

IMPACT OF KNOWLEDGE SHARING TO VALUE CO-CREATION ON SOCIAL MEDIA

Aulanniswah Al Fadhilah

School of Business and Management, Institut Teknologi Bandung, Indonesia

*Email: aulanniswah@sbm.itb.ac.id

Abstract. This study is aimed to find the impact of knowledge sharing to value co-creation including customer learning value, social integrative value, and hedonic value. The study focused on college students aged 18 to 24 years old domiciled in Bandung city. A quantitative approach is used by collecting primary data from the questionnaire. Exploratory research was conducted based on the questionnaire along with theoretical frameworks. The independent variable is knowledge sharing behavior and the dependent variable is co-creation behavior including customer learning value, social integrative value, and hedonic value. A Structural Equation Modeling (SEM) is used as a statistical tool for analyzing the impact of the independent variable on the dependent variable. This research found that knowledge sharing behavior among college students has a positive impact on co-creation behavior and enhance value co-creation, including customer learning value, social integrative value, and hedonic value.

Keywords: Knowledge Sharing; Co-Creation; Value Co-Creation; Social Media

INTRODUCTION

As enhancement in technology and the effect of globalization, information spread fastly around the world. The rise of Web 2.0 emerged social media platforms that redefine internet users from the passive audience into active participants (Levy, 2013). Social media have features that allow them to voluntary contribute to the information environment by sharing their knowledge in the form of user-generated content (Kim, Lee, & Elias, 2015). Knowledge sharing activity in social media emerges collaboration between users in the creation process which usually called co-creation, that are including customer learning value, social integrative value, and hedonic value (Chen, Du, & Li, 2017). All internet users in Indonesia are also active social media users, according to We Are Social (2019) there are 150 million or 56% of Indonesia people using the internet and based on Idn Research Institute (2019), 94.4% of Indonesian Millennials are internet users. Indonesian people also prefer to search for information on social media (Katadata, 2018). User-generated content has increasingly had a strong impact on consumer decisions nowadays. It's emerged a trend that Indonesia millenials decision making are influenced by Instagrammers and Youtubers in a lot of their lifestyle aspects from shopping, culinary, to their travel plan (Idn Research Institute, 2019). This interaction between social media users which generated co-creation can be utilized for business marketing nowadays. It is important for the business to implement social co-creation because from social media they can gain knowledge from customers such as opinions, reviews, and others which very important for business development. However, previous research also found that internet users tend to do knowledge sharing only when they need it (Liao, Hsu, & To, 2013). Based on the statement below, the researcher wants to answer the following questions:

- To be able to explain the knowledge sharing behavior impact to co-creation behavior.
- To be able to explain the co-creation behavior impact to value co-creation.
- To be able to explain the knowledge sharing behavior impact to value co-creation.

The finding from this research hopefully will give another insight that can be used for business enhancement especially for marketing strategy development by utilizing customers behavior in knowledge sharing and directing to value co-creation.

LITERATURE REVIEW

Knowledge sharing is individuals or groups of people's behavior in sharing knowledge, skills or information, with others for their benefits or interest (Seewon et al, 2003; Lin et al, 2009; Chen, Du, & Li, 2017). User-generated content is social media that is included in the knowledge sharing activities (Chen, Yang, & Leo (2017). Social media provide features that it is possible to facilitate a lot of customers participate in knowledge sharing into the co-creation process (Rathore, Ilavarasan, & Dwivedi, 2015). The co-creation concept refers to joint value creation through a process of interaction between providers and recipients to share their information, learn and integrate their resources into creation (Prahalad & Ramaswamy, 2004; López, Maya, & López, 2017). Social media emerge value co-creation between their users, which made consumers nowadays tend to support business create added value through collaboration and social interactions, which also known as co-creation of value, in the form of user-generated content (reviews, advice, experiences, impressions, etc) on social media (Mladenovic & Dolenec, 2016). Based on Parker, Alstynne, and Choudary (2016) statement, there are two parties involved in value co-creation in social media, which are customers and providers (brands or firms). Knowledge sharing influence value co-creation, which are customer learning value, social integrative value, and hedonic value (Chen, Du, & Li, 2017). Customer learning value expected co-creation benefit in acquiring new knowledge and skills (Verleye, 2014). Social integrative value reflects users' experiential value derived from developing and strengthening social relationships (Chen, Du, & Li, 2017). And hedonic value indicates the feeling of a strengthening enjoyment derived by users through an experience, which can come from users' interaction that considered as entertaining and interesting (Chen, Du, & Li, 2017). Furthermore, it is important in business to implement social co-creation as from social media they can gain valuable references such as customer opinions, reviews, and other forms of information to enhance their product and service (Moe and Schweidel, 2011; Rathore, Ilavarasan, & Dwivedi, 2015). This process might lead to competitive advantage and collaborative value creation which is important for business and those value wouldn't exist without co-creation in social media (Parker, Alstynne, and Choudary, 2016). The relationships between variables that already been explained are made up of some hypotheses as below:

