Collaboration between Social Values and Information-Communication Technology (ICT): A Strategy to Develop Startups in Indonesia

Abstract. Indonesia is currently entering the knowledge economic era after the industrial sector lost its position as a driver of economic growth. In 2018, startups become the most potential economic sector in Indonesia after contribution 57.5% of the GDP. The low TFP growth rate and the small number of startups which utilize ICT indicate that ICT literacy education is necessary to develop Indonesian startups and accelerating economic growth. However, older and least educated people are not interested to utilize ICT for business purpose since they do not find the root of their cultural value within it. A developing project is essential to increase the interest in using internet and further ICT to develop startups in Indonesia. This research create a strategy that collaborates the social values and ICT by improving the developing project of digital startups and collaborate it with the social values of Indonesia in every stages of the developing project.

Keywords : Developing strategy, Startups, Indonesia, Social Values, ICT

1. Introduction

Indonesia is the fourth most populous country in the world with 258,316,051 populations in 2016 after China (1,373,541,278), India (1,266,883,598) and United States (323,995,528). The number of population is directly proportional to labor sufficiency, thus if every workforce in Indonesia is productive, then Indonesia should have high economic growth. In fact, Economic growth in Indonesia has been trending down from about 6.5% in 2010 to less than 5% recently while the number of population is increasing. The main cause was that the pace of Total-Factor Productivity (TFP) growth has slowed since 2010, thus there is another factor beside capital and labor sufficiency that affects the economic growth in Indonesia (Dutu & Richard, 2016).

Economic growth is affected by the economic activities of startups and firms. Startup is *a developing business company*, while firm is *the developed business company*. In 2018, there are more than 57.9 million startups in Indonesia. They have high contribution toward the GDP about 57.5%, and employed more than 107.65 million of the population, thus startups are essential to accelerate the economic growth of Indonesia. On the other hand, there are only 1.19% of startups that use ICT to run their business. (BEKRAF, 2018).

Most of startup managers in Indonesia do not realize the benefit from using better technology, especially ICT to run the business. Thus, the other factor to increase the TFP growth and accelerate the economic growth is ICT. ICT (especially internet and social media) has big role in improving the startups such as promoting their products/services to the wider market (local or even international), reducing the advertisement cost, making online transaction, etc. (Nord, 2013). Internet is not a new thing in Indonesia. Younger and more educated people utilize internet, especially via smartphone. In contrast, the older people (most of startup managers) and less educated people choose to keep their feature phones regardless of their income level. Some of them are not even interested to access the internet. This different interest about accessing internet or using further ICT is called *digital devides*. ICT literacy education is important to increase the interest in accessing the internet to develop startups in Indonesia (Puspitasari & Ishii, 2016).

The older people of Indonesia usually hold the strict tradition and philosophy, including managing their business activities. Javanese – the culture in the most dense populated island – business tradition is a good example. They are more concerned how to obtain more close

relatives with their business than expand their business to the wider market (Herliana, 2015). The other cultures in Indonesia also have one thing in common; it is the concern of the social values. Thus, the startups developing project in Indonesia should be managed by a different strategy than the common ICT literacy education.

The purpose of this research is to create a strategy that answer the question *How to develop startups in Indonesia?* The developing strategy includes the collaboration of the social values from Indonesian culture and the use of ICT. The Section 2 provides the Theoretical Analysis. Section 3 presents the detailed methodology. Result and Discussion are presented in Section 4 and Section 5 respectively. This research is concluded in Section 6.

2. Theoretical Analysis

2.1. Management in common

The term *management* is from the Old French, *menage* which means handling or controlling horse. Management can be defined as

> "*Getting things done through other people*. Or more specifically: *coordinating the efforts of people towards common goals*. The other people involved may be subordinates, clients, customers, suppliers, authorities, or the public in general. Important is that management is always about people. Jobs in which no other people are involved are technical, not management" (Hofstede, 2007)

Management is part of the culture of the society it takes place. The management techniques are culturally specific. A management strategy or philosophy that is appropriate in one national culture is not necessarily appropriate in another, because every nation have their own culture and values. Values are *broad tendencies to prefer certain states of affairs over other* (Hofstede, 1984).

