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CORPORATE ACCELERATOR: PROPOSED IMPLEMENTATION OF OPEN INNOVATION FOR START-UP AND INDUSTRY PARTNERSHIP MODEL IN INDONESIA

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Abstract. The rapid growth of start-ups in both developed and developing nations is observed due to an increase of entrepreneurship education in the curriculum of formal education institutions. The Open Innovation (OI) has been known since early 2000s where this model was utilized by various organizations to develop strategic partnership and creating a 'win-win' scenario. If implemented properly, OI model can generate a better product and services (Pile, 2018). In supporting a start-up's growth in their initial stage, Corporate Accelerator (CA), as one of OI models, offers a more intensive way. In several cases, contrasting differences between start-up and big company is proven to be a challenge for arranging a partnership. CAs must maximize start-up's incentives while creating significant profits for them (Kohler, 2016). Since the OI paradigm and how it was related to the industry and start-up partnership model is still rare, this paper tries to provide a conceptual model for an implementation of open innovation in a start-up and industry partnership, especially in Indonesian ICT industry. The limitation is that this conceptual framework and hypothesis have not been tested but the proposed methodology for completing this research is a qualitative study with a top management depth-interview to get the appropriate relationship.

Keywords: open innovation (OI); corporate accelerator (CA); start-up and industry partnership;

INTRODUCTION

Since the 4.0 industrial revolution era emerged in Germany on 2011, developed countries such as the United States recognized the importance of adopting cutting-edge technological innovation to boost the economy by increasing industries' productivity. In recent years, the same drive has arrived in developing countries, including Indonesia.

Insights that are necessary to produce innovations which are generally conceived in unrelated fields from the company's industry driving company's management to be assertive in seeking external innovative sources. One common way is to utilize emerging entrepreneurs from both formal education institutions such as university and informal such as incubator and co-working space (Kohler, 2016). Nowadays, start-ups have started to initiate innovations to replace existing technology with a new business model.

A partnership form that is commonly used by industries and start-ups is called corporate accelerator (CA). In this model, a unique platform is provided to sustain company's long-term growth and renewal of company's business model. An appropriate partnership could reduce the risk for industry in adopting new technological innovations in their production line. This is because a startup company tends to have a more flexible and agile structures in comparison to big company in the industry. Therefore, big firms must concern more about the drivers of innovation such as global availability of knowledge, technology fusion and shorter innovation cycles (Inauen & Schenker-wicki, 2012). Most companies that had been leading in their respective industry experienced a retardation in their abilities to innovate. This creates chances for startup to become a solution for bigger companies, with its flexibility, agility and lower operational costs. Open innovation is a result of a complex co-creation process which involves knowledge flows

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across the business process thus it becomes a key source of organization's competitive advantage fostering its success (Sivam, Dieguez, Ferreira, & Silva, 2019). The numbers of start-ups in both developed and developing nations are growing rapidly due to an increase in formal education institutions that implements entrepreneurship in their curriculum. Corporate Accelerator (CA), as one of OI models, offers a more intensive way in supporting a startup's growth in their initial stage. In several cases, contrasting differences between startup and big company proven to be a challenge in arranging a partnership. CAs must maximize startup's incentives while creating significant profits for them (Kohler, 2016).

LITERATURE REVIEW

Open Innovation (OI)

The OI has been known since early 2000s where this model was utilized by various organizations to develop strategic partnership and creating a 'win-win' scenario. If implemented properly, OI model can generate a better product and services (Pile, 2018).The OI term was first popularized by Dr. Hendry Chesbrough (2003). It was a theory that explain how organizations will be more efficient if they're utilizing external input to develop innovations. OI has encourage organizations to acquire intellectual properties and values beyond its' internal limitation. What makes OI distinguishable is the challenge faced to revamp the traditional model of organization's R&D that has a closed innovation system (Pile, 2018).

