

E-MARKETPLACE ACCEPTANCE AND USE BY MILLENNIALS FOR BUSINESS START-UP

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Abstract-By the year 2025, Millennials are growing up to 75% of the global workforce, their entrepreneurial mindset will likely shape the workplace in the coming years (Sox et al., 2014). Millennials assess entrepreneurship as an appealing life path. As a digital generation, Millennials are as well as familiar with the internet based business platform namely E-Marketplace. E-Marketplace are growing gradually, becoming the prominent players in several industries due to the economic efficiency, decrease the margin between price and cost, and ease complicated business transaction (Feldman, 2000). It has created favorable business opportunities for Millennials who are interested to choose entrepreneurs as their career path. However, there is limited study which specifically investigating the intention to use the E-Marketplace for business start-up among Millennials. Therefore, the focus in this study is to examine factors that influence the acceptance and use of E-Marketplace for business start-up. The conclusion of this research is partially, performance expectancy, social influence and facilitating condition have significant effect on the behavioral intention to use E-Marketplace for business start-up. Meanwhile, effort expectancy is insignificantly affecting the behavioral intention to use E-Marketplace for business start-up. Furthermore, simultaneously performance expectancy, effort expectancy, social influence and facilitating condition have significant effect on the behavioral intention to use E-Marketplace for business start-up.

Keywords: Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Condition, E-Marketplace

I. INTRODUCTION

Millennials possess strong connection with internet characterized by the use and adaption of technology in their daily lives. This generation was born in emerging

world of technology and accustomed with all forms of information technology. In Indonesia, as refer to the survey by the Indonesian Internet Services Provider Association (APJII), internet users in Indonesia was 54.7% of total population, whereby the highest composition fall between age 19-34 years old (49.52%).

By the year 2025, Millennials are growing up to 75% of the global workforce, their entrepreneurial mindset will likely shape the workplace in the coming years (Sox et al., 2014). Millennials assess entrepreneurship as an appealing life path. As a digital generation, Millennials are as well as familiar with the internet based business platform namely Electronic Marketplace (E-Marketplace). E-Marketplace are growing gradually, becoming the prominent players in several industries due to the economic efficiency, decrease the margin between price and cost, and ease complicated business transaction (Feldman, 2000). It has created favorable business opportunities for Millennials who are interested to choose entrepreneurs as their career path.

However, there is limited study which specifically investigating the intention to use the E-Marketplace for business start-up among Millennials. Previous study focused on the behavioral intention to use internet marketing among entrepreneur (Tan et al., 2013) rather than the E-Marketplace for business start-up. Therefore, the focus in this study is to examine factors that influence the acceptance and use of E-Marketplace for business start-up.

II. LITERATURE REVIEW

A. *Unified Theory of Acceptance and Use of Technology (UTAUT)*

Venkatesh et al. (2003) proposed the UTAUT and has become a frequent model applied by scholar to investigate the intention and use behavior toward technology (Chua et al., 2018; Tan et al., 2012; Abd Latif et al., 2011). The technology adoption by UTAUT theory is originated from theory of Diffusion Of Innovation (DOI), Social Cognitive Theory (SCT),

Theory of Planned Behavior (TPB) and The Theory of Technology Acceptance Model (TAM). Those theories create four key constructs. The four constructs include performance expectancy, effort expectancy, social expectancy and facilitating condition.

B. Performance Expectancy

Davis et al. (1989) posited that performance expectancy as the degree to which an individual believes that using a system will help him or her attains a good job performance. In this research context, performance expectancy can be stated as the extent to which of belief toward the availability of the E-Marketplace will enable an individual to reach several benefits like the escalation of productivity, saving the time and efficiency due to the availability and customization of information (Srihivasan et al., 2002). The study of Tan et al. (2012) found that performance expectancy has significant effect on the intention to the use of internet marketing for both Malaysians and South Koreans. Therefore, the following hypothesis are proposed:

H₁ : Performance Expectancy has significant effect with the behavioral intention to use E-Marketplace for business start-up.

