Factors Affecting The Intentions of Students to be Entrepreneurs
Based on Theory of Planned Behaviour (TPB) (Study at Telcom University 2012 and 2013)

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Abstract. Entrepreneurship at Telkom University is intended as a support for entrepreneurial spirit of the graduates. The support is given by debrief each department in Telkom University an Entrepreneurship subject. The purpose of this study is to replicate the Theory of Planned Behavior model towards student’s intention on Telkom University students through the Theory of Planned Behavior approach to 1) see how attitudes, subjective norms, and behavior control of the students after attending an entrepreneurship class; 2) know how the entrepreneurship intention of the students after attending an entrepreneurship class; 3) measure how much is attitudes, subjective norms, and behavior control can influence student’s entrepreneurship intentions after attending an entrepreneurship class. The population of this study is the students of Faculty of Business and Economics (FEB), Faculty of Business and Communications (FKB), Faculty of Creative Industry (FKI), Faculty of Applied Science (FIT), and Faculty of Industrial Engineering (FRI) class of 2012-2013 which is already took an entrepreneurship class. The sample size of this study is 344. This research is using quantitative study with Path Analysis method using SPSS 22.0 for windows. This study used a significance level of 5% and hypothesis testing performed simultaneously (entirely) and partially (individual). The result of the simultaneously test, the value Fvalue> Ftable so that H0 is refused and H1 is accepted, meaning attitudes, subjective norms and behavioral control significantly influenced student interest in entrepreneurship. Judging from the influence of simultaneous variables, students interest in entrepreneurship could be explained by 70.2% by attitudes, subjective norms and behavioral control, while the remaining percentage of 29.8% is influenced by other factors were not examined in this study. The test results showed from partial hypothesis t showed that value of tvalue of attitudes 8.704>(1.960) so that H0 is refused and H1 is accepted, meaning that attitude significantly influenced student interest in entrepreneurship. The value of tvalue subjective norms is (4.872)>(1.960) so that H0 is refused and H1 is accepted, meaning subjective norms significantly influenced student interest in entrepreneurship. Behavioral control had tvalue (6.071)>(1.960) so that H0 is refused and H1 is accepted, meaning that behavioral control were significantly influenced student interest in entrepreneurship.

Keywords. Theory of Planned Behavior; Attitudes; Subjective Norms; Behavior Control; Path Analysis.

I. INTRODUCTION

As quoted in the website of the University of Telkom, Telkom Institute of Technology (IT Telkom), Telkom Institute of Management (IM Telkom), Telkom College of Fine Arts and Design (STISI Telkom) and Telkom Polytechnic Institute, their managements used to run independently. Under the association of Telkom Education Foundation (YPT), the four had the same goal namely to be recognized as International Universities who excel and become the agents of change in the formation of intelligent and competitive beings, and contribute in the formation of a prosperous society.

To achieve the target of becoming a World Class University (WCU) in 2017, the alteration of the name, from Telkom School of Technology (STT Telkom) to Telkom Institute of Technology (IT Telkom) in 2007 marked the start of the long term goal. The alteration was officiated by the Decree of the Minister of Education No. 235/D/O/2007 on November 30th, 2007. After the approval, the official new logo of IT Telkom was announced, followed with the placement of the first cornerstones of the IT Telkom Learning Center, Laboratory, and Polytechnic buildings in Jl. Telekomunikasi Terusan Buah Batu, Kabupaten Bandung, on
Saturday, February 23rd, 2008. The University of Telkom (or Tel-U) is the incorporation of several faculties under the association of Telkom Education Foundation (YPT), which are the Faculty of Technology of Telkom (IT Telkom), the Faculty of Economic and Business and the Faculty of Communication and Business (IM Telkom), and the Faculty of Applied Science (Poltek Telkom) and the Faculty of Creative Industry (STISI Telkom).

The University of Telkom focuses on the field of studies of “Information and Communications Technologies, Management and Creative Industries” in response to the demands of the rapid industrial development of Information and Communication Technology (ICT). The University of Telkom has planned to become internationally recognized universities that excel in the field of Information and Communication in 2017, and to become the agents of change in the formation of intelligent and competitive beings.

The number of entrepreneurs in Indonesia has increased from 2012 to 2015 (Indonesia Statistics Center). However, Indonesia still requires half of its population to be involved in entrepreneurship (Perwitasari, 2012). The will to become an entrepreneur has proven to be the best predictor for entrepreneurial behavior (Indriantoro and Supomo, 2002). A person’s will toward a particular behavior is influenced by three variables: attitude, subjective norm, and perceived behavioral control (Icek Ajzen, 1991). The effect of entrepreneurship education has been considered as one of the important factors to grow and develop entrepreneurial passion, spirit and behavior among young people (Kourilsky and Walstad, 1998).

