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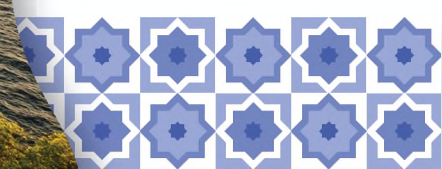
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PROGRAM &
ABSTRACT

About ICSEC 2019

The International Computer Science and Engineering Conference (ICSEC) is the premier forum for the presentation of researchers, practitioners and educators to present and discuss the most recent innovations, research, experience, trends and concerns in the field of Computer Science, Computer Engineering, Software Engineering, and Information Technology. ICSEC 2019, will be held over three days, with special sessions and presentations delivered by researchers from the international communities, including presentations from well-known keynote speakers. Accepted Full Papers (4 to 6 pages) will be submitted to the IEEE Xplore database. In addition, the authors of the selected papers will be suggested to submit the paper to many journals which are indexed by SCOPUS and ISI.

Papers related to this conference theme include theories, methodologies, and emerging application are encouraged. Contributions covering theoretical developments and practical applications, including but not limited to the following technical areas, are invited:

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Table of Contents

The Difference Adoption of E-Commerce Technology among Z and Y Generations

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Abstract— The rapid growth of e-commerce transactions among Y and Z generations in Indonesia goes along with the large number of internet users on both of the generations. Indonesia has become a potential market for the digital creative industry, especially to applications of online payments, online shopping, online booking, and online banking. In-depth investigations into these two generations in the form of developing e-commerce technology adoption models will provide valuable contributions in the development of models and implementation of e-commerce industries in Indonesia. This study aims to obtain factors that influence the acceptance of generation Z and Y against e-commerce technology and reveal the differences in their acceptance of it. Investigation was done by collecting 343 questionnaires in age range of Y and Z generations. The results of this study reveal that all variables employing in the model naming Satisfaction, Trust, Perceived Information Quality, Perceived Service Quality, Performance Expectancy, Effort Expectancy, Hedonic Motivation, Social Influence, Price Value, Habit, and Facilitating Conditions have statistically significantly correlation to Behavioral Intention and to each other. The significantly difference of adoption of e-commerce technology among Z and Y generations are only found on Hedonic Motivation and Social Influence. The other difference on gender is found on Age, Education, Satisfaction, Effort Expectancy, and Perceive Information Quality. This study can contribute to who have concern on enhance adopting of e-commerce technology especially to the two generations, especially developers of e-commerce application considering the factors that have correlation to intention to use e-commerce.

Keywords—adoption technology, e-commerce, Z generation, Y generation

I. INTRODUCTION

According to Special Reports, Digital 2019 [1], the total population of the world is 7.676 billion with 5.112 billion of its are unique mobile users and 4.388 billion of its are internet users. E-commerce Infographic 2019 by Einstein Marketer report [2] stated that the mobile internet as share of total e-commerce transactions are 67.2% in 2019 and estimated up to 70.4% & in 2020. In Indonesia context, the survey conducted by APJII in 2018[3] stated that 64.8% of Indonesia population (264. 16 million) or 171. 17 million is internet users. Regard to the survey, 91 % of Z generation in the age range of 15 – 19 years old are internet users, whereas Y generation in the age range of 20 – 24 years old are 85.5% .

The penetration of online shopping in Indonesia is 36.6% of internet users [3] that separated on four online shopping applications including Shopee, Bukalapak, Lazada, and Tokopedia.

The purpose of this research is to investigate the difference among Z and Y generation in accepting e-commerce technology through studying factors related to intention to use e-commerce technology. The study address research questions: what are the factors that are related to adopting e-commerce technology among Z and Y generations and; what are the relationships among these factors?

The outcomes of the study are expected to contribute to a theoretical understanding of the adopting e-commerce technology and to provide advice for practitioners who have interests in increasing of e-commerce adoption among the two generations. Furthermore the study also has contribution to the practice. The practitioners will gain more understanding about human factors, such as personality traits, that affect a user's intentions of e-commerce. Other factors reflecting the different adoption between Z and Y generations and male and female may enable practitioners to design campaign and other efforts based on the different motivation among them.

