

UDC 334

BUILDING STARTUPS: THE DESIGN ELEMENTS OF STARTUP ACCELERATORS IN INDONESIA

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ABSTRACT

Previous study had indicated a new generation of business incubator called as the accelerator. Accelerator or also known as 'startup accelerator' describe to be an entity that designs and curates program for new ventures providing mentorship, networking, and funding opportunities. The purpose of this study is to identify the various startup accelerators in Indonesia. This paper analyzes the different accelerator design elements of their key activities. Utilizing an inductive study, this study investigates four startup accelerators and identifies its features and characteristic. The result describes the distinction and similarities between the four accelerators. In conclusion, this paper provides an understanding of the building blocks of each accelerator and examines its different design elements. Recommendation resulted from this study is that there is a heterogeneity of accelerator model in which all of the four accelerator design elements as key features can be adopted to support startups and stimulate the entrepreneurship ecosystem. However, this paper does not examine the effectiveness among the four different accelerators.

KEY WORDS

Startup, accelerator, design elements, entrepreneurship.

Entrepreneurship and innovation are widely accepted as essential sources of business success, high value-added job creation and national economic development (Ozdemir and Sehitoglu, 2013). Entrepreneurs are known to be the individuals that create new business, drive and shape innovation, speed up structural changes, introduce new competition and contributing to an economy's fiscal health (Xavier et al., 2014; Sanawiri & Iqbal, 2018). Researches around the world have generated a hefty amount of evidence that supports the argument that small business is the largest providers of jobs and wealth (Stokes and Wilson, 2010). Despite the positive impact of small business on the economy, startups are also fragile and vulnerable in its early years. Small business or startups often fail very early in their lifecycle and only a small percentage of them remain in the survival and manage to succeed in growth (Stokes and Wilson, 2010). Therefore, various actors in the entrepreneurial community are now moving towards promoting a vibrant entrepreneurial ecosystem for new ventures to grow. The birth of different support mechanism offered for startups in improving its survivability is now proliferated in many countries (Miller and Bound, 2011) including in Indonesia.

Previously, several incubation mechanisms have been widely proposed by various stakeholders in the entrepreneurial ecosystem from policymakers, private investor, corporate, universities, and research entities in providing support and the acceleration of growth of startup companies (Mian, et al., 2016). Extent literature on business incubation generally confirms that incubators contribute in nurturing new ventures despite the different incubation model (Barbero et a., 2014). As incubation model continues to evolve into new generation of incubators (Bruneel et al., 2012) it is therefore important to gain better understanding of their specific features and characteristic before assessing its performance and impact on firms (Barbero et al., 2012). Various new generation of incubation model is being introduced in last five years, or known to be startup accelerator. Accelerator are organizations that focuses on providing supports needed to create and accelerate new entrepreneurial firms. A startup accelerator is an organization that design and curate

programs for startups by providing incubation services, such as education and training, mentoring through series of intensive programs and organized in a certain period of time duration (Cohen and Hochberg, 2014; Miller and Bound, 2011). Accelerators are argued previously by Bruneel et al., (2012) as alternatives from previous generation of business incubators which primarily focused on providing co-working space and in-house business and training support. As accelerators being adopted worldwide (see Seed-DB), yet the empirical and theoretical model is considered to be limited (Birdsall et al., 2013). Moreover, previous insights from the incubation study seem to partly provide early understandings of what actually is the startup accelerator. By assuming that there are differences among incubation and accelerator, therefore this study will attempt to fill the gap of previous discussions on incubators through utilizing a theoretical lens in analyzing and explain the heterogeneity among different incubation model (Bruneel et al., 2012).

Based on the discussion above, this study will attempt to explore 4 different accelerators in Indonesia and answers the following research question: "How do accelerator in Indonesia operate as new generation incubation model?", Utilizing the design elements and construct of startup accelerator from Pauwels et al., (2016) this study will explore the key characteristic of an accelerator's. Through this study, we provide knowledge of how accelerator differs from previous generation incubation models and how they particularly create value for their startups. By doing so, this study aims to contribute in existing literature in several ways. First, by depicting accelerators as new generation incubation model, this study seeks to identify accelerators key design parameters. The study conceptualizes both the dimension of their heterogeneity and distinctiveness in relation to other incubation models. Second, by extending previous study on incubators, this research will provide insights from startup accelerator in Indonesia, whereas previous research mainly conducted in developed countries (Miller and Bound, 2011; Dempwolf, et al., 2014; Pauwels, et al, 2016). These enable analyzing the adoption of startup accelerator program from developed countries to monitor its consistency and evolution.

LITERATURE REVIEW

The Evolution of the Business Incubation Concept

There is no one standard definition and type of business incubation (Ozdemir and Sehitoglu, 2013). The definitions and types of business incubations are available in the literature that reflects the aspects of the national policies and local cultures and covers wide range of services, approaches and objectives (Ratinho and Henriques, 2010). However, one common characteristic shared by all definitions is that business incubators are facilities designed to create conducive environment to new and small ventures in order to help them cope with the difficulties existed in the initial stages of an early startup, survive and grow and become successful mature businesses in the future. Other than that, there are basic services that are provided by business incubators, such as physical space at subsidized rates, shared basic business services and equipment at little or no cost, business assistance, legal and technical advises and financial supports (Bruneel et al., 2012; Ratinho and Henriques, 2010). According to other literatures the business incubation also has evolves over time, from an initial focus on facilities and administrative services to a more recent emphasis on the importance of business support. Currently, the research in the topic of business incubators has advance to the point where there is generational evolution of incubation models, due to the changing needs of the participating ventures and the entrepreneurial ecosystem. Furthermore, it is argued that each generation of incubation models adjusts its value proposition to the evolving needs of participating ventures or startups (Bruneel et al., 2012).

The Startup Accelerators

Accelerators are being adopted and replicated around the world as evolutions of incubators (Wise and Vallerie, 2014) by providing new ventures with more services than incubators. According to Hathaway (2016) Startup accelerators support early-stage, growth

driven companies through education, mentorship, and financing in a fixed period, cohort based setting. While they are often grouped with other early stage support and investing organizations, such as incubators, angel investors, seed stage venture capitalists, and even co-working spaces, these are all distinct things. Accelerators provides supportive environment for instance peer learning and peer support which allows the development of network and possible referrals. By becoming affiliated with a startