

# FOSTERING NASCENT ENTREPRENEUR: UNIFIED THEORY OF ACCEPTANCE AND USE OF TECHNOLOGY AND ENTREPRENEUR POTENTIAL MODEL WITHIN HIGHER STUDENT'S INTENTION

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**ABSTRACT:** *Technology is changing the way Millennia's live and work. Universities are under public pressure to work closer to the market forces, adjusted to the needs of industry, and even to be more entrepreneurial. University-linked startups can be the linkage between universities and industries. Fostering the new nascent entrepreneur at the university ecosystem could affect Indonesian economic and social development. This study will observe what we do know about the nascent entrepreneurs in university ecosystem and the linkage between technology adoption and entrepreneurship ecosystem in higher educational institutions. The revised Unified Acceptance and Use of Technology (UTAUT) theory is useful for explaining adoption behaviors related to the entrepreneur ecosystem in the university. The variables are adopted from the theoretical model that combines UTAUT and Entrepreneurial Potential Model (EPM). This study investigates several factors that affect the adoption of e-commerce technology within students based on samples of 202 higher students. The results indicate that the combined factors of "Perceived Desirability", "Perceived Feasibility", "Performance Expectancy", "Effort Expectancy" and "Facilitating Condition" on "Behavior Intention" as a representation of e-commerce technology acceptance intention in Indonesia have a different result compared to the previous empirical research because of situational factor. The path analysis on SPSS-21 is used to analyze the model.*

**Keywords:** Entrepreneurship, EPM, Millennial, Technology Adoption, UTAUT

## INTRODUCTION

Al Ghabid, Atikah, Sutopo, Nizam, & Muhamad [1] and Ganefri, Mardin, Rahmi, & Yulastri [2] proposed the production-based learning for the university for improving the entrepreneurial skills of the students since synergize the knowledge (cognitive) and psychomotor abilities. The commercialization strategy for successful university spin-off is a must in place for fostering the Social media in general, is awesome for millennial and small businesses. Having a visual product on Instagram, Facebook, Snap chat, Twitter or another channel will suit their business model best [3]. Currently, Indonesia has a productive age, 24.5% of population. Starting from 2020-2035, Indonesia will enjoy a rare era called demographic bonus, where the number of productive age is projected on the highest graph of the nation's history, which is 64% of Indonesia's population of 297 million people [4]. As we know, the young generation today is very close to the Internet, as seen from 64 million users in Indonesia, 56 percent of those who are 16-24 years old [5]. Not a few young people who use this business to sell online as in Instagram, Facebook, Snap chat, Twitter or another channel. However, most social-media platform users prefer to buy products from accounts that have many followers [6]. This has caused the new millennipreneurs struggle to enter and compete in the market. There are 84.2% of people in Indonesia who access social networking sites such as A social media like Instagram, Facebook, Snapchat, Twitter or another channel [5].

University is a willing and eager place for Indonesia' millennial to get the entrepreneur spirit and starting a successful start-ups company. Hence the university experience can be a part of their entrepreneur journey, especially for ambitious and smart millennial. Such millennial need the very best entrepreneurial education that displays the discipline and works ethics for their future success. Successful start-up comes with a team from diverse background, skills, knowledge, and experience.

Millennial also has a risk tolerance with more room to experiment with both, successes and failures [7].

Unfortunately, there are still a small number of start-up companies coming from Indonesian university, and nearly zero of them were spine-off. There's a huge barrier that hinders the ability of Indonesian' university provided the successful start-up. Some of the barriers were due to the lack of cross-campus collaboration, no proven experimental programs, no available workspace and no mentorships program [7]. In Individual perspective, low achievement of the entrepreneur courses at university is due to the lack of experience and lack of ability to generalize the courses. Even though they have it, their start-ups will fail at an early stage of development entrepreneurial incubator in university [1, 8]. On the contrary, Payumo, Arasu, Fauzi, Siregar, & Noviana [9] found that Bogor' university has successful in managing the intellectual property as an entrepreneurial research-based university. The strategies applied to knowledge transfer, innovation to empower regional communities and strategic partnerships with private .

Currently, Indonesian National Qualifications Framework (KKNI) is a guidance of the Indonesian higher education institution to set up the curriculum that contains the objectives of the study program, and subjects that are relevant to achieve the goals stated in KKNI [10]. The goal of KKNI was to meet-match between the curriculums to the needs of all stakeholders as the user of graduates of formal education. Some empirical evidence suggests that entrepreneurship courses, education, and workshops under KKNI programs can spur the ability of millennial to identify opportunities ("OIC"), which can play an important role in improving millennial skills [11-13].

Likewise, the ability to see business opportunities for millennial can be improved through the provision of training and entrepreneurship courses [14, 15]. When the Opportunity Identification Capabilities (OIC's) can be improved, there are always special factors inherent in each

individual subject to change during the course and the training, whereby there are certain millennial who are better able to identify business opportunities. Some researchers find that the entrepreneur's ability to identify business opportunities can be attributed to individual characters [16–18]: the capability to identify business opportunities should be developed over time, this may explain why employers are able to understand a different reality than any other individual. Millennial can link the information they get from the outside environment and how to identify the business opportunity.

Indonesian government have launched a program “1,000 Startup Movement” with the goal to grow 1,000 startups until 2020 with a value approximately \$10 billion US. The goal is to have 200 startups across 10 cities around Indonesia. This is quite ambitious, as only a few of e-commerce companies might be considered as unicorn status. Regardless, it is important for university back-initiated for having the e-commerce ecosystem. Some seed funding or cash flow for this start-up is vital, the start-ups could not benefit from the exposure of entrepreneurship courses otherwise the initiatives will remain just that. Some budget allocation coming from the collaboration of University-Industry-Government should be given to get the startups off the ground.