II. FACTORS RELATED TO ADOPTING ON E-COMMERCE IN PREVIOUS STUDIES

Reviewing literatures in previous studies are conducted on the adoption technology of e-commerce. Several models are employed on the studies including TAM, TPB, and UTAUT. The main objectives of these studies concern the exploration and understanding of human behaviors related to adopting and using e-commerce. The discussion on variables supported direct antecedent on behavioral intention to use e-commerce technology is discussed in detail. In the context of adoption of ecommerce technology Behavioral Intention can be defined as "The extent to which the user intends to use a system in the future. [4]"

A. Perceived Information Quality and Perceived Service Quality

According to [5], Perceived Information quality is the quality of relevance, sufficiency, accuracy and timeliness of information got by users. meanwhile Baabullah (2019) defined Perceived Service Quality as "the overall support delivered by the service provider" to ascertain empathy, assurance, and responsiveness delivered to users.

References [5] and [6] conducted studies on M-banking acceptance and employed Perceived Information Quality and Perceived Service Quality as variables having direct effect to m-banking acceptance. Meanwhile reference [7] also conduct study on m-banking acceptance and reveal that Perceived Information Quality has a direct effect on m-banking acceptance. For these reasons, Perceived Information Quality and Perceived Service Quality are predicted to have positive direct effect on Behavioral Intention to use e-commerce technology (H1 and H2).

B. Trust and Satisfaction

Trust and Satisfaction were importance variables on e-commerce studies. Trust was defined by Verkijika [8] as "the extent to which an individual believes that using m-commerce is secure and has no privacy threats." According to [5], Satisfaction is acquired by positive experience with using of a service. References [9], [8], and [10] conducted study on mobile shopping acceptance and References [5], [7], [8], [11], [12], and [13] conducted study on m-banking acceptance verified that Trust and Satisfaction were importance variables in e-commerce study. References [5] and [10] reveal that Satisfaction has direct effect on m-banking and m-shopping acceptance, respectively. Meanwhile, References [11] and [12] reveal that Trust has significantly direct effect on m-banking acceptance. Similarly Reference [9] also reveal that Trust has significantly direct effect on m-shopping acceptance. Furthermore, the study conducted by [13] reveals that Trust has direct effect on Satisfaction. On the study of adoption mobile internet, Reference [14] revealed that Trust also has direct effect on Behavioral Intention to use e-commerce technology. For these reasons, Trust and Satisfaction are predicted to have positive direct effect on Behavioral Intention to use e-commerce technology (H3 and H4).

C. Hedonic Motivation

References [15] defined Hedonic Motivation as the fun or enjoy derived with use of a technology. Several researchers used Perceived Enjoyment ([4], [10], [14]) and Flow Experience ([4]) to refer Hedonic Motivation. According to [8], [10], [11], [14], [15], [16], [17], and [18], Hedonic Motivation has direct effect on e-commerce acceptance. For these reasons, Hedonic Motivation is predicted to have positive direct effect on Behavioral Intention to use e-commerce technology. [H5]

D. Performance Expectancy and Effort Expectancy

Performance Expectancy is defined by Harnadi [4] as "the extent to which an individual believes that using the system will help them to attain personal gains". Effort Expectancy is defined by Venkatesh et al[15] as "the degree of ease associated with consumers' use of technology". Performance Expectancy and Effort Expectancy have proven as main variables on adoption technology researches. On TAM model by Davis [19], these variables naming Perceived Usefulness and Perceived Ease of Use have significantly correlation to Behavioral Intention through variable Attitude. On the research conducted by Venkatesh et al[20], Attitude was not employed. He argues that without Attitude, the two variables Performance Expectancy and Effort Expectancy have significantly correlation to Behavioral Intention. Several researchers on e-commerce adoption ([10], [11], [15], [16], [21], [22]) stated that Performance Expectancy has direct effect on Behavioral Intention to use e-commerce technology, meanwhile References [18] and [23] reveal that Performance Expectancy has direct effect on Use Behavior of e-commerce technology. Meanwhile [12] and [24] stated that Performance Expectancy has direct effect on Behavioral Intention to use e-commerce through Attitude. On the studies of adoption of mobile internet conducted by Alalwan et al[14] and online gaming technology conducted by Harnadi [4], they revealed that Performance Expectancy has direct effect on Behavioral Intention to use e-commerce technology.

