Understanding Maslow's hierarchy of needs to measure continuance intention of SNSs

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Abstract –**Currently, citizen believe social media as the strategic platforms for life. In Indonesia, active users of SNSs in 2014 as much as 70 million (Facebook), 20 million (Twitter), 30 million (Chatting Line, Path, Instagram, LinkedIn, Google+). The purpose of this research is to determine Maslow's hierarchy of needs to analyze users' continuance intention of social networking services (SNSs). This research focus on the expectation-confirmation model of IS continuance. This research believes that self-actualizations needs from the respect of Maslow's hierarchy of needs theory (i.e. self-expression and happiness include on consumerism) is the main area that requires this research attention. This research uses path analysis and survey from questionnaires among Bandung citizen. The findings of this research are, first: users tend to adjust their expectations of fulfillment of self-expression and fulfillment of happiness to figure out the actual condition according to their experience. Second, fulfillment of self-actualization needs is found to have a mutual significant impact on satisfaction. Third, satisfaction and fulfillment of self-actualization needs have impact of continuance intention; however the effect of fulfillment of self-actualization needs on continuance intention is completely mediated by satisfaction in term of low significance. This research defines that satisfaction on SNSs among Bandung citizen in term of continuance intention is low condition, because mostly Bandung citizen are determinate themselves toward continuance intention of SNSs usage just motivated by self-actualization needs. The findings provides implications for marketing managers that should pay attention to users' assessment on web site basic functions, collect users' feedback in a timely manner, and update website properly.**

Keywords – **Self-actualization needs, continuance intention**

I. INTRODUCTION

Currently, social media service is rapidly emerging among countries of the world which encouraged by the presence of information and communication technologies (ICT). ICT has unpredictable blast to positive improvement, development and unlimited involvement to be digital connection and linkage for human and community include both external and intern circumstances in organizations [1]. The social media platforms are widely improve since social media become proper tools or equipment in daily activity in communication, connection, information and entertainment purposes. Social media are also useful to support commercial Internet for online products and services timeless and borderless [2]. Social media that has websites basis are utilized by individuals to determine open connection and public connection in the user's sites [3]. The interesting activities that user can navigate are the connection of own and also other's connection directed toward the common sites within the systems. The second activity depends on the permissions given by other users.

The federal Web Managers Council provided definition terms of social media as platforms that involve vary activities integrated with update technology, social reacting with convergence interactions, and content creation process. Social media known and become popular such wikis, podcast, photo and video sharing, blogs, virtual worlds and social networking (U.S. General Services Administration – GSA, 2009, p.1) [4].

Actually, social media sites (SMSs) focus on users' network connections made that appear on a site and then distribute information wider. In some cases, the social media of Twitter is marked as the platforms for spare time in useless attention point of view and discontinue the productive activity [5]. But differently, according to Hemsley and Mason (2012) stated that social media in the scup of intern organization would not prohibit knowledge sharing process among employees, innovation in creating product and service and also in productivity based on targets [6]. Social media consist of a variety of tools and technologies that include collaborative projects (Wikipedia and Wikispaces), blogs (Wordpress) and microblogs (Twitter), content communities (YouTube), social networking sites (Facebook, Path, Instagram and Cyworld), folksonomies or tagging (delicious), virtual games worlds (World of War craft), virtual social worlds (Second Life), and all other internet-based platforms that facilitate the creation and exchange of UGC. These social media technology purpose as the mediate role for social interaction, proper connector and enabler role for conduct deliberation across stakeholders as well [7]. Social media include a variety of social networking application [8], and the most well-known types being social networking sites or service (SNS). SNS is a platform that established and

maintains social relations among people who share regards on interests, activities, backgrounds, or real-life connections openly [9].

Broadly speaking, SNS can be categorized into two types: (1) Internet based and (2) Smartphone based [10]. Internet-based SNSs are commonly accessed through e-mail IDs. While Smartphone-based SNSs are accessed through mobile phone numbers. In Indonesia, Facebook, Path, Instagram, Google+ are the most popular internet-based SNSs. Line, Whatsapps, KaKao-Talk are famous Smartphone-based SNSs. Mostly, Indonesian use and take advantages of SNSs to create profile that has tremendous value appearance and open connection to interact with public, to navigate, to browse and to visit the user's list of connection and others simultaneously. Moreover, SNSs could be designed in boosting the marketing strategy such word-or-mouth marketing through sequence of words of product or service offering [11].

