Examining the Influence of Social Norms on the Intention to Use Social Networking Media: A Study of Generation Z in Indonesia

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Abstract—The objective of this study is to observe the influences that affect the dissemination of social networking media among Generation Z in Indonesia. The country has been dubbed a 'sweet spot' for Internet-based business. However, there are still very few social media companies which have opened their bases in Indonesia. Is it because of the slow pace of technology acceptance in the country? A conceptual model of the Technology Acceptance Model (TAM) is proposed and empirically tested in the context of social networking media usage. Subjective norms were added on as an external factor, since they are said to have an impact on the nature of using social networking media. Structural Equation modeling was used on the survey data from 200 respondents from a particular group (Generation Z, age 11-16) to test the model's fit and the corresponding hypotheses. The results show social norms were not a factor influencing the usage of social media. Usefulness with an indirect influence from ease-of-use were the factors that could encourage the spread of social media.

Index Terms—TAM, Social Media, Generation Z

I. INTRODUCTION

The growth of social networking media in Indonesia is strong. Research done by Digital Media Asia [1] notes that Indonesia was ranked second in the world in terms of Facebook usage in 2011, while the country ranked third in terms of Twitter in the same year. Considering this fact, many people would assume that Facebook, as the dominant social networking media, has an office in Indonesia. However, it does not. This is of interest since countries below Indonesia in the rankings, have representative offices for social networking media. This leads us to the question: "Does it have anything to do with doubts about technology acceptance of social networking media in Indonesia?"

A technology acceptance model (TAM) was used to examine factors affecting the tendency to use social networking sites.

Davis [2] defined two factors affecting the tendency to use new technology: perceived usefulness and ease-of-use. Perceived usefulness relates to "the degree to which a person believes that using a particular system would enhance his or her job performance" [2]. Ease-of-use relates to "the degree to which a person believes that using a particular system would be free of effort" [2]. Therefore, the objective of this study is to examine the factors that shape and influence social networking media behavior among Generation Z: a group of young people who are perceived to be 'digital natives'.

II. THEORETICAL BACKGROUND

A. Generation Z

The Internet and social networks open up new possibilities for society, and help us to define the new generation known as 'Generation Z'. According to a study by Grail Research [6], the individuals belonging to this group were born between the years 1995 and 2010. What distinguishes these adolescents from those of every prior generation is that they are the most electronically connected generation in history [7]. These individuals are the first generation to be born into a world in the digital era.

The behavioral traits of this generation are unique. They are growing up with the Internet, laptops, mobile phones and other electronic devices, which have become their characteristic accessories. Nielsen [8] found that 44 percent of children between the ages of 6 and 12 wanted an iPad for Christmas, 30 percent wanted an iPod Touch, and 25 percent wanted a computer. These facts are proof that Generation Z has a high level of technology-consciousness.

In addition, peer acceptance is very important to Generation Z. Their self-concept is partially determined by the sense of belonging to a group, more so than other generations before them [9].

B. Technological Acceptance Model

The Technology Acceptance Model or TAM [2] was developed to predict the acceptance of new technology in a collective environment. The theory itself is an extension of the Theory of Reasoned Action [10][11], whereby its findings determine the behavioral intention that defines behavior. It cannot be compared to the Theory of Planned Behavior [12],

as they are different. TAM addresses the collective environment that is not only measured by a user's beliefs about new technology. Davis [2] states that individuals use technology to an extent that they believe it will enhance their performance, or else they would not use it. For this reason, the Theory of Extended Behavior was then applied to technology-related goals (the TAM), as it is difficult to determine since all behavioral influences are optional. Shown in Figure 1 is the final version of the TAM. Perceived Ease of Use indicates the results of individuals' evaluation of difficulty using a certain technology. Perceived Usefulness is the belief of individuals that the technology will assist them to increase or improve their performance.
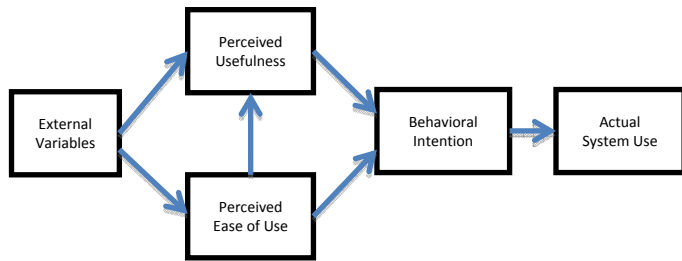

Fig. 1. TAM Model [15]

This TAM model has been extended by including subjective norms as an additional predictor of the intention to use new technology [12]. Subjective norms are defined as "the person's perception that most people who are important to him think he should or should not perform the behavior in question" [11]. Furthermore, subjective norms have a direct positive relationship with perceived usefulness. It is related to intention because people often act based on their perception of what others think they should do.

