

# Factors That Influence Behavior Intention of Z Generation in Choosing Products of Cellular Telecommunication Services

Ardi W. Alfani<sup>1</sup>, Fadil P. Satria<sup>2</sup>, and Shu-Chiang Lin<sup>3</sup>

<sup>1</sup>Department of Technology Management, Institut Teknologi Sepuluh Nopember, Surabaya

<sup>2</sup>Department of Business Management, Institut Teknologi Sepuluh Nopember, Surabaya

<sup>3</sup>Texas Health and Science University, Texas, USA

*e-mail:* slin\_100@hotmail.com

**Abstract**— This research studies about Behaviour Intention of Z Generation in choosing cellular telecommunication services product. Using combination of Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) and Structural Equation Modeling (SEM) method. UTAUT2 is commonly used to review the acceptance of information technology product, then SEM can provide clear picture of the relationship between variables. After data processing, can be seen if some independent variables are significantly influence to dependent variables. Effort Expectancy, Price Value, Habit are significantly influence to Behavioral Intention with the value of 0,3, 0,2, and 0,8. Then habit also significantly influence Use Behavior with the value of 0,49. The aim of this research is to be able to find out which variables that can influence the intention behaviour of Z Generation for choosing the cellular telecommunication services product so than can be used for operators as reference in taking strategic step of product development.

**Keywords**— Generation Z, Behaviour Intention, Telecommunication Services Product, SEM, UTAUT2.

## I. INTRODUCTION

IN TERMS of service type contributors to the revenue of cellular telecommunications service operators is increasingly shifting, from what was previously contributed by revenue from the use of legacy services (telephone, sms) increasingly shifted to the revenue side of broadband (data packages). One segment of users with high potential to be worked on is from the Z generation, namely the generation born between 1995-2005, they were born in the midst of technological establishment and the availability of connectivity, sophisticated gadgets, unlimited internet access to get information. At present (2020), the projected number of generation Z is 30% of the total population in Indonesia (Dwidienawati and Gandasari). Even 20% of them have started to fill positions in the professional work world, of course, is a segment that is very potential to be worked on by mobile telecommunications operators.

By developing the right products to accommodate the needs and adjust the character of this Z generation. Researchers will analyze what factors that significantly influence generation Z users of cellular telecommunications services in Indonesia. The model used is the Unified Theory of Acceptance and Use of Technology 2 (UTAUT 2) combined with Structural Equation Modeling (SEM) to determine relation between variables. Where the modelling of these variables is expected

to be more helpful to find out which variables that significantly affect generation Z users of cellular telecommunications service products to determine their choices.

## II. METHOD

This research use combination of 2 basic theory, Structural Equation Modeling (SEM), and Unified Theory of Acceptance and Use of Technology 2 (UTAUT2). First, structural Equation Modeling (SEM) is a multivariate analysis technique used to test theories related to a set of relations between variables simultaneously. A set of relations between variables is a relationship between one or several independent variables with one or several dependent variables. Then the second is UTAUT2, Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) is a theory that is widely used to conduct research related to user acceptance on a technological product (Chang). UTAUT2 combines features on eight leading technology acceptance models to obtain a unified view of user acceptance seen in Figure 1.

Using indicator at UTAUT2 that modelled using SEM will be used to analyze what factor that most important for Z Generation to choose a telecommunication services product. By connecting the characters that have been studied for the process of developing a cellular telecommunications service product, it is expected that input will be generated for the appropriate product development process.

Then we making inner model and outer model of those variables to simulate and seek the relation from each variables. This research uses IBM SPSS Amos 24.0.0 software to calculate the model, which can be seen in Figure 2 – 3.

