# **Examining Factors Correlating with Social Commerce Behavior** in Generation X

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Abstract—The purpose of this study was to investigate the behavioral factors that influence the acceptance of Generation X in making purchases at social commerce.

The research was conducted using the FGD method and interviews with representatives of generation X and social media experts to capture the phenomenon of this generation's acceptance of social commerce technology. A literature review study was carried out to reveal the factors that influence the acceptance of social commerce and propose hypotheses and research models based on these findings. The questionnaire was developed based on the hypothesis and distributed to this generation as many as 189 respondents using a purposive sampling method. Data testing was carried out using descriptive statistical methods, validity, reliability, and correlation tests. Analysis of individual respondent factors was carried out to reveal the characteristics of generation X. Correlation analysis was carried out to gain insight into the relationship between the factors studied and the acceptance factor of generation X for social commerce technology.

The results of this study will provide insight into the buying behavior of Generation X in making purchases on social commerce. These insights will be useful to marketing scientists, those wishing to do business with this generation and marketing policy makers. How to use the factors resulting from this research to attract generation X to purchase products in social commerce..

Keywords— social commerce; technology acceptance; generation X; social media; E-commerce.

# I. INTRODUCTION

The internet has now become an important part of everyday life. The development of the internet has also increased from what was previously only used for work, now it can be used for learning, entertainment, socializing and for shopping. Based on We Are Social Hootsuite survey data, there will be 204.7 million Internet users in Indonesia in 2022. This figure is equivalent to 73.7% of Indonesia's population. In the past year, there has been an increase of 2.1 million users compared to the previous year [1].

Advances in technology allow everyone to access the internet easily. People can use the internet via smartphones, devices, and other gadgets at affordable prices.

The development of the potential of buying and selling online is due, in part, to the convenience provided by the internet to modern society, one of which is now that people can use social commerce. Social commerce is a consumer shopping experience that happens directly on a social media platform. This experience includes attempting to access links on social networks that lead to a marketer's product page to make an immediate purchase [2]. One of the new ways to extend e-commerce to users is the use of social media, the most popular of which is Facebook. The use of social media platforms provides the most sales on the internet. Sales that occur and are established on social media are included in social network-based sales [3]. Most researchers and practitioners agree that social trading is only in its infancy because not so many companies are showing successful and profitable activities in online social networks. This is mainly due to consumer perceptions and attitudes towards the environment and behavioral habits [4].

The use of social commerce can provide quite good economic benefits. However, on the other hand, this technology is not easily accepted by all generations, one of which is generation X. Generation X are those born in 1965-1979 or who are currently 44 to 58 years old [5]. Compared to the baby boomer's generation, generation X was born in the early days of using computers, cable television, the internet and so on [6]. The problems faced by generation X arise because generation X who is not native to technology will have difficulty accepting various types of technology [6].

The study of acceptance of social media as a means of promotion has been extensively researched and developed by many researchers. Several previous studies have shown factors that can influence a person's use of social commerce, especially acceptance of the younger generation.

Although several previous studies have explored the acceptance of the use of social commerce technology in several younger generations, there are not many studies that examine how acceptance from older generations such as generation X is to this technology and steps that can be taken to increase acceptance of social commerce technology in this generation.

This study investigates the phenomenon of the X generation's difficulties in using social media for shopping or social commerce activities. The purpose of this study was to investigate the behavioral factors that influence Generation X's acceptance of social commerce. The results of this study will provide insight into the buying behavior of Generation X in making purchases on social commerce. These insights will be useful to marketing scientists, those wishing to do business with this generation and marketing policy makers.

# II. METHOD

This research is a descriptive study using a quantitative approach. The population that is the focus of this research is Generation X or those born in 1965-1979, who are considered quite familiar with e-commerce technology but do not understand this technology because they are not used to using it. The social commerce platform used is Facebook and WhatsApp.

