

## Adoption of social commerce: An empirical analysis in the context of Pakistan



Zulfiqar Ali Solangi<sup>1,\*</sup>, Yasir Ali Solangi<sup>2</sup>, Salman S. Al-Githami<sup>3</sup>, Abdullah Maitlo<sup>2</sup>, Mahmood Hussain Shah<sup>4</sup>

<sup>1</sup>Jubail Technical Institute-Education Sector, Royal Commission Jubail, Saudi Arabia

<sup>2</sup>Institute of Computer Science, Shah Abdul Latif University, Khairpur, Pakistan

<sup>3</sup>School Computing, Universiti Teknologi Malaysia, Johor Bahru, Malaysia

<sup>4</sup>Newcastle Business School, Northumbria University, Newcastle, UK

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### ABSTRACT

Businesses are utilizing social media extensively to increase the opportunities for traditional and online businesses. However, the driving factors affecting both consumers' and proprietors' behavior are not well investigated so far in the context of developing countries like Pakistan. Persuading extended social commerce technology acceptance model (TAM) theory and theory of reasoned action (TRA), this paper investigates behavioral intention to use social commerce. The quantitative exploratory research approach was applied to accomplish the explicit research aims and objectives using the survey data from 2019 respondent consumers/firms active in six metropolitan cities of Pakistan. The study findings indicate a significant positive influence on behavioral intention to adopt social commerce is appraised with a greater level of perceived ease of use, usefulness, social influence, and risk factors. In the conclusion, this paper discusses research implications and utilization of the most recent ICT advancements helping business people and investors develop new commerce procedures and processes.

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### 1. Introduction

Marketing on social networks has proven the increase online business. Developing countries such as Pakistan can practice these online social platforms to extend business opportunities. There were 37.00 million social media users in Pakistan in January 2020. The number of social media users in Pakistan increased by 2.4 million (+7.0%) between April 2019 and January 2020. Social media penetration in Pakistan stood at 17% in January 2020. Online networking has changed the way shoppers impart and connect over the web. Web-based social networking turned into the stage that enabled the clients to make content on the web, known as client-produced content. Clients are impacted by the general population encompassing them (Ashman et al., 2015); which makes Internet-based life an incredible asset to share data and item-related input.

Additionally, clients depend on online item audits and appraisals before making a buy; these surveys given by clients are viewed as fundamental amid the buying basic assessment practice (Solangi et al., 2018).

Customers are influenced by their friends and friends of friends and feel vital during deciding to purchase online to consider the product reviews and ratings posted on the social media platform. Sharing posts about the product, reviews and ratings makes social media a powerful tool and essential for customers during purchase decisions online (Ashman et al., 2015). Hence, SMN has evolved into a major information hub for all types of businesses and their products during the last decade, and marketing on social networks has proven the increase in online business. Social commerce is a kind of electronic exchange, which uses technology-based appliances to harvest the contribution of business products. This kind of exchange utilizes customer considerations, referrals, online events, and social promotion to strengthen electronic shopping. Today, the movement of web business in the modernized economy has induced social exchange (s-trade) not as an elective perspective but primary. Web 2.0 has permitted the expressway of broadcasting and sharing any material on the web

\* Corresponding Author.

Email Address: [zulfs@hotmail.com](mailto:zulfs@hotmail.com) (Z. A. Solangi)

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Corresponding author's ORCID profile:

<https://orcid.org/0000-0001-5177-5197>

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which has broadened an opportunity for every business and personal to connect and communicate freely (Baptista and Oliveira, 2015) as appeared in

Fig. 1, a high expansion in retail internet business deal worldwide by Statistica.

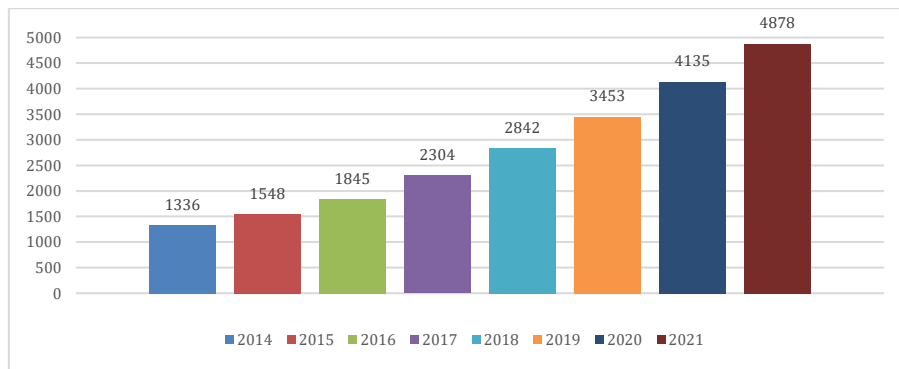


Fig. 1: Retail e-commerce sales worldwide from 2014 to 2021 (in billion U.S. dollars)