Despite the huge efforts, comparing with other developing countries, such as China & India, the ability for Indonesian millennial to set up new start-ups company and university to spin-off the tech business company is relatively low. Regardless of the growing importance of social media and adoption on new technology in our social life, many millennial remain deterred from jumping, adopting and investing in a new start-up business [19].

This paper has a collecting questionnaire & found that 86.8% of the 202 respondents said millennial were interested in becoming new millennipreneurs in the creative industry but they had little knowledge of it. To become new millennipreneurs, they must have an experience plus knowledge on shopping with the social-media platform. They believe that they are able to design their own product, market it and get the benefit on it. For new millennipreneurs, starting a business from zero-means learning from mistakes first-hand. They have had to deal with customers, employees and other organizations, but they've taken these as opportunities to improve their know-how.

This paper aims to explore the decision of whether millennial will adopt a specific technology which influences their business choice and university' life. This paper also explores the potential of new millennipreneurs in the field of creative industry and a specific technology's adoption. The technology' skill literacy was integrated into current curriculum and push a certain of technology adoption [20–22]. Therefore, we hope that this paper will provide a clear insight, why Indonesian millennial remains hesitant from jumping, adopting and investing in new start-up business?

## LITERATURE REVIEW

There is limited understanding behavior of new millennipreneurs that have effect on the entering entrepreneurship' decisions in the current literature [23]. Modern literature about entrepreneurship suggests that it requires diverse skills/characters to become an entrepreneur [24]. Entrepreneur classical theory starts on

entrepreneurship on personal character, especially in terms of ability to innovate [25–27] and bear the uncertainty and risk [26, 28–30]. Entrepreneurship is comprehensive and has several components of important characteristics and is still continuing to be studied to the extent in which they can be learned. On the other hand, the managerial ability is more likely to be learned. Guiso [31] also found some positive relationship that those employers who grow in the location where entrepreneurship develops, have significantly better managerial practices.

### Millennial Entrepreneurship

Millennial Entrepreneurs has their own orientation; entrepreneur orientation (EO) is the most important subject in the topic and entrepreneurial organization that has become the main focus of all the literature and research on entrepreneurship [32]. Entrepreneur orientation is defined as the readiness of entrepreneurs to find and accept new opportunities, take responsibility, and make changes. Others [33] defined the orientation of entrepreneurs in three dimensions, which are innovation, risk-taking and proactive. Orientation Behavior Entrepreneur or Entrepreneurial Attitude Orientation (“EAO”), which made by [34] are used to measure the EO [35].

This dimension based on the behavioral models, namely through the recognition, influence and cognitive awareness as the three main components. This dimension is taken from the four sub-dimensions of achievement, innovation, personal control and self-esteem that distinguishes the difference between the entrepreneur and not the entrepreneurs [34, 36, 37]. Consensus on the causes and consequences of EO, or the means of measurement to be its own dilemma and still have not reached an agreement [33]. Ferreira, Marques, Bento, Ferreira, & Jalali used the approach of cognitive mapping and the MCDA technique to examine EO [38].

Opportunity Identification Capabilities (“OIC”) can be learned through entrepreneurship training, education and workshop, which can play an important role in enhancing the ability of entrepreneurs [12, 13, 37]. Other researchers found that the ability of entrepreneurs to identify opportunities can be associated with individual characters [16, 17, 18]. Therefore, the character's ability to identify business opportunities developed from time to time, it may explain why entrepreneurs are able to understand the different realities of other individuals. Afuah (2009)[39] suggested that new millennipreneurs should entrant to pursue the new business in three ways: a revolutionary, resource building, or position-building new game. By pursuing these three strategies, new millennipreneurs can act as a first-mover entrepreneur or uses the radical resources or offers a different product that reduces the existing products become noncompetitive.

Many successful new millennipreneurs develop a small, medium enterprises (“SMEs”) based on ability to learn, adapt and adjust their expertise on changes in internal and external environments, that are changing very rapidly [40]. It will be important for new millennipreneurs to gain the competitive advantage for the company in determining the chosen market with the resources they currently own, mainly in an attempt to exploit opportunities in the future [23].

The new millennipreneurs requires management skills strategy; as the next goal is how new millennial- navigate the company to get sustainable growth [41]. A successful

new millennipreneurs of SMEs requires expertise to organize and manage the activities involving innovation activity and the change in the external environment [41]. Opportunity to see the future is a process that does not happen purely through formal business analysis, moreover through cognitive learning process through the strategic planning process [16]. The opportunity to see the future could be through inspiration and imagination where many others do not see. There is always a passion, vision, and pleasure, that the creation of opportunities cannot be described by lots of economic theory and other theories [16, 42].

Opportunities create enthusiasm, skills, resources, bureaucracy, commitment, and also the strategy that pursued by many new millennipreneurs around the world [37, 43–45]. The creation of a chance can be explained and cover almost by all disciplines; economics, psychology and cognitive science, strategic management, resources, as well as contingency theory that are combined together, aligned and formed and created something new in the form of an idea [44]. The important aspect for new millennipreneurs is the ability of a chance to see it first, act first before someone else does. This process occurs because of how the function implementing our senses work and how it perceives the outside world, and process all the information that has been obtained [37 44]. Something produced by intuition, vision, insight, discovery, or creation of an idea evolves into an opportunity.