Effort Expectancy was also used as variable in model to predict Behavioral Intention to use e-commerce technology. The study conducted by Alalwan et al[11], Alalwan et al[14], Venkatesh et al[15], Chopdar et al[16], and Martins et al[21] stated that Effort Expectancy has direct effect on Behavioral Intention to use e-commerce. Reference [12] also stated that Effort Expectancy has direct effect on Behavioral Intention to use e-commerce through Attitude. For these reasons, Performance Expectancy and Effort Expectancy are predicted to have positive direct effect on Behavioral Intention to use e-commerce technology (H6 and H7).

E. Price Value and Facilitating Conditions

Price Value was defined by Venkatesh et al[15] as "consumers' cognitive tradeoff between the perceived benefits of the applications and the monetary cost for using them". References [11], [14], [15], and [16] reveal that Price Value has direct effect on Behavioral Intention to use e-commerce technology. Reference [18] also revealed that Price Value has direct effect on Use Behavior in using e-commerce technology.

According to [4], Facilitating Conditions is "the extent to which an individual believe that there is organizational and technical infrastructure supporting in using a systems". The studies conducted by Verkijika et al[8], Venkatesh et al[15], and Chopdar et al[16] stated that Facilitating Conditions has direct effect on Behavioral Intention to use e-commerce technology. References [15] and [18] revealed that Facilitating Conditions also has significant direct effect on Use Behavior in using e-commerce technology. For these reasons, Price Value and Facilitating Conditions are predicted to have positive direct effect on Behavioral Intention to use e-commerce technology (H8 and H9).

F. Social Influence and Habit

Reference [22] defined Social Influence as "the perceived social pressure from close members to the individual to perform or not to perform the behavior in question". The studies conduct by Venkatesh et al [15], Martins et al[21], and Alshare et al[22] reveal that Social Influence has direct effect on Behavioral Intention to use e-commerce technology.

Habit was defined by Venkatesh et al [15] as "the extent to which people tend to perform behaviors automatically because of learning and the behaviors was the results of prior experiences." References [15] and [16] conducted study in adoption e-commerce technology and revealed that Habit has direct effect on Behavioral Intention to use e-commerce technology. In other hand, [15] and [18] revealed that Habit also has direct effect on Use Behavior in using e-commerce technology. For these reasons, Social Influence and Habit are predicted to have positive direct effect on Behavioral Intention to use e-commerce technology (H10 and H11).

III. PROPOSED MODEL AND HYPOTHESIS

Based on the literature reviews, a theoretical model is proposed on Figure 1. In the theoretical model there are eleven independent variables relating to one dependent variable Behavioral Intention. The eleven variables (Perceived Information Quality, Perceived Service Quality, Trust, Satisfaction, Hedonic Motivation, Performance Expectancy, Effort Expectancy, Price Value, Social Influence, Habit, and Facilitating Conditions) have significant direct effect on Behavioral Intention.

IV. Method

The study is a field study which aims to develop theoretical knowledge with practical implications concerning factors that influence the use of e-commerce platform among the target population of individuals with e-commerce experience currently on Z and Y generations in Indonesia. The questionnaires were collected from students on high schools and universities. The students are in age range of 15 - 25 years.
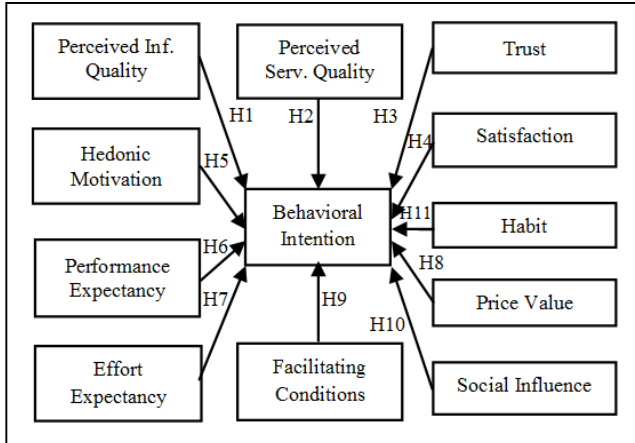

Fig. 1. Proposed Theoretical Model.