As organizations around the globe have exploited the intensity of Internet and social networking sites and began to explore and receive the best techniques to fuse it into their plans of action in their businesses and marketing. In developed nations, e-commerce business groups have optimized their business processes and marketing strategies by socializing products and trade on social media platforms (Coelho and Duarte, 2016; Enginkaya and Yilmaz, 2014; Rathore et al., 2016). According to a recent survey, there were 37.00 million social media users in Pakistan in January 2020. The number of social media users in Pakistan increased by 2.4 million (+7.0%) between April 2019 and January 2020. Social media penetration in Pakistan stood at 17% in January 2020. Thus, small-medium enterprises in developing countries such as Pakistan can practice these online social platforms to extend business opportunities. A few studies have been conducted on social commerce using an inadequate theoretic foundation as debated by Tajvidi et al. (2020) and Solangi et al. (2018). The current study has utilized a blend of the Technology Acceptance Model (TAM) with the Theory of Reasoned Action (TRA). Both theories have been credited as parsimoniously effective and predictive (Venkatesh et al., 2003). More, these theories have been utilized to investigate the determinants of users' acceptance of which part of the allied technological sorts with e-commerce (Devaraj et al., 2002), Internet banking (Shah and Khan, 2017), and mobile banking (Baptista and Oliveira, 2015). The above theories have been most valued to examine user behavior and acceptance of technology. Customers' eagerness to share details about the shopping with peers was investigated by Dwidienawati et al. (2020). The study conducted by Wang and Chang (2013) utilized research framework to measure the consumers' belief about the product is more effective provided by peers rather than the manufacturer of the product. Likewise, this study was conducted as a case study of Facebook with addition of Twitter. Positive reviews, referrals, recommendations, and reviews about the products and services increase the trust to intent for social commerce (Wang and Yu,

2017). This study focused on the decision-making power of consumers. Further, this article is arranged in 5 sections consisting of background information, proposed research framework, research methodology, results and discussion and conclusion of the study.

## 2. Related works

Social trade or social business has assorted implications in current web business so it has no specific definition. Social business is an electronic business including interpersonal interaction social media locales to facilitate clients to participate in an online exchange, contrasting, and sharing data about business items in online networks or marketplaces (Lin et al., 2017; Kundi and Shah, 2009). Pakistan is the 6<sup>th</sup> biggest populace, emerging at 4.87 per annum. Pakistan is evolving to remodel strategies for its corporate sector to boost the digital economy. Pakistan is one of the emerging countries, encountering amazing and frightful encounters, explicitly in digital business. IT workshops, technology expos, and techno zones are furnished with state-of-the-art technologies boosting the digital economy trend in the country.

A few business visionaries are involved to set up and deal with the particular areas of the high-tech progression and its organization to accumulate the chances of its advanced phase. As indicated by an investigation of the 54 SMEs (Lin et al., 2017), 84% of the business firms claimed the social networking profiles, and 46% have guaranteed standards to have e-business operations in their businesses. Furthermore, 59% of the affiliations had either in-house or outsourced business facilities and 67% of business firms possessed the home pages. Pakistan is an emerging country and rapidly growing its ICT infrastructure the organizations are digitally transformed and embrace automation at the rate of 30 percent annually whereas the digital business is evolving at almost twofold digital transformation yearly, Ibrahim report (Bai et al., 2015). Pakistan top imports spent the most on smartphones, and ICT-related devices in the year 2019 worth USD 1.4

billion, and demand for utilization of smart devices upraised to 35 percent from 15 percent beforehand as official reports distributed in January 2018 (Kamal et al., 2022). Web-based life has created social online commercial centers by incorporating informal organizations into online nearby business firms, giving the customers a chance to search for buys from their Internet buddies or buddies of buddies online (Jotkar et al., 2012). Successively, private and public sectors are capitalizing on social e-commercial centers in the business division of Pakistan, this study is also intended to explore prospects, challenges, and promising factors of social trade.

### 3. Literature review and hypothesis development

The current study has utilized a blend of the Technology Acceptance Model (TAM) with the Theory of Reasoned Action (TRA). Both theories have been credited as parsimoniously effective and predictive (Venkatesh et al., 2003). More, these theories have been utilized to investigate the determinants of users' acceptance of a part of the linked technological sorts with e-commerce (Devaraj et al., 2002), Internet banking (Shah and Khan, 2017), and mobile banking (Baptista and Oliveira, 2015). The above theories have been most valued to examine user behavior and acceptance of technology. Customers' eagerness to share details about their shopping with peers was investigated by Dwidienawati et al. (2020). The study conducted by Wang and Chang (2013) proposed a research framework to measure the consumers' belief about the product is more effective provided by peers rather than the manufacturer of the product. A similar study conducted as a case study of Facebook