The ability to see a chance is not owned by most people in the community. Many new millennipreneurs also make the mistake of looking at and execute a chance. In the SMEs sector, new millennipreneurs has the same values or norms in looking at an opportunity. Therefore, business opportunities are affected by the new millennipreneur's aspirations, their families, and motivation that cannot be easily separated from its business objectives [46]. So the hierarchy of looking at an opportunity to come is from personal, family, and business objectives.

#### **Adoption-Diffusion Theories as a lens for Entrepreneurial Potential Model.**

Adoption-diffusion theories referred in this paper is the entrepreneurial process involving the millennial' new idea over their study in university. The adoption process denotes the millennial's decision to assimilate the innovation knowledge into his or her life. Meanwhile, diffusion process describes the adoption process over time [22]. Hence, the adoption theory in this paper observes the millennial' choices to accept or reject those specific innovation they got during their university' life [47, 48]. In some empirical study, adoption process was extended to which the innovation is assimilated into the different research context. And, diffusion process explains how the innovation fits in and spreads over the people. Therefore the diffusion theory took the macro-level viewpoint how millennial took the diffusion process over time in made their adoption' decisions [22].

Rogers's IDT theory of innovation diffusion provides a foundational understanding of adoption-diffusion theory in this research. Rogers's IDT theory [47, 49, 50] has been used and becomes the fundamental theory in many researches across disciplines to predict the change of behavior and synthesis of the adoption-diffusion literature. Rogers's theory might the influential theory ever in adoption-diffusion theory specifically to direct

implementation of an innovation [48]. Meanwhile, The TAM and UTAUT were very hand-full and easy in the application of adoption-diffusion theory. The TAM has been used in many areas to explain the acceptance [51–53]. This paper uses some relatively new theories to predict millennial' behavior, technology's adoption in the entrepreneurship courses. The Technology Acceptance Model (TAM) and its successor, the Universal Technology Adoption and Use Theory (UTAUT) are used as a background specifically to observe e-commerce' adoption. Observing the variables for university's student as Indonesia' nascent entrepreneur to integrate personality traits, entrepreneurship courses, the information-technologies experiences evolved into entrepreneurial for the purpose of business start-up [54].

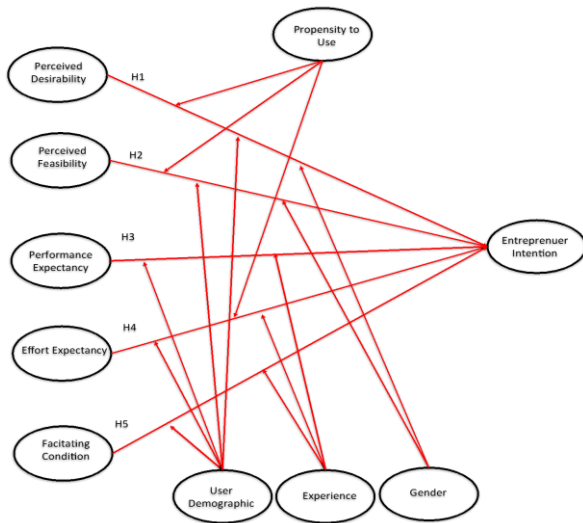
Venkatesh *et al.* developed the UTAUT, UTAUT is a new theory which combines many adoption-diffusion theories and intention-behavior theories. The UTAUT has moderate relationship variables consists of gender, age, experience and voluntariness of use. However, the UTAUT model has specific limitations, such as the complexity problem between intention and behavior (intention-behavior gaps) [21]. In the Research on the entrepreneurship intention, Moghavvemi *et al.* suggested to fulfill the gaps. Hence, it is necessary to have the Entrepreneurial Potential Model (EPM) for better improvement to capture the different factors of IT adoption behavior [17, 55].

The EPM theory is the combination from the two important antecedent models, the theory of planned behaviors (TPB) [56] and the entrepreneurial event model (EEM) [57, 58]. Guerrero, Rialp, & Urbano used this EPM theory with three construct variables; the perceived desirability (attitude and social norms), perceived feasibility (self-efficacy) and credibility [59]. Guerrero *et al* found desirable and feasible behaviors are necessary to be involved in the credibility as antecedents influence the intentions toward the behavior. Hence, under this EPM theory even though the millennial perceives the new university-linked startup creation as desirable, feasible, and credible, they have not confirmed their intention upon the new startup being set up [60].

#### **METHODS**

The research strategy used in this paper is quantitative studies, subsequently detailed information that provides sampling using primary data. The result will use multi layers data, in order to identify the phenomenon of change. The primary data is the questionnaire ("questionnaire"), and in this case, the research instruments were distributed directly to the higher students randomly. The questionnaires are the standard; the respondents are asked exactly the same questions in the same order and the results tend to consistent. It's easy and reliable.

In order to reduce questionnaires response collection time, an electronic method was used [61], where a set of questionnaires were uploaded into Google Forms, and then sent through emails, WhatsApp and Line mobile application. From 207 questionnaires sent out, 97.58% response yield was achieved, where 202 responses returned within one month. The respondents were considered as a group of millennials, the hyper-connected generation born from 1980 to 2000 and most of the respondents are highly educated and understand e-commerce platform. The hypotheses framework of this study is illustrated as below:

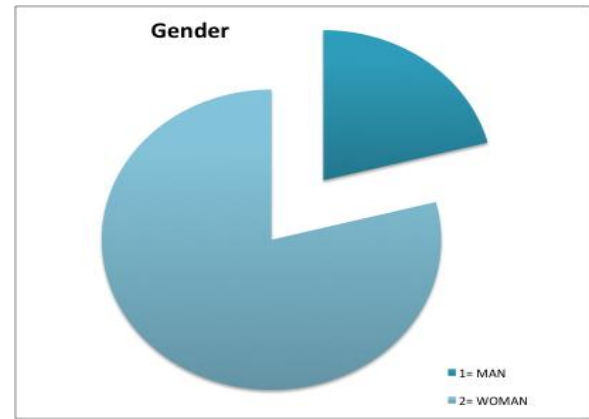


**Figure 01: Revised UTAUT Analysis for Entrepreneur Intention**

- H1: ‘Perceived Desirability’ and “‘Perceived Desirability’ moderate by ‘user-demographic’, ‘propensity to use’ and ‘gender’” are significantly positively related to Entrepreneur’s intention
- H2: ‘Perceived Feasibility’ and “‘Perceived Feasibility’ moderate by ‘user-demographic’, ‘propensity to use’ and ‘gender’” are significantly positively related to Entrepreneur’s intention
- H3: ‘Performance Expectancy’ and “‘Performance Expectancy’ moderate by ‘user-demographic’ and ‘experience’”, are significantly positively related to Entrepreneur’s intention
- H4: ‘Effort Expectancy’ and “‘Effort Expectancy’ moderate by ‘user-demographic’, ‘experience’ and ‘propensity to use’” are significantly positively related to Entrepreneur’s intention
- H5: ‘Facilitating Condition’ and “‘Facilitating Condition’ moderate by ‘user-demographic’ and ‘experience’”, are significantly positively related to Entrepreneur’s intention

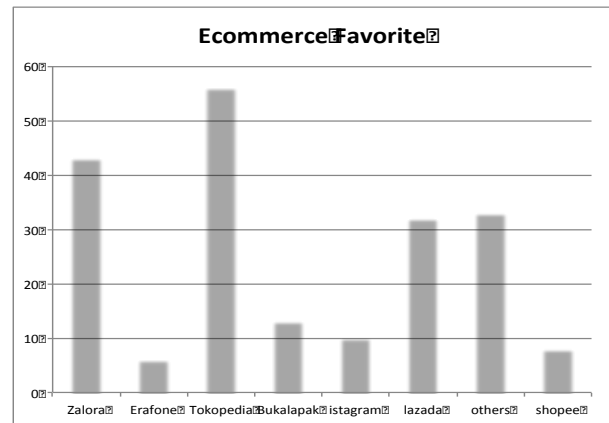
**RESULT AND DISCUSSION**

The primary data of this paper are achieved through the closed-ended questionnaire. The research populations are millennial. Research samples are determined based on purposive sampling. In total, 202 responses were collected. The respondents were also considered as a group of young people who attends the college, hence most of the respondents are highly educated and understand the e-commerce platform. From the figure 02, the majority respondents are women.



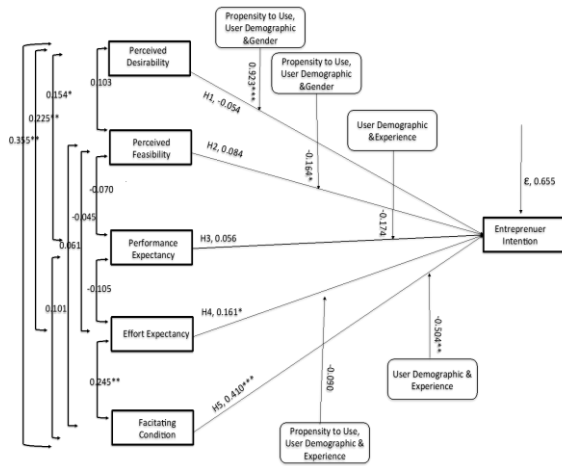
**Figure 02: Gender Respondents**

The locations of two research samples were taken in five places: Jakarta, Depok, Bekasi, Bogor and other. Those young millennial were asked which e-commerce platform is the most favorable for them. In the figure 03, we can see the favorite e-commerce that been selected.



**Figure 03: The favorite E-commerce Platform**

The empirical results presented below are based on multiple regression analyses. The overall regression demonstrates the direction of the impact of every research object. The regression coefficient that has a positive sign, which signifies that five variables with four moderate variables from “Perceived Desirability”, “Perceived Feasibility”, “Performance Expectancy”, “Effort Expectancy” and “Facilitating Condition” have a significant effect on “Behavior Intention” in as a representation of e-commerce technology acceptance intention. A high level of model fit (34.50 %) was observed with Adjusted R square and “Fvalue”. The correspondence has Adjusted R square and “Fvalue” value with “F0.00” or 0.00 significance level. The significance value less than “F0.01” or 1% demonstrates that these outcomes have the ability to show that those five variables with four moderate variables have the impact on “e-commerce technology acceptance”. Thus, the researcher nominates the 34.50% impact is in the significant level in the study.



**Figure 04: Path Analysis for Entrepreneur Intention Model, \*\*\*, \*\* and \* indicate significance at the 1, 5 and 10 percent respectively**

The ‘Perceived Desirability’ to the UTAUT model shows that there is a strong and significant relationship between the perceived desirability and the other dimensions of this construction in each of the mentioned models in all cases found in the previous empirical studies. The result found that the ‘Perceived Desirability’ and ‘‘Perceived Desirability’ moderate by ‘user-demographic’, ‘propensity to use’ and ‘gender’ has a significance level of 0.483 and 0.000 with a ‘t’ value of -0.702 and 5.487 respectively. This means only ‘‘Perceived Desirability’ moderate by ‘user-demographic’, ‘propensity to use’ and ‘gender’ has a significant effect on Entrepreneur’s intention. This study supports the empirical evidence the ‘Perceived Desirability’ has strong variables to entrepreneurs intention [17, 55, 58, 62]. Perceived desirability considered as the personal attractiveness of start doing the business, both intrapersonal and extra personal impacts [57, 63].