The research was conducted using the FGD method and interviews representatives of generation X and social media experts to capture the phenomenon of this generation's acceptance of social commerce technology. A literature review study was carried out to reveal the factors that influence the acceptance of social commerce and propose hypotheses and research models based on these findings. The questionnaire was developed based on the hypothesis and distributed to this generation as many as 300 respondents using a purposive sampling method. The 189 final data was examined using descriptive statistical methods, validity, reliability, and correlation tests. Analysis of individual respondent factors was carried out to reveal the characteristics of generation X. Correlation analysis was carried out to gain insight into the relationship between the factors studied and the acceptance factor of generation X for social commerce technology

# III. LITERATURE REVIEW

# **Social Commerce Acceptance**

Venkatesh [7] created a Unified Theory of Acceptance and Use of Technology (UTAUT) by combining eight acceptance models after conducting an analysis of general theories and models in the field of technology acceptance. UTAUT has four main constructs: performance expectations, effort expectations, social influence, and facilitating conditions. These influence behavioral constructs intention to use technology and usage behavior.

The UTAUT2 model was proposed in 2012, and extended with more constructs like habit, price value, and hedonic motivation [8].

# **Perceived Risk on Intention to Use**

One of the hurdles to technology adoption that is most frequently acknowledged is perceived risk ([9], [10], [11]). Although it is briefly discussed in m-shopping papers ([12, [13], [14], [15], [16]), empirical research on perceived risk in this setting is still in its early stages.

# **Trust on Intention to Use**

The importance of initial trust has been established throughout the digital retail industry and has typically been empirically tested as an independent variable ([17], [18], [19], [20], [21]), a moderator ([22], [23], [24]). Despite the fact that younger women are often shown to have stronger trust views, research shows that experience level has a significant impact on general trust perceptions ([18], [25]).

# **Information Quality on Intention to Use**

Information quality plays a crucial role in determining the excellence of a service or product, and it is closely linked to consumers' intentions to make a purchase. Offering high quality information enables consumers to thoroughly evaluate various aspects and features of products and services. This, in turn, assists e-vendors in delivering personalized, integrated, innovative, and value-added offerings to their customers [26].

# Social Influence on Intention to Use

As people frequently examine the opinions of others when determining whether to utilize a particular technology, social influence argues that people's decisions are influenced by their social networks. Positive opinions of this sort will promote user adoption, whilst negative ones will promote non-adoption. According to earlier research ([27], [28]), social impact

significantly increases the likelihood that consumers will accept mobile commerce solutions.

#### Price Value on Intention to Use

When applied to the context of mobile commerce (m-commerce), Price Value translates to the scenario where the benefits derived from m-commerce applications surpass the monetary expenditure required for comparable transactions conducted face-to-face through or alternative channels. For instance, the expense of mobile internet usage for running mcommerce shopping apps can be substantial due to the data-intensive nature of these apps, which often display numerous images of products for sale. This might prompt consumers to reassess the effectiveness of using such apps, weighing it against the potential advantages they offer.

The introduction of the concept of price value into the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) has led to notable research findings. Several studies ([29], [30], [31], [8]) have demonstrated a noteworthy correlation between price value and the intention to engage in certain behaviors.

#### Satisfaction on Intention to Use

According to Wang and Liao [32], satisfaction in the context of m-commerce refers to the emotional response (of variable intensity) that follows mobile commerce activities. It is influenced by several factors, including the calibre of the information provided and the systems and services offered.

After conducting a literature review, a theoretical model is presented in Figure 1. Out of the six proposed structural paths, all were found to be statistically significant and aligned with the predictions, except for the path leading from perceived ease of use of social commerce to attitudes toward social commerce.

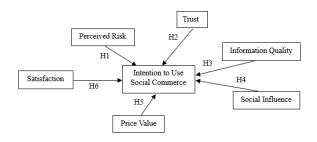


Figure 1. Proposed Research Model

# IV. RESULTS AND DISCUSSION

Result and Discussion contains the results, their relation with theory, and their comparisons with previous related studies.