Figure 2 shows the research model used to investigate the intention to use social networking media among Generation Z. Subjective norms are included in the model, since the intention to use social networking media is likely to be influenced by closest friends, family or peers. Therefore the first two hypotheses are tested as follows.

H1: Subjective norms have a positive effect on Perceived Usefulness of the use of social networking media

H2: Subjective norms have a positive effect on the intention to use social networking media

The Technology Acceptance model is influenced by perceived ease-of-use, while it is equal. The easier the system is to use the more useful it can be. We can assume from this statement that it is possible that a higher ease-of-use score will correlate with a higher usefulness score. Therefore the third hypothesis is tested as follows.

H3: Individuals with higher ease-of-use score will correlate with the usefulness score for social networking media

The perceived usefulness by individuals will support the use of social networking media use. Individuals who think it is useful will be likely to have more 'friends' in their social networking media. Therefore the fourth hypothesis is tested as follows.

H4: Higher Perceived Usefulness will result in higher social networking media use

According to Devaraj et al. [13], if a certain technology is easy to use it will reflect in the frequency of use of the technology as well. However, this relationship needs to be supported. Coyle & Vaughn [5] stated that the relationships needed to be bound by social networks as it fosters "connected presence". Therefore the last hypothesis is tested as follows.

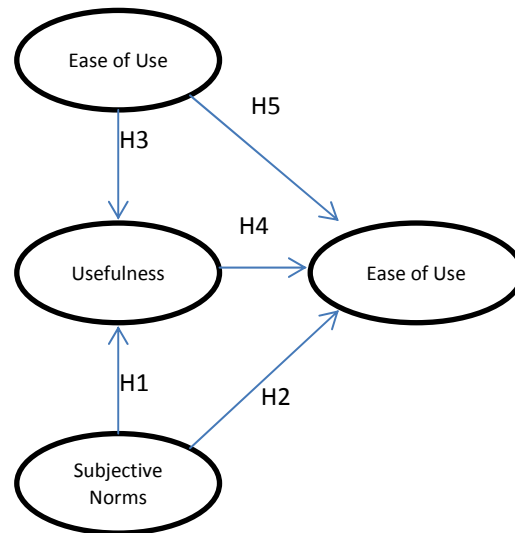*H5: Higher perceived ease of use will lead to higher social networking media use*

Fig. 2. Theoretical Framework

III. RESEARCH METHODOLOGY

A survey was conducted from April 2012 to May 2012, involving 200 respondents from a particular group (Generation Z, age 11-16) in Jakarta, Indonesia. The non-probability technique is used as the sampling technique for this study. The sampling design is classified as convenience sampling. The 6-point Likert scale questionnaire (strongly disagree =1, strongly agree=6) was distributed online through popular social networking media as well as offline. To assess the instrument and test the initial conceptual constructs, we used confirmatory factor analysis (CFA) and the LISREL 8.8 program. Robust Maximum Likelihood was used to estimate the parameters in the model.

IV. RESULTS

To test the model, we used Structural Equation Modeling (SEM). The constructs in this model all had multiple indicators which are needed to reduce the impact of bias on the results. We followed Wijayanto [14] in conducting two-step processes for examining latent variables. The measurement model was run to establish the discriminate and convergent validity and then the structural model was run to examine the proposed relationships. These results are shown in Table 1 and 2 respectively.

Both measurement model and structural model have a very strong goodness of fit indices (GOFI). Exploratory factor analysis of all of the test items showed convergent and discriminate validity of the measures with low cross-loadings. However all factor loadings were above 0.7, meeting the minimum requirements [14]. Table 2 summarized the hypothesis testing.