The Perceived behavioral reflects the ‘Perceived Feasibility’ of playing out the conduct and an identified with an impression of situational skill (self-efficacy). The ‘Perceived Feasibility’ is how much one feels fit for beginning a business. Unfortunately, we found that ‘Perceived Feasibility’ has no significance level impact to entrepreneur intention, meanwhile ‘‘Perceived Feasibility’ moderate by ‘user-demographic’, ‘propensity to use’ and ‘gender’ has a significance level of 0.250 with a ‘t’ value of 1.1155, it is less than 0.10 or 10%. This means that ‘‘Perceived Feasibility’ moderate by ‘user-demographic’, ‘propensity to use’, and ‘gender’ has moderate significant effect on Entrepreneur’s intention. ‘Perceived feasibility’ is the degree to which one feels personally capable of starting a business [17, 55, 57, 58, 62, 63].

The ‘Performance Expectancy’ in UTAUT theory is described as the extent to which a person believes that using a system will help him gain an advantage in working performance. In each individual model, ‘Performance Expectancy’ is the strongest predictor of intent and remains statistically significant. According to the UTAUT model, gender and age can affect the impact of performance expectations on behavioral intentions.

The level of significance of ‘Performance Expectancy’ and ‘‘Performance Expectancy’ moderate by ‘user-demographic’ and ‘experience’ has amounted to 1.921 and negative sign -1.094 with a ‘t’ value of 0.056 and

0.275 respectively. It has no significant impact for ‘Performance Expectancy’. It implies that ‘Performance Expectancy’ on e-commerce skillful has an irrelevance issue within Indonesian higher students due to the thought that e-commerce skill is not a unique skill. Fortunately, when it was moderated by ‘user-demographic’ and ‘experience’, the relationship between those variables looks reasonable impact to entrepreneur intention. Hence, this study does not support the empirical evidence that ‘Performance Expectancy’ has strong impact to entrepreneur intention done by Venkatesh et al. (2003). In this study ‘Performance expectancy’, is the degree to which student’s believe that e-commerce will assist them in performing job duties, this is influenced by perceived ease of use [48, 64, 65].

The ‘Effort Expectancy’ in UTAUT theory is the rate at which users perceive the system to be easy to use, and have the strongest and expected predictor impact on behavioral intentions, whether forced or compromised by gender, age, and experience. The ‘Effort Expectancy’ in UTAUT theory is fundamental aspects that attract people or organizations to adopt new technologies [66, 67].

On ‘Effort Expectancy’ and ‘‘Effort Expectancy’ moderate by ‘user-demographic’, ‘experience’ and ‘propensity to use’ have a significance level of 0.503 and 0.550 with a ‘t’ value of 0.671 and -0.599, it is more than 0.10 or 10%. This means that both of ‘Effort Expectancy’ and ‘‘Effort Expectancy’ moderate by ‘user-demographic’, ‘experience’ and ‘propensity to use’ have no significant impact on Entrepreneur’s intention. ‘Effort Expectancy’ is the degree to which student perceived the e-commerce technology to ease to use [48, 64, 65]. ‘Effort Expectancy’ was measured by the perception of ease by which students could learn, use, and become skillful at using e-commerce systems. It implies that e-commerce was absolutely easy to use and no unique pattern which can differentiate the perceive value on support the entrepreneur intention at all. Hence ‘Effort Expectancy’ variable has an irrelevance issue or not antecedent for Indonesian higher students. It does not support the evidence empirical research done by [48].

The ‘Facilitating Condition’ is characterized as how much a person trusts that the current hierarchical and specialized foundation will bolster the adoption or utilization of technology. The dimensional attributes of the facilitating conditions are required to give solid help and to the revised UTAUT show utilized as a part of this study.

The ‘Facilitating Condition’ and ‘‘Facilitating Condition’ moderate by ‘user-demographic’ and ‘experience’ have a significance level of 4.917 and -2.497 with a ‘t’ value of 0.000 and 0.013, it is less than 0.01 or 1.0% for ‘Facilitating Condition’ and less than 0.05 or 5.0% for ‘‘Facilitating Condition’ moderate by ‘user-demographic’ and ‘experience’’. This means that both of ‘Facilitating Condition’ and ‘‘Facilitating Condition’ moderate by ‘user-demographic’ and ‘experience’ have significant impact on Entrepreneur’s intention. ‘Facilitating Condition’ is the degree to which student believe his or her organization is supporting to change [48], [64]. It implies that ‘Facilitating Condition’ sign that the strong variables for entrepreneur intention. ‘Facilitating Condition’ was measured by the perception of accessing resources, knowledge and technical support needed to use e-commerce technology [48, 68].

Based on the results of the study, it can be summarized as follows: 1) 'Facilitating Condition' has the most significant effect on Entrepreneur's intention. Testing results of significance level are smaller than the standard significance, 2) The 'Performance Expectancy' and 'Effort Expectancy' has no significant effect on Entrepreneur's intention. Results of testing the significance level are greater than the standard significance, 3) 'Perceived Desirability' and 'Perceived Feasibility' have moderate significant effect on Entrepreneur's intention.