concluded positive reviews, referrals, and recommendations about the products and services increase the trust to intent for social commerce use (Wang and Yu, 2017). The most notable and appropriate factors are preferred from previous theories and literature for this research study to develop a hypothetical research framework, which might be supportive in measuring the influence of factors in the context of this research study. The prior research signifies several challenges and a clear gap in the development of business operations, which uses social media tools entirely because there is nothing readily comparable business scenario available in developing economies like Pakistan. Hence, this research study projected to develop a research framework not only for customers but also for enterprises and entrepreneurs to accept the use of social commerce competently in day-to-day businesses. More, this research study intended to investigate a real response to the challenges currently faced by small and medium enterprises, and business agents like vendors, whole-sellers, retailers, and merchants in Pakistan.

#### 3.1. Proposed research framework

Based on the literature review and comparative study of the above studies, this research study proposes an integrated model in Fig. 2. Consequently, the hypothetical framework combined both TAM and TRA theories variables with three external factors i.e. risk, trust, and online experience. TAM theory variables are perceived ease of use (PEU) and perceived usefulness (PU) combined under the TRA theory variable attitude. More, the Subjective Norm variable of TRA theory is incorporated to measure social media influence.

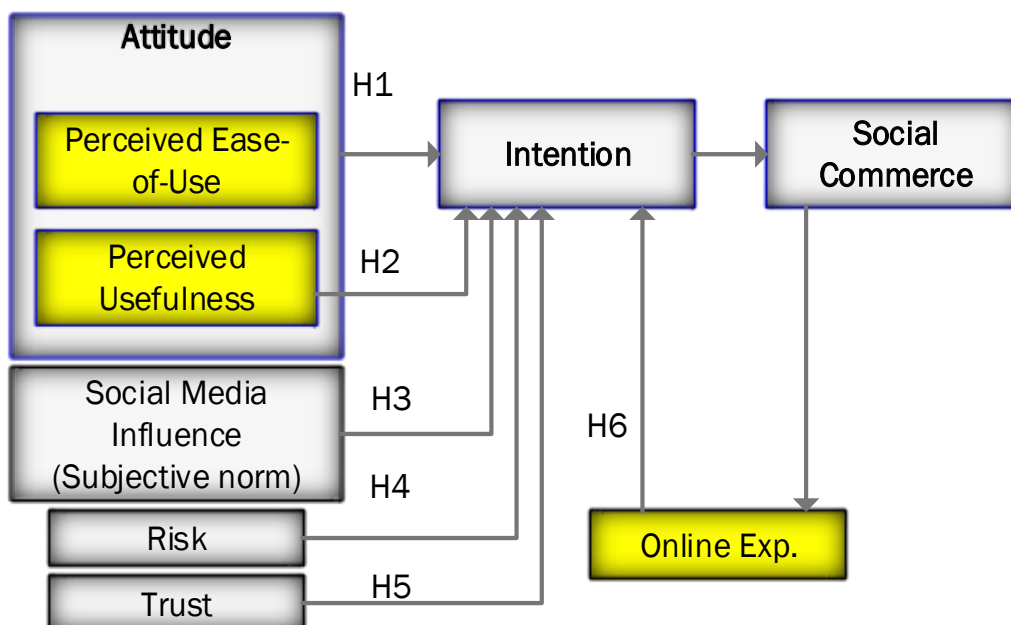


Fig. 2: Proposed research framework

### 3.2. Hypothesis development

Following are hypotheses phrased to verify significance and non-significance regarding the intention of customers to use social commerce:

**Hypothesis-1 (H1):** Customer's perceived ease of use will positively affect the use of social commerce.

**Hypothesis-2 (H2):** Customer's perceived usefulness will positively affect the use of social commerce.

**Hypothesis-3 (H3):** Social media will positively affect the customer to use of social commerce.

**Hypothesis-4 (H4):** Risk of cyberspace will negatively affect the customer to use social commerce.

**Hypothesis-5 (H5):** Trust in cyberspace will positively affect the customer to use social commerce

**Hypothesis-6 (H6):** Internet user experience will positively affect customers' use of social commerce.

### 4. Research methodology

The quantitative research approach was applied to accomplish the explicit research aims and objectives. The unit of analysis included both purchasers and retailers from key metropolitan cities of Pakistan with social media profiles who were eager to utilize social media business platforms. The research study requested each participant to check and acknowledge consent on the questionnaire with an email and phone contact of the Computer Science Dept. of Shah Abdul Latif University.

The questionnaire was developed as suggested by Creswell (2013), proper selection of scale type, question items, sequence of items, content, wording, and response formatting, pre-testing, and pilot testing was conducted with a sample of 40 valid responses for ensuring questionnaire reliability. The Head of Computer Science dept. approved the pilot study. A questionnaire was designed with three sections. The first section gathered information about the social media profiles of the respondents, their experience with web 2.0, and general demographic information. In the second part, 29 items were used to measure the six hypotheses and seven constructs presented in the research model. Multiple items were associated with each construct to count questionnaire responses on a 5-point Likert scale. The third section was focused on collecting information about business operations, e-commerce sites, and their associated payment options and risks.