The literature review presents a comprehensive survey of previous studies related to the variables that influence the adoption and use of e-commerce by individuals. Based on this review a theoretical model is developed which incorporates the important variables and their relationships.

A self-administered questionnaire is used to measure the variables. In order to improve the validity and reliability of measures wherever possible the questionnaire adapts existing measuring instruments used in previous studies. The questionnaire was prepared in two sections. The first section presents questions related to profile of the respondents including questions used to measure the four variables Age, Gender, Education, and Experience, and behavioral factors regard to day per week and minute per day respondents used e-commerce. The second section presents questions related to the eleven variables presented on the theoretical model.

The questionnaires were collected from students of High School and University level in Indonesia. Any questionnaires no satisfying the definition of the target population were removed from the sample. The final samples of 343 questionnaires were used in the study. The final samples were prepared to preliminary analyze using principle components factor analysis to assess the construct validity of the indicators for each of the latent variables and Cronbach's alpha coefficients to assess the internal consistency reliability of the indicators for each of the latent variables.

Furthermore, the result of preliminary analyze was used to reveal: the first, the correlation among variables employed on the study using Pearson Correlation; the second, the gender difference among female and male and generation difference among Z and Y generations using T-Test analysis.

The causal effect analysis using AMOS software was employed to examine the theoretical model. The all of analyses of the study have purpose to investigate the difference adoption of e-commerce technology through the investigation of the correlation and the causal effect analysis of the variables for two generations Z and Y.

V. Findings and Discussion

A. Demographic of Respondent

The demographic, location and technology used, and behavioral variables of respondents regarding to e-commerce adoption will discuss firstly and then the discussion of construct validity and reliability analysis of questionnaires, and finally the discussion of correlation among variables including the discussion the difference among gender and generation.

From analysis of 343 respondents, the type of e-commerce used by respondents is shown on Table I and the frequency of age, gender, and education of respondents is presented on Table II.

TABLE I.   TYPE OF E-COMMERCE USED BY RESPONDENTS

Type of E-Commerce	Z generation		Ygeneration	
	Freq.	%	Freq.	%
Online Transaction	156	62.9	38	40.0
Online Shopping	71	28.6	34	35.8
Online Booking	8	3.2	11	11.6
Online Banking	13	5.2	12	12.6
Total	248	100.0	95	100.0

As shown on Table II, the Z generation was on age range of 15 – 19 years old represented by 248 respondents and the Y generation was on age range of 20 – 25 years old represented by 95 respondents.

TABLE II.   AGE, GENDER AND EDUCATION OF RESPONDENTS

Generation (Age)	Education		Gender	
Z (15 -19)	Senior High School	182	Male	95
248	University	66	Female	153
Y (20 – 25)	Senior High School	-	Male	60
95	University	95	Female	35

Male on Z Generation is represented by 95 respondents; meanwhile Female is represented by 153 respondents. The Z generation that has level of educations in senior high school is 182 respondents and in university are 66 respondents. In opposite, all of the Y generation or 95 respondents have level of educations in university.   Furthermore, male on Y generation is represented by 60 respondents and female is represented by 35 respondents.

Table III presents the location and technology used commonly used by respondents. Table III stated that most of respondents use mobile phone to access e-commerce services and more often this activity was done in home.

TABLE III.   LOCATION AND TECHNOLOGY USED BY RESPONDENTS

Technology Used	Generation		Location Used	Generation	
	Z	Y		Z	Y
Mobile phone	244	85	Home	194	81
Laptop/netbook	4	9	School/Univ.	21	11
PC-desktop	-	1	Service point	33	3
Total	248	95		248	95

The data of behavioral variables naming Experience, days per week, and minutes per day respondents used e-commerce technology is shown on Table IV.

TABLE IV.　Behavioral Factors in using E-Commerce

Experience (months)	Generation		Days/Week (days)	Generation	
	Z	Y		Z	Y
<= 1	22	6	1	99	44
2 - 3	23	11	2	41	15
4 - 5	19	6	3	45	8
6 - 7	12	3	4	12	5
8 - 9	23	4	5	8	6
10 - 11	14	5	6	11	7
>= 12	135	60	7	32	10
Total	248	95	Total	248	95

Generation	Minutes/day				
	< 10	10 - 15	16 - 30	> 30	Total
Z	66	77	70	35	248
Y	23	30	24	18	95

B. Construct Validity and Reliability Analysis of Questionnaires

The result of validity test using Component Factor Analysis and Reliability analysis using Cronbach's Alpha Coefficient is shown on Table V.