## CONCLUSION

This paper aims to integrate a unified theoretical model to investigate the environmental, technological and individual dimension of technology acceptance. This paper uses the Unified Theory of Acceptance and Usage of Technology (UTAUT) [48] and united it with the Entrepreneurial Potential Model (EPM) [17, 58] in order to explore the IT-adoption within students' behaviors [21] in Indonesia. This combined model of the UTAUT and EPM to explore and test the relevant to achieve the goals stated in KKNi entrepreneur program. By using the EPM, this model also investigated the social influence on the higher students' activities and verified it on the 'Perceived Desirability' and 'Perceived Feasibility'. The above results show some interesting findings. First, on overall regression model, the model confirms our initial argument that revised UTAUT has positively effect to entrepreneur intention. But unfortunately, on individual variable, only 'Facilitating Condition' has powerful impact on student intention (H5). On the other hand, both 'Performance Expectancy' (H3) and 'Effort Expectancy' (H4) has no significant at all. At the last 'Perceived Desirability' (H1) and 'Perceived Feasibility' (H2) have moderate impact level on the entrepreneur's intention.

The powerful valuable of 'Facilitating Condition' is understandable; since the higher students in Indonesia rely so much on their own institution or university especially on accessing the resources, knowledge and technical support for helping them on actualization the entrepreneur intention. This is inline with KKNi program; to convey the entrepreneurial knowledge in the syllabus through entrepreneurship education. The collaboration program with several industrial in university' curriculum will help raise the higher students' entrepreneurial awareness and mindset, willingness to innovate and create new activities. Hence the KKNi's goal was to meet-match, can be investigated using this model. Some similar program such as 'CoBLAS' probably need to be implemented, since the program is to attract students' attention and attract in deciding entrepreneurship as a career [14]. The future research could be a comparative and continuously assessment to test the effectiveness this revised UTAUT model over a period time. This simultaneous assessment includes some variables taking from several entrepreneur's programs needed to identify the characteristics, such as academic approach, objective, content, etc.

## REFERENCES

- [1] A. H. Al Ghabid, N. Atikah, W. Sutopo, M. Nizam, and I. I. Muhamad, "Commercialization Strategy Formulation for University Spin-Off: A Case Study," in *International Multi Conference of Engineers and Computer Scientists*, 2015, vol. II.
- [2] Ganefri, A. Mardin, U. Rahmi, and A. Yulastri, "Production Based Learning: As A Tool To Increase Entrepreneurial Skills Of Students," pp. 353–360, 2017.
- [3] T. Mccorkindale, M. W. Distaso, and H. F. Sisco, "How Millennials are Engaging and Building Relationships with Organizations on Facebook"," *J. Soc. Media Soc.*, vol. Vol. 2, no. March 2012, pp. 66–87, 2013.
- [4] P. McDonald, "The Demography of Indonesia in Comparative Perspective," *Bulletin of Indonesian Economic Studies*, vol. 50, no. 1. pp. 29–52, 2014.
- [5] UNFPA Indonesia, N. Goodwin, and I. Martam, "Indonesian Youth in the 21st Century." p. 6, 2014.
- [6] Y. Bai, Z. Yao, and Y. F. Dou, "Effect of social commerce factors on user purchase behavior: An empirical investigation from renren.com," *Int. J. Inf. Manage.*, vol. 35, no. 5, pp. 538–550, 2015.
- [7] wired.com, "Why the university is the ideal startup platform," <https://www.wired.com/insights/2014/02/university-ideal-startup-platform/>, 2014. [Online]. Available: <http://www.wired.com/2014/02/university-ideal-startup-platform/>.
- [8] C. Kusuma, W. Sutopo, Yuniaristanto, S. Hadiyono, and M. Nizam, "Incubation Scheme of the University Spin Off to Commercialize the Invention in Sebelas Maret University," in *The International Multi Conference of Engineera and Computer Scientists*, 2015, vol. II.
- [9] J. G. Payumo, P. Arasu, A. M. Fauzi, I. Z. Siregar, and D. Noviana, "An entrepreneurial, research-based university model focused on intellectual property management for economic development in emerging economies: The case of Bogor Agricultural University, Indonesia," *World Pat. Inf.*, vol. 36, pp. 22–31, 2014.
- [10] A. Maksum, "Kurikulum dan Pembelajaran di Perguruan Tinggi: Menuju Pendidikan yang Memberdayakan," *Semin. Nas. Has. Penelit. Pendidik. dan pembelajaran*, 25-26 April 2015, 2015.
- [11] M. Wright and K. Fu, "University Spin-outs: What do we know and what are the policy implications? Evidence from the UK," *J. Innov. Manag.*, vol. 3, no. 4, pp. 5–15, 2015.
- [12] D. R. DeTienne and G. N. Chandler, "Opportunity Identification and Its Role in the Entrepreneurial Classroom: A Pedagogical Approach and Empirical Test.," *Acad. Manag. Learn. Educ.*, vol. 3, no. 3, pp. 242–257, 2004.
- [13] J. O. Fiet, "A prescriptive analysis of search and discovery," *J. Manag. Stud.*, vol. 44, no. 4, pp. 592–611, 2007.
- [14] M. Mansor and N. Othman, "CoBLAS: Inculcating Entrepreneurial Culture among Higher Education Institutions' Students," *Int. J. Soc. Sci. Humanit.*, vol. 1, no. 1, pp. 86–91, 2011.
- [15] J.-A. I. F. (JAIF), "Methodology of Training Programs (COBLAS)," <http://asnep.asia/coblas/>, 2017. .
- [16] R. A. Baron, "Opportunity recognition: A Cognitive Perspective.," in *Academy of Management*, 2004, pp. A1–A6.
- [17] N. F. Krueger Jr., M. D. Reilly, and A. L. Carsrud,