The strategy to manage a startups developing project must be appropriate to the culture of Indonesia or more specific, the social values in Indonesia. It plays an essential role in effectiveness and corporate identity because every business including startups have home country (Carney, 2005).

2.2. Indonesian Social Value

Indonesia is a country in South-East Asia between Pacific Ocean and Indian Ocean. Indonesia is an archipelago that consists of 17,504 islands, thus Indonesia has many different cultures such as Javanese, Balinese, Batak, etc. There are three social values in every culture of Indonesia which represent collectivism: *Silaturahmi*, *Gotong-royong* and *Musyawarah*.

The literal translation of *Silaturahmi* is the ties of friendship. In general, the definition of *Silaturahmi* is *strengthening the social bonds among people*. Indonesian people have tendencies to make social bonds with the other people even a stranger. This social value becomes the main purpose to run a business in *pasar* (Indonesian traditional market). The retailer has tendencies to create social bond with the other retailer and buyer. There is a feeling of comfort when they make as many close relatives as possible. Some of them treat their close relatives more like family members than friends. Individuality is generally not acceptable in the social enviroment of Indonesia. Collectivity has a higher value than privacy.

The value of *Gotong-royong* represent something stronger than teamwork. It can be defined as *mutual help*. Teamwork derived from the legality of a team to achieve the same goals, while *Gotong-royong* derived from the will to help close relatives or family members to achive the same goal or even the goal from other people. Indonesian people do not hestitate to help other even stranger. *Gotong-royong* is the value of selflessness and social work. This value is lectured to the people since childhood. Children is participated to simple task like clean enviroment in the neighborhood and even more serious issue like helping the victim of natural disaster (Taylor & Peace, 2015).

The last value plays role in decision making, it is *Musyawarah* or deliberation. While political like election are made based on vote, the minor decisions are usually made by deliberation. Indonesian people do not hasty or impatient to weight arguments with a view to a choice or decision. Bargaining is a simple example of *Musyawarah* that is common in *pasar*.

These values cannot be separated from the economic activities of Indonesia, including managing startups. The developing strategy must contain the values of *Silaturahmi*, *Gotong-royong* and *Musyawarah* to be appropriate with the social values of Indonesia.

2.3. Knowledge Economic Era in Indonesia

There are three eras of global economic disorientation: aglicultural era, industrial era, and knowledge economic era. Each era has different concern about the core value to run a business. Aglicultural era value financial capital and natural resources, industrial era value manufacturing technology and knowledge economic era value knowledge to utilize ICT to make creativity (Pink, 2005).

The history of business starts at the agricultural era, where most of the product are based on the natural resources. Industrial technology did not exist thus the products were manufactured by the hand of human. This constraints causes the rate of production could not satisfy the demand rate thus the manufacturer could set high price for a single product. It was an obivious strategy by the law of economics. The industrial research was focused on creating more products such that the manufacturer could satisfy all the demand an retrive maximum profit.

Industrial era begins when the boiler was applied for industrial purposes. Many researches were initiated to design manufacturing machines. By these machines, production becomes trivial thus many manufacturing industry (firm and startups) were built in the industrial era. The competition between firms/startups had affected the amount of product in the market. The number of supply is higher than the demand, thus the price was dropped to dominates the market share. In this era, the concern of business was to minimize the production cost by effectivity, thus the manufacturer could recieve high profit even if they set low prices on their product. It is clear that there is a disorientation from agricultural era where people was trying to satisfy the demand rate to the industrial era where people was trying to minimize the production cost.

The industrial era of Indonesia was likely began after the Asia financial crisis between 1984 and 1996 which is indicated by strong growth in the industrial and service sectors (7.3% and 7.2% per annum respectively). It was too late, since the western countries enter the industrial era was started after the application of boiler for manufacturing purpose in 1781. After 2008, industrial sector lost its position as a driver of economic growth and remain almost stable from 2010 until 2012. (Suryahadi et al., 2012). It indicates that the industrial era was ending around the first half of this decade and Indonesia is currently entering knowledge economic era.

Manufacturing technologies in industrial era create tight competition between firms/startups. How to run the business when every supply is higher than demand rate while the prices are dropping? Advance knowledge – including the knowledge to utilize ICT - is essential to run the business. This era is called, knowledge economic era. In this era, ICT must be utilized to create a creative solution about business problem. People can start a business online without spent any money for renting a shop or using social media for free advertisement media. In conclusion, knowledge to utilize ICT is the solution to develop startups in knowledge economic era.