TABLE V.　Construct Validity and Reliability Analysis of Questionnaires

Rotated Component Matrix								Cronbach's Alpha
	Component							
	EE-FC	BI-HB	SF-IQ	HM-PE	PV	SQ	SI	TR	
EE2	.728	.075	.273	.138	.121	.212	.141	.175	.894 (Good)
EE1	.719	.020	.200	.201	.194	.124	.131	.104	
EE3	.691	.120	.265	.138	.103	.250	.161	.210	
FC1	.683	.057	.250	.239	.206	.067	.196	.109	.857 (Good)
FC2	.642	.110	.193	.096	.312	.007	.175	.137	
FC3	.585	.223	.228	.045	.276	.069	.102	.223	
BI2	.217	.778	.145	.182	.216	.050	.093	.070	.926 (Excellent)
BI3	.120	.767	.085	.241	.270	.055	.151	.152	
BI1	.171	.751	.118	.222	.284	.061	.107	.130	
HB3	-.091	.718	-.060	.084	-.039	.234	.157	.075	.791 (Acceptable)
HB2	-.026	.708	.098	.117	.078	.182	.281	.104	
HB1	.164	.566	.132	.060	.020	.085	.353	.298	
SF2	.212	.031	.752	.149	.140	.105	.278	.175	.895 (Good)
SF3	.236	.072	.731	.214	.108	.097	.236	.181	
SF1	.174	.186	.690	.233	.164	.078	.157	.149	
IQ2	.249	.025	.622	.117	.203	.274	.008	.215	.829 (Good)
IQ3	.167	.079	.575	.128	.227	.217	.061	.318	
IQ1	.228	.116	.561	.134	.269	.137	.045	.223	
HM2	.019	.224	.167	.769	.059	.104	.131	.125	.817 (Good)
HM3	-.028	.170	-.022	.735	.017	.181	.214	.200	
HM1	.188	.113	.286	.725	.085	.052	.084	.108	
PE1	.347	.064	.138	.523	.387	.144	.104	.233	.884 (Good)
PE2	.333	.077	.127	.486	.436	.093	.148	.187	
PE3	.297	.135	.167	.446	.454	.129	.135	.255	
PV2	.115	.146	.177	.047	.771	.125	.215	.151	.826 (Good)
PV1	.095	.108	.105	.102	.765	.103	.233	.085	
PV3	.191	.181	.209	.107	.602	.163	.252	.220	
SQ2	.084	.135	.101	.062	.055	.864	.165	.135	.896 (Good)
SQ3	.045	.094	.096	.137	.107	.853	.161	.112	
SQ1	.067	.057	.073	.067	.090	.853	.141	.130	
SI2	.064	.212	.054	.110	.158	.154	.853	.069	.876 (Good)
SI3	.082	.179	.059	.158	.195	.176	.799	.067	
SI1	.159	.083	.166	.115	.189	.213	.742	.098	
TR2	.173	.129	.161	.157	.120	.156	.098	.804	.820 (Good)
TR3	.012	.045	.090	.118	.105	.140	.134	.797	
TR1	.103	.139	.200	.171	.134	.140	.022	.751	

C. Gender and Generation Differences

Gender difference between males and females was calculated using T-test and the result was shown on Table VI.

TABLE VI.　Mean Differences between males and females

	Levene's Test for Equality of Variances		t	Sig. (2-tailed)	Mean for Males – Mean for Females
	F	Sig.			
A	8.902	.003	4.658	.000	1.041
EDU	1.668	.197	3.942	.000	.209
E	.193	.661	-.685	.494	-.162
D/W	.299	.585	-.726	.468	-.166
M/D	.001	.970	-.569	.570	-.065
SF	1.179	.278	-2.328	.021	-.16400
IQ	5.864	.016	-2.449	.015	-.16370
SQ	.099	.753	-1.508	.132	-.11438
TR	.196	.659	.896	.371	.06207
HM	.960	.328	-1.220	.223	-.08662
PE	.006	.937	-1.170	.243	-.08365
EE	.369	.544	-1.970	.050	-.14132
SI	.005	.944	.287	.774	.02145
FC	.018	.892	-.561	.575	-.03896
PV	1.147	.285	-.784	.434	-.05446
HB	.809	.369	-.404	.686	-.03556
BI	.120	.729	.473	.637	.03878

Similar to Table VI, Table VII presents generation difference between Z and Y generations.

