47 studies (25 in developed and 22 in developing) and so considered the most widely used factor influencing customers' buying intention across the e-commerce research. In the same vein, it appears that most antecedents applied in e-purchase intention at the aggregate level are emotional factors (34 times), usefulness factors (33 times), website characteristics (27 times), ease-use factors (25 times), risk-type factors (24 times), general factors (20 times), and quality factors (17). On the other hand, risk-type factors, product characteristics, reliability-related factors, demographic factors, security and privacy factors, and appearance factors have been emphasized more in developed economies. While value factors, brand factors, involvement-type factors, social and behavioral factors, efficacy-related factors, challenge-related factors, and website characteristics have been employed more in developing economies. Trust factors, price factors, norm factors, enjoyment factors, experience factors, personality traits, logistics-related factors, and ease-use factors have been fairly given equal attention across developed and developing economies in studying the adoption of ecommerce.

Multiple theoretical frameworks have been adapted to examine online shopping intention as in Table 5 shown in Appendix A. It appears that acceptance models are the most frequently used in e-commerce studies with more than 55% (54 articles). TAM is a very popular model and so it is the most widely used with a total of 23 studies; 16 studies in developed economies and 7 studies in developing economies. TPB ranks second with a total of 13 studies; 7 studies in developed economies and 6 studies in developing economies while TRA ranks third with 5 studies for each of developed and developing economies.

Table 4Factors Classification Based on their Similar Aspects Across Developed and Developing Economies

Factors Classification	Developed	Developing	Total
Trust Factors	25	22	47
General Trust	14	14	28
Vendor Trust	3	1	4
Trust in Website	1	2	3
Product Trust	1	0	1
Trust Propensity	1	2	3
Company Trust	1	0	1
Brand Trust	1	0	1
Trust in Group Members	0	1	1
Trust in Auction Indicator	0	1	1
Trust in Members Integrity/ Benevolence	0	1	1

a, b The construct names with their abbreviation code is described in Appendix A.

^c Some studies do not report variance explained by the model or report partially for a specific group = NR

Factors Classification	Developed	Developing	Total
Trust in Institutional Mechanisms	1	0	1
Trust in IT Infrastructure	1	0	1
Internet Trustworthiness Beliefs	1	0	1
Risk-Type Factors	16	8	24
Perceived Risk	9	8	17
Financial Risk	2	0	2
Risk Preference	1	0	1
Performance Risk	1	0	1
Psychological Risk	1	0	1
Online Payment Risk	1	0	1
Product Risk	1	0	1
Product Characteristics	11	2	13
Product Type	5	0	5
Perceived Product Quality	1	0	1
Product Evaluation	1	0	1
Product Presentation	1	0	1
Concern about Life Content of Products	1	0	1
Product Perception	1	0	1
Online Product Recommendation	1	0	1
Product Image Percentage	0	1	1
Product Description	0	1	1
Price Factors	6	7	13
Perceived Price	3	2	5
Transaction Cost	1	1	2
Belief about Perceived Price	1	0	1
Perceived Cost	0	1	1
Subjective Price Level	1	0	1
Price Perception	0	1	1
Price Concessions	0	1	1
Perceived Fee	0	1	11
Value Factors	3	9	12
Perceived Value	2	3	5
Dollar Value	1	0	1
Perceived Value of Advertising	0	1	1
Utilitarian Value	0	1	1
Hedonic Value	0	1	1
Value Barrier	0	1	1
Perceived Time Value	0	1	1
Co-Creation Value	0	1 7	1 7
Quality Factors	10	7	17
Perceived Quality	2	2	4
Information Quality	2	2	4
Service Quality	0	2	2
System Quality	1	1	2
WOM Quality	1	0	1
Website Quality	1	0	1
Review Quality	1 1	0	1 1
Perceived Affective Quality	1	0	1
Vendor Quality Brond Factors	2	5	7
Brand Factors Brand Image	<u>2</u> 1	1	2
Brand Image Online Retailer Brand	1 1	1	2
Brand Attachment	0	1	1
E-Store Image	0	1	1
E-Store image	U	1	1

Factors Classification	Developed	Developing	Total
Brand Awareness	0	1	1
Norm Factors	4	4	8
Subjective Norm	4	3	7
External Normative Belief	0	1	1
Involvement-Type Factors	3	9	12
Regular Involvement	1	3	4
Affective Involvement	1	3	4
Cognitive Involvement	1	1	2
Enduring Involvement	0	1	1
Situational Involvement	0	1	1
Review Factors	3	1	4
Review Credibility	1	0	1
Reviewer Agreement	1	0	1
Valence Review	1	0	1
Detailed Positive Review	0	1	1
Reliability-Related Factors	6	2	8
Perceived Reliability	1	0	1
Reliability/Prompt Response	0	1	1
Credibility Type of Avatar	1	0	1
Signal Credibility	1	0	1
Belief about Perceived Service	1	0	1
Integrity	1	0	1
Availability	1	0	1
Credibility	0	1	1
Enjoyment Factors	6	7	13
Perceived Enjoyment	3	4	7
Entertainment	0	2	2
Playfulness	2	1	3
Consumer Excitement	1	0	1
Experience Factors	4	2	6
Online Shopping Experience	2	0	2
User Experience	0	1	1
Prior Purchase	1	0	1
Usage Period	0	1	1
Virtual Product Experience	1	0	1
Demographic Factors	12	1	13
Gender	3	0	3
Income	2	0	2
Firm Size	1	0	1
Age	1	0	1
Network Size	1	0	1
IT Education	1	0	1
Number of Children	1	0	1
Residential Area	0	1	1
Education	1	0	1
Home	1	0	1
Internet Factors	3	0	3
Internet Preference	1	0	1
Internet Knowledge	1	0	1
Internet Usage	1	0	1
Personality Traits	3	3	6
Individualism	1	0	1
Openness	1	1	2
Agreeableness	0	1	1

Factors Classification	Developed	Developing	Total
Need for Uniqueness	1	0	1
Neuroticism	0	1	1
Efficacy-Related Factor	3	5	8
Self-Efficacy	0	1	1
Computer Self-Efficacy	1	0	1
Mobile Skillfulness	0	1	1
Perceived Behavioral Control	2	2	4
Ethical Self-Efficacy	0	1	1
Security and Privacy Factors	7	2	9
Security	5	1	6
Privacy	1	1	2
Transaction Safety	1	0	1
Usefulness Factors	18	15	33
Perceived Usefulness	13	8	21
Compatibility	1	2	3
Usability	1	0	1
Performance Expectancy	1	2	3
Operational Performance	0	1	1
Expectation	1	0	1
Perceived Benefit	1	0	1
Effectiveness	0	1	1
Settlement Performance	0	1	1
Appearance Factors	8	0	8
Aesthetics	3	0	3
Appearance & Site Design	1	0	1
Likeability Type of Avatar	1	0	1
Avatar Attractiveness	1	0	1
Layout & Functionality	1	0	1
Visual Appearance	1	0	1
Logistics-Related Factors	3	4	7
Order Fulfilment	1	0	1
Absence of Error	1	0	1
Belief about Resource Facilitation	1	0	1
Facilitating Conditions	0	1	1
Procedural Justice	0	1	1
Interactional Justice	0	1	1
Distributive Justice	0	11	1
Ease-Use Factors	12	13	25
Perceived Ease of Use	10	4	14
Familiarity	1	3	4
Ease of Access/Attentiveness	0	1	1
Flow	0	2	2
Navigational Efficiency	0	1	1
Access	0	1	1
Effort Expectancy	1	<u>l</u>	2
Motivation-Related Factors	3	1	4
Socialization Motivation	1	0	1
Hedonic Motivation	1	1	2
Utilitarian Motivation	1	0	1
Emotional Factors	18	16	34
Attitude	12	10	22
Satisfaction	4	2	6
Attitudinal Loyalty	1	0	1
Loyalty	0	1	1

Anxiety	Factors Classification	Developed	Developing	Total
Addiction	Anxiety	0	2	2
Social and Behavioral Factors 4 7 11 Social Self-Image Expression 1 0 1 Sticker-Use Frequency 0 1 1 Social Media 1 0 1 Buying Impulsiveness 1 0 1 Buying Impulsiveness 1 0 1 Purchasing Frequency 0 1 1 Social Influence 0 1 1 Intention for Search 0 1 1 User Engagement 0 1 1 Habit 0 1 1 Challenge 0 1 1 Usage Barrier 0 1 1 Tradition Barrier 0 1 1 Challenge 0 1 1 Online Uncertainty 0 1 1 Omine Uncertainty 0 1 1 Onine Uncertainty 0 1 1 Onine Uncertainty	• • • • • • • • • • • • • • • • • • •	1	0	1
Social Self-Image Expression	Addiction	0	1	1
Sticker-Use Frequency 0 1 1 Social Media 1 0 1 Current Online Shopping Behavior 1 0 1 Buying Impulsiveness 1 0 1 Purchasing Frequency 0 1 1 Social Influence 0 1 1 Intention for Search 0 1 1 User Engagement 0 1 1 Habit 0 1 1 Challenge-Related Factors 0 3 3 Usage Barrier 0 1 1 Tradition Barrier 0 1 1 Challenge 0 1 1 Challenge 0 1 1 Usage Barrier 0 1 1 Tradition Barrier 0 1 1 Challenge-Related Factors 0 3 3 Usage Barrier 0 1 1 Tradition Barrier	Social and Behavioral Factors	4	7	11
Social Media 1 0 1 Current Online Shopping Behavior 1 0 1 Buying Impulsiveness 1 0 1 Purchasing Frequency 0 1 1 Social Influence 0 1 1 Intention for Search 0 1 1 User Engagement 0 1 1 Habit 0 1 1 Challenge-Related Factors 0 3 3 Usage Barrier 0 1 1 Tradition Barrier 0 1 1 Challenge 0 1 1 Online Uncertainty 0 1 1 Online Uncertainty 0 1 1 Website Characteristics 12 15 27 Innovativeness 5 1 6 Informativeness 0 2 2 External Similarity 0 1 1 Novelty	Social Self-Image Expression	1	0	1
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User Engagement		0	1	1
Habit		0	1	1
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Word-of-Mouth Referral 1 0 1 Active Control 1 1 2		0	1	1
Active Control 1 1 2			0	1
		1	1	2
	Benevolence	1	0	1

Factors Classification	Developed	Developing	Total
Electronic Word of Mouth	0	1	1

DISCUSSION AND CONCLUSION

This study suffers from some limitations. First, it has restricted the keyword search to e-commerce explicit platforms such as online retailer sites, fruit e-commerce sites, movie ticket sites, etc. while has excluded other types of e-commerce like mobile banking, internet banking, and mobile payment - examples include Brown et al.'s (2003) study that explores cell-phone banking adoption in South Africa and Brown et al.'s (2004) study that compares internet banking adoption between Singapore and South Africa. Second, the review has focused on e-commerce studies that examine behavioral buying intention at an individual level only, and hence organizational-level studies, like Kabanda & Brown's (2017) study that investigates SME's intention to engage in e-commerce in Tanzania, are excluded. Third, online databases pertaining to ISI and ABDC indexes are the primary sources of our sample articles, limiting the study boundary to include only articles from such quality indexes. However, there has been substantial research conducted in developing economies with regards to e-commerce, but all the abovementioned aspects have significantly reduced the number of developing-economies' studies included in our review. As a result, we have a very low representation of e-commerce studies from Middles East and Africa.

Overall, this review can provide several interesting insights that may help to understand the current outlook of e-purchase intention and revealing future research opportunities.

- First, it appears that developed economies (mostly from the Western countries) are quite far ahead in exploring individuals' adoption of e-commerce during the period of 2000 to 2015. This could be attributed that developing economies have been busy focusing on ICT local innovation (Avgerou, 2010) in the earlier decades instead, but after 2015, developing economies have overpassed developed economies in the number of e-commerce studies. Though e-commerce research in developing economies, except for Taiwan, must be given more attention to help in further accelerating the development wheel of e-commerce sector in local industries, specifically for the Arab region (only two articles found from Jordan and Oman). However, South Korea, as a developed country, is not from the Western countries, but has conducted plenty of research in e-commerce and ranks second after the United States.
- Second, the yearly distribution of the articles over the 20-year period shows a sharp decline for developed economies and a high increase for developing economies in the recent five years. This could indicate that the maturity level of research in developed economies are high, whereas there is a larger room for improving e-commerce practices in developing economies, especially in Middle East and North Africa.
- Third, we can compare the factors influencing the adoption of e-commerce at two levels. The classification level gives a broader understanding of the most and least used clustered- factors while the individual level provides a specific understanding of the least matured areas:
 - Classification-level factors: generally speaking, the future research of e-commerce in developing economies should pay a significant attention to demographic factors, product characteristics, security and privacy factors, risk-type factors, and appearance factors because they are scarcely examined. In addition, reliability-related factors, quality factors, and internet factors have become more important in developing economies because some of which still struggle from IT weak

- infrastructure that affects service credibility and availability. This warrants more research to explore their impact on individual's intention to shop online.
- o Individual-level factors: the future research should call for further investigation of the least studied factors in developing economies, namely, product type, integrity, credibility, gender, income, security, aesthetics, buying impulsiveness, and innovativeness while are quite matured in developed economies. However, there are some factors require less investigation overall such as, trust, attitude, personality traits, perceived ease of use, perceived risk, perceived enjoyment, reputation, and familiarity since they have been sufficiently studied in both developed and developing worlds contexts, meaning that those factors can overcome barriers of culture, tradition, risk, usage, and so could be generalizable to both contexts.

In general, studying the least examined factors can help in understanding whether these factors are limited in application for e-commerce platforms in a specific world context and hence we can confirm their compatibility and utility in a counterpart world context. This might be facilitated by conducting a cross-cultural study to extend e-commerce factors from a developed country context to a developing counterpart context.

- Fourth, it is noticeable that acceptance models, such as TAM, TPB, TRA, UTAUT, etc., appear to be the most generalizable in the e-commerce research and have great explanatory power. This suggests that these models have a higher capability to explain an individual intention to buy online regardless of the world context. However, further research is warranted to focus on the less frequent theories and frameworks (namely, signaling theory, valence framework, customer value theory, personality traits model, value-based adoption model, IS success model, flow theory, innovation resistance theory, and equity theory). These models could be adapted and so validated at a larger scale at both worlds to establish their capacity and specificity across e-commerce platforms, especially in social commerce and mobile commerce as they are the least investigated platforms.
- Fifth, this review can be a useful source for e-commerce practitioners either in developed or in developing economies. They could benefit from knowing which factors most matter to customers and which factors have less value to customers. In addition, the e-commerce practitioners in developing economies could reap more profit by extending the factors mostly used in developed economies to their local communities. Overall, the factors classification can enable the practitioners to be a customer-centric and smartly direct their resources for further enhancements and developments of e-commerce strategies.

The contributions of this review are threefold. First, this study attempts to develop a holistic comparative reference of research regarding the adoption of e-commerce across developed and developing economies with providing a summary of the most influential factors in this area. Second, it sheds light on the under-investigated contexts, theories, models, and factors, which can help future research to uncover new gaps and address new e-commerce concerns, especially in the developing economies. Third, the study results can identify important practical implications. Professionals could be provided with practical e-commerce principles, enabling them to design, develop, and integrate such principles to their e-commerce business model. This, in turn, leads to a smart refinement process, and hence, a higher marginal revenue.

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APPENDIX A

Table 5 describes the most used theories and model to examine e-purchase intention. Table 6 describes the abbreviations for all factors.

 Table 5

 Theories/Models/Frameworks Applied in e-Purchase Intention

Theories/Models	Developed Economies	Developing Economies
Technology Acceptance Model (TAM)	15	8
Theory of Planned Behavior (TPB)	7	6
Theory of Reasoned Action (TRA)	5	5
Stimulus-Organism-Response Framework (S-O-R)	5	3
Unified Theory of Acceptance and Use of Technology (UTAUT)	3	2
Innovation Diffusion Theory (IDT)	1	2
Hofstede's Framework (HSF)	1	1
Justice Framework (JF)	1	1
Theory of Perceived Risk	1	1
Congruity Theory	1	
Information Processing Theory	1	
Mental Accounting Theory	1	
Sociolinguistic Theory	1	
Trust Framework	1	
Expectation Confirmation Theory	1	
Online Servicescape Framework	1	
Signaling Theory	2	
Valence Framework	1	
Belief Reinforcement Model	1	
Customer Value Theory	1	
Personality Traits Model		1
Social Cognitive Theory		1
Value-Based Adoption Model		1
The 3M Model of Motivation and Personality	1	
Expectancy Value Theory		1
IS Success Model		2
Transaction Cost Theory		1
Trust Transference Theory		1
Flow Theory		1
Innovation Resistance Theory		1

Theories/Models	Developed	Developing
THEOTIES/IVIOUEIS	Economies	Economies
Equity Theory		1
Value-Intention Framework		1
3D Virtual Model		1
Commitment-Involvement Theory		1
Technology Task Fit		1

Table 6Factor Abbreviations

No.	Factor	ID	No.	Factor	ID
1	Trust	TR	2	Attitude	AT
3	Perceived Usefulness	PU	4	Perceived Risk	PR
5	Affective Involvement	ΑI	6	Perceived Ease of Use	PEU
7	Compatibility	CMP	8	Perceived Enjoyment	PE
9	Gender	GEN	10	Subjective Norm	SN
11	Perceived Quality	PRQ	12	Reputation	REP
13	Involvement	IN	14	Product Type	PRT
15	Performance Risk	RR	16	Satisfaction	SAT
17	Financial Risk	FR	18	Security	SEC
19	Flow	FL	20	Innovativeness	INO
21	Familiarity	FAM	22	Perceived Value	PV
23	System Quality	SY	24	Perceived Behavioral Control	PBC
25	Cognitive Involvement	CI	26	Trust in Website	TW
27	Online Retailer Brand	ORB	28	Vendor Trust	VTR
29	Informativeness	INF	30	Aesthetics	AE
31	Entertainment	ENT	32	Information Quality	IQ
33	Active Control	ACC	34	Usability	US
35	Perceived Price	PP	36	Subjective Price Level	SPL
37	Perceived Product Quality	PPQ	38	Psychological Risk	PSR
39	Performance Expectancy	PEX	40	Online Payment Risk	OPR
41	Transaction Cost	TSC	42	Price Perception	PPR
43	Online Shopping Experience	OSE	44	Closeness	CL
45	Income	INE	46	Perceived Affective Quality	PAQ
47	Trust Propensity	TRP	48	Service Quality	\overline{SQ}
49	Brand Image	BI	50	Internet Preference	IP
51	Perceived Value of Advertising	PVA	52	Novelty	NOV
53	Technology Risk	TR	54	Privacy	PRC
55	Attitudinal Loyalty	ATL	56	Detailed Positive Review	DPR
57	Valence Review	VLR	58	Reviewer Agreement	RA
59	Ethical Self-Efficacy	ESE	60	Infomediary Reputation	IR
61	Perceived Network Size	PNS	62	User Experience	UX
63	Availability	AVB	64	Product Risk	PRK
65	Rational Appeals	RAP	66	Incentive Programs	INP
67	Product Evaluation	PRE	68	Number of Children	NBC
69	Utilitarian Value	UTV	70	Loyalty	LY
71	Hedonic Value	HDV	72	Addiction	AD
73	Product Trust	PTR	74	Brand Trust	BTR
75	Company Trust	COT	76	Neuroticism	NEU
77	Perceived Benefit	PB	78	Need for Cognition	NFC
79	Expectation	EX	80	Need for Material Resources	NFMR
81	Intention to Get Information	IGI	82	Openness	OP
83	Trust in Members Integrity/ Benevolence	TMIB	84	Agreeableness	AG

No.	Factor	ID	No.	Factor	ID
85	Intention for Search	IS	86	Computer Self-Efficacy	CSE
87	Virtual Product Experience	VPE	88	Education	EDU
89	Consumer Informedness	CIF	90	External Similarity	EXS
91	Consumer Excitement	CEX	92	Internal Similarity	INS
93	Perceived Cost	PC	94	Telepresence	TEL
95	Prior Purchase	PCH	96	Basic Attributes	BAT
97	Anxiety	AX	98	Offline Presence	OLP
99	Mood	MOD	100	Cirimo i robolico	RSP
101	Product Presentation	PRPR	100	Mobile Skillfulness	MOS
101	Individualism	INV	102	Residential Area	RSA
105	Social Self-Image Expression	SSIE	104	Property Beliefs	PPB
				Internet Trustworthiness	
107	Effort Expectancy	EEX	108	Beliefs	ITB
109	Procedural Justice	PDJ	110	Local Shopping Orientations	LSO
111	Distributive Justice	DSJ	112	Economic	EC
113	Interactional Justice	INJ	114	Home	НО
115	Offline Purchase Intention	OPI	116	Innovative Predisposition	IOP
117	Co-Creation Value	CCV	118	Perceived Reliability	PRR
119	User Engagement	UEG	120	Brand Attachment	BATT
121	Task-Technology Fit	TTF	122	Product Image Percentage	PIP
123	Navigational Efficiency	NVE	124	Sticker-Use Frequency	SUF
125	Price Concessions	PCNC	126	C	UP
127	Online Uncertainty	OUN	128	Layout & Functionality	LF
129	Purchasing Frequency	PCF	130	Avatar Attractiveness	AVA
131	Settlement Performance	STP	132	Avatar Expertise	AVE
133	Return Depth	RTD	134	Credibility Type of Avatar	CRTA
135	Perceived Return Policy Fairness	PRPF	136	Likeability Type of Avatar	LKTA
137	Appearance & Site Design	ASD	138	Trust in Group Members	TRGM
139	Concern about Life Content of Products	CLCP	140	Trust in Auction Indicator	TRAI
141	Internet Usage	INU	142	E-Commerce Knowledge	ECK
143	Vendor Quality	VDQ	144	Social Influence	SCI
145	IT Education	IEDU	146	Usage Barrier	USB
147	Perceived Consequences	PCO	148	Value Barrier	VAB
149	Effectiveness	EFV	150	Tradition Barrier	TDB
				Online Product	
151	Ease of Access/Attentiveness	EAA	152	Recommendation	OPRM
153	Access	AC	154	Trust in IT Infrastructure	TITI
155	Reliability/Prompt Response	RPR	156	Internet Knowledge	INK
157	Social Media	SCM	158	Risk Preference	RKP
159	Current Online Shopping Behavior	COSB	160	Website Quality	WBQ
161	Brand Awareness	BAW	162	Signal Credibility	SGC
163	Firm Size	FSZ	164	Visual Appearance	VSA
165	Transaction Safety	TSS	166	Order Fulfilment	ORF
167	Communication	CMM	168	Absence of Error	ABE
169	Word-of-Mouth Referral	WOMR	170	Reciprocal Communication	RCOMM
171	Interactivity	INTR	170	Social Identity	SCID
173	Challenge	CHGE	174	Review Credibility	RVC
175	Trust in Institutional Mechanisms	TIM	174	Integrity	INY
173	Belief about Perceived Service	PAPS	178	Benevolence	BNV
177	External Normative Belief	ENB	180	Perceived Fee	PRF
181	Belief about Resource	BARF	180	Review Quality	RVQY
183	Facilitation E-Store Image	ESIM	184	Belief about Perceived Price	BAPP
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No.	Factor	ID	No.	Factor	ID
185	Age	AGE	186	Buying Impulsiveness	BIM
187	Credibility	CRD	188	Hedonic Motivation	HCM
189	Product Perception	PRPC	190	Utilitarian Motivation	UNM
191	Dollar Value	DRV	192	Operational Performance	OPP
193	Entrepreneurial Orientation	ERO	194	Perceived Time Value	PTV
195	Perceived Similarity	PRSM	196	Habit	HBT
197	WOM Quality	WOMQ	198	Facilitating Conditions	FCN
199	Need for Uniqueness	NFU	200	Self-Efficacy	SEF
201	Socialization Motivation	SLM	202	Product Description	PRD
203	Situational Involvement	SLI	204	Enduring Involvement	EGI