Due to the challenge mentioned above, OI has become a paradigm that forces companies to seek external ideas as much as internal ones and as a means to market development by adopting cutting-edge technology. With this definition, collaboration with external partners resulting in three OI processes. First is 'outside-in' which honed company's knowledge based on innovation from external sources. The second process is 'inside-out' where internal knowledge source exploited external knowledges. The last process is a merge of both 'outside-in' and 'inside-out' (Moschner & Herstatt, 2017). On one side, by funding a start-up company, well-established industry will gain insights on new technological development and emerging markets. On the other hand, start-up's will gain funding and access to administrational resources in exchange of the ideas they generated (Moschner & Herstatt, 2017).

Several studies have been conducted and found that OI had a significant impact on organization's performance. A study involving five major European markets in 2008-2013 resulted three dimensions as measurable outcomes namely: (1) economic performance, measured by the firm's turnover; (2) financial performance, measured by shares value; (3) human resources performance, measured as the level of employment. Internal development and external acquisition affect the inbound OI positively and significant for all mentioned dimensions (Moretti & Biancardi, 2018). The relationship between OI practices and firm's innovation performance is measured by some variables with inbound OI and outbound OI as independent variables while firm's innovation performance as the dependent variable (Rangus, 2013). Kratzer, Meissner, & Roud (2017) found it hard to implement OI for many big firms at the operation level. Innovation culture and innovation openness are the two crucial factors that have been concerned. The major challenges in constructing and developing the innovation culture is how to change the organization's mindset to mobilize teams to deliver new products and services to the market promptly.

Open Innovation and Business Model

On a previous study, it was mentioned that the concept of a business model is not included in the definition of OI, however they're closely related. In OI, external and internal idea are combined in a system that will be used in a business model. A business model, whether from an internal or external idea, generate values and defined an internal mechanism to determine the value itself (H. W. Chesbrough & Vanhaverbeke, 2014). New development of OI mainly in the area of business model innovation and shifting the business model from products to services. The hardest challenge is how to link the front-end of OI to the back end business that must bring these inputs to market (H. Chesbrough, 2017).

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Business model and OI-based strategy will ally the two forces of start-ups and large corporations. Hence, large corporations become a kind of "business catalysts" and keep looking for more initiatives to improve the innovation system. Vanhaverbeke (2013) found that OI must be embedded in corporate's strategy in order to understand the real value of OI initiatives.

Corporate Accelerator (CA)

It was found that the 'accelerator' partnership model between a start-up and big industry is in fact differs with the once-popular 'incubator' model. This model is an upgrade from the incubator model where the focus lies on intangible assets (e.g., knowledge and skills). Accelerator is an organization that accelerate the creation of start-up. Accelerators are usually funded by bigger companies, usually used to create technology-based start-up companies due to the lower cost of research in technological field (Pauwels, Clarysse, Wright, & Hove, 2015). Another study revealed internal and external motives that affect larger companies in creating a corporate accelerator (CA) program, and how it was implemented in a new partnership with a start-up firm. The research shows that the idea in creating a CA were mainly proposed by company's CEO (Moschner & Herstatt, 2017). This is due to the fact that CEOs mostly understand the importance of OI as an instrument to gather external opportunities to ensure company's long-term abilities to innovate. The role of dynamic innovation capabilities and OI activities should be a central focus in order to produce a break-through innovation, and in this case OI proposed to be a moderating variable (Cheng & Chen, 2013).

CA's program is meant to support newly-established company in forms of infrastructure, mentoring, training & networking. It has been proven that the most effective mode for a company to adopt start-ups technology through CA is by involving start-up-related parties in routines meetings and workshop for the duration of 3 months. According to Kohler (2016) there are four dimensions in designing a CA program as a link between a company and start-ups; proposition (programs offered), process (how the program is run), people (parties involved) and place (where the program's located).

Another previous studies, there are 8 dimensions of CA's focus configuration, which are; (1) locus of opportunity (internal vs external); (2) strategic logic (exploration vs exploitation);(3) industry focus (tight vs broad); (4) equity involvement (yes vs no); (5) venture stage (early vs later); (6) external partner (yes vs no); (7) connection to parent (integrated vs independent); and (8) leadership experience (internal vs external) (Kanbach & Stubner, 2016). Shankar & Shepherd (2018) discovered 5 dimensions that may determine the success of a CA programs, and those are; corporate nurturing through CA (ecosystem vs innovations), identifying potential venture to accelerate (inbound vs outbound), strategic posture (reserve vs adapt), investment time horizon (long term vs short term), and CA stages (access to customers vs access to business units).