TABLE VII.　Mean Differences between Z and Y generation

	Levene's Test for Equality of Variances		t	Sig. (2-tailed)	Mean for Z – Mean for Y Generations
	F	Sig.			
G	.262	.609	4.233	.000	.249
E	.152	.697	-.942	.347	-.247
D/W	.981	.323	.242	.809	.062
M/D	1.410	.236	-.967	.334	-.123
ASF	.612	.435	1.202	.230	.09474
AIQ	1.949	.164	-.165	.869	-.01241
ASQ	.190	.663	.468	.640	.03959
ATR	1.829	.177	-1.509	.132	-.11593
AHM	3.202	.074	-2.282	.023	-.17917
APE	1.042	.308	.456	.649	.03633
AEE	.229	.633	.676	.499	.05422
ASI	.469	.494	-2.072	.039	-.17108
AFC	1.014	.315	-1.112	.267	-.08584
APV	.001	.974	-.635	.526	-.04926
AHB	.039	.843	-1.678	.094	-.16355
ABI	2.296	.131	-1.022	.307	-.09311

D. Correlation Analysis

The graphical representation of correlation among variables presents on Figure 2 and is derived from Table VIII (statistically significant correlation, Table VI (statistically significant difference between males and females) and Table VII (statistically significant difference between Z and Y generations).

From Figure 2, it can be concluded that:

1) There are a positive correlation among variables: Effort Expectancy, Satisfaction, Perceived Information Quality, Perceived Service Quality, Trust, Performance Expectancy, Hedonic Motivation, Social Influence, Facilitating Conditions, Habit, Price Value, and Behavioral Intention.

2) Individuals with high experience have more: easier, satisfy, believe in getting certain information and service quality, trust, believe it help them to attain personal gains, hedonic motivation, influenced by friends and family, believe

TABLE VIII.   CORRELATION ANALYSIS OF VARIABLES

Variables																
	A	E	D/W	M/D	ASF	AIQ	ASQ	ATR	AHM	APE	AEE	ASI	AFC	APV	AHB	ABI
A	1	.066	-.037	.081	-.034	-.037	-.072	.041	.139*	-.033	-.015	.018	.067	.003	.045	.028
E		1	.300**	.115*	.283**	.254**	.126*	.219**	.170**	.213**	.301**	.130*	.293**	.185**	.170**	.213**
D/W			1	.091	.105	.077	.029	.086	.066	.047	.103	.146**	.146**	.122*	.221**	.145**
M/D				1	.064	.105	.023	.064	.239**	.078	.129*	.099	.174**	.141**	.156**	.114*
ASF					1	.610**	.329**	.465**	.421**	.543**	.562**	.415**	.543**	.472**	.298**	.389**
AIQ						1	.367**	.502**	.390**	.523**	.561**	.354**	.532**	.483**	.273**	.357**
. ASQ							1	.375**	.301**	.333**	.342**	.414**	.270**	.335**	.342**	.266**
ATR								1	.418**	.483**	.416**	.317**	.401**	.417**	.338**	.380**
AHM									1	.522**	.373**	.385**	.375**	.376**	.388**	.448**
APE										1	.576**	.438**	.554**	.548**	.322**	.479**
AEE											1	.387**	.637**	.488**	.263**	.380**
ASI												1	.392**	.502**	.462**	.448**
AFC													1	.527**	.274**	.422**
APV														1	.362**	.466**
AHB															1	.636**
ABI																1

