ACCEPTANCE AND ACTUAL USE OF "FACE BOOK": THE ROLE SOCIAL IDENTITY AND ALTRUISM AS ANTECEDENT

Rahab[1], Octavianus Pamungkas[2], and Shine Pintor .S .Patiro[3]

[1]Management Department, Faculty of Economics, Jenderal Soedirman University, Indonesia.
Email: rahab_inc@yahoo.co.id or rahab@unsoed.ac.id
[2]Management Department, Faculty of Economics, Diponegoro University, Indonesia.
Email: pungky@yahoo.com
[3]Information System Department, STMIK AKAKOM Yogyakarta, Indonesia.
Email: batikpakuan@rocketmail.com

Abstract- The aims of this study are twofold. First, empirically examine how individual characteristics affect actual user acceptance of facebook. To examine these individual characteristics, this study apply a Technology Acceptance Model (TAM) to construct an amended model that focuses on two individual differences: social identity and altruism as antecedent of user acceptance. Next, examine the role users' perception on intention to reuse. The result show that altruism significantly effect on acceptance of "facebook" whereas social identity partially effect on "facebook" acceptance. Perceived usefulness and perceived ease of use effect on intention to reuse.

Keywords: Social identity, social network, altruism, Technology Acceptance Model

I.   INTRODUCTION

In recent years, social network services have expanded to provide services to millions of people all world-wide. Social network services: facebook, twitter, Google+, YouTube, Linkedln give people on world to communicate each others any time by information technology. As examples, millions of users have Friendster since 2003; twitter has over 340 million users, and Facebook more than 1.43 billions (Reuters, 2013) on 2013. In traditional social network theory, a social network is defined as a set of social entities that includes people and organizations that are connected by a set of socially meaningful relationships and who interact with each other in sharing the value (Garton, Haythornthwaite, & Wellman, 1997; Kempe, Kleinberg, & Tardos, 2003; O'Murchu et al., 2004). The traditional form of a social network service focuses on relationship types such as friends and face-to-face relationships, but social network services are recently bringing more focus to online virtual community and computer mediated communication for users (Kwon and Wen, 2009).

Online social network services build and verify social networks for the individuals and communities who share interests and activities with one another, or who are interested in exploring the interests and activities of others (Kwon and Wen, 2009). Social network services (SNS) can be regarded as web-based services that allow individuals to construct a public or semi-public profile within a bounded system, articulate a list of other users with those who share a connection, and view their list of connections and also those made by others within the system (Boyd & Ellison, 2007).

Hence we define social network services as a web-based service is based on certain meaningful and valuable relationships including friendship, kinship, interests and activities, etc. In this study, we used facebook case as one of famous SNS in indoensia users. Social network services allows individuals to network for a variety of purposes including sharing information, building and exploring the relationship, etc. People have various reasons for using social network services. These services provide ways to maintain contact with friends and family, but also for meeting new people (Boyd, 2007). Regret and self-image congruity affect have been regarded as determinants of continuance intention to use social network services (Kang, Hong, & Lee, 2009). Some services can also be used for blogging or sharing content and media (Yuta, Ono, & Fujiwara, 2007). Many social network services allow users (example:facebook users) to join or create groups so that they can interact with other users who have similar interests.

Moreover, using social network services may be related to social capital. For instance, self-esteem has been regarded as a moderator of the relationship between social network site use and social capital (Ellison, Steinfield, & Lampe, 2007; Steinfield, Ellison, & Lampe, 2008). Affective and social factors are more important in explaining the usage of social network services other than task-oriented systems, such as office information systems. For instance, intimacy has been regarded as an indicator of interpersonal relationship which in turn affects social network use (Rau et al., 2008). However, despite the importance of affective and social factors, very few efforts have been done to date. More research is needed to identify the significant affective and social factors in a social network service context. Social network service, we will explore in this study is facebook, as famous SNS in indonesia

II.   HYPOTHESES AND RESEARCH MODEL

H1a. Social identity will have a positive effect on perceived ease of use of facebook.

H1b. Social identity will have a positive effect on perceived usefulness of facebook.

H2a. Altruism will have a positive effect on perceived ease of use of facebook.

H2b. Altruism will have a positive effect on perceived usefulness of facebook.

of a social network service.

H3a. Perceived ease of use will have a positive effect on perceived usefulness of facebook.

H3b Perceived ease of use will have a positive effect on intention to reuse of a facebook.

H4: Perceived usefulness will have a positive effect on intention to reuse of facebook.

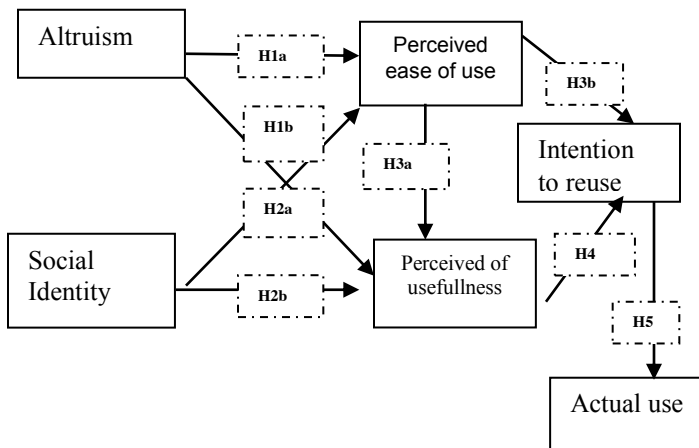H5: Intention to reuse will have a positive effect on actual use of facebook.

Figure 1. Research model

III.   RESEARCH METHODS

A survey technique was used to collect data. This study used non probability sampling by convenience sampling. The population sample was selected from among undergraduated and graduated students who are using facebook as one of popular commercial social network services in indonesia. Initially, we ran a pilot study on SNS users to determine any ambiguous items that needed to be revised. We obtained a total of 105 usable survey responses out of 280 (from 12 nd January to 31st february, 2012) through an direct survey. The sample consisted of 50,48% male and 49,52% female participants ranging in age from 17 th to 30 th , the majority of which were in their twenties (58,09 %). Moreover, most of the respondents have heavily used facebook: 46.6% and 27.7% of the respondents have used the service from 1 to 2 years and more than 3 years, respectively. Hence, the responses seem to be qualified to analyze the factors affecting the actual use of facebook as social network services.

The technique of data analysis used in this research is Partial Least Square (PLS) by using the application of Smart PLS V.20 M3. PLS is a Structural Equation Model (SEM) based on component or covariance. PLS is an alternative approach which shifts from SEM approach based on covariance into variance based (Ghozali, 2006). The PLS technique analysis uses two steps; the step of measurement model analysis which examines

the validation and reliability. The next step is structural model analysis which examines the correlation between the hypothesized variables.

IV.   RESULT

A. Measurement Model

Measurement model connected to the instruments' validity is tested by using convergent validity and discriminant validity. To test the convergent validity, Average Variance Extracted (AVE) and communality are considered (Rahab et al., 2011). Convergent validity can be completed if the construct has AVE and communality above the minimal level 0.5 (Hair et al.,, 2006). All constructs have AVE and communality ≥ 0.5. Based on above mentioned criteria, it can be concluded that the convergent validity is completed. It means that the items used to measure the construct do measure the construct.

There are two procedures to measure discriminant validity (Ghozali, 2006, Rahab, 2008, Rahab et al., 2011, Rahab dan Supadi, 2012). First, each item in construct must have high loading in construct and the cross loading is lower than item loading in the construct Second, by comparing the AVE square root of each construct and other inter-construct correlation. If the root square value of AVE is higher than the correlation between constructs, it means that the discriminant validity is completed (Fornell and Larcker, 1981). The items that do not have high loading in their construct but they have high loading on other constructs, can not be used in further analysis.

The measurement model connected to the construct-reliability testing is measured by using composite reliability with its minimal limit 0.7 (Nunnally and Bernstein, 1994); Ghozali, 2006; Rahab et al., 2011, Rahab dan Supadi, 2012; Rahab and Jogiyanto, 2012). Composite reliability value of each construct is higher than 0.7. This indicates that the construct of the research is valid.

B. Structural Model

Based on analysis by using PLS software, the t-count and the relation among variables can be seen. The value of t-count can be counted from the value of p-value by using excel calculation with the formula :tdist (value t;df:tail). The output and the relation can be seen on table 5. Based on the value of p-value, it can be traced back that out of 8 hypotheses, 2 hypotheses are not supported and 6 hypotheses are supported with reliability level 95 percent or alpha <0,05.

Table 1. Path Coefficients

Path	Original	t-statsitics	P value	Result
ALTR -> PEOU	0,097120	0,689311	0,246096	Not supported
ALTR -> POU	0,209794	1,668854	0,049107	Supported
ITU -> AU	0,370003	3,834323	0,000109	Supported
PEOU -> ITU	0,297249	2,048458	0,021542	Supported
PEOU -> POU	0,429933	3,089441	0,001292	Supported
POU -> ITU	0,368381	2,421161	0,008619	Supported
SOC_ID -> PEOU	0,368843	2,454284	0,007905	Supported
SOC_ID -> POU	0,195972	1,551069	0,061991	Not Supported

V.   DISCUSSION AND CONCLUSION

A. Discusion

As indicated in the previous section, altruism significantly affect perceived usefulness but not effect perceived ease of use. The idea that higher altruism results in higher perceived usefulness: individuals with higher levels of altruism will perceive that facebook is important as media to transfer of knowledge to others. If that individual recognizes that facebook

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are good tools to share knowledge, then it's more likely he or she will perceive that the services are useful. Altruism not effect on perceived ease of use, it means that individual perception about facebook is not caused by altruism.

Social identity, as an important social factor, also serves as a determinant of perceived usefulness and perceived ease of use. The relationship between social identity and perceived usefulness, and hence facebook use, has already been hypothesized in the recent literature (Mazman & Usluel, 2009). One of the contributions of this paper is that these are examined more closely and demonstrate that the hypotheses are in fact supported. In addition, we found that social identity specifically affects perceived ease of use: individuals who have a higher social identity and hence relatively more have spirit full to learn about facebook, and are more optimism to use facebook (Cle´ment et al., 2001).In this paper, we regard facebook as relationship oriented information systems.

This study find that perceived ease of use significantly effect on perceived usefulness. It means that higher individual perceived ease of use on facebook, higher individual perceived usefulness on facebook. Facebook will be perceived usefulness by user if facebook system ease to used by user. Like with prior studies, perceived ease of use and perceived usefulness significantly effect on intention to reuse facebook. It means that facebook user will reuse facebook if this system more ease to use and useful for user. This find supported with technology acceptance model. TAM show that people will use technology if they perceive technology ease to use and usefulness. Finally, this study show that intention to reuse SNS significantly effect on actual use. It means that higher intention to re use, higher likely to use SNS in future. This finding suggest that individual behavior as consequence of intention.

However, a less likely motivation emerged for using social network services: people may adopt facebook as a tool for establishing their own tasks. In other words, compared to legacy information systems that are more task-oriented, social network services can be task-oriented or human-relationship-oriented. According to Fielder's leadership theory, ''task-oriented behavior'' focuses on completing work tasks efficiently and effectively; ''relationship-oriented behavior'' emphasizes the importance of listening to, encouraging, supporting. (Fiedler & Chemers, 1982). A relationship orientation is a way of interacting with another person, comprising motivational, perceptual, and judgmental processes which are organized in terms of an overall attitude toward the relationship. The items are imported from Hersey and Blanchard's research (Hersey & Blanchard, 1988). Kwon and Wen (2009) proposed that legacy information systems can be classified with two dimensions: orientation and users. Orientation indicates to what extent the main purpose of information system is: building relationships, or helping users perform their task(s). In an information system, users are those who have the authorization to develop information. In comparison with collective emotion tools, relationship-oriented tools are mainly used by individuals seeking to build relationships.

In this paper, we focused on tools that provide social network services that are presumably relationship-oriented. However, in the future, how users perceive social network services may be addressed through the Technology Acceptance Model (TAM). One possible area for examination would be whether facebook user are affected by, and/or to what extent the users perceive, the orientation of facebook they are using. Specifically, the discrepancy between intended orientation and perceived orientation must be considered in building a social network services TAM (Kwon and Wen, 2009). Defined as to what extent a user regards a target facebook as a task or a relationship, perceived orientation is a key issue and should be included in the social network service TAM for improved model accuracy. In particular, perceived orientation can be considered as a moderator between external variables, especially social identity and altruism, and perceived constructs.

B. Conclusion

The main goal of this paper was to examine what factors would determine the user acceptance of a facebook as one of SNS, an emerging innovative relationship-building information system emerging in the near future. We use Davis' Technology Acceptance Model (TAM) to evaluate facebook usage.

We also successfully show that our extended TAM has significantly more explanation power than the conventional TAM, which invites perceived ease of use and perceived usefulness only. Second, since emerging network services such as Web 2.0 based services and user created services (UCC) are essentially the same as legacy facebook, the findings from our study could be adopted to examining determinants for the emerging service use. Hence our study is timely and relevant for relationship-oriented system use. Last, for the practitioners, the results of this study imply that administrators or operators of social network services should provide more realistic content so that the users may feel adequate to use this system. Moreover, strategic management to deliver encouragement from others is crucial to increase system users, especially those who have higher levels of social identity and altruism. For example, since an altruistic person could be a good adopter for facebook, the facebook provider managers may want to develop an event to discover altruistic persons for more effective ads.

C. Limitations

This research has limitations in its method and results interpretation; these limitations indicate avenues for further research. The main participants of our survey were aged from 18's to 23's and as students. Therefore we have to be careful if we want to use the findings to explain all generations' actual use of social network service. The participants were actual users of a limited services such as second life, facebook, etc., so we simply cannot say that our findings must be applied all social network services including Facebook. More rigorous surveys which cover more diverse service users will be needed in the future. Despite these concerns, we believe that our model is a good starting point to explain human-relationship services and could be a benchmark for more general studies.

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