2.4. ICT and Digital Startups in Indonesia

The improvement of ICT utilization in a developing country indicated by leapfrogging, *the process by which new Internet users access the Internet.* Steinmueller (2001) stated that leapfrogging enable developing country may now develop. Furthermore, mobile leapfogging - *the process by which new Internet users access the Internet by mobile phone* – can be used to overcome digital divide in Indonesia (Puspitasari & Ishii, 2015).

Mobile leapfrogging is initiated by some digital startups in Indonesia. The online transportation startups educate the conventional driver to make easier communication with theitr client, the startups who are managing online marketplace educate retailers to sell and promote their products by mobile phone, etc. Digital startups are trying to overcome the digital divide in Indonesia. On the other hand, they who do not want to learn about ICT oppose this change. In the late 2007 until 2018 many conventional drivers attack online drivers as the rejecting opposition, hence online transportation services slow down their business. Some retailers in *pasar* blame online market for their lower income. Digital startups should evaluate their education strategy to overcome this issue.

2.5. Business Model

The project to develop startups by increasing the interest of ICT utilization should include the education using appropriate business model that covers the social values in Indonesia. Business model is a concise representation of how an interrelated set of decision variables in the areas of venture strategy, architecture and economics are addressed to create sustainable competitive advantage in defined markets.

There are many business model to represent the business. Foss & Saebi (2017) stated that perfect business model that would be appropriate to any condition does not exist. Startups should choose the most appropriate business model to the society where they take place.

This research suggests the *Business Model Canvas* (BMC) developed by Osterwalder & Pigneur (2010) as the appropriate business model to be added in the developing project, since it focuses on value creation which is the main aspect to collaborate the the social value and ICT. BMC contains nine panel which are : (1) value creation/proposition; (2) key partners; (3) key activities; (4) key resources; (5) channel; (6) customer relationship; (7) customer segmentation; (8) cost structure and (9) revenue stream. The ilustration of BMC is presented in Fig 1.

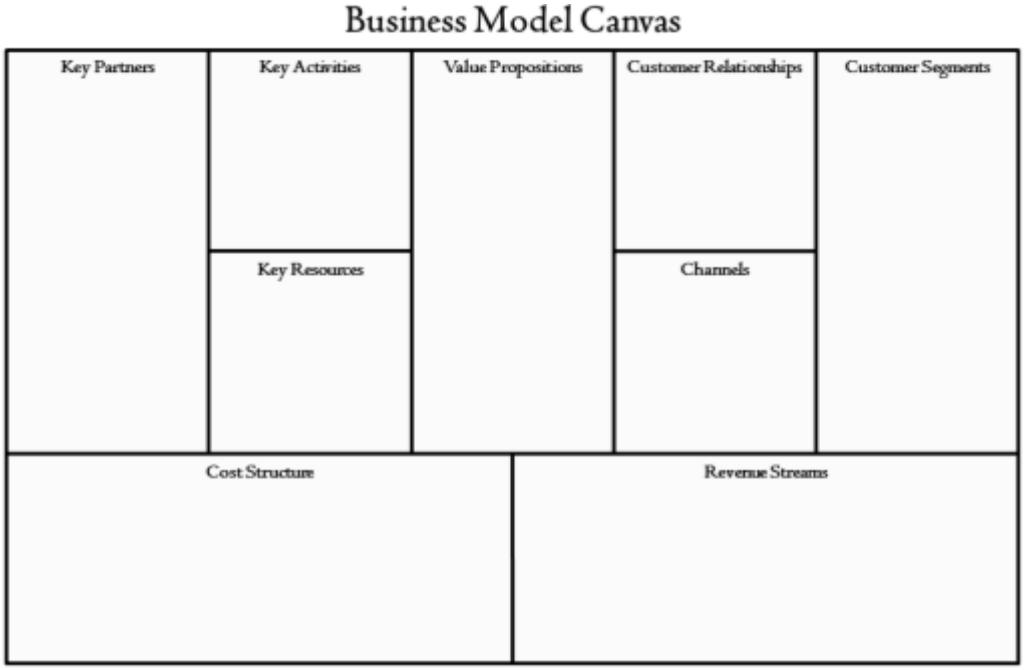

Fig 1. Business Model Canvas by Osterwalder & Pigneur (2010)

3. Method

This study uses interview and group discussion to collect data. The interview was done to collect the data of how one of the most leading ICT firms in Indonesia manage a training project to develop the digital startups. Then a group discussion was done with on of the field manager from one of the startup who managed online marketplace and recently became a leading firm to analyze the BMC of their business. Both of the interview and discussion are initiated in early 2018.