that their technical infrastructure can support them, habit, acceptable with price value and intention in using e-commerce technology. Individuals with high experience also have high level of duration in day per week and minute per day in using e-commerce technology.
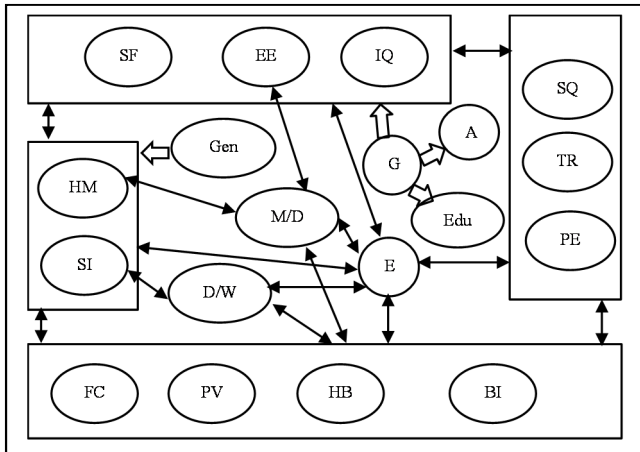

Fig. 2. Graphical Representation of Correlations and Mean Difference of Gender and Generation

3)   Individuals with the high level of Social Influence in using e-commerce have high number of day each week in using it.

4)   The variables Effort Expectancy, Satisfaction, Perceived Information Quality and Age have significantly difference due to Gender. It means that males and females have difference perception on finding easier in using e-commerce, feeling satisfy, perception on finding certain information, and on age in using e-commerce technology.

5)   The Significant difference due to gender are found on Sastifaction, Effort Expectancy, Information Quality, Age, and Education. It means that males are more older and have higher education than females in this study. Furthermore, males are less satisfy and finding more difficulty in using e-commerce technology and hold less information with better quality than females.

6)   The Significant difference due to Z and Y generations where found on Hedonic Motivation and Social Influence and not on else. It means that Z generations hold less hedonic

motivation and influenced by friends and family in using e-commerce than Y generation.

E. Causal Effect Analysis

The result of statistical analysis for the theoretical model is shown on Figure 3. The analysis was conducted by AMOS software. Figure 3 shows that Trust, Hedonic Motivation, Performance Expectancy, Effort Expectancy, Price Value, and Facilitating Condition have effect on Behavioral Intention with positive, small but not statistically significant at a level of 0.05 or less. According to [25] S (small), M (medium), and L (large) were interpreted as magnitudes less than 0.1, 0.1 to less than 0.5, and 0.5 or greater, respectively. Furthermore, Perceived Information Quality, Perceived Service Quality, Satisfaction, and Social Influence have effect on Behavioral Intention with negative, small but not statistically significant at level of 0.05 or less. In conjunction with the results of correlation analysis, these causal effect analysis results state that H1, H2, H3, H4, H5, H6, H7, H8, H9, and H10 are partially support.

Only Habit has effect on Behavioral Intention with positive, large, and statistically significant at level of 0.001. The reference [25] stated that the standardized effect using *** related to statistically significant at level of 0.001. In conjunction with the result of correlation analysis for the relation of Habit and Behavioral Intention, this causal effect analysis result states that H11 are fully support.

F. Causal Effect Analysis for Z and Y Generations

The causal effect analysis of the model for Z and Y generation is shown on Table IX. In the view of comparison table, firstly, for the two generations, Habit has positive, large, and statistically significant effect on Behavioral Intention. Furthermore, the results of the causal effect analysis for two generations are equally for Perceived Information Quality, Trust, Satisfaction, and Facilitating Conditions on Behavioral Intention.

Secondly, the difference results on causal effect analysis for two generations are found on Perceived Service Quality, Hedonic Motivation, Performance Expectancy, Effort Expectancy, Price Value, and Social Influence. For Z generation, Performance Expectancy and Price Value have positive, medium, and not statistically significant on Behavioral Intention. In other hand, for Y generation, Perceived Expectancy has positive, small, and not statistically