Hypotheses and Proposed Model of Start-up and Industry Partnership

Since large corporations in developing country, such as Indonesia, cannot afford high internal R&D expenses, and also learn from global trend, they started to develop start-ups ecosystem fostering their business growth. Business model and OI strategy from both start-up and corporation will be the key success of constructing a corporate accelerator. The OI type whether inbound or outbound would vary due to the maturity level of existing internal R&D of the corporation (Inauen & Schenker-wicki, 2012; Rangus, 2013).

From previous study, it also found that value proposition will be the main component from the business model to pivot the strategic partnership between start-up and corporation (H. W. Chesbrough & Vanhaverbeke, 2014) and the innovation performance will be measured from general indicators such as profitability, growth, market share and sales (Moretti & Biancardi, 2018). The hypotheses are as follows:

H1a: Inbound radical OI will be suitable for start-up - corporation partnership in implementing OI.
H1b: Outbound radical OI will be suitable for start-up – corporation partnership in implementing OI.
H1c: Inbound incremental OI will be suitable for start-up - corporation partnership in implementing OI.

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H1d: Outbound incremental OI will be suitable for start-up - corporation partnership in implementing OI.
H2: Startup's and corporation's business model alignment-especially its value proposition-is important to set up an effective corporate accelerator (CA).
H3: The CA outcomes could be measured by: sales, profitability, growth, market share, sales and other financial indicators related to its dimensions such as industry focus, equity involvement, entrepreneurial mindset and leadership experience.

And the following is the diagram that shows the proposed model for start-up - corporate partnership in Indonesia especially for ICT industry:

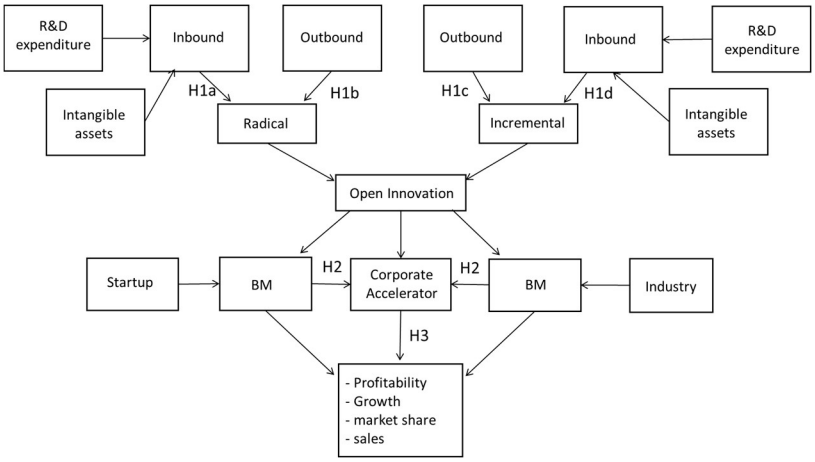

Fig 1. Conceptual Framework of Corporate Accelerator as Start-up – Industry Partnership Model
This conceptual framework has not been tested yet and further research would be conducted to examine the three hypotheses by selecting some ICT companies in Indonesia which have some intensive programs related to start-up ecosystem and development such as PT Telkom Indonesia Tbk., PT Bank Mandiri Tbk, and other private large corporations. The methodology will be a qualitative study with a depth interview with the top management of the corporations and startups' owners.

EXPECTED RESULTS

By adopting the open innovation concept (OI), it is crucial for an industry, especially ICT industry to merge their research and innovation teams, both external and internal, in order to preserve and expand their market. Corporate Accelerator (CA), as one of OI models, offers a more intensive way in supporting a startup's growth in their initial stage. Previous studies have shown that there is a significant relationship between OI activities and firm's performance and this relationship could be extended to the corporate-startup model with value proposition in business model as a pivot. The conceptual framework will be used as a guide in finding the large corporation and startup model of partnership in open innovation context. This model can be used as a reference for many corporations that seek growth through open innovation in terms of collaboration with startups.

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