Then the obtained data from the interview is compared with the social value of Indonesia by presenting the idea to five local startups who do not use ICT to run their business. The five local startups are managed by 40-60 years old with various income level, gender, birthplace, and educational level. While the obtained data from the group discussion is compared to the common BMC of a online marketplace.

4. Results

4.1. How startups developing project is managed in Indonesia

The startups developing project managed by the government mostly focused on the agricultural startups. The government of Indonesia understands the importance of digital startups, thus the developing project which focuses on the digital startups is managed by the leading ICT firm, which is also national company (a firm strictly regulated by government and running their business for the importance of the nation).

The developing project begins with an audition to select the potential participants. The audition is managed by organizer with workshop, submission and interview,

1. Workshop

Every registered participant are joined to a workshop to improve their knowledge. The workshop material contains the general view about business and ICT to increase

the business productivity, value proposition and business model in three days. The purpose of this workshop is to develop the participant to create a high quality submission for their business.

2. Submission

   The participant must submit their business idea with digital form to the organizer about the workshop material. Each startup can have a consultation with a coach before submit the business idea.

3. Interview

   Every participant who submitted their business idea must have be interviewed by the organizer about the details of their business idea. The selection are made by the organizer based on the data received through an interview.

If they past the interview, then the participating startups have to undergo the training through 5 stages : (1) customer validation; (2) product validation; (3) business model validation; (4) market validation; and (5) value validation.

1. Customer Validation

   The first stage of the training is to validate the customers of the start-ups. The participating startups need basic knowledge about their business and the potential customer of their business, idea about how to collect the data of the customers, and what are they going to do with the customer data in order to improve their business.

2. Product Validation

   In this stage, the participants have to create an innovation for their product. What distinguish their product to the other business. This innovation is initiated by the collected data from the potential customers.

3. Business Model Validation

   The participants create a planning about the whole business model to run their business, after they understand what innovation that validates their product.

4. Market Validation

   This stages is managed for 2 years. In this stages, the participants are ready to offer their products to the market, then the project organizer gives funding, market access and market channel to the start-ups to accelerate the progress of their business.

5. Value Validation (Follow on funding)

   This is the last stage of the training. If the start-ups in the market validation stage accomplishes the target, then they will not give further funding from TELKOM. The purpose of this stage is to find funding to the participating start-ups from the other leading company such that the start-ups would be independence.

The participating start-ups are declared to be success if they pass all of the five stages. The data of participants of this project from 2013 to 2017 is recieved from their documentary book by Utoyo (2016) and presented in Figure 2.

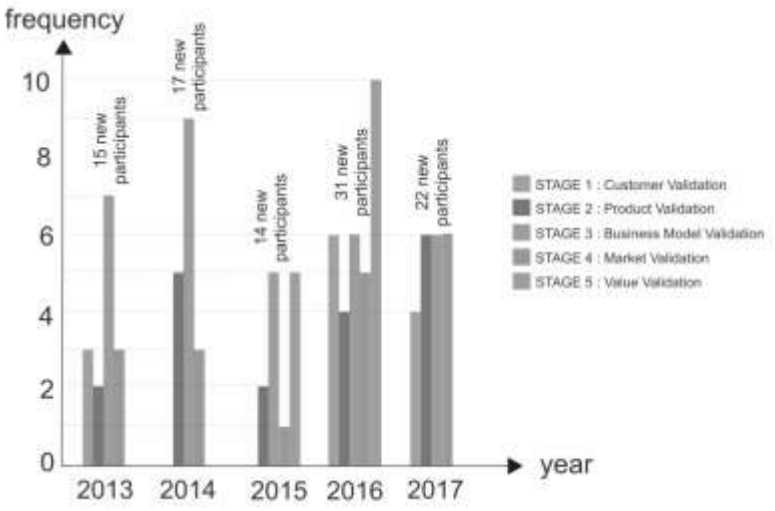

Figure 2. The distribution of startups participants in the five stages from 2013 to 2017