In Indonesia, SNSs have become center of relationship among citizen because mostly used for social interaction in last years and the appealing phenomenon of update social media has redefined the form of communication and social activity. In Indonesia, active users of SNSs in 2014 as much as 70 million users who access Facebook, 20 million users who access Twitter, 30 million users who access Chatting Line, Path, Instagram, LinkedIn, and Google+. Indonesian users of SNSs mostly conduct activity consisting of chat in the timeline, opens online shop, gives "like" for others users, display photos for vastly moments, sharing knowledge, discussion through Twitter, and promise to "follow". Especially for photos, Indonesian users also do *selfie* style where users take their self regularly [12]. In facts, they perpetuate their activities, achievements, moments, happiness and event location in the form of photos and "caption" openly. For example photos when do traveling, when achieve new appreciation, when feel happy or other feelings, and also when purchase something new (goods and services) to express their happiness and become popular among users.

Posting happiness through SNSs is one of the fundamental indicators of self-actualization to achieve the fulfillment of expression needs and fulfillment of happiness [13]. Every individual of Indonesian that high of connection, seeking for recognition from others and consumerism behavior, for instance, tend to satisfy on their live and achievement. Especially citizen of Bandung who known as the centre pleasure and enjoyment of Indonesia because Bandung city has lots of factory outlets for shopping, restaurants in variety themes and atmosphere design, the entertainment packages for visual and audio, and natural adventure or tourisms. Bandung citizen are consumptive and also the happiest of all. Based on survey organized by government and Laboratories Quality Control Department of Statistics of Padjajaran University in 2015, the happiness index of Bandung citizen is 70,60% from households. From the survey, Bandung citizen prefer defined happiness associated to need of affiliation better than need of power [14]. The happiness realization of Bandung citizen is through SNSs

in the form of photos, captions, stories, video sharing and then receive comments from others "like" in unlimited amount.

Based on Maslow's hierarchy of needs theory, an individual has a hierarchy of motivational needs (Maslow, 1954). The most basic needs are physiological such as the needs for food and sleep. The second level is safety needs such as security and stability needs. In the next level the needs is regards on belonging and love that are also termed social needs including love, be loved, and a sense of belonging. The fourth level is the needs of self-esteem such as achievements, respect and recognition from others. Finally, Maslow believed that in the highest level of needs is self-actualization needs, which refer to people's aspirations to achieve self-fulfillment and realize their potential. Pleasure-stimulation is one of the ten most human needs which refer to "the feeling that you get plenty of enjoyment and pleasure rather than feelings bored and under stimulated by life [15].

Waterman et al., (2008) argued that happiness has two conceptions (i.e. hedonia and eudaimonia) [16]. Happiness is achieved through the pursuit of enjoyment, pleasure and comfort in the hedonic view and through seeking to use or develop the best in oneself in the eudaimonic view [17]. It is similar that self-actualization associated with more-frequent peak experiences. Brandyberry et al. (2010) adopted the hierarchy to determine antecedents of perceived usefulness in the individual adoption of SNSs [13]. SNSs as if Facebook, Instagram and Path accommodate Bandung citizen to express their happiness. Chou and Lim (2009) found that the use of SNSs can result in higher levels of happiness [18]. This fulfillment of happiness among Bandung citizens on their SNSs will motivate them on continuance intention and more immersed regarding the use of SNS to execute activities such as connecting friends, self- expressions, personal identity, professional advancement, passing time, searching emotional support, seeking pleasure and trends including showing the form of consumerism to others freely.

This research focus on the expectation-confirmation model of IS continuance because this model believes on intention as the basic indicator and parameter of IS continuance habits. This research adopts the previous researches conducted Use and Gratifications (U&G) that explains why people prefer to a specific medium than alternatives communication media [19]. Prior research has commonly focused on indentifying the determinants of motivations and evaluating some perceived values of SNSs. This research takes a different focus by understanding of the SNSs motivation regarding on happiness and self-actualization and then how they can affect continuance intention. Constructing on the existing research on SNSs motivations, this research believes that self-actualization needs from the respect of Maslow's hierarchy of needs theory (i.e. self-expression and happiness) is the main area that requires this research attention.

Self-actualization needs include self-expression and seeking happiness. Self expression is mainly mirrored as a self-disclosure aspect and self-expression behavior motivation of SNSs. Derlega and Chaikin (1977) stated that self-expression is defined as individuals' desire to show themselves [13]. Basically, people that utilize homepage more frequently than before period, it indicate that user has ability and competency to filter and screen unlimited information manageable [20]. Thus, when users perceive better fulfillment of self-expression associated of consumer and consumptive habits that could suggest to achieve more social attractiveness, they will acquire psychological satisfaction, and this will further enhance the continue intention.

Happiness is associated with entertainment element and joyful culture through social media, include other SNSs. The feeling of pleasure or absorption will have an effect on user's behavior intention. Amusement feeling generate effect of intention in using SNS directly [21]. When SNSs influence the happiness feeling of users, it will evoke positive impact on satisfaction then further indicate continuance intention in using SNSs. Research in term of happiness regarding SNSs topic is rare from Indonesia perspective. Hence, this research adopts Maslow's hierarchy of needs framework to capture SNSs users' motivation and continuance intention. This research focuses on Bandung citizen. This research departs from earlier works and makes the main contributions consist of specifying a systematic classification of SNSs user motivations based on Maslow's hierarchy of needs.

II. METHODOLOGY

With full of regardless, this research gain approach to Maslow's hierarchy of needs theory, authors find that self-actualization needs are particularly relevant to capture the motivations of SNSs. This research based on

the expectation-confirmation model of the information systems continuance model (ECM-IS) that this approach have been empirically tested to explain the continuance model with different types of IS. The following ECM-IS model described below:
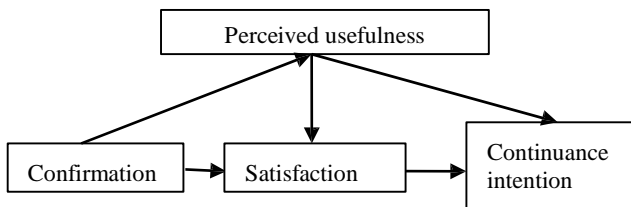

Figure. 1. ECM-IS model (H. Cao et al., 2013:172)

To better explanation in term of people's motivation on continuance intention of SNSs using, authors turn to uses and gratifications literature collected by Jinhu et al. (2013). Previous authors researched in defining the driver factors and evaluating the perceive value of SNSs utilizing. Because both value and needs play a fundamental role in perceptual judgment, this research

conducts a different focus by examining user's needs to understand the motivations on SNSs. In the perspective of SNSs, the values of SNSs are well studied and remain relatively stable. Thus, this research obtains inspiration from prior research which relevant to understand user's perceptions of SNSs using and how they can affect continuance intention, by generating one condition that called consumerism activities. Building on the existing research on SNSs motivations, authors believe that self-actualization needs (self-expression and happiness) are main areas that require author' attention.

In this research, self-expression indicates that individuals show their trustworthiness, competence and energy to obtain social attractiveness. Jung et al. (2007) stated that increasingly more individuals used homepages provided by SNSs to express themselves while having the ability to manage information disclosure effectively [20]. Thus, when users of SNSs received that higher levels of all kinds of fulfillment of self-expression could drive more social attractiveness, they will obtain psychological satisfaction; this will further enhance the continuance intention of using SNSs.

This research also frames the relationship between satisfaction and continuance intention, based on the previous research which stated that influencing factors of customer loyalty in the context of instant messaging and finds that satisfaction not only affects customer loyalty directly but also can act as a mediating variable between social value, emotional value and customer loyalty [22]. Vasalou et al. (2010) stated that the fundamental aim of SNS providers was to encourage users to continue using SNSs and that users' satisfaction with SNSs was positively related with loyalty [23]. This research use path analysis technique. Hence, here is the framework and the model of this research:
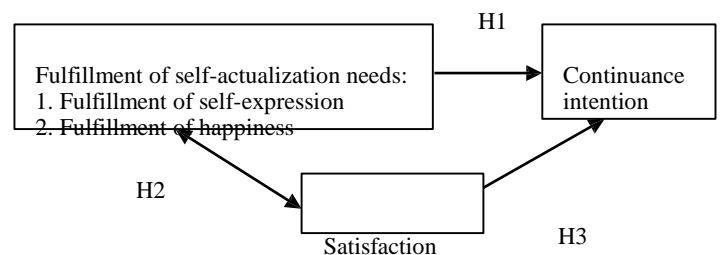

Figure. 1.The research model

H1. Fulfillment of self-actualization needs positively influences continuance intention

H2. Fulfillment of self-actualization needs positively influences satisfaction with SNSs.