C. Effort Expectancy

Effort expectancy is the degree of ease associated with the use of a particular system (Venkatesh et al., 2003), known as an important factor in determining behavioral intention to use the technology (Park and Ohm, 2014). Venkatesh et al. (2003) stated that the length of experience in using the information system may affect the end-users' perceptions and adoption intentions toward the system (Abd Latief et al., 2011). Based research conducted by Tan et al. (2012), the effort expectancy affects on the intention to the use of internet marketing for South Koreans.

H₂ : Effort Expectancy has significant effect with the behavioral intention to use E-Marketplace for business start-up.

D. Social Influence

Chong (2013) posited that user's behavioral intention in the study of mobile commerce can be determined through social influence. Martin and Herero (2012) and Venkatesh (2012) proposed that social influence can be described as the degree to which individual become aware that important people surrounding, whether family or friends, have a belief that she or he should use new technology. According to Chua et al. (2018), social influence has the strongest effect to determine the behavioral intention and use behavior towards social networking apps.

H₃ : Social Influence has significant effect with the behavioral intention to use E-Marketplace for business start-up.

E. Facilitating Condition

Venkatesh et al. (2003) stated that facilitating condition can be referred as the degree to which a belief of individual that an organizational and technical infrastructure available in order to support the system. Facilitating condition embraces ease of access, searching and navigation (Siddiqui et al., 2003; Yang, 2010) and added by the appropriate guidance is available. Other important conditions such as prior knowledge, cost and other resources were linked to the behavioral intention (Ajzea, 1991; Taylor and Todd, 1995). Based on those reason, the following hypothesis is:

H₄ : Facilitating Condition has significant effect with the behavioral intention to use E-Marketplace for business start-up.

F. Behavioral Intention to Use E-Marketplace for Business Start-Up

E-Marketplace can be interpreted as virtual information mediator attached in business network and supported by telecommunications, designed to allow many buyers and supplier for the information exchange and transaction accomplishment (Zwass, 1999). Behavioral intention in this study is defined as the users' intention rather than the actual use of E-Marketplace. In fact, behavior intention is the intention to use E-Marketplace in the near future over the traditional business start-up. According to Saphero (1985); Krueger and Brazel (1994), an individual's desire to pursue a given behavior and represent an individual's commitment toward a specific behavior is a definition of intention. In this study, behavior intention refer as the degree to which Millennials plan to use E-Marketplace for business start-up.

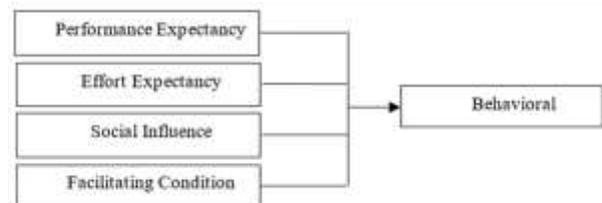


Fig 1 Research Framework

III.METHODS

The type of this research is a case study located in University of Sumatera Utara. The population in this research is 894 students from Faculty of Economics and Business and Faculty of Public Health batch 2017 in University of Sumatera Utara that had already received entrepreneurship courses. All of the university students

can be categorized as Millennials, born from 1980-2000. By using Slovin Method, found 276 Millennials as samples. Below is the calculation of proportionate sample in the population.

TABLE 1 SAMPLING PROPORTION

Faculty	Population	Sample Proportion
Economics and Business	598	$\frac{598}{894} \times 276 = 184$
Public Health	296	$\frac{296}{894} \times 276 = 92$
Total	894	276

Source: Processed Data (2019)

Then, simple random sampling performed for each stratum. This research used two types of data resources, which are: (1) Distribution of Questionnaires, and (2) Documentations Studies. Multiple linear regression analysis is used as data analysis technique to discover the influence of the independent variables, which are Performance Expectancy (X1), Effort Expectancy (X2), Social Influence (X3), and Facilitating Condition (X4) to the dependent variable that is Behavioral Intention to Use E-Marketplace for Business Start-Up (Y).