4.2. How online marketplace represent their business in BMC

The obtained results from the group discussion were presented by the field manager of the firm. Field manager is a user (retailer) of the online marketplace who coordinates the other retailer and make a fellowship events to in the certain area. In this discussion, the results were obtained from the field manager of Klaten – a city in Central Java. The obtained result is represented in Table 1.

Table 1. The comparison of the presented BMC and the common BMC of online marketplace

BMC element	Presented BMC	Common online marketplace
Value	Help retailer to expand their business by mutual profit relation	Easier shopping, anywhere and anytime
Revenue	Promotion fee from retailer and small revenue substraction for every selling to retailer	Revenue substraction for every selling to retailer
Cost	Employee fee, web maintenance	Employee fee, web maintenance
Customer	Buyer and retailer	Buyer
Relation	Fellowship between retailer	Online customer service
Channel	Web and Field Manager	Web (anytime, anywhere)
Activity	Online digital transaction	Online digital transaction
Partner	Retailer	Retailer
Resource	Web and retailer	Web

4.3. How the local startups response the developing project and the presented BMC

This research asked five local startups who run their business without ICT to response the developing project and the BMC presented by the field manager of the online marketplace. The response is presented in Table 2. The five startups are: (1) beauty salon managed by 57 years old woman; (2) home industry who produce snack and cake managed by 38 years old woman; (3) a traditional retailer in *pasar* (60 years old man); (4) a local wedding organizer managed by 54 years old man; and (5) a local clothing industry managed by 34 years old man.

Table 2. The response of the five local startups

Startup	Beauty Salon	Home Indusrty	Traditional Retailer	Wedding organizer	Clothing Industry
The developing project	*It is to difficult and I am too old to join the project*	*I would like to join but I do not have the time and the workshop place is too far*	*I can run my business without joined such a project*	*My business has a local market. I don't think I need to join the project*	*That is interesting. I hope I have the team to join the project*
The BMC of the online marketplace	*If they can promote other business than retail, then I would ask my son to register my business*	*It is nice to help each other especially with fellow retailer who sell snack and cake*	*We already have such a community in this pasar*	*Well, it is great for the leading business, but I will stay with the traditional way of promotion, by promote it to my close relatives.*	*I like how they build the fellowship. I was planning to promote my product too, if I have a smartphone*
Their most imprtant thing to improve their business	Finacial capital	Manufacturing technology	Social bond	Social bond	Creativity

5. Discussion

From the Figure 2, the number of startups who passed all of the developing project is keep increasing, except in 2017 because there are still in the fourth stage (it needs at least 2 years to pass the fourth stage). Furthermore, the number of startups who do not pass the stages is also decreasing per annum thus the developing project is managed well.

The problem is that the most of the participants are younger and more educated people. They are belong to the 1.19% of the startups. The older and less educated people

cannot join the project because it is not appropriate to their values to run business. Even though younger generation will replace them in the future, It is still important to increase their interest of ICT since the most of startups in Indonesia do not utilize ICT.

An improvement is required to increase the interest of the local startups to join the developing project. This research suggest two improvements to the developing project : (1) the workshop and (2) the selection process

1. Improvement in the workshop

The workshop focuses to prepare the participants with the basic knowledge about modern business. The material can be simplified by answering these question.

1) What do they need?
2) What do they want ?
3) What do they do to make their business different (creativite)?
4) What do they do to improve their business?

If most of the the main idea of the business is to make *silaturahmi*, then the organizer must ensure that ICT would have them accomplish that purpose. The material about value proposition should be presented with they social values, documented, then published to increase the interest of the other startups owner to join the project through social media and TV (since the older and less educated people do not use internet).