- “Competing Models of Entrepreneurial intentions,” *J. Bus. Ventur.*, vol. 15, no. 5, pp. 411–432, 2000.
- [18] C. M. Gaglio and J. A. Katz, “The Psychological Basis of Opportunity Identification: Entrepreneurial Alertness. Small Business Economics,” *CEUR Workshop Proc.*, vol. 1225, no. February, pp. 41–42, 2001.
- [19] techinasia.com, “Indonesians are founding fewer startups now than five years ago,” <https://www.techinasia.com/indonesia-where-are-the-startups>, 2017. .
- [20] A. E. Barron, K. Kemker, C. Harmes, and K. Kalaydjian, “Large-Scale Research Study on Technology in K-12 Schools: Technology Integration as It Relates to the National Technology Standards,” *J. Res. Technol. Educ.*, vol. 35, no. 4, pp. 489–507, 2003.
- [21] S. Moghavvemi, N. A. M. Salleh, and M. Abessi, “Determinants of IT-Related Innovation Acceptance and Use Behavior: Theoretical Integration of Unified Theory of Acceptance and Use of Technology and Entrepreneurial Potential Model,” *Soc. Technol.*, vol. 3, no. 2, pp. 243–260, 2013.
- [22] E. T. Straub, “Understanding Technology Adoption: Theory and Future Directions for Informal Learning,” *Rev. Educ. Res.*, vol. 79, no. 2, pp. 625–649, 2009.
- [23] R. Henderson and M. Robertson, “Who wants to be an entrepreneur? Young adult attitudes to entrepreneurship as a career,” *Career Dev. Int.*, vol. 6, no. 6, pp. 279–287, 2000.
- [24] E. P. Lazear, “Entrepreneurship,” *J. Labor Econ.*, vol. 23, no. 4, pp. 649–680, 2005.
- [25] J. A. Schumpeter, “The Theory of Economic Development: An Inquiry into Profitd, Capital, Credit, Interest and the Business Cycle, translated from the German by Redvers Opie News Brunswick (U.S.A) and London (U.K.): Transaction Publishers.,” *J. Comp. Res. Anthropol. Sociol.*, 1934.
- [26] S. R. Á. C. Domingo Ribeiro, “Entrepreneurship : Concepts , Theory and Perspective.,” *Entrepreneur*, vol. 21, no. 4, pp. 11–21, 2005.
- [27] T. Tiago, S. Faria, J. P. Couto, and F. Tiago, “Fostering Innovation by Promoting Entrepreneurship: From Education to Intention,” *Procedia - Soc. Behav. Sci.*, vol. 175, pp. 154–161, 2015.
- [28] M. A. Crumpton, “Innovation and Entrepreneurship,” *Manag. Libr. Financ.*, vol. 25, no. 3, pp. 98–101, 2012.
- [29] R. Cantillon, *An Essay on Economic Theory*. 1755.
- [30] F. H. Knight, “Risk, uncertainty and profit,” p. 381, 2002.
- [31] L. Guiso, “Is entrepreneurship contagious?,” pp. 1–10, 2016.
- [32] J. G. Covin and G. T. Lumpkin, “Entrepreneurial orientation theory and research: Reflections on a needed construct,” *Entrep. Theory Pract.*, vol. 35, no. 5, pp. 855–872, 2011.
- [33] D. Miller, “Miller (1983) revisited: A reflection on EO research and some suggestions for the future,” *Entrep. Theory Pract.*, vol. 35, no. 5, pp. 873–894, 2011.
- [34] P. B. Robinson, D. V Stimpson, J. C. Huefner, and H. K. Hunt, “An Attitude Approach to the Prediction of Entrepreneurship,” *Entrep. Theory Pract.*, vol. 15, no. 4, pp. 13–31, 1991.
- [35] M. noor M. Shariff and M. B. Saud, “An Attitude Approach to the Prediction of Entrepreneurship on Students at Institution of Higher Learning in Malaysia,” *Int. J. Bus. Manag.*, vol. 4, no. 4, pp. 129–135, 2009.
- [36] J. M. Veciana, “Entrepreneurship as a Scientific Research Programme,” vol. 8, no. 3, pp. 23–71, 2007.
- [37] I. Nasip and E. Sudarmaji, “Model Bisnis Kanvas: Alat Untuk Mengidentifikasi Peluang Bisnis Baru Bagi Pengusaha UKM Indonesia,” in *1st National Conference on Business and Entrepreneurship*, 2017, no. May.
- [38] F. A. F. Ferreira, C. S. E. Marques, P. Bento, J. J. M. Ferreira, and M. S. Jalali, “Operationalizing and measuring individual entrepreneurial orientation using cognitive mapping and MCDA techniques,” *J. Bus. Res.*, vol. 68, no. 12, pp. 2691–2702, 2015.
- [39] A. Afuah, *Strategic Innovation: New Game Strategies for Competitive Advantage*. 2009.
- [40] M. A. Islam, M. A. Khan, A. Z. M. O. Obaidullah, and M. S. Alam, “Effect of Entrepreneur and Firm Characteristics on the Business Success of Small and Medium Enterprises in Bangladesh.,” *Int. J. Bus. Manag.*, vol. 6, no. 3, pp. 289 – 299, 2011.
- [41] L. Farrell and A. C. Hurt, “Training the Millennial Generation: Implications for Organizational Climate,” *E J. Organ. Learn. Leadersh.*, vol. 12, no. 1, pp. 47–60, 2014.
- [42] C. A. Muñoz, S. Mosey, and M. Binks, “Developing Opportunity-Identification Capabilities in the Classroom: Visual Evidence for Changing Mental Frames,” *Acad. Manag. Learn. Educ.*, vol. 10, no. 2, pp. 277–295, 2011.
- [43] A. M. Classman, R. W. Moore, G. L. Rossy, K. Neupert, N. K. Napier, D. E. Jones, and M. Harvey, “Academic Entrepreneurship: Views on Balancing the Acropolis and the Agora,” *J. Manag. Inq.*, vol. 12, no. 4, pp. 353–374, 2003.
- [44] S. Hagen, “From tech transfer to knowledge exchange: European universities in the marketplace,” pp. 103–117, 2008.
- [45] E. Sudarmaji, “Employing Open Innovation Where SMEs Need It Most: The Indonesian Perspective,” in *4th Gadjah Mada International Conference on Economics And Business 2016*, 2016, pp. 696–709.
- [46] A. Basu, “Entrepreneurial aspirations among family business owners,” *Int. J. Entrep. Behav. Res.*, vol. 10, no. 1/2, pp. 12–33, 2004.
- [47] E. M. Rogers, *Diffusion of Innovation*. 2003.
- [48] V. Venkatesh, M. G. Morris, G. B. Davis, and F. D. Davis, “User Acceptance of Information Technology: Toward a Unified View,” *Manag. Inf. Syst. Res. Cent.*, vol. 27, no. 3, pp. 1689–1699, 2003.
- [49] E. M. Rogers, “A prospective and Retrospective Look at The Diffusion Model,” *J. Health Commun.*, vol. 9, no. November, pp. 13–19, 2004.
- [50] E. M. Rogers, U. E. Medina, M. A. Rivera, and C. J. Wiley, “Complex Adaptive Systems and The Diffusion of Innovations,” *Innov. J.*, vol. 10, no. 3, pp. 1–26, 2005.
- [51] V. Chooprayoon, C. C. Fung, and A. A. Depickere, “TECTAM, a Modified Technology Acceptance