### 5. Data analysis and results

The research study consumed various statistical methods and advanced data analytic tools of Microsoft Excel for refining sample collection. Then progressed with standard tests such as reliability

using Cronbach's Alpha, factor loading, and t-test to investigate the significant factors of social commerce in the e-business of Pakistan by testing and validating the proposed research hypothesis in the precision of TAM and TRA theories.

### 5.1. Demographics

Table 1 presents demographic information (gender, age, occupation, education, city, web experience, online shopping frequency, the purpose of Internet surfing, etc.). In total 2149 responses were submitted out of 3000. The final valid sample size was 2019, consumed for analysis. The statistics of age shows that mostly 90% of young people participated in the survey, and all young generation is more inclined towards the use of Internet and Internet services like online shopping and use of social media. The occupation and education of the sample show the grand mixture of equally distributed private/public servants, businesspersons, and students, which witnesses that all sophisticated community members are covered. The population sample was collected from five metropolitan cities and one small town in Pakistan. However, the population belonging to metropolitan cities showed more preference and use of online shopping and social media. More than 90% of the sample used the Internet for the purpose of social media, online shopping, and entertainment, and 55% used it for business purposes. Concerning social media usage, the majority of respondents 85% were experienced in Internet surfing and used multiple social media accounts like Facebook 98%, Google+ 74%, Twitter 52%, and Instagram 42%. The average expenses spent on online shopping were amazing. 55% population spent between 46K and 70K in Pakistani rupees, which reflects the frequency of 48.5% of online shopping activities.

Table 2 states the source of information inquired about the products/services before purchasing online. The sample believed to get information from various sources before making a purchase online including social media friends, 48.5%, friends' advice via the traditional channel, importantly the sample believed 69.3% in online reviews and rating available online. Table 3 states that various local e-commerce business sites were chosen by the sample for online shopping. Most importantly daraz.pk, cartpk.com, and tazamart.pk are 82.2%, 74.8%, and 73.8% respectively. These three sites offer more interactive responses, promotions, and offers via customer service on social media and most importantly provide the easy and fast payment method easy paisa 69.0% and on-delivery cash 49%.

### 5.2. Measurement model

The author utilized SEM (Structural Equation Modeling) approach for testing, representing, and estimating correlations between latent and measured variables as SEM is one of the most

recognized techniques for quantitative data analysis (Anderson and Gerbing, 1988).

**Table 1:** Demographics details of the sample

	Group	Frequency	Percent	Cumulative Percent
Gender	Male	124	76.1	76.1
	Female	39	23.9	100
Age	20-35 Years	30	18.4	18.4
	36-45 Years	68	41.7	60.1
	45-55 Years	57	35.0	95.1
	More than 55 Years	8	4.9	100.0
	Student	23	14.1	14.1
Occupation	Government Servant	28	17.2	31.3
	Private Sector	42	25.8	57.1
	Business person	37	22.7	79.8
	Other	33	20.2	100.0
Education	High School or Primary	0	0	0
	Intermediate	0	0	0
	Bachelor degree	28	17.2	17.2
	Master degree	57	35.0	52.1
City	Ph.D. degree	78	47.9	100.0
	Karachi	41	25.2	25.2
	Hyderabad	24	23.9	49.1
	Lahore	45	33.7	82.8
	Islamabad	28	17.2	84.7
	Khairpur	10	6.1	90.8
	Sukkur	15	9.2	100.0
	<1 year	0	0.0	0.0
Internet User Experience	2-5 years	0	0.0	0.0
	6-10 years	23	14.1	14.1
	More than 10 years	140	85.9	100.0
	Daily	79	48.5	48.5
Online Shopping Frequency	Weekly	50	30.7	79.1
	Monthly	14	8.6	87.7
	Yearly	0	0.0	87.7
	Frequently	20	12.3	100.0
Internet Surfing Purpose	Never	0	0.0	100.0
	Education or information or research	89	55.0	81.6
	Shopping	140	85.9	85.9
	Social Media or Communication	150	92.0	92.0
	Business	90	55.2	55.2
	Entertainment	145	89.0	89.0
	Hobby	22	13.0	92.0
	Other	15	9.2	9.2
	Facebook	161	98.8	98.8
	Twitter	85	52.1	52.1
Social media accounts	LinkedIn	67	41.1	41.1
	Google+	121	74.2	74.2
	YouTube	17	10.4	10.4
	InstaGram	76	46.6	46.6
	Other	5	3.1	3.1
Average Expenses Online Shopping Income (Rupees)	<20,000 Rs	23	14.1	14.1
	21,000-45,000 Rs	32	19.6	33.7
	46,000-70,000 Rs	90	55.2	89.0
	71,000-100,000 Rs	13	8.0	96.9
	>100,000 Rs	5	3.1	100.0