This research suggest that the business model used in the workshop is BMC, because BMC focuses on the value – which can be social values – and the panel of customer relationship, channel and key partner are suit the social value of Indonesia. The five stages after the audition can be finished if they understand BMC. The first stage is about customer segmentation panel. The second panel is about value proposition and key activities. The third stage is the idea of key resource, cost structure and revenue stream. The fourth stage is about accelerating their business by strengthening the bond with other while it is contained in the channel and customer relation panel in BMC. The last stage can be passed if they can deliver the correct value proposition of the business to the potential investor

2. Selection process

Social bond is important to Indonesia thus before selecting the participant who selected to enter the five stages, every participant should have a chance to know each other make a discussion and create a mutual relation. This idea can be accomplish if the workshop is managed in a creative camp, where they can make social bonds beside the training sections.

A presentation and delibration can be used to replace interview process. Every participant will be devide into group and present their business idea to the other participant. They will receive the input from the organizer and the other participant this is more appropriate and create a stronger bond between them. The participants are included to give score to the presentation thus the organizer will receive the general response to their business idea.

The selected participant will be proceed to the incubation phase (the five stages), while the other can support them by becoming their partner. This idea is too reduce the competitive atmosphere that do not appropriate in Indonesian culture. The rest of the incubation phase is managed well thus major improvement is not necessary. Thus, the strategy of the overall developing project can be represented in Figure 3.

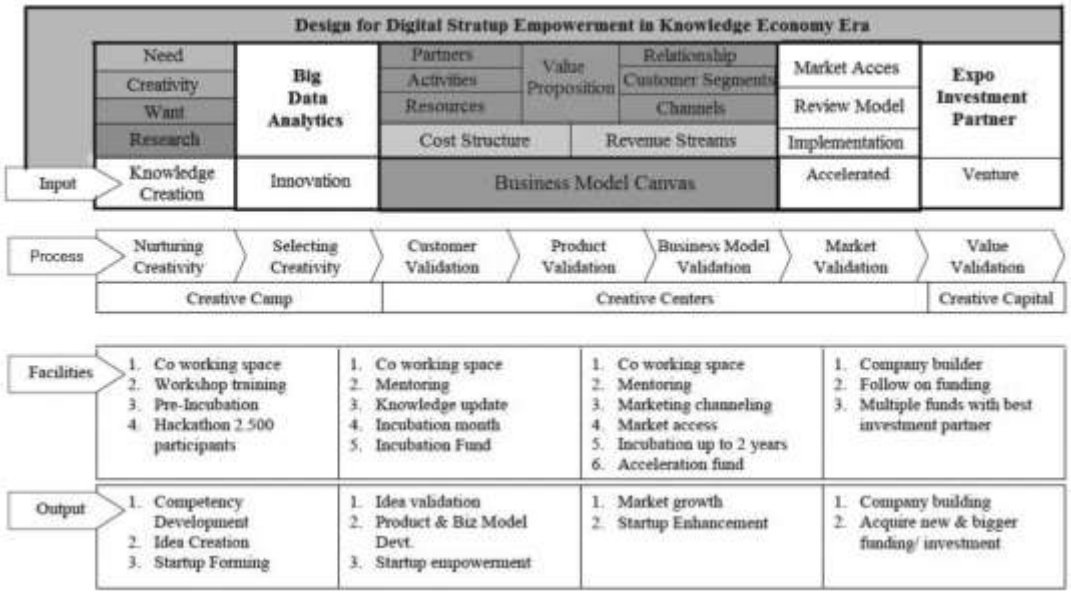

Figure 3. Strategy to develop startups in Indonesia

6. Conclusion

It is true that ICT is important to develop startups in Indonesia, thus the economic growth would be accelerated since startup is the most contributing sector to GDP of Indonesia. Developing startups in Indonesia is not about how to force them using the latest ICT to increase their productivity and advance knowledge in this knowledge economic era. Business has their home base, managing a business cannot be separated from the social values of the culture it takes place. An developing strategy with solid theory of business and managerial techniques is important, but it would be not effective if it does not managed well.

The appropriate strategy to manage a project to develop startups in Indonesia is by focused on the social values of *Silaturahmi*, *Gotong-royong* and *Musyawarah* to replace the competitive environment in the developing project. This is more acceptable to the Indonesia people, thus many traditional startups would be developed. The other important aspects like understanding the material, utilizing of ICT, and expanding business activities are managed as the hidden objectives that will be explained later.

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