Definition of operational variables are Performance Expectancy is the belief that by using E-Marketplace will increase productivity, efficiency and time saving for business start-up. Effort Expectancy is the degree of ease of E-Marketplace usage for business start-up. Social Influence is the degree to which individual aware of others' belief to use E-Marketplace for business start-up. Facilitating Condition is the belief that organizational and technical structure of E-Marketplace available. Behavioral Intention is user's intention to use E-Marketplace for business start-up

TABLE 2 VALIDITY TEST

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Q1	87.03	126.930	.621	.945
Q2	87.13	129.154	.604	.946
Q3	87.20	128.166	.633	.945
Q4	87.27	127.651	.634	.945
Q5	87.17	126.902	.590	.946
Q6	87.27	124.271	.697	.944
Q7	87.40	124.110	.725	.944
Q8	87.37	122.723	.744	.943
Q9	87.40	123.283	.780	.943
Q10	87.43	123.564	.730	.944
Q11	87.67	124.575	.659	.945
Q12	87.93	125.789	.527	.947
Q13	87.40	128.041	.470	.947

Q14	87.63	122.516	.809	.943
Q15	87.97	124.585	.562	.946
Q16	87.83	120.075	.788	.943
Q17	87.67	118.713	.797	.943
Q18	88.10	127.541	.459	.947
Q19	87.83	125.592	.519	.947
Q20	87.40	126.110	.554	.946
Q21	87.40	125.007	.791	.943
Q22	87.57	119.978	.737	.944
Q23	87.93	126.064	.544	.946

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.947	.949	23

Source: Processed Data (2019)

In table 2, it can be seen all the statements are valid, due to Corrected Item-Total Correlation value on each statement is above 0.361, hence it can be concluded 23 (twenty three) statements in the questionnaire of this study are valid. It can be seen from the table 3 all statements in the questionnaire are reliable due to the Cronbach's Alpha value of 0.949 is higher than 0.80.

IV. RESULT AND DISCUSSION

The result demonstrates that the majority of Millennials do not have business experience and about 39.1% of them have business experience. The highest number of E-Marketplace use duration less than one year (30.1%), only 2.5% who have experience between 5.5 years until 6.5 years. The majority of E-Marketplace use for shopping is Shopee while Blibli.com is the least E-Marketplace use as for shopping among Millennials. Millennials choose Shopee as the most favorable E-Marketplace for them to sell their product compared to other E-Marketplaces.

TABLE 3 THE RESULT OF MULTIPLE LINEAR REGRESSION ANALYSIS

No	Variables	Coefficients	t-Values	Significant	Conclusion
1	Constant	1.048	0.769	0.442	
2	Performance Expectancy (PE)	0.169	2.864	0.005	H ₁ Supported
3	Effort Expectancy (EE)	-0.33	-0.623	0.534	H ₂ Not Supported
4	Social Influence (SI)	0.285	4.364	0.000	H ₃ Supported
5	Facilitating Condition (FC)	0.264	5.833	0.000	H ₄ Supported
6	R ² = 0.311				
7	(F-Statistic = 30.543)			0.000	

Source: Processed Data (2019)

It is found the Multiple Regression Analysis Model is:

$$Y = 1.048 + 169PE - 0.33EE + 0.285SI + 0.264FC + e$$

Table 5 shows the two predictor variables, partially Performance Expectancy (Sig. = 0.005 < 0.05), Social Influence (Sig. = 0.000 < 0.05) and Facilitating Condition (Sig. 0.000 < 0.05) are significantly affecting Behavior Intention to Use E-Marketplace for Business Start-Up. On the other hand, the remaining one variable, which is Effort Expectancy (Sig. = 0.534 > 0.05) is insignificantly contributing to Behavior Intention to Use E-Marketplace for Business Start-Up. The coefficient determination of this research is 0.311, which means that Performance Expectancy, Effort Expectancy, Social Influence and Facilitating Condition contributed 31.1% to explain Behavior Intention to Use E-Marketplace for Business Start-Up. While the remaining of 68.9% is explained by other variables.