The University of Telkom aspires to implement entrepreneurship in their study programs, aiming to encourage the spirit of entrepreneurship for the graduates. For starter, some of the departments have already been given the introductory course of entrepreneurship. Not only does it provide the students the lecture on the subject, but also the practice of entrepreneurship.

Considering the increasing number of Indonesian entrepreneurs in the last four years, and the fact that the University of Telkom has prepared the education and the practices of entrepreneurship for the graduates, the writer would like to see if there is any relation between the education of entrepreneurship and the will to become an entrepreneur. The writer is going to study the entrepreneurial intention of the students of the University of Telkom, in particular.

The objectives of the study is in line with the aforementioned background and research questions: (1) To measure the attitude, subjective norm, and perceived behavioral control of the students after taking the course of entrepreneurship, (2) to measure the effect of the course of entrepreneurship in encouraging the students’ intention to become an entrepreneur, and (3) To measure the effect of attitude, subjective norm, and perceived behavioral control of the students toward entrepreneurship after taking the course.

II. THEORETICAL FRAMEWORK

A. Entrepreneurship

The word “entrepreneur” is originated from French; “entre” means “between” and “prendre” means “take”. These words were initially used to describe people who dared to take risks and to start something new (Wijatno, 2009:2). According to Alma (2009:19) the term wirausaha is originated from “entrepreneur” (French) which was translated into English by the meaning of “between taker” or “go-between”. There are some definitions of entrepreneurship, one of them is “entrepreneurship is the ability to be creative and innovative, used as the basis, tips, and resources to find opportunities to success” (Suryana, 2006:2).
B. Process of Entrepreneurship

Entrepreneurship begins with innovation driven by personal, environmental and sociological factors. Pioneering of entrepreneurship is driven by three factors, including:

a. Personal factors.
b. Related environmental factors.
c. Sociological factors.

C. Entrepreneurship Education

Entrepreneurship education began to develop around 60 years ago in the United States. Katz study conducted in 2003 showed that the first entrepreneurship courses were given at Harvard Business School in 1947.

D. The Theory of Planned Behavior (TPB)

This theory was originally named the Theory of Reasoned Action (TRA), which was developed in 1967, which was continually revised and expanded by Icek Ajzen and Martin Fishbein. Beginning in 1980, the theory is used to study human behavior and to develop more effective interventions. Theory of Reasoned Action, is a manner determined by the intention to behave, and intention to behave is influenced by two factors, one is personal and the other is the attitude reflecting the influence of social, commonly called as the subjective norm. The Theory of Planned Behavior (TPB) provides a framework for studying attitudes toward the behavior. Ajzen (2005) explains that one's intention to conduct, in addition to be affected by the attitude toward certain behavior and subjective norms, is also influenced by the perceived behavioral control variable. Intention is a function of three basic determinations, which are personal, social and control.

![Conceptual Model](image)

According to Cooper and Schindler (2006: 35), to reduce bias in the collection of the questionnaire, because respondents tend to choose a neutral alternative, a writer needs to use an unbalanced rating scale. The scale is from 1 to 4.

III. RESEARCH METHOD

A. Classical Assumption Test

According to Wijaya (2012: 125), there are several kinds of classical assumption including multicolinearity, autocorrelation, heterokedasticity and normality. In this study the writer did not use autocorrelation test for autocorrelation test is only performed on the time
series data and does not need to be done on questionnaire data where the measurement of all variables is simultaneously carried out at the same time.

B. Double Linear Regression Analysis

Regression analysis is the one that measures the effect of an independent variable on a dependent variable. Double Regression Analysis is carried out to find out the attitude (x1), subjective norms (X2), control behavior (X3) toward the entrepreneurial intention (Y) of the students of the University of Telkom. Therefore, the writer opted to use Double Regression Analysis with the following equation:

\[ Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e \]  

(1)

C. Hypothesis Test

Determination Coefficient

According to Purwanto and Sulistyastuti (2011:195) determination coefficient which is often symbolized by R2, in principle measures the ability of a model to explain the variance of a dependent variable.

\[ KD = R^2 \times 100\% \]

Simultaneous Determination Coefficient

According to Riduwan (2010:145), to test the research hypotheses simultaneously:

1. If \( F_{calculated} > F_{table} \), then \( H_0 \) is rejected
2. If \( F_{calculated} \leq F_{table} \), then \( H_1 \) is accepted

Partial Determination Coefficient

Test for statistic value of \( t \) is a significance test of individual parameter.

\[ t = \frac{r \sqrt{n - 2}}{\sqrt{1 - r^2}} \]

1. If \( t_{table} \leq t_{calculated} \leq t_{table} \), then \( H_0 \) is accepted or \( H_1 \) is rejected.
2. If \( t_{calculated} > t_{table} \) or \( t_{calculated} < -t_{table} \), then \( H_0 \) is rejected or \( H_1 \) is accepted.

D. Operational Variable

Table 1. Operational Variable

<table>
<thead>
<tr>
<th>Variable</th>
<th>Variable Definition</th>
<th>Indicators</th>
<th>Scale</th>
<th>No Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Intentions (Y)</td>
<td>Entrepreneurial Trait</td>
<td>Confidence</td>
<td>Interval</td>
<td>1,3,5,15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Task-and-result oriented</td>
<td>Interval</td>
<td>4,7,9,12,14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Risk and challenge taking</td>
<td>Interval</td>
<td>10,11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Leadership</td>
<td>Interval</td>
<td>8,16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Innovative and creative originality</td>
<td>Interval</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Future oriented</td>
<td>Interval</td>
<td>2,6</td>
</tr>
<tr>
<td>Attitude (X1)</td>
<td>Academic supports</td>
<td>Taking entrepreneurship course brings success</td>
<td>Interval</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Taking entrepreneurship course helps to</td>
<td>Interval</td>
<td>18</td>
</tr>
<tr>
<td>Variable</td>
<td>Variable Definition</td>
<td>Indicators</td>
<td>Scale</td>
<td>No Item</td>
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<td></td>
<td></td>
<td>understand the practice</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interested in business opportunity</td>
<td>Interval</td>
<td>22.25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Creatively and innovatively thinking</td>
<td>Interval</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Positive perspective of entrepreneurship</td>
<td>Interval</td>
<td>20,21,24</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sense of leadership and responsibility</td>
<td>Interval</td>
<td>27,28</td>
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<tr>
<td></td>
<td></td>
<td>Risks and culture</td>
<td>Interval</td>
<td>23</td>
</tr>
<tr>
<td>Behavior confidence</td>
<td></td>
<td>Parents let the children build their own business</td>
<td>Interval</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parents let the children become employees</td>
<td>Interval</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parents ask the children to handle family business</td>
<td>Interval</td>
<td>31</td>
</tr>
<tr>
<td>Subjective norm (X2)</td>
<td>Normative confidence</td>
<td>Friends’ support to start a business</td>
<td>Interval</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Believe that the main family needs the students to work on their own</td>
<td>Interval</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interested to start a business</td>
<td>Interval</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Friends agree to start a business</td>
<td>Interval</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Culture in the country is beneficial for a business</td>
<td>Interval</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Friends appreciate entrepreneurial activities and other career paths</td>
<td>Interval</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In my country, entrepreneurship is valued although it is risky</td>
<td>Interval</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The role of entrepreneurs in economic development</td>
<td>Interval</td>
<td>39</td>
</tr>
<tr>
<td>Control Behavior (X3)</td>
<td>Individual perception</td>
<td>Starting a business is an opportunity to succeed</td>
<td>Interval</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ready to do what it takes to be an entrepreneur</td>
<td>Interval</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Confident about the skills they have</td>
<td>Interval</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Starting a business without permission</td>
<td>Interval</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Friends refused to support but the business still goes on</td>
<td>Interval</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All the efforts of starting their own business</td>
<td>Interval</td>
<td>45</td>
</tr>
</tbody>
</table>

**IV. RESULTS AND DISCUSSION**

The result of data collection using the questionnaire simultaneously suggested that the formation of entrepreneurial intention of the students with regard to the attitude variable is considered very well, with the average item total score of 1068 or 99.8% by percentage. The variable of attitude showed the highest score compared to the other two. This result suggested that the Faculty of Economic and Business (FEB), the Faculty of Communication and Business (FKB), the Faculty of Creative Industry (FIK), the Faculty of Engineered Industry (FRI) and the Faculty of Applied Science (FIT) have managed to encourage entrepreneurial intention to the students through the course of entrepreneurship.