# A. RESULT Profile of Respondents

Table 1 shows the age range and gender of Generation X respondents who use Social Commerce. Respondent data shows that those aged 45 use Social Commerce the most, while there is no significant difference regarding the gender of Social Commerce users.

Table 1. Profile of Respondents

Table 1. Proffle of Respondents							
Age	Frequency	Percent					
44	22	11.5					
45	33	17.5					
46	13	6.9					
47	16	8.5					
48	9	4.8					
49	6	3.2					
50	11	5.8					
51	2	1.1					
52	10	5.3					
53	13	6.9					
54	16	8.5					
55	7	3.7					
56	11	5.8					
57	12	6.3					
58	8	4.2					
Total	189	100.0					
Gender							
Male	85	45.0					
Female	104	55.0					
Total	189	100.0					

Table 2 contains respondents' experiences in using social media and social commerce. It can be seen that most respondents used

social media for 2 years and used social commerce for a year.

Table 2. Respondents' Experience

Experience in using social media							
Frequency Percent							
1 year	34	18.0					
2 years	68	36.0					
3 years	36	19.0					
4 years or more	51	27.0					
Total	189	100.0					
Experience in u	ising Social Co	ommerce					
Experience in u	sing Social Co Frequency	ommerce Percent					
Experience in u	_						
	Frequency	Percent					
1 year	Frequency 90	Percent 47.6					
1 year 2 years	Frequency 90 51	Percent 47.6 27.0					

Table 3 shows how many times respondents used social commerce during 1 week, as well as how much time respondents spent using social commerce. The results of the questionnaire showed that respondents used social commerce at most once per week, and the time spent was 1-2 hours.

**Table 3. Time Spent using Social Commerce** 

Time per Week						
Frequency Percen						
1 time	90	47.6				
2 times	69	36.5				
3 times	17	9.0				
4 times or more	13	6.9				
Total	189	100.0				
Hour per Time						
Frequency Percent						
Less than 1 hour	56	29.6				
1-2 hours	94	49.7				
3-4 hours	28	14.8				
0 11100110	20	14.0				
5 hours or more	11	5.8				

# Validity & Reliability Analysis

Principal Component factor analysis and Cronbach Alpha Coefficients were used to investigate the concept validity and equivalence reliability of the resulting indicators for UTAUT factors, and the findings are shown in Table 4 and Table 5.

**Table 4. Construct Validity Analysis** 

	Component					
	1	2	3			
PR1	562	.497	012			
PR2	505	.530	116			
PR3	444	.518	173			
TR2	.067	012	.916			
TR3	.085	040	.927			
InfQ2	.561	063	.384			
InfQ3	.659	134	.237			
SI1	.008	.826	.042			
SI2	024	.802	051			
SI3	021	.807	095			
PV1	.704	138	.186			
PV2	.653	197	.144			
PV3	.669	199	.331			
Sat1	.694	126	.135			
Sat2	.695	195	.208			
Sat3	.636	226	.336			
BI1	.754	135	.149			
BI2	.740	236	.242			
BI3	.741	145	.250			

Extraction Method: Principal Component Analysis.
Rotation Method: Equamax with Kaiser Normalization.
a. Rotation converged in 6 iterations.

Table 5. Reliability Analysis

Variable	Cronbach's	Internal		
	Alpha	Consistency		
Perceived Risk	.792	Acceptable		
Trust	.862	Good		
Information	.675	Questionable		
Quality				
Social Influence	.788	Acceptable		
Price Value	.753	Acceptable		
Satisfaction	.789	Acceptable		
Intention to Use	.814	Good		
Social				
Commerce				

The Pearson correlation coefficients were used in measuring associations among all the factors excluding Gender shown in Table 6. The correlation among Gender and others factors is shown in Table 6.

# Mean Differences between Males and Females

T-Test is used to explain the statistically significant difference (p<0.5) between the means of the distribution for males and females. The mean difference between males and females is presented on Table 7.