**Table 2:** Source of information about product/service

Group	Frequency	Percent	Cumulative Percent
Friends' advice through social network	79	48.5	48.5
Friends' advice through the traditional channel	97	59.5	59.5
Ratting and reviews available on the internet	113	69.3	69.3
Information provided by the company	73	44.8	44.8
Directly visiting the store	60	36.8	36.8
Other	45	27.6	27.6

SEM analysis is performed using a two-step approach, measurement model in Fig. 3 recognized as Confirmatory Factor Analysis(CFA) as well that supports analyzing convergent and discriminant validity of the factors and finally, testing of hypothesis using structural model equation

approach (Hair, 2009). Additionally, exploratory factor analysis (EFA), Kaiser-Meyer-Olkin (KMO) were completed for adequate sample, and Cronbach's  $\alpha$  tested sufficient value to approve the reliability and the validity of survey. Table 4 and

Table 5 show the results separately. Table 6 shows CFA model fit.

**Table 3: E-Commerce sites and preferred payment methods**

	Group	Frequency	Percent	Cumulative Percent
e-commerce site(s) used to shop online	daraz.pk	134	82.2	82.2
	lotoo.pk	90	55.2	55.2
	ishoping.pk	80	49.1	49.1
	tazamart.pk	120	73.6	73.6
	cartpk.com	122	74.8	74.8
	aliexpress.com	45	27.6	27.6
	amzon.com	15	9.2	9.2
	ebay.com	23	14.1	14.1
	Easy paisa Mobile	114	69.9	69.9
	Easy paisa Agent	90	55.2	55.2
Payment methods	Mobicash Jazz Account	65	39.9	39.9
	UBL Omni Account	45	27.6	27.6
	Cash on delivery PayPal	80	49.1	49.1
	Debit/ Credit Card	40	24.5	24.5
	Other	13	8.0	8.0

**Table 4: Kaiser-Meyer-Olkin statistics and Bartlett's test of sphericity**

Adequate of sample		0.812
Test	Approx. Chi-Square	7795.805
	Degree of Freedom (DF)	820
	Sig.	.000

**Table 5: Loading factors, reliability, and validity**

Construct	Loading	Cronbach's $\alpha$	Composite Reliability	Average Variance Extracted (AVE)
S-Commerce Use (SCU)	.748	<b>0.96</b>	.931	.723
	.736			
	.802			
	.815			
	.845			
Perceived Ease of Use (PEU)	.828	<b>0.82</b>	.851	.613
	.870			
	.891			
	.875			
	.788			
Perceived Usefulness (PU)	.856	0.78	.923	.612
	.773			
	.914			
	.775			
	.811			
Social Media Influence (SMI)	.739	0.89	.912	.631
	.721			
	.891			
	.792			
	.809			
Risk (RI)	.829	0.71	.833	.561
	.815			
	.854			
	.837			
	.805			
Trust (TR)	.821	0.70	.813	.571
	.852			
	.844			
	.799			
	.702			
Web Experience (WXP)	.774	0.72	.921	.715
	.785			
	.824			
	.812			
	.812			

**Table 6: CFA model fit**

Measure	Estimate	Onset	Reading	Reference
CMIN X <sup>2</sup>	575.314	--	--	(Hair, 2009)
Df	473	--	--	
CMIN/Df	1.216	>1 to 3	Exceptional	(Browne and Cudeck, 1992; Tucker and Lewis, 1973)
CFI	0.982	>0.95	Exceptional	
SRMR	0.039	<0.08	Exceptional	(Hair, 2009)
RMSEA	0.028	<0.06	Exceptional	(Hair, 2009; Browne and Cudeck, 1992; Chin and Todd, 1995)
PClose	1.000	>0.05	Exceptional	

Notes: SRMR= Standardized Root Mean Residual, CMIN/Df= Minimum discrepancy divided by Degrees of freedom; X<sup>2</sup> = Chi-Square, CFI= Comparative Fit Index; RMSEA= Root Mean Square Error of Approximation

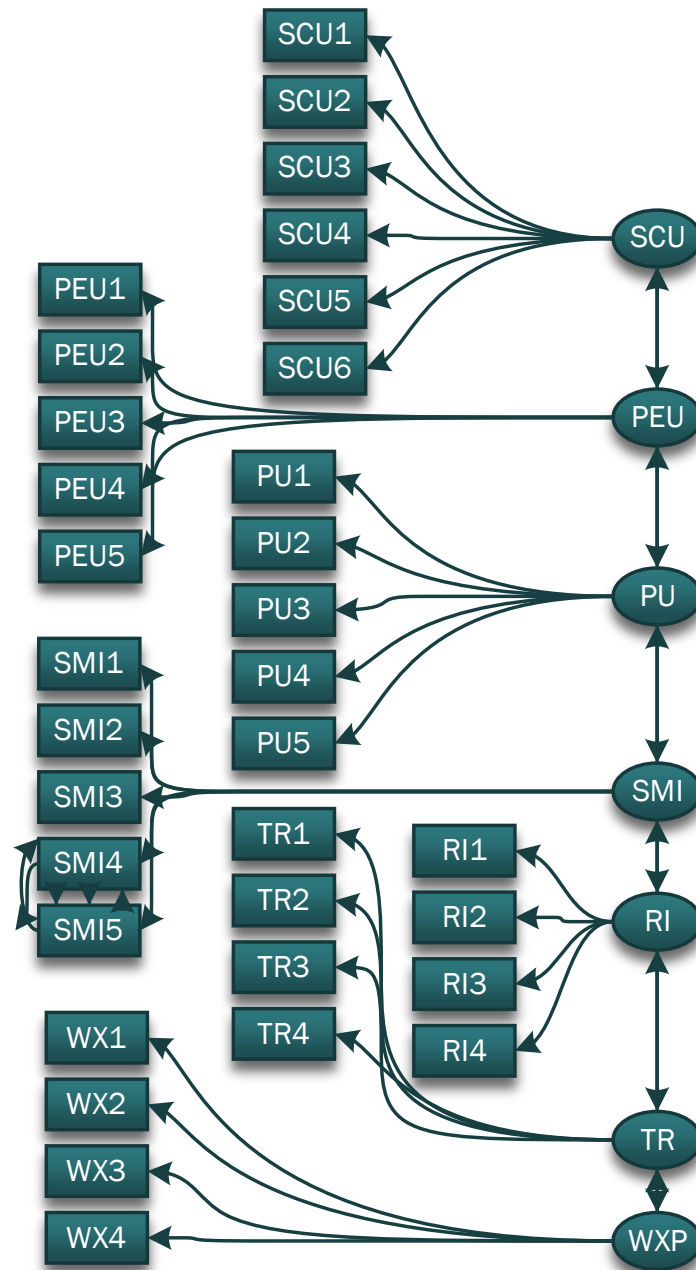


Fig. 3: Co-variated confirmatory factor analysis (CFA) model

The final confirmatory factor analysis (CFA) model shows rational findings in Table 6. There are three significant model measurement fit categories namely incremental fit, absolute fit, and parsimonious fit. The author has ensured all of this fitness to achieve the required level. Having analyzed the unidimensionality of measured variables with high residual variance, few items were dropped and a few were co-variated in final CFA because of higher Modification Indices (MI) values. The model fits all parameters that meet the threshold value as excellent i.e. chi-square/degree of freedom ( $X^2/Df=1.2$ ), which is marked excellent falling between 1 and 3, RMSEA=0.028, which is less than the recommended value of 0.06, and CFI=0.982, which is larger than the recommended value with SRMR value in acceptable range  $\pm 2.58$ .

### 5.3. Structural model

The findings of casual relationships were tested and verified using the structural model technique in Fig. 4. Table 7 shows three significant measures of fit categories incremental fit, absolute fit, and parsimonious fit are achieved. The author has ensured all of this fitness to achieve the required level. The model fits all parameters to meet the onset value. The final proposed model is shown in Fig. 5 integrated with structural model results. All the exogenous factors i.e. PEU, PU, SMI, RI, TR, and WXP showed a prediction of 46 percent (0.468) on endogenous factor s-commerce use, which shows the R2 squared variance of the hypothetical model.