The result of data collection using the questionnaire simultaneously suggested that the formation of entrepreneurial intention of the students with regard to the subjective norm variable is considered very well, with the average item total score of 1038,1 or 96.68% by percentage.
The result of data collection using the questionnaire simultaneously suggested that the formation of entrepreneurial intention of the students with regard to the control behavior variable is considered very well, with the average item total score of 1049.8 or 99.75% by percentage.

The result of data collection using the questionnaire simultaneously suggested that the formation of entrepreneurial intention of the students is considered very well, with the average item total score of 1121.6 or 99.7% by percentage. Hence, it can be concluded from the descriptive analysis using continuum line:

Attitude (X.1) : very well
Subjective norm (x.2) : very well
Control behavior (X.3) : very well
Entrepreneurial intention (Y) : very well

All variables of X1, X2, X3 and Y fell into “very well” category, meaning that there are very good relationships among the studied variables.

The elements of the Theory of Planned Behavior including attitude, subjective norms, and control behavior perceived by the students are all in the category of “very well”, with the result score of 98.74%. The variable of attitude has the highest score, which is 99.8%. The control behavior comes second with 99.75% and the last is subjective norm with 96.68%.

V. CONCLUSION AND SUGGESTION

Conclusion

From the research result related to the effect of attitude, subjective norms, and control behavior factors on the entrepreneurial intention, a case study of the students of the Faculty of Economic and Business, the Faculty of Business Communication, the Faculty of Applied Science, the Faculty of Engineered Industry, and the Faculty of Creative Industry of the University of Telkom it can be concluded that:

1. Attitude (X.1) is considered very well with average of total item score of 1068 or 99.8%.
2. Subjective norm (x.2) is considered very well with average of total item score of 1038.1 or 96.68%.
3. Control behavior (X.3) is considered very well with average of total item score of 1049.8 or 99.75%.
4. Entrepreneurial intention (Y) is considered very well with average of total item score of 1121.6 or 99.7%.

Because the results of X1, X2, X3 and Y are all very well, then it can be concluded that there are very good relationships among the studied variables. Meanwhile, the elements of the Theory of Planned Behavior including attitude, subjective norm, and control behavior perceived by the students are also considered very well with a total score of 98.74%. The variable of attitude has the highest score, which is 99.8%. The control behavior comes second with 99.75% and the last is subjective norm with 96.68%.

Suggestion

Theoretical Aspect

Based on the research that has been conducted, the writer has some suggestions that may help future researchers to further continue this research:

a) This study only used a sample of the students of the University of Telkom. It would be better if future researches can be done by comparing samples from other universities that
implement entrepreneurship courses to the students, so that the study sample measured can be varied for the similar research topic in all over Indonesia, especially in West Java.

b) This study only examined students' entrepreneurial intentions. To complete the Theory of Planned Behavior, the current writer suggested that future researches can be directed to investigate the issue longitudinally through the real behavior of students in entrepreneurship, in order to obtain a complete and more accurate model framework.

Practical Aspect

Based on the results of the study, the author suggests:

a) The respondents' response indicated that the subjective norm variable had the lowest score. That is because of lack of support from the closest person, therefore, the researcher hopes for good supports from the parents, friends, or relatives of the students in order to help them to be more confident to be involved in entrepreneurship.

b) Parents expecting their children to continue the family business showed the lowest point in the indicators of subjective norm, as it is considered by some students as a stumbling block for them to take up a desired job. It is expected that the parents of the students can give greater freedom for the son or daughter to choose the job they want, because it can encourage them to do something they actually are passionate about.

c) Students are reluctant to start a new business because their parents do not give the permission, and this is the lowest indicator on the control behavior variable in this study. The advice given by the author is that the parents of the students should support the business planned by their children, because it can boost their confidence to be successful entrepreneurs.

d) Institutions should be able to encourage the students to start a business. This is because getting entrepreneurship courses and practicing the skill can positively and significantly affect the students' entrepreneurship intentions. The encouragement can be done by conducting sharing session with the alumni who have successful entrepreneurial careers, at least 2 times per semester, for these activities can support the students to start a business.

e) Moreover, the lack of knowledge about the practical details needed to start a business has become an important factor in growing the entrepreneurial intentions for the students. They really need the information and knowledge on entrepreneurship so that later when they run a business, they know what to do. One way to do it is to build the university's Business Incubator Room in every faculty, so that the students can easily access the information needed to start and run a business.

f) As for the suggestion for the government, according to the Draft Bill on National Entrepreneurship Section 3 Article 19 Paragraph 1-3, the government is expected to implement the Entrepreneurship Education as early as possible within the curriculum, both in formal and informal education, as to spur Indonesian youth to become an entrepreneur.

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