H3. Satisfaction with SNSs positively influences continuance intention

A survey was administered to SNS users in Bandung. All respondents had prior experience using SNS platforms and had expressed their self in term of consumption activity through their SNS's account such as purchase in restaurant, in mall, tourism and picnic activity with friends and family, activities in the campus/school,

achievements and valuable moments in somewhere and kinds of consumption activities. The questionnaire was designed by adopting measures that have been validated by previous research and refined for the context of SNSs (Cao et al., 2013). Fulfillment of self-actualization needs was operationalized as the main construct with two first-orders construct namely fulfillment of self-expression and fulfillment of happiness.

Respondents of this research are taking by probability sampling strategy used cluster type that spreads among Bandung area. The amount of sample is 103 users that calculated from Slovin pattern for sampling, from the total users is 2.905.420 in 2015. The technique for questioner is by unbalancing for every region of Bandung, consist of west Bandung, east Bandung, south Bandung, north Bandung, and the central of Bandung city. Furthermore, this research uses path analysis technique to understand the relation of fulfillment of self-actualization needs, satisfaction and continuance intention in using SNSs

III. RESULTS

First, reliability and validity of higher-order constructs (i.e. fulfillment of self-actualization) were assessed. Here the following result of respondents' description of this research:

TABLE 1
DESCRIPTION STATISTICS OF DEMOGRAPHIC

	Frequency	Percentage
Domicile		
West Bandung	21	20.38
South Bandung	26	25.24
Central Bandung	10	9.70
East Bandung	28	27.18
North Bandung	18	17.47
Gender		
Male	49	47.57
Female	54	52.42
Years of SNSs experience		
1-2 years	4	3.88
2-3 years	22	21.35
>3 years	77	74.75
Number of SNSs used		
1	3	2.91
2	10	9.70
3	23	22.33
>3	67	65.04
Average time of use at SNSs (weekly)		
3-14 hours	35	33.98
>3 hours	15	14.56
	Frequency	*Percentage*
14-21 hours	25	24.27
>21 hours	28	27.18

Note: $n = 103$

The following results of SPSS 16.0 measurement used in this research.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.703ª	.494	.483	.50072

a. Predictors: (Constant), X2, X1

Figure. 3. Model Summary

ANOVAª

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.198	2	12.099	48.257	.000ᵇ
	Residual	24.821	99	.251		
	Total	49.020	101			

a. Dependent Variable: Y

b. Predictors: (Constant), X2, X1

Figure. 4. ANOVA Analysis result of SPSS

Coefficientsª

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.527	.374		1.409	.162
	X1	.458	.083	.469	5.506	.000
	X2	.415	.108	.327	3.841	.000

a. Dependent Variable: Y

Figure. 5. Coefficients analysis result of SPSS

Correlations

		X1	X2	Y
X1	Pearson Correlation	1	.543**	.647**
	Sig. (2-tailed)		.000	.000
	N	102	102	102
X2	Pearson Correlation	.543**	1	.582**
	Sig. (2-tailed)	.000		.000
	N	102	102	102
Y	Pearson Correlation	.647**	.582**	1
	Sig. (2-tailed)	.000	.000	
	N	102	102	102

**. Correlation is significant at the 0.01 level (2-tailed).

Figure. 6. Correlation analysis result of SPSS

IV. DISCUSSION

The results of the analysis are shown in Table 4 and Table 5. From the table of coefficient, Beta measured that the path value of X1 variable (fulfillment of self-actualization needs: measured from indicators consist of fulfillment of self-expression and fulfillment of happiness) towards Y variable (continuance intention) is 0.469, whereas the path value of X2 variable (satisfaction of using SNSs) towards Y variable (continuance intention) is 0.327. In the table of correlation, the result of

SPSS measured that the mutual relationship between X1 variable and X2 variable is 0.543.

The value of direct relationship from X1 variable (fulfillment of self-actualization needs) towards Y variable (continuance intention) is 0.469*0.469 = 0.219, although the value of indirect relationship among both variables (which means that mediated by X2 variable (satisfaction) is 0.496*0.543*0.327 = 0.083. So that the total value of indirect relationship from fulfillment of self-actualization needs towards continuance intention is 0.646. Fulfillment of self-actualization needs only partially mediated the relationship toward satisfaction.