- H1: Knowledge Sharing Behavior have an impact on Co-Creation Behavior*
- H2: Knowledge Sharing Behavior have an impact on Customer Learning Behavior*
- H3: Knowledge Sharing Behavior have an impact on Social Integrative Value*
- H4: Knowledge Sharing Behavior have an impact on Hedonic Value*
- H5: Co-Creation Behavior have an impact on Customer Learning Behavior*
- H6: Co-Creation Behavior have an impact on Social Integrative Value*
- H7: Co-Creation Behavior have an impact on Hedonic Value*

METHODOLOGY

The first step of the research is problem identification to find the problem that occurs in the community. The second step is exploratory research to dig deeper into the problem that has been identified before. The exploratory research conducted by interview 30 college students in Bandung to gain data and groundwork for the next step. The third step is the theoretical framework for the groundwork of the research. The fourth step is data collection, researcher choose quantitative approach using questionnaire. The question of the questionnaire based on exploratory results and borrowing scale from the previous study. Data collection is conducted from May to July 2019, distributed to college students in Bandung via online form. The questionnaire is designed in three pages of questions which consist of the respondent profile on the first page, knowledge sharing behavior in the second page, and co-creation on the third page. The questionnaire is designed to answer the research questions. The questionnaire provide in Bahasa since the respondent are Indonesian and more fluently in Bahasa. The population of college students in Bandung are 210.998 (Badan Pusat Statistik, 2018), with confidence level 95% and margin of error 5% the sample size are 384 college students. The questionnaire got 400 respondents with valid data to be analysed.

Tabel 1. Research Measurement and Variable

Variable	Scale	Number of Indicator	Source
Knowledge Sharing Behavior	7 likert scale (1 for very disagree to 7 very agree)	6	Junga Kim and Chunsik Lee (2015)
Co-Creation Behavior	7 likert scale (1 for very disagree to 7 very agree)	9	Geoffrey G. Parker, Marshall W. Van Alstyne, Sangeet Paul Choudary (2016), Cassandra France, Bill Merrilees, and Dale Miller (2014)
Customer Learning Value	7 likert scale (1 for very disagree to 7 very agree)	3	Chen Chen, Rong Du, and Jin Li (2017)
Social Integrative Value	7 likert scale (1 for very disagree to 7 very agree)	3	
Hedonic Value	7 likert scale (1 for very disagree to 7 very agree)	4	

After collecting the data, the next step is data analysis. The researcher used Confirmatory Factor Analysis Structural Equation Modelling (CFA-SEM) to predict and test the theory of the impact of knowledge sharing on value co-creation on social media. The software used for CFA-SEM testing in this research is IBM SPSS AMOS 22 because it has advantages on their user-friendly interface. The last step is a conclusion and recommendation.

FINDINGS AND ARGUMENT

Exploratory was conducted first to gain insight into the knowledge sharing and co-creation behavior of college students in social media. The exploratory research conducted by interviewing 30 respondents. The finding obtained from exploratory research used for bases the quantitative research along with literature review. After that, the researcher used a quantitative approach for collecting the data to be analyzed.

Researcher do the descriptive analysis aims to analyze data by describing data that has been collected. Researcher got 400 valid respondents data from their questionnaire. There are 66% female respondents and 34% male respondents. Most respondents are 21 years old (33%), the rest are aged 20 years old (23%), 19 years old (18%), 22 years old (12%), 18 years old (10%), 23 years old (4%), and the least is aged 24 years old (1%). Most of the respondents were taking bachelor degree (85%), while the rest are taking Diploma 1 (1%), Diploma 2 (0%), Diploma 3 (10%), and Diploma 4 (4%). The respondents comes from diverse major, which are engineering (23%), economic (19%), social (16%), science (11%), health (8%), education (8%), art (5%), and others (11%). From the demographic result, the most popular topic for knowledge sharing in social media is the lifestyle that includes entertainment and hangout, traveling, culinary, fashion and beauty. While the most popular social media for knowledge sharing are Instagram and YouTube. This finding is in accordance with Idn Research Institute (2019) study which concludes that Instagrammer and YouTuber play a big role in influencing young generation decisions in shopping as they become a reference for them in deciding where to eat and where to travel.