TABLE I.   GOODNESS FIT INDICES

GOFI	Measurement Model	Structural Model	Criteria	Conclusion
p-value	0.99483	0.99483	p-value ≥ 0.05	Fit
RMSEA	0.000	0.000	RMSEA ≤ 0.08	Fit
NFI	0.99	0.99	NFI ≥ 0.90	Fit
NNFI	1.03	1.03	NNFI ≥ 0.90	Fit
CFI	1.00	1.00	CFI ≥ 0.90	Fit
IFI	1.01	1.01	IFI ≥ 0.90	Fit
RFI	0.98	0.98	RFI ≥ 0.90	Fit
Std. RMR	0.046	0.05	Std.RMR ≤ 0.05	Fit
GFI	0.97	0.97	GFI ≥ 0.90	Fit

TABLE II.   SUMMARY OF INDEPENDENT VARIABLES RELATIONSHIP

Impact of Latent Variables	t-value	coefficients	Conclusion
H1: Subjective Norm has a positive effect on Perceived Usefulness of the intention to use Social Network media	-0.78	-0.19	Rejected
H2: Subjective Norm has a positive effect on the intention to use Social Network Media	1.58	0.22	Rejected
H3: Individuals with higher ease of use score will corellate with the usefulness score for social networking media	2.16	0.47	Accepted
H4: Higher Perceived Usefulness will result in higher social networking media use	2.87	0.85	Accepted
H5: Higher perceived ease of use will lead to higher social networking media use	-0.78	-0.78	Rejected

The proposed relationship between subjective norms and perceived usefulness (Hypothesis 1) was rejected with a t-ratio of 0.78. Perceived ease-of-use had an impact on perceived usefulness (Hypothesis 3) with a t-ratio of 1.58. Usefulness subsequently had an impact on social media use with a t-ratio of 5.33, supporting Hypothesis 4. The proposition that the subjective norms had an impact on social networking media use was not found to be significant (Hypothesis 2). The proposed impact of perceived ease-of-use on social networking media use was also not significant so hypothesis 5 was also not supported.

In line with the model, those with high ease-of-use scores found social networking media more useful. The influence of subjective norms on the perceived ease-of-use of the social networking media had a negative outcome, meaning those who are more independent found the social networking media less easy to use and those who prefer to work less independently found social media easier to use. Also in line

with the model, the more useful the social networking media was perceived to be, the more it was used.

V.   CONCLUSIONS

Ease-of-use does not act as a factor relating to the intensity in nature of using social networking media. While usefulness, on the other hand, affects the intention to use social networking media. However, ease-of-use does affect usefulness. This is mainly explained by the fact that Generation Z is technology adept by default, as they are connected through a wide variety of electronic networks. Thus, the individuals belong to a generation that will use that certain technology if it is considered useful. A study conducted by William and Page [9] shows that 'realness' is a core value for Generation Z. They have a good understanding of right or wrong. This explains why usefulness is an important factor to this group.

Even though the same study conducted by William and Page [9] revealed one of the main reasons individuals from Generation Z spent much time on social media is "all friends are there", they are more concerned with establishing "personal identity" rather than complying to social norms.

Further research for this study should be undertaken, as there are only a few similar studies with regards to social networking media in Indonesia. As this research is mainly based on a cross-sectional study because of the restrictions of the timeframe, it is suggested that a study with a longer timeframe should be conducted, so that it gives a deeper insight into the findings.

Another factor that should be taken into consideration relating to the intensity of social networking media is cultural influence. The expansion of the specific social networking media establishments in Indonesia could hasten the effect of Indonesia's cultural influence on other countries. This is the main reason for YouTube [16] opening its local domain in Indonesia. The video sharing website is trying to penetrate the Indonesian market by creating tailored cultural content. It is also recommended that for the data collection method, probability sampling is used in order to create a detailed specification to add to the descriptive statistics in the research. A more thorough and rigorous study could explore the many relationships at play that influence our use of technology.

Last but not least, it is also advised to conduct research of technology acceptance through social networking media with a different framework, particularly the Unified Theory of Acceptance and Use of Technology (UTAUT). UTAUT takes a more detailed approach in finding the influence of a tendency to use a certain technology, since it also creates a sub-variable inside the observed variable. Social networking media have plenty of external variables that can be considered as influences worthy of investigation. Examples like gender and behavioral intentions can play an important part in describing the differences in choosing a preferred social networking media, according to the original Technology Acceptance Model.

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