Discussion

Partially, performance expectancy, social influence and facilitating condition have significant effect with the behavioral intention to use E-Marketplace for business start-up among university students. It supports the prior research (Tan et al., 2013) that the E-Marketplace will be useful for the future business start-up. The E-Marketplace will help Millennials to achieve the productivity, as well as the business performance. Moreover, this business platform will allow for the time saving and efficiency in business management. Hence, it is undoubtedly many students who are aware of these benefits of the E-Marketplace are interested to use E-Marketplace for their business start-up.

Result shows that effort expectancy is not significant influence on the intention to use E-Marketplace for business start-up. Effort expectancy can be defined as the individual experience towards the effortless level of a technology. If new technology demands high effort to learn and understand to use it, the users adoption intention of such technology would be lower (Curtis et al., 2010). The insignificant influence in this study may due to the unfamiliarity of E-Marketplace among Millennials. Millennials in Medan is at the beginner level and needs more effort to use E-Marketplace, as refers to the characteristics of respondents, the highest number of E-Marketplace use duration less than one year (30.1%), only 2.5% who have experience between 5.5 years until 6.5 years. Despite the insignificance of effort expectancy, simultaneously performance expectancy, effort expectancy, social influence and facilitating condition have significant effect on the behavioral intention to use E-Marketplace for business start-up.

Another important finding in this study is the social influence has a significant effect with the behavioral intention to use E-Marketplace for business start-up among Millennials. A possible explanation of this result that mostly young generation like Millennials have the tendency to be influenced by others. In addition to that, Indonesia has collectivist culture where the influence of society is very vital to effect the individual's behavior. Millennials tend to use the same technology with their group of friends, families and colleagues. This result coherent with study of Taylor et al. (2011); Chong et al. (2012); and Tang et al. (2013) which found that social influence plays a significant influence in adoption of Internet Marketing, Mobile Application and Mobile Commerce.

Facilitating condition is found significantly related with the behavioral intention to use E-Marketplace for business start-up among Millennials, which confirms the studies on the adoption of internet marketing by Tan et al. (2013). It implies the appropriate guidance is available, conditions such as prior knowledge, cost and other resources are favorable to support the use of E-Marketing for business start-up.

V.CONCLUSION

The conclusion of this research is performance expectancy, social influence and facilitating condition have significant effect with the behavioral intention to use E-Marketplace for business start-up. Meanwhile, effort expectancy is insignificantly affecting the behavioral intention to use E-Marketplace for business start-up. Furthermore, simultaneously performance expectancy, effort expectancy, social influence and facilitating condition have significant effect on the behavioral intention to use E-Marketplace for business start-up.

ACKNOWLEDGEMENT

The authors would like to express the gratitude to Universitas Sumatera Utara for the financial support for this research through TALENTA funding for research 2019. That support has given us a great opportunity to present this paper in the ICOI 2019 – Ulsan, South Korea. Moreover, we would like to gratefully acknowledge the contribution of research reviewers, Faculty of Economics and Business, and all the research team members for the completion of this paper.

REFERENCES

- [1] Abd Latif, A. R., Adnan, J., & Zamalia, M. (2011). Intention to Use Digital Library Based on Modified UTAUT Model: Perspective of Malaysian Postgraduate Students. *World Academy of Science, Engineering and Technology*, 116-122.