The classification of assessment categories in this study was determined based on the number of measurement scales used, which are as many as five classifications. Based the calculation, classification of rating categories for the calculated average value is as; Vary Bad/Very Low (1.00 – 2.20), Bad/Low (1.21 – 3.40), Fair/Medium (3.41 – 4.60), Good/High (4.61 – 5.80), Very Good/Very High (5.81 – 7.00). Knowledge sharing behavior variable got 3.57 average score which classified as medium, means that college students behavior in sharing with others about

information, experiences, and knowledge is considered to be quite good. Co-creation behavior variable got 2.75 average score which classified as low, means that respondents behavior in collaborating their information, experience, and knowledge to create a new creation with others is classified in low category. Customer learning value variable got 4.94 which classified as good, means that respondents perceived those activities increases their knowledge. Social integrative value variable got 4.61 which classified as good, means that respondents perceived those activities enhance their social relationship. And hedonic value variable got 5.06 which classified as good, means that respondents perceived those activities give them entertainment and enjoyment.

After that, researcher do SEM analysis to test the data. The software that researcher used is AMOS 22. After preparing the SEM model and also the variables along with the indicators, the next step is making the path diagram.

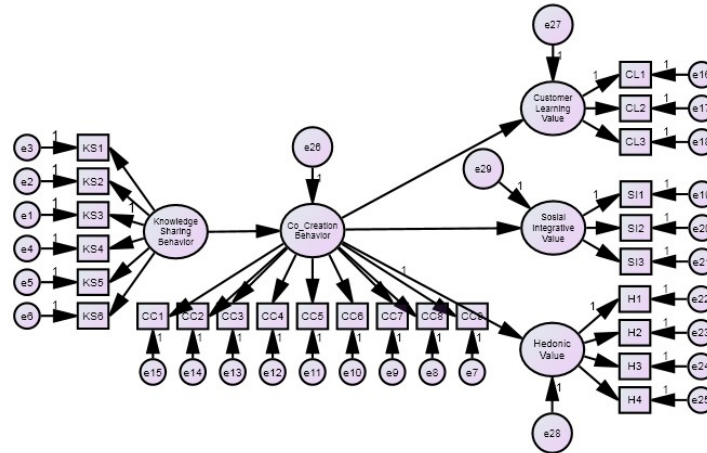


Figure 1. Research Path Diagram

The result of AMOS output which shows a df model value of 271. This indicates that the model is categorized as over-identified because it has a positive df value. The minimum sample size needed to reduce bias in all types of SEM estimates is 200. 400 respondents filled out the questionnaire in this research, so it fulfills the sample size requirements. The results of the normality test shows that the data has a multivariate c.r of $-2.58 < 2.37 < 2.58$, so that the data used is normally distributed. The determinant of sample covariance matrix is 833.13. From these results, it can be seen that the determinant value of the sample covariance matrix is above zero. Thus it can be concluded that there is no multicollinearity and singularity. The next step in SEM analysis techniques is the measurement model stage (Measurement Model). If there is an estimated value of the indicators that have a significance level of ≤ 0.05 , the indicator cannot describe the construct. All the variable tested is in accordance with the required p value, this means all the indicators are declared valid and can form the constructs. The next analysis is the analysis of the Structural Equation Model (SEM) in the Full Model which is intended to test the models and hypotheses developed in this study. From the results of GOF testing it is evident that the model is fitted with the data. The next step is to measure the reliability of the construct variables. the results of the reliability calculation for each construct have a value above the cut-off value of 0.70 and for the variance extracted calculation shows that all constructs meet the cut-off requirements above 0.50. Thus the indicators used as the observed variable for the construct or latent variable are stated to be able to explain the construct or latent variable it forms. Therefore, data analysis can proceed to the next stage.

Furthermore, the next stage is hypothesis testing that conducted by analyzing the value of C.R (Critical Ratio) and the P-value then compared with the required statistical limit, which is above 1.96 for the CR value and below 0.05 for the P-value. If the results of the data show the value that meets these requirements, the proposed hypothesis can be accepted. The result below:

Tabel 2. Hypothesis Testing Result

No.	Hyphotesis	C.R Value	Explanation
1	Knowledge sharing behavior impact on co-creation behavior	22.986	Significant positive
2	Co-creation behavior impact on customer learning value	23.565	Significant positive
3	Co-creation behavior impact on social integrative value	22.520	Significant positive
4	Co-creation behavior impact on hedonic value	22.971	Significant positive
5	Knowledge sharing behavior impact on customer learning value	22.993	Significant positive
6	Knowledge sharing behavior impact on customer learning value	22.132	Significant positive
7	Knowledge sharing behavior impact on hedonic value	22.816	Significant positive

The research found that knowledge sharing behavior have positive significant impact to co-creation behavior. College students that have knowledge sharing habit they tend to do co-creation activities in social media. The study also found that knowledge sharing behavior positive significant impact to value co-creation, including customer learning value, social integrative value and hedonic value, respectively. The knowledge transfer in social media have a lot of form, which made the participant feel satisfied if they can share useful knowledge to other users. The co-creation activity that based on knowledge sharing rise values that useful for the participant. They can learn together (customer learning value), enhance their social relationship (social integrative value), and enjoyment (hedonic value). This research found a customers behavior in online community which can be utilize for better business and marketing strategy.