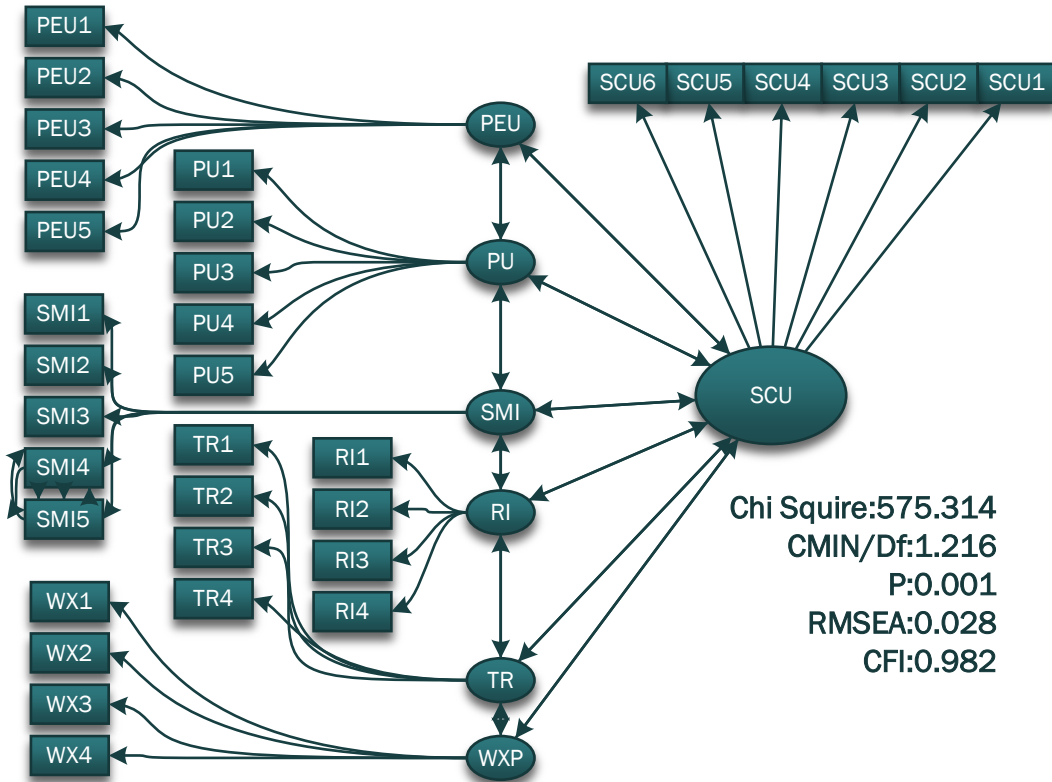


Fig. 4: Structural model

Table 7: Structural model fit indices

Measure	Estimate	Onset	Reading	Reference
CMIN X <sup>2</sup>	575.314	--	--	
DF	473	--	--	(Hair, 2009)
CMIN/DF	1.216	1 to 3	Exceptional	
CFI	0.982	>0.95	Exceptional	(Browne and Cudeck, 1992; Tucker and Lewis, 1973)
SRMR	0.039	<0.08	Exceptional	(Hair, 2009)
RMSEA	0.028	<0.06	Exceptional	(Hair, 2009; Browne and Cudeck, 1992; Chin and Todd, 1995)
PClose	1.000	>0.05	Exceptional	

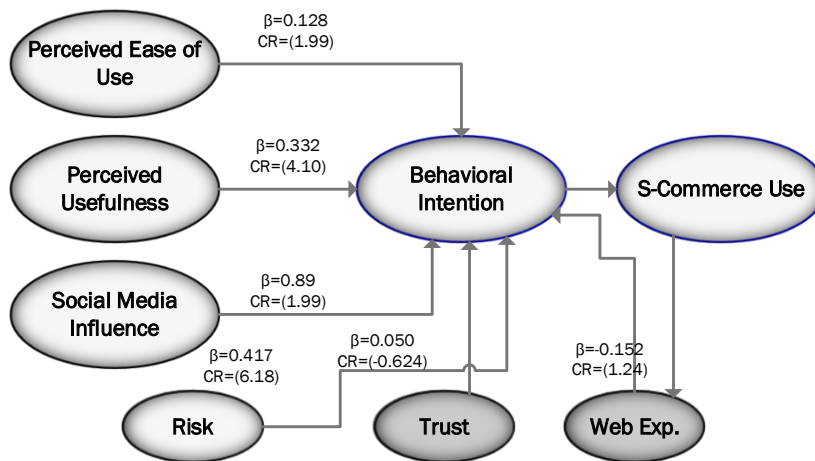


Fig. 5: Final framework supported by empirical data

6. Hypothesis testing and discussion

Hypothesis shown with all casual paths were tested and confirmed whether as accepted factors or rejected factors using Structural Equation Modeling (SEM). The detailed statistical score of each factor is tabulated in Table 8. Perceived Ease of Use (PEU), Perceived Usefulness (PU), Social Media Influence (SMI), Risk (RI), Trust (TR), Web Experience (WXP),

and S Commerce Usage (SCU). SEM analytical methods tested the hypothetical relationship between dependent and independent factors using the covariance matrix of the proposed research framework. “When the critical ratio (CR) or t-value was higher than ±1.96 for an estimate (regression weight), then the parameter coefficient value was statistically significant at the p-value less than .05 levels” (Hair, 2009). The critical ratio or t-value of



hypothetical relational was above  $\pm 1.96$  with a p-value less than 0.05 confirming the significant relation whereas a t-value less than  $\pm 1.96$  confirmed insignificant relation. The hypothetical research framework combined both theories TAM and TRA with the most influencing external factors from the literature, i.e. risk, trust, and web experience. In general, the study findings indicate a significant positive influence on behavioral intention to adopt social commerce is appraised with a greater level of PEU, PU, SMI, and RI factors. These findings are relatively steady with past observational information system research. The outcome of H1 and H2 relations are coherent with the prior study (Maia et al., 2018) revealing that perceived ease of use and perceived usefulness make customers' life easier. The outcome of the H3 relation is coherent with prior research studies (Liang and Turban, 2011; Zhou et al., 2013) revealing that word of mouth, referrals, and information sharing on social media play a vital role in influencing customers' intentions.