Table 7. Mean Difference between Males and Females

1 chiares								
Var.		e's Test for of Variances Statistical	t	Statistical Sig. (2-tailed)	Mean for Males – Mean for			
		Sig.			Females			
A	.049	.824	1.000	.319	.769			
EXP- SM	.138	.710	- 2.169	.031	337			
EXP- SC	.096	.757	- 1.362	.175	204			
T/W	1.227	.269	.023	.982	.003			
H/T	.153	.696	.833	.406	.100			
APR	14.052	.000	- 2.566	.011	32553			
ATR	1.487	.224	.175	.861	.03083			
AInfQ	2.302	.131	1.736	.084	.19938			
ASI	2.295	.131	- 1.769	.079	22112			
APV	2.016	.157	1.915	.057	.19495			
ASat	10.520	.001	2.201	.029	.22345			
ABI	13.862	.000	2.524	.012	.26874			

# **Correlation Analysis**

Table 6. Co	orrelation	Ana	lvsis
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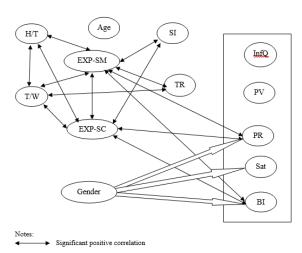
	Tuble of Coll clation finally sig											
	Α	EXP-SM	EXP-SC	T/W	H/T	APR	ATR	AInfQ	ASI	APV	Asat	ABI
Α	1	118	136	.063	.050	085	.051	.135	.058	.107	.101	.125
EXP-SM	118	1	.745**	.329**	.302**	.316**	182 <sup>*</sup>	102	.265**	095	109	216**
EXP-SC	136	.745**	1	.314**	.316**	.284**	112	068	.228**	013	036	145*
T/W	.063	.329**	.314**	1	.434**	004	284**	.026	.070	.084	.080	.072
H/T	.050	.302**	.316**	.434**	1	153 <sup>*</sup>	102	.094	.017	.078	.102	.037
APR	085	.316**	.284**	004	153 <sup>*</sup>	1	224**	507**	.489**	597**	560**	655**
ATR	.051	182*	112	284**	102	224**	1	.357**	055	.330**	.327**	.339**
AinfQ	.135	102	068	.026	.094	507**	.357**	1	170*	.645**	.626**	.647**
ASI	.058	.265**	.228**	.070	.017	.489**	055	170*	1	256**	272**	233**
APV	.107	095	013	.084	.078	597**	.330**	.645**	256**	1	.711**	.793**
Asat	.101	109	036	.080	.102	560**	.327**	.626**	272**	.711**	1	.760**
ABI	.125	216**	145 <sup>*</sup>	.072	.037	655**	.339**	.647**	233**	.793**	.760**	1

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

# **B. DISCUSSION**

It is seen from Figure 2 that:

- There is a positive correlation between Experience, the time factors needed to use Social Commerce, Perceived Risk, Information Quality, Price Value, Satisfaction and Behavioral Intention. Individuals who have been using social commerce for a long time believe that social media can be trusted for shopping, and feel satisfied in using social media for shopping.
- Significant differences due to the gender factor were found in three factors related to individuals and behavioral factors (Perceived Risk, Satisfaction and Behavioral Intention).
- T-Tests are used to test differences between males and females. The results of the mean significant differences test between males and females can be seen in Table 7. Females use slightly more social media for shopping than males.



Significant differences between the mean for males and females

Figure 2. Significant associations among factors

# V. CONCLUSION

The results reveal that there is a positive correlation between Experience, the time factors needed to use Social Commerce, Perceived Risk, Information Quality, Price Value, Satisfaction and Behavioral Intention.

This study has objectives to provide insight into the buying behavior of Generation X in making purchases on social commerce. These insights will be useful to marketing scientists, those wishing to do business with this generation and marketing

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

policy makers. How to use the factors resulting from this research to attract generation X to purchase products in social commerce.

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