CONCLUSIONS

The rapid development of technology and globalization has led the world to Web 2.0, which made the numbers of social media users growth rapidly. People used social media for a lot of purpose start from communication, social networking information exchange, into knowledge sharing activities. Social media have features that facilitate their users to do knowledge sharing activities by creating content. Furthermore, by creating content users can also co-create with others. This co-creation activity give benefical value for them who participated in. Those value co-creation that emerged from that activity are customer learning value, social integrative value and hedonic value. Co-creation can emerged from both customers and also with brands. This behavior can be utilize by business. Knowledge sharing behavior can utilize by business by co-create with customers in creating content. If business can make their customers to do knowledge sharing and co-create with them, it can be new source of electronic word of mouth, and also a form of marketing strategy. Business can utilize user-generated content to make free advertisement of their new products, they also can used those user-generated content as insights for their produt developments, and others practical implications for the business development. The recommendation for further research is better to find the correlation of knowledge sharing behavior to value co-creation. The deeper research expected to give more benefical insight for business as different topic may have different behavior and different results.

REFERENCES

- Badan Pusat Statistik. (2018). *Kota Bandung Dalam Angka 2018*. Retrieved May 14, 2019, <https://bandungkota.bps.go.id/publication/2018/08/16/a2782ae62042b1aee91fb4bc/kota-bandung-dalam-angka-2018.html>
- Badan Pusat Statistik. (2018). *Statistik Pendidikan 2018*. Retrieved May 14, 2019, from <https://www.bps.go.id/publication/2018/12/06/a65b526c119ce8f799e5ea63/statistik-pendidikan-2018.html>.

- Chen, C., Du, R., Li, J., & Fan, W. (2017). *The impacts of knowledge sharing-based value co-creation on user continuance in online communities*. *Information Discovery and Delivery*, 45(4), 227-239.
- Chen, T., Yang, S. O., & Leo, C. (2017). *The beginning of value co-creation: Understanding dynamics, efforts and betterment*. *Journal of Service Theory and Practice*, 27(6), 1145-1166.
- Edelman. (2018). *Edelman Trust Barometer Global Report: Kepercayaan Publik Terhadap Media di 28 Negara*. Retrieved April 8, 2019, from <https://databoks.katadata.co.id/datapublish/2018/05/08/bagaimana-kepercayaan-publik-terhadap-media>
- France, C., Merrilees, B., & Miller, D. (2015). *Customer brand co-creation: A conceptual model*. *Marketing Intelligence & Planning*, 33(6), 848-864.
- IDN Research Institute. (2019). *Indonesia Millennial Report 2019*. Retrieved April 14, 2019, from <https://www.idntimes.com/indonesiamillennialreport2019>
- Kim, J., Lee, C., & Elias, T. (2015). *Factors affecting information sharing in social networking sites amongst university students*. *Online Information Review*, 39(3), 290-309.
- Levy, M. (2013). *Stairways to heaven: Implementing social media in organizations*. *Journal of Knowledge Management*, 17(5), 741-754.
- Liao, C., To, P., & Hsu, F. (2013). *Exploring knowledge sharing in virtual communities*. *Online Information Review*, 37(6), 891-909. doi:10.1108/oir-11-2012-0196
- López, R. A., Maya, S. R., & López, I. L. (2017). *Sharing co-creation experiences contributes to consumer satisfaction*. *Online Information Review*, 41(7), 969-984.
- Mladenovic, D. & Dolenc, S. (2016). *Theoretical overview of social media-value (co) creation bond*. *Economic and Social Development: Book of Proceedings*, 187.
- Parker, G. G., W., V. A., & Choudary, S. P. (2017). *Platform revolution: How networked markets are transforming the economy - and how to make them work for you*. New York: W. W. Norton & Company.
- Rathore, A. K., Ilavarasan, P. V., & Dwivedi, Y. K. (2016). *Social media content and product co-creation: An emerging paradigm*. *Journal of Enterprise Information Management*, 29(1), 7-18.
- We Are Social. (2019). *Digital 2019: Indonesia*. Retrieved April 8, 2019, from <https://wearesocial.com/global-digital-report-2019>