The value of direct relationship from X2 variable (satisfaction) towards Y variable (continuance intention) is 0.327*0.327 = 0.107, whereas the value of indirect relationship among that variable (means that mediated by X1 variable: fulfillment of self-actualization needs) is 0.469*0.543*0.327 = 0.083. So that the total value of direct relationship from satisfaction towards continuance intention is 0.19. Satisfaction also partially mediated the relationship between fulfillment of self-actualization needs and continuance intention.

However, the effect of fulfillment of self-actualization on continuance intention was no longer significant when satisfaction was controlled, indicating a full mediation between fulfillment of self-actualization and continuance intention. This result is supported by the previous research which was conducted by Cao et al. (2013). This research develops and empirically assess a Maslow needs-based SNS continuance intention model. Here is the following the result of the analysis:
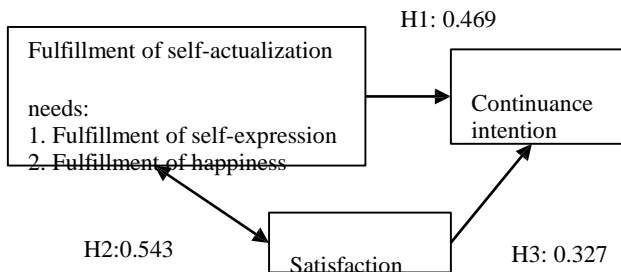

Figure . Path analysis results

Authors obtains several key findings. Confirmation positively affects fulfillment of self-actualization needs, which indicates that users will adjust their expectations of fulfillment of self-expression and fulfillment of happiness to figure out the actual condition according to their experience prior years.

Then, fulfillment of self-actualization needs is found to have a mutual significant impact on satisfaction. The results indicate that users' satisfaction with SNSs typically emerge from adjustments of their expectations, consistent with earlier studies (Limayem et al., 2007 [24]; Bhattacherjee, 2001 [25]; Cao et al., 2013). Satisfaction and fulfillment of self-actualization needs have an impact on continuance intention; however the effect of fulfillment of self-actualization needs on continuance

intention is completely mediated by satisfaction and low significance.

Based on this result, this result also found that satisfaction with SNSs among Bandung citizen is low determinant of SNSs continuance intention, because mostly Bandung citizen are determinate them self toward continuance intention of SNSs usage just motivated by self-actualization needs. They become "exist and popular" in the social media is the highest target, rather than become satisfy of SNSs. This motivation strongly drives continuance intention significantly. This finding is in line with other research examining usage intention, which stated that fulfillment of self-actualization needs has a positive direct effect on continuance intention.

V. CONCLUSION

This research has improved and evaluated simultaneously a Maslow needs-based SNSs continuance intention model. Authors obtained several key findings. First, confirmation positively affects fulfillment of self-actualization needs, which indicates that users will synchronize the expectations of fulfillment of self-expression and fulfillment of happiness to figure out the actual condition according to their experience prior years.

Second, fulfillment of self-actualization needs is found to have a mutual significant impact on satisfaction. The results indicate that users' satisfaction with SNSs typically emerge from adjustments of their expectations. Third, satisfaction and fulfillment of self-actualization needs have an impact of continuance intention; however the effect of fulfillment of self-actualization need on continuance intention is completely mediated by

satisfaction and low significance. Based on this result, this result also found that satisfaction with SNSs among Bandung citizen is low determinant of SNSs continuance intention, because mostly Bandung citizen are determinate them self toward continuance intention of SNSs usage just motivated by self-actualization needs.

This research has theoretical contribution which becomes the first research that generates and uses the Maslow's hierarchy of needs theory to study SNSs in Bandung. Previous researches associated on SNSs motivations mostly focus on value. This research also proposed a conceptual model of continuance intention in the SNS context because the continuance intention of SNSs is still an unexplored topic.

From the practical standpoint, this finding provides implies for practical expert in selling and marketing field in organization to notice and regularly evaluate the SNSs utilization such organizations' website to improve users' continuance intention. SNS managers should concern on facilities for self-actualization of citizen and should endeavor to enrich instant messaging features, generate a platform for facilitating between interaction and involving that convenient for users to obtain communication and suggestion further. That platform also must availability

for express users' selves, entertain them well and develop users' potential at the same time.

This research indicates that user satisfaction still drive the fundamental and strategic role in terms of SNSs taking continuance intention in long term existence. SNSs managers should continue focus on users' expectation and experiences in term of websites in order to satisfy user needs. Managers should also collect comments in a time manner and update the website functions necessarily.

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