Respectively, the H4 relation finding is accepted by earlier studies (Ariffin et al., 2018) revealing that risk factor leads to a negative relationship with intention toward online purchase. The H5 and H6 relations resulted in non-significant previously several researchers (Ling et al., 2010; Daroch et al., 2021) revealed that customers are more hesitant to purchase online without tangibly touching the product. Similarly, the online experience was publicized as non-significant by Martin et al. (2015) and Daroch et al. (2021) stating that lack of knowledge and earlier bad experience causes low intention to buy online. Hence, the researcher developed a worthy blend research framework to investigate a real response to the challenges presently encountered by the consumers and small and medium business agents in Pakistan. Accordingly, the research study concluded with solid and rational findings and contributed to evolving business strategies modestly.

**Table 8:** Hypothesis testing results using a structural model

	Hypothesis		Estimate	S.E.	C.R.(t-value)	P value	Hypothesis status
SCU	←	PEU	.332	.081	4.107	***	Accepted
SCU	←	PU	.128	.064	1.993	.046	Accepted
SCU	←	SMI	.089	.064	1.994	.016	Accepted
SCU	←	RI	.417	.067	6.18	***	Accepted
SCU	←	TR	-.050	.080	-.624	.533	Rejected
SCU	←	WXP	-.152	.122	01.24	.213	Rejected

S.E=Standard Error; CR=Critical Ratio; P=significance value\*\*\*; Significance at 0.001 level(two tailed); Estimate=regression weight

## 7. Implications of the study

In this study, PEU, PU, SMI, and RI all were found to have a significant positive influence on the behavioral objective of social commerce practice. The factor TR and WXP seem to be the only factors that do not have any influence on behavioral intention of social commerce use. These finding results may contribute to the practical exploration of social commerce's influence on the small business industry of the population. The findings may discourse the theoretical gap in knowledge and cover the limitation of social commerce to be accepted in Pakistan and it may help professionals and stockholders in evolving business strategies and campaigns to share the marketplace competitively using the latest ICT innovations. Though the findings are valuable for stockholders and business professionals, they must be measured in the light of limits. Like, this study was based on a one-time data survey; the longitudinal study may reveal more results that are significant. More, the study is purely based on quantitative methods, the future study may also be conducted using qualitative or mixed-mode research methods to understand and distinguish between general expectations about the use of social commerce in e-business.

## 8. Conclusion

The research study consumed various SPSS 24.0 and AMOS 24.0 statistical methods along with

advanced data analytic tools of Microsoft Excel for refining sample collection. The Proposed research framework is tested and validated by the research hypothesis in the precision of the Technology Acceptance Model (TAM), and Theory of Reasoned Action (TRA) theories. More, it is progressed with standard tests such as reliability using Cronbach's Alpha, factor loading, and t-test to investigate the significant factors of social commerce in the e-business of Pakistan. Each item factor loading score was verified according to an acceptable range specified in the literature. Hence, a few items were rejected in the rotated component matrix due to multiple cross-loading scores. Underlying the conditions of the structured equation model created for deciding coefficient boundaries and integrity of-fit values as a fundamental logical strategy for testing for speculated relationships among the factors of the proposed research framework. Be that as it may, four out of six relationships specifically H1, H2, H3, and H4 were measurably critical and affirmed that were highly effective factors for the acceptance of social commerce in the e-business of Pakistan. Likewise, H5 and H6 were measurably unimportant and demonstrated trust and web experience to be outside factors were immaterial. Henceforth, the two variables made future boundaries or difficulties receive social commerce effectively in the e-business of Pakistan. These elements act the future difficulties for scientists to rethink the obstruction of social trade appropriation in the e-business of Pakistan. The purpose for is the

risk factor importance with t-value (6.18), which shows high danger conduct of financial specialists and purchasers related with the new innovation explicitly web business. This is making preventive conduct towards the appropriation of advancement in e-business of Pakistan. Though the research contributed to transforming e-business operations and approaches usefully, this research also has limitations that are straight related to the empirical part, mostly related to data collection. The data was collected cross-sectional for this research study, which is a one-time observational activity in a limited time only in one country. However, it is concerning the nature of the study, which involves consumer behavior. Hence, the research could be directed to perform longitudinal survey data followed up by qualitative research methods so that future studies can overcome the limitations. An incorporated research model of this research study was a core contribution, which was only confirmed in the context of Pakistan mixed with private and public businesses yet that may differ in other developing countries and require future studies for generalizing the findings there.

### Compliance with ethical standards

### Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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