## III. RESULT AND DISCUSSION

The combination of model that resulted a calculated model can be seen at Figure 4, which is not yet being conducted a respecification process to take out loading factor value that less than 0,5. This value is used to determine the variable is Reliable or Not Reliable. If the value of loading factor  $\geq 0,5$  the variable is Reliable, so we can conduct for nest process. Then at Figure 5 we can find the outer model after respecification process. All loading factor for each variable is

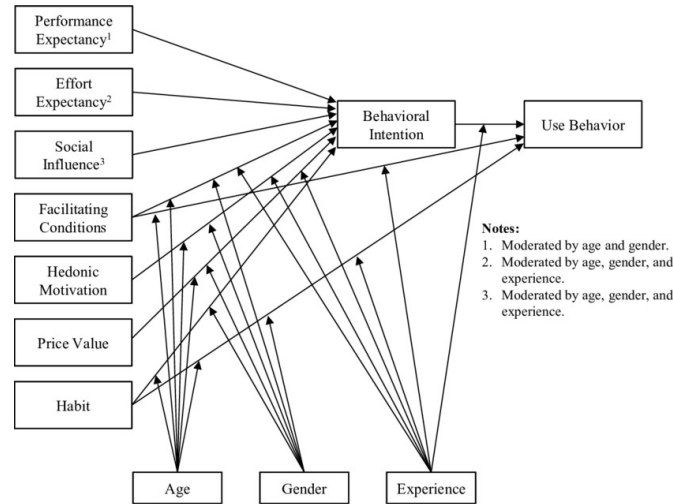


Figure 1. Unified Theory of Acceptance and Use of Technology 2 (UTAUT2)

