

Effectiveness of Effectuation-Based Entrepreneurship Learning

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ABSTRACT

School plays an important role in shaping the characters of an entrepreneur. In many cases, the success of an entrepreneur is believed to be closely related to his/her education. The appropriateness of the entrepreneurship learning method will greatly influence the quality of the graduates' ability to run their businesses. One way to produce entrepreneurs is through effectuation-based approach. This approach consists of five principles: (1) a bird in hand; (2) affordable loss; (3) crazy quilt; (4) lemonade; and (5) pilot-in-the-plane. The purpose of this research is to analyze the effectiveness of effectuation-based learning in comparison with causation-based learning. This research uses qualitative descriptive approach by taking samples from students who experienced causation-based learning and effectuation-based learning. Ciputra University conducted the research by distributing 5-point Likert Scale questionnaires to 30 students who followed causation-based entrepreneurship learning and conducting surveys to 30 students who followed effectuation-based learning. The five indicators tested in this research are (1) business idea discovery, (2) risk minimization, (3) business flexibility, (4) networking, and (5) resources utilization. Research result suggests that, based on

the five indicators, students who received effectuation-based learning have higher average score than those who received causation-based learning.

Keywords: Learning model, entrepreneurship, effectuation approach

INTRODUCTION

According to Klein (2014), the driving factor of America's economy was entrepreneurship. The source also argued that the businesses of these entrepreneurs contributed to the nation's economy through job opportunity creation, innovation, research and development, competition, productivity, and new industry creation (Gartner, 1990). Entrepreneurship education (Morris, 1998; Carsrud, 2009; Chell, 2008) remains an interesting discussion subject because many people are of the opinion that entrepreneurs are born and not made. Entrepreneurship education has secured a spot in higher education. The topic of Global Entrepreneurship Monitor (GEM Report, 2014) supported stated the findings that for six years in more than 40 countries, entrepreneurship education and training (Morris and Sexton, 1996) have become a significant factor in the development of the number of entrepreneurs in a country.

The research findings of Kao (1995) and Casson (1982), suggest that the number of entrepreneurs is limited in a developed country is 2% the minimum. To achieve a status change from a developing country to a developed country, Indonesia needs to have more new entrepreneurs. The existence of young entrepreneurs is believed to help overcome unemployment problem and accelerate the welfare improvement of the society.

Based on Ciputra's book (2006) entitled "The Best Practices of Becoming A True Entrepreneur" and The Ciputra Way (Harefa, 2009), it opted to choose 'Creating World-Class Entrepreneurs' as the slogan for Ciputra University in Surabaya. The basic at this decision, is on the realization that some conditions should be created to encourage and increase the birth of new entrepreneurs (Pietra, 2005) who will bring pride to Indonesia in the future. The most appropriate way to produce new entrepreneurs is through entrepreneurship education by creating a conducive environment and developing entrepreneurial potentials. Proper learning method and entrepreneurship model development will produce robust entrepreneurs who can minimize failure risks and support the development of their businesses (Kodrat, 2011).

The appropriateness of the entrepreneurship learning method will greatly influence the quality of the graduates' ability to run their businesses. The entrepreneurship learning methods progress along with the development of technology and knowledge (Hornaday, 1971). The current traditional entrepreneurship learning method implemented in Indonesia is being slowly replaced by newer models with a more relevant approach. Since the education focus of Universitas Ciputra is entrepreneurship, the University continues to develop its learning methods, and effectuation-based learning is one of the methods.

It is believed that the current causation pattern used in many business schools is no longer relevant in answering the challenges. The stiff and cautiously structured causation pattern is not in line with the dynamic economic condition. Young entrepreneurs are expected to have a more flexible mindset and persistence in facing various constraints and uncertainties. Effectuation-based learning pattern serves as a means and a bridge to answer such needs (Chandler *et al.*, 2009). The basic entrepreneurial skills obtained from effectuation approach are expected to improve the abilities of students and new entrepreneurs in running a business.

According to Ciputra (2009) and Schumpeter (1934) an entrepreneur must possess the following characteristics: (1) persistence to face obstacles and drive to overcome challenges; (2) courage to try something new, such as creating a revolution that will unlock a new source of supply for certain products or services; (3) sharpness to identify business opportunities that others may miss or underestimate and vision to create something new; (4) innovativeness to change undesirable condition into a desirable one; and (5) risk-taking attitude.

The learning model continues to evolve. Therefore, to shape the characters of young entrepreneurs and prepare them future uncertainty (Kirzner, 1982), experts classify learning patterns based on causal and effectual approaches (Sarasvathy 2008). Chandler *et al.* (2009) further differentiated the entrepreneurial processes adopted by an entrepreneur when starting a new business into causation and effectuation. Causation approach consistently directs an entrepreneur when starting a new business according to the opportunities and trends, before creating a business plan which consists of a series of structured activities for the next stage of development. Meanwhile, effectuation process helps young entrepreneurs start a business according to the initial capital owned, instead of market opportunities. The next stage of development sees the young entrepreneurs take a more flexible set of strategies based on the loss incurred and experimental experience formed. Causation approach has a negative effect for young entrepreneurs in facing future

uncertainties while effectuation approach enables them to face future uncertainties in a positive way. Effectuation approach also provides many alternative options and experiences that enable young entrepreneurs to be more flexible in facing future possibilities and uncertainties (Chandler *et al.*, 2009).

OBJECTIVE OF THE STUDY

The purpose of this research is to determine the effectiveness of effectuation-based entrepreneurship learning model in comparison with causation-based learning model.

FRAMEWORK

The study was anchored on the Effectuation Approach of Sarasvathy (2008). According to Sarasvathy (2008), effectuation approach consists of the following five basic principles:

A bird in hand principle. Entrepreneurs have the courage to start a business with what they have, whom they know and what they know. In other words, entrepreneurs need to know their present capabilities to start a business.

Affordable loss principle. Every entrepreneur needs to face considerable risks; and therefore, they must be able to determine which losses are affordable.

Lemonade principle. Entrepreneurs should always be ready to face the unexpected.

Crazy quilt principle. Entrepreneurs should be creative and innovative. It means that they must be able to create something acceptable to consumers.

Pilot-in-the-plane principle. Entrepreneurs must be able to control and anticipate all possible situations and minimize risks.

Sarasvathy (2001) also emphasized the following six main cores of effectual approach for entrepreneurs to start a business:

Entrepreneurs start their business according to what they own and who they are. Their basic capitals include knowledge, experiences, acquaintances and other supporting factors. Entrepreneurs take immediate actions according to these capitals. This first step will then lead them to bigger opportunities. This first step is also followed by other activities which will provide young entrepreneurs with experiences and bring them closer to success.

Young entrepreneurs should specifically determine the amount of affordable loss. True entrepreneurs will not take actions with more risk than they can handle. If

they do that, they are prone to bankruptcy when they make the wrong decisions. It is recommended that they take affordable risks, because when they experience loss or bankruptcy, they can still survive and continue their business.

Young entrepreneurs should be able to create their opportunities. They must be able to create creatively market and opportunities based on their recurring experiences and possessed knowledge.

Entrepreneurs (Pinchot, 1985) should be able to trust others. To find bigger potential, an entrepreneur should work closely with other people. Effectuation approach emphasizes-on the importance of networking because more associates are equal to more assets.

Effectual mindset can be learned by every entrepreneur. Since entrepreneurship is an implementation of logical things, the pattern of an effectual mindset can be studied. It can also be trained and developed in an established environment.

The more failures an entrepreneur experiences, the closer he is to success. The success rate of a novice in running a business is arguably small, but each failure teaches a new lesson. In the process, an entrepreneur takes various lessons, such as not trusting people too easily, taking advantage of every opportunity, and determining the amount of affordable loss. Failure is not something we should avoid or fear because it is a part of a learning process that will enrich the experiences and skills of an entrepreneur.

The implementation of effectuation-based learning pattern is perceived to be more suitable for the condition and trend of present-day society. The use of internet in general and social media like *Twitter* and *Facebook*, in particular, is the basic platform of effectual implementation. The internet and social media enable entrepreneurs to meet other people in different occasions and levels. Such encounters can contribute to the success of the business because the people they meet may be consumers, partners or investors. Effectuation-based learning will provide a different experience through different ways for every entrepreneur who runs the same type of business.

METHODOLOGY

This research uses a quantitative approach (Kuncoro, 2009) with independent sample t-test and descriptive approach. The population is the student who takes Entrepreneurship subject. Ciputra University conducted research by distributing 5-point Likert Scale questionnaires to 30 students who followed causation-based entrepreneurship learning and conducting surveys to 30 students who followed effectuation-based learning. The differences between the applications of causation and effectuation reviewed under the following aspects:

Business Idea Discovery

The indicators of business idea discovery are: (1) ensuring that the marketed products are in accordance with the interest of the consumers; (2) performing changes on the marketed products; (3) making sure that the marketed products are the same as the planned products; and (4) finding a suitable business model.

Risk Minimization

The indicators of risk minimization are: (1) limiting the use of resources to prevent loss; (2) using cost according to the budget; (3) managing finance carefully to avoid bankruptcy; (4) setting out initial agreements with consumers, suppliers and other organizations to cope with uncertainty; (5) establishing initial business agreements with particular consumers and suppliers; and (6) using initial agreements as a reference for decision making when there are changes in business environment.

Business Flexibility

The indicators of business flexibility are: (1) ensuring that the business continues to develop and follows existing opportunities; (2) adapting owned resources; (3) ensuring the flexibility of the business, and (4) eliminating the things that limit flexibility.

Networking

The indicators of networking are (1) prioritizing the support of family, relatives and friends in the development of business as opposed to professionals; and (2) prioritizing partnerships with family, relatives or friends to reduce the operational cost of the company.

Resources Utilization

The indicators of resources utilization are: (1) conducting a thorough evaluation of knowledge and resources when starting a business; (2) making decisions based on familiar subjects when choosing a business opportunity; (3) taking advantage of maximum profit; (4) making decisions based on the knowledge and resources owned; and (5) using knowledge and resources owned as a basis to plan business development.

RESULTS AND DISCUSSION

The differences in results between causation model and effectuation model in every sample class can be seen from the Table 1 and Table 2:

Table 1. Mean and Deviation Standard of Respondents Using Causation Method

No	Variable	Mean	STD
1	Business idea discovery	3,18	0,75
2	Risk minimization	3,28	0,66
3	Business flexibility	3,33	0,64
4	Networking	3,23	0,7
5	Resources utilization	3,35	0,59

Source: processed data

Table 1 suggests that the average answers of the respondents regarding the existing variables are close to 3 or “neutral,” based on Likert scale. The highest perception of the respondents regarding Resources Utilization has an average value of 3.35, as shown by X5 variable. Meanwhile, the lowest perception of the respondents regarding Business Idea Discovery has an average value of 3.18, as shown by X1 variable. The lowest standard deviation value is 0.59, which means that the opinions of the respondents on Resources Utilization indicate the lowest variation compared to other variables. The Business Idea Discovery variable has the highest standard deviation value of 0.75, which means that the opinions of the respondents on Business Idea Discovery indicate the highest variation compared to other variables.

Table 2. Mean and Deviation Standard of Respondents Using Effectuation Method

No	Variable	Mean	STD
1	Business idea discovery	3,76	0,75
2	Risk minimization	3,96	0,81
3	Business flexibility	4,0	0,8
4	Networking	3,67	1,03
5	Resources utilization	3,95	0,79

Source: processed data

Table 2 suggests that the highest perception of the respondents regarding Business Flexibility has an average value of 4.0, as shown by X3 variable. Meanwhile, the lowest perception of the respondents regarding Networking has an average value of 3.67, as shown by X4 variable.

Table 2 also suggests that the lowest standard deviation value is 0.75, which means that the opinions of the respondents on Business Idea Discovery indicate the lowest variation compared to other variables. The X4 variable has the highest standard deviation value of 1.03, which means that the opinions of the respondents on Networking indicate the highest variation compared to other variables.

Table 3. Independent Test Result of t-Test Sample

		Levene's Test for Equality of Variance		T-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Business Idea	Equal variances assumed	.576	.451	1,044	58	.301
	Equal variances not assumed			1,044	55,493	.301
Risk	Equal variances assumed	9,147	.004	-.025	58	.980
	Equal variances not assumed			-.025	46,314	.980
Flexibility	Equal variances assumed	1,725	.194	-2,028	58	.047
	Equal variances not assumed			-2,028	52,451	.048
Networking	Equal variances assumed	.144	.014	-1,104	58	.274
	Equal variances not assumed			-1,104	57,306	.274
Resources	Equal variances assumed	6,449	.006	-1,067	58	.290
	Equal variances not assumed			-1,067	49,215	.291

Source: processed data

Table 3 suggests that the variables of idea business discovery, business flexibility, and resources utilization are significantly different between students who followed causation approach and effectuation approach. On the other hand, the risk minimization and networking variables show no significant differences.

Causation-based learning model will encourage new entrepreneurs to identify the trends and opportunities in the market. Young entrepreneurs tend to use current trends and market demands as a reference to start a business. The Causation-based learning model is suitable for businesses in the mature phase, because at this phase, approach and development can be combined with management techniques (Brandt, 1986). Normally, at this stage, a company is considered mature with numerous employees and standard operational procedure. The focus of the business is not to create an opportunity but to respond to market trends and needs (Melinda, 2014).

Effectuation approach focuses more on the resources owned by an entrepreneur when starting or developing a business (Miller, 1983). This approach is suitable for start-up phase, in which an entrepreneur is encouraged to be innovative and creative with the resources owned (Covin, 1989; Kao, 1989). Entrepreneurs who successfully adopt the effectuation approach are normally more flexible in the management and development of the business which often starts from a micro scale. The most interesting aspect of this approach is its ability to train mentally entrepreneurs to be stronger and able to see the alternatives, while at the same time, looking at failures as challenges instead of an ending (Melinda, 2014).

Effectuation can also be implemented in the development of a family business. The use of owned resources for the development of the business will strengthen and further advance the business as the previous generations have never done before. The principles of effectuation are also easy to understand and implement for various business owners.

CONCLUSIONS

The findings of this research suggest that the average students who use effectuation-based learning have higher mean scores than those who use causation-based entrepreneurship learning. Based on the five indicators used in this research, three indicators mark the differences between students who use causation-based learning and those who use effectuation-based learning, namely business idea discovery, business flexibility, and resources utilization.

RECOMMENDATIONS

Further research can use this approach to determine how large the influence of the three indicators, namely discovery business idea, business flexibility and resources to the successful utilization of the business is done and also be able to dig deeper in order to find other indicators in addition to the five indicators used in this study.

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