- [2] Ajze, I. (1991). The Theory of Planned Behavior, Organizational Behavior and Human Decision Processes. 50, 2, 179-211.
- [3] Chong, A. Y. L. (2013). Predicting M-Commerce Adoption Determinate A Neural Network Approach. *Expert Systems With Applications*, 40, 2, 523-530.
- [4] Chong, A. Y. L., Chan, F. T. S., & Ooi, K. B. (2012). Predicting Consumer Decisions to Adopt Mobile Commerce: Cross Country Empirical Examination Between China and Malaysia. *Decision Support Systems*, 53, 1, 34-43.
- [5] Chua, P. Y., Rezaei, S., Gu, M. L., Oh, Y. M., & Jambulingan, M. (2018). Elucidating Social Networking Apps Decisions: Performance Expectancy, Effort Expectancy and Social Influence. *Nankai Business Review International*, 9, 2, 118-142.
- [6] Curtis, L., Edwards, C., Fraser, K. L., Gudelsky, S., Holmquist, J., Thornton, K., & Sweetser, K. D. (2010). Adoption of Social Media for Public Relations by Nonprofit Organization. *Public Relations Review*, 36, 1, 90-92.
- [7] Davis, F. D., Bagozzi, R., & Warshaw, P. (1989). User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. *Management Science*, 35, 8, 982-1003.
- [8] Feldman, S. (2000). Electronic Marketplaces. *IEEE Internet Computing*, 4, 4, 93.
- [9] Krueger, N., & Brazel, D. V. (1994). Entrepreneurial Potential and Potential Entrepreneurs. *Entrepreneurship Theory and Practice Journal*, 18(3): 91-104.
- [10] Martin, H. S., & Herrero, A. (2012). Influence of The User's Psychological Factors on The Online Purchase Intention in Rural Tourism: Integrating Innovativeness to The UTAUT Framework. *Tourism Management*, 33, 2, 341-350.
- [11] Park, E., & Ohm, J. (2014). Factors Influencing Users' Employment of Mobile Map Services. *Telematics and Informatics*, 31, 2, 253-265.
- [12] Shapero, A. (1985). Why Entrepreneurship? A Worldwide Perspective. *Journal of Small Business Management*, 23, 000004, 1.
- [13] Siddiqui, N., O'Malley, A., McColl, J., & Britwistle, G. (2003). Retailer and Consumer Perceptions of Online Fashion Retailers Website Design Issues. *Journal of Fashion Marketing and Management*, 17, 1, 20-35.
- [14] Sox, C. B., Kline, S. F., & Crews, T. B. (2014). Identifying Best Practices, Opportunities and Barriers in Meeting Planning for Generation Y. *International Journal of Hospitality Management*, 36, 244-254.
- [15] Srihivasan, S. S., Anderson, R., & Ponnaveolu, K. (2002). Consumer Loyalty in E-Commerce An Exploration, If It Antecedents and Consequence. *Journal of Retailing*, 78, 1, 41-50.
- [16] Tan, G. W. H., Sim, J. J., Ooi, K. B., & Phusavat, K. (2012). Determinants of Mobile Learning Adoption: An Empirical Analysis. *Journal of Computer Information Systems*, 82-91.
- [17] Tan, K. S., Chong S. C. and Lin B. (2013). Intention to Use Internet Marketing: Comparative Study Between Malaysia and South Koreans. *Kybernetes*, 42, 6, 888-905.
- [18] Taylor, S., & Todd, P. (1995). Understanding Information Technology Usage: A Test of Competing Models. *Information Systems Research*, 6, 2, 144-176.
- [19] Taylor, D. G., Voelker, T. A., & Pentina, I. (2011). Mobile Application Adoption by Young Adults: A Social Network Perspective. *International Journal of Mobile Marketing*, 6, 2, 60-70.
- [20] Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User Acceptance of Information Technology: Toward A Unified View. *MIS Quarterly*, 27, 3, 425-478.
- [21] Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer Acceptance and Use of Information Technology: Extending The Unified Theory of Acceptance and Use of Technology. *MIS Quarterly*, 36, 1, 157-178.
- [22] Yang, K. (2010) Determinants of US Consumer Mobile Shopping Services Adoption: Implications for Designing Mobile Shopping Services. *Journal of Consumer Marketing*, 27, 3, 262-270.
- [23] Zwass, V. (1999). *Structure and Macro-Level Impacts of Electronic Commerce: From Technological Infrastructure in Emerging Information Technology Improving Decisions, Cooperation, and Infrastructure*. Thousand Oaks, CA: SAGE Publications, K. E. Kendall (Ed.).
- [24] <https://apjii.or.id/>