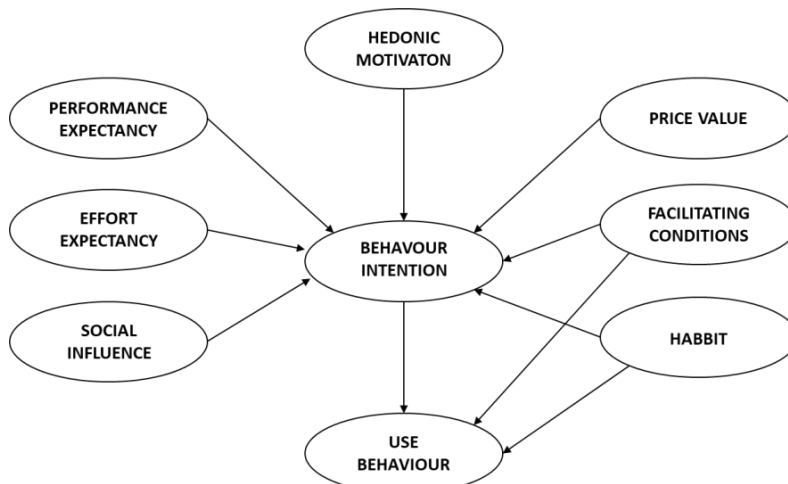


Figure 2. Inner Model

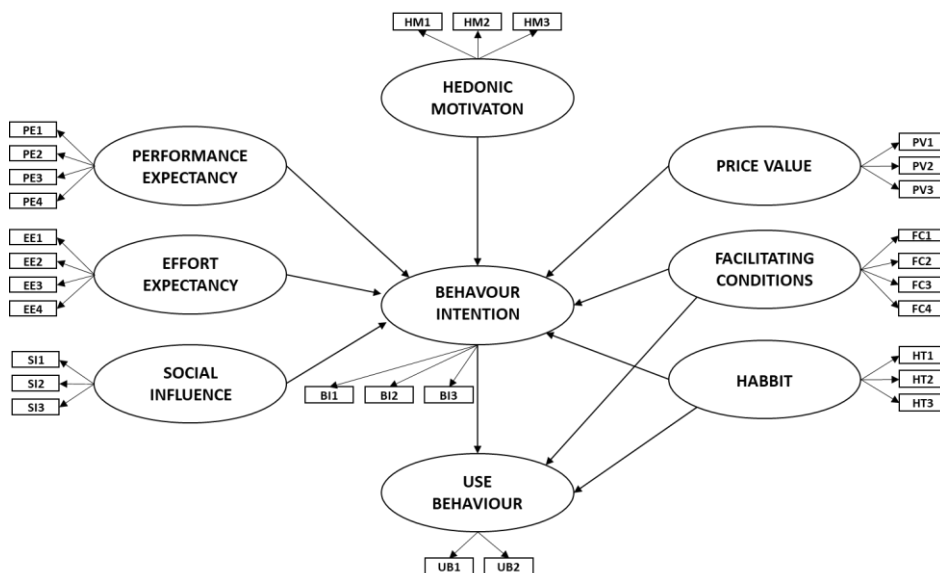


Figure 3. Outer Model

already  $\geq 0,5$ , and also there are some positive and negatives correlation between variables. Effort Expectancy (EE), Price Value (PV), Habbit (HT) that significantly affect Behavioural Intention with number of Standarized Estimates 0,300, -0,120, and 0,800 And Habbit (HT) is also significantly affect

Use Behaviour (UB) with the number of Stqandarized estimates 0,490.

Using cronsbach's alpha as one of the indicator of variables reliability ( $>0,6$ ), the result show that all variables are reliable. The results of data processing from the model in

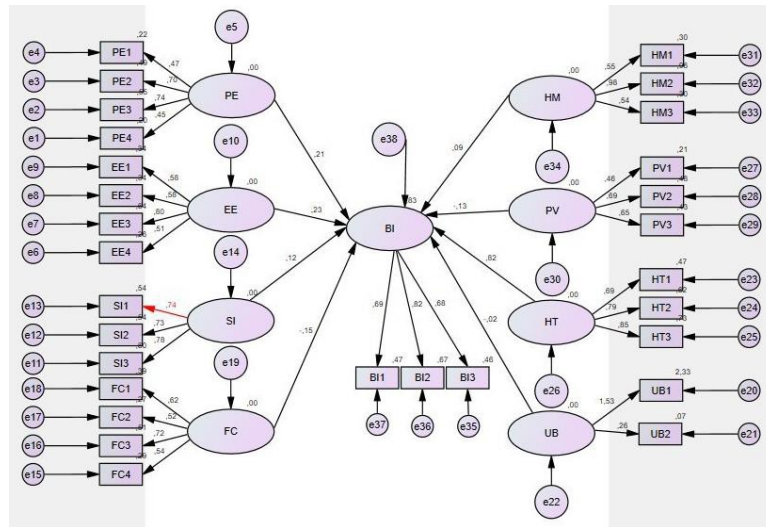


Figure 4. Outer Model before Respesification

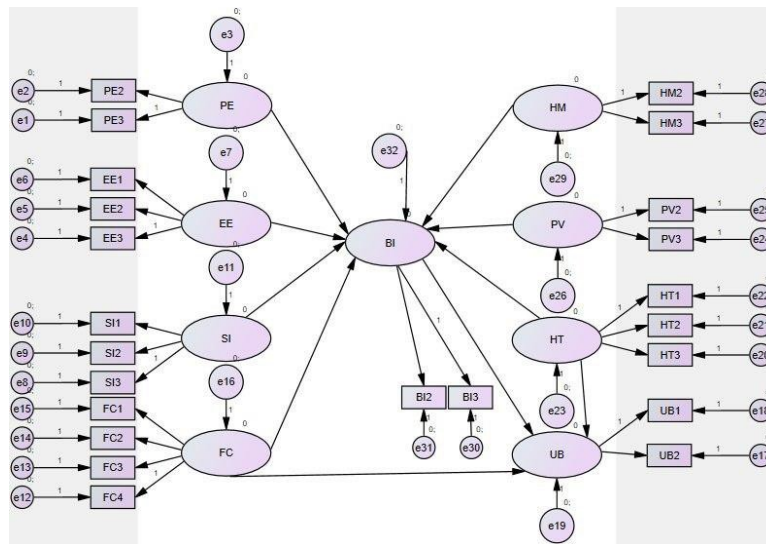


Figure 5. Outer Model after Respesification

which there are research variables that indicate the level of suitability or fit the research model. The parameters produced in the study are the Parsimonious Normed Fit Index (PNFI) of 0.56, and the Parsimonious Goodness of Fit Index (PGFI) value of 0.61 meets the PNFI cut-off value (0.5-0.9), PGFI (0.5-1). So the model at this research is already fulfill the fitness index, which can be seen in Table 1.