TABLE IX. CAUSAL EFFECTS ANALYSIS FOR Z AND Y GENERATIONS

| Effect | Z generation (N = 248) | | | | Y generation (N =95) | | | |
	Unstandardized Estimate	Statistical Significance	Standardized Estimate	Magnitude	Unstandardized Estimate	Statistical Significance	Standardized Estimate	Magnitude
IQ→ BI	-.084	NS	-.071	S	-.023	NS	-.017	S
SQ→ BI	-.112	NS	-.107	M	-.082	NS	-.060	S
TR→ BI	.042	NS	.034	S	.162	NS	.092	S
SF→ BI	-.021	NS	-.016	S	-.043	NS	-.033	S
HM→ BI	-.042	NS	-.040	S	.449	NS	.264	M
HB→ BI	.611	***	.647	L	.703	***	.627	L
PE→ BI	.254	NS	.217	M	.106	NS	.097	S
EE→ BI	.005	NS	.004	S	-.074	NS	-.063	S
PV→ BI	.216	NS	.189	M	-.147	NS	-.103	M
SI→ BI	-.046	NS	-.045	S	.045	NS	.034	S
FC→ BI	.164	NS	.136	M	.164	NS	.126	M

Note: *** indicate statistical significance at a level of 0.001 and NS indicates not statistically significant at a level of 0.05 or less.

significant on Behavioral Intention. Price Value has negative, medium, and not statistically significant on Behavioral Intention.
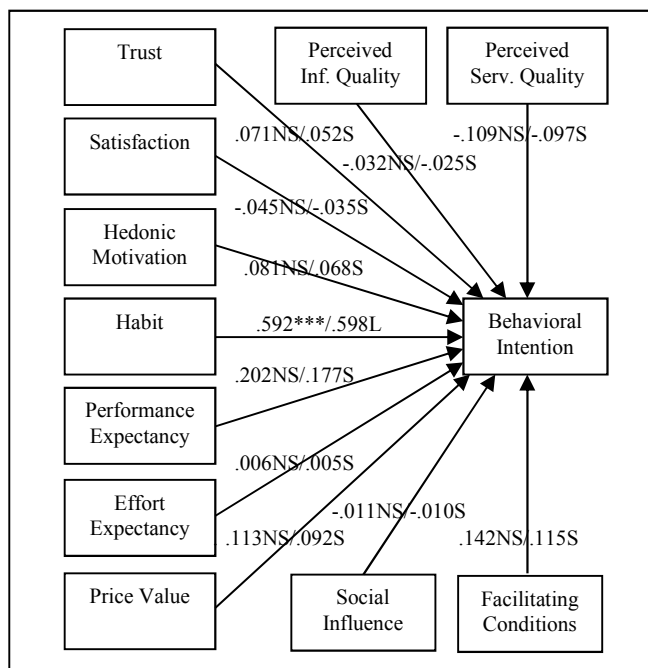

Fig. 3. Causal Effect Analysis for the Model

The other result in the difference, for z generation, Hedonic Motivation and Social Influence have negative, small, and not statistically significant on Behavioral intention. In other hand, for Y generation, Hedonic Motivation has positive, medium, and not statistically significant on Behavioral intention. Social Influence has positive, small, and not statistically significant on Behavioral Intention.

The last result in the difference, for Y generation, Perceived Service Quality and Effort Expectancy have negative, small, and not statistically significant on Behavioral Intention. Meanwhile, for Z generation, Perceived Service Quality has negative, medium, and not statistically significant on Behavioral Intention. Effort Expectancy has positive, small, and statistically significant on Behavioral Intention.

This study has not devoted new results regarded to correlation analysis of variables and causal effect on Behavioral Intention. The results were partially and fully support on the H1 – H11 hypotheses. However, comparing of two generations Z and Y in correlation and causal effect analysis represents new findings have not reported on previous studies. It is necessary to emphasize that these new findings entail to be validate in future studies.

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Unika
SOEGIJAPRANATA

LETTER OF DUTY AFFIRMATION
No. 00207/H.2/ST-LPPM/XI/2019

The director of Institute of Research and Community Service hereby assigns:

N a m e	:	Bernardinus Harnadi, ST.,MT.,Ph.D	(Chief)
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		Albertus Diwyoga Widiantoro, S.Kom.,M.Kom	(Member)

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Time and Place : 29th October – 2nd November 2019 , in Novotel Phuket Resort Price of Songkla University Phuket Thailand.

Thus, This letter has made and we hope it can be used as it should be.

Semarang, November 4, 2019

The Director of Institute of Research and Community Service,

Dr. Berta Bekti Retnawati, MSi