- Model to Assess E-Commerce Technologies Adoption by Thai SME,” *IEEE Xplore*, 2007.
- [52] H. O. Awa, O. U. Ojiabo, and B. C. Emecheta, “Integrating TAM, TPB and TOE frameworks and expanding their characteristic constructs for e-commerce adoption by SMEs,” *J. Sci. Technol. Policy Manag.*, vol. 6, no. 1, pp. 76–94, 2015.
- [53] P. A. Pavlou, “Consumer Acceptance of Electronic Commerce: Integrating Trust and Risk with the Technology Acceptance Model,” *Int. J. Electr. Commer.*, vol. 7, no. 3, pp. 69–103, 2003.
- [54] T. Wiradinata, “Nascent Entrepreneurs in E-Marketplace: the Effect of Founders’ Self-Efficacy and Personality,” *Int. J. Electron. Bus.*, vol. 13, no. 2/3, pp. 163–182, 2017.
- [55] N. F. Krueger Jr. and A. L. Carsrud, “Entrepreneurial intentions: Applying the theory of planned behaviour,” *Entrep. Reg. Dev.*, vol. 5, pp. 315–330, 1993.
- [56] I. Ajzen, “The Theory of Planned Behavior,” *Organ. Behav. Hum. Decis. Process.*, vol. 50, no. 2, pp. 179–211, 1991.
- [57] J. P. Ullhøi, “The social dimensions of entrepreneurship,” *Technovation*, vol. 25, no. 8, pp. 939–946, 2005.
- [58] N. F. Krueger Jr. and D. V. Brazeal, “Entrepreneurial Potential and Potential Entrepreneurs,” *Entrep. Theory Pract.*, pp. 91–104, 1994.
- [59] M. Guerrero, J. Rialp, and D. Urbano, “The impact of desirability and feasibility on entrepreneurial intentions: A structural equation model,” *Int. Entrep. Manag. J.*, vol. 4, no. 1, pp. 35–50, 2008.
- [60] A. C. Martínez, J. Levie, D. J. Kelley, R. J. Saemundsson, and T. Schott, “Global entrepreneurship monitor special report: A Global Perspective on Entrepreneurship Education and Training.” 2010.
- [61] Y. Baruch and B. C. Holtom, “Survey response rate levels and trends in organizational research,” *Hum. Relations*, vol. 61, no. 8, pp. 1139–1160, 2008.
- [62] N. E. Peterman and J. Kennedy, “Enterprise Education: Influencing Students’ Perceptions of Entrepreneurship,” *Entrep. Theory Pract.*, vol. 28, no. 2, pp. 129–144, 2003.
- [63] A. N. Licht and J. I. Siegel, “The Social Dimensions of Entrepreneurship.” 2006.
- [64] F. D. Davis, “Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology,” *Manag. Inf. Syst. Res. Cent.*, vol. 13, no. 3, pp. 319–340, 1989.
- [65] V. Venkatesh and H. Bala, “Technology Acceptance Model 3 and a Research Agenda on Interventions,” *Decis. Sci.*, vol. 39, no. 2, pp. 273–315, 2008.
- [66] S. S. Al-Gahtani, G. S. Hubona, and J. Wang, “Information technology (IT) in Saudi Arabia: Culture and the acceptance and use of IT,” *Inf. Manag.*, vol. 44, no. 8, pp. 681–691, 2007.
- [67] N. Nistor, M. Wagner, E. Istvanffy, and M. Dragota, “The Unified Theory of Acceptance and Use of Technology: verifying the model from a European perspective,” *Int. J. Knowl. Learn.*, vol. 6, no. 2/3, pp. 185–199, 2010.
- [68] S. Y. Hung, C. M. Chang, and T. J. Yu, “Determinants of user acceptance of the e-Government services: The case of online tax filing and payment system,” *Gov. Inf. Q.*, vol. 23, no. 1, pp. 97–122, 2006.