Standardized estimates value is used to determine the relation between variables, is it positive relation or negative relation. At this research combining by looking from p-value to find that the variable is significantly affected or not. The result of this research there are 4 variables that significantly affected, Effort Expectancy (EE) is has a positive relation to Behavioral Intention (BI) with Standarized Estimates value 0,300, then Price Value (PV) is has a negative relation to Behavioral Intention (PV) with Standarized Estimates value -0,120. And Habbit (HT) with positive relation with Behavioral Intention (BI) and Use Behaviour (UB) with Standarized estimate value 0,800 and 0,490.

The hypothesis test using from the significant of p-value ( $\leq 0,1$ ), when the p-value is  $\leq 0,1$  the hypothesis is accepted.

From this calculation can be seen here there are 4 hypothesis that accepted. Which mean the variables are significantly affect the dependent variables. Those variables are h2, Effort Expectancy (EE) is significantly affect Behavioral Intention (BI) with p-value 0,000. H6 Price Value (PV) is significantly affect Behavioral Intention (BI) with p-value 0,008, then h7 Habbit is significantly affect (Behavioral Intention (BI) with p-value 0,000. Habbit also significantly affect Use Behaviour (UB) at h10 with p-value 0,028

#### IV. CONCLUSION

After conducting this research, the result are explained at previous chapter. There are 3 variables that significantly affect the Behaviour Intention, and the expectation of Z Generation about a product of cellular telecommunication services. There are Effort Expectancy, Price Value, and Habbit that affect the Behavioral Intention. The Habbit also significantly affect the Use Behaviour. From these results it can be seen that Generation Z's expectations of cellular telecommunications service products are products that are not

Table 1.  
Internal Consistency Reliability Result (Cronbach's Alpha)

Variabel	Construct Reliability	Keterangan
Performance Expectancy (PE)	0.645	Reliable
Effort Expectancy (EE)	0.640	Reliable
Social Influence (SI)	0.781	Reliable
Facilitating Conditions (FC)	0.691	Reliable
Hedonic Motivation (HM)	0.712	Reliable
Price Value (PV)	0.646	Reliable
Habbit (HT)	0.736	Reliable
Behavioral Intention (BI)	0.752	Reliable

Table 2.  
Relation Between Variables

Variable A	Relation Between Variables Variable B	Standardized Estimates
PE	BI	0.140
EE	BI	0.300
SI	BI	0.080
FC	BI	-0.120
HM	BI	0.120
PV	BI	-0.210
HT	BI	0.800
FC	UB	-0.100
BI	UB	-0.150
HT	UB	0.490

Table 3.  
Hypothesis Test Result using p-value

Hypothesis	Variables	C.R.	P	Notes
h1	BI <---	PE 1.222	0.222	Not Significant
h2	BI <---	EE 3.319	0.000	Significant
h3	BI <---	SI 1.180	0.238	Not Significant
h4	BI <---	FC -1.561	0.118	Not Significant
h5	BI <---	HM 1.617	0.106	Not Significant
h6	BI <---	PV -2.667	0.008	Significant
h7	BI <---	HT 8.202	0.000	Significant
h8	UB <---	BI -0.723	0.470	Not Significant
h9	UB <---	FC -1.006	0.314	Not Significant
h10	UB <---	HT 2.192	0.028	Significant

difficult or complicated to use, a tendency that they do not want to bother with product features that are difficult to use or understand. Next is a product at an affordable price. And the most important thing is a product that suits their needs. So the operators can be more focused on this variables in development, so the product can meet the expectancy of Z Generation, and can be nicely accepted at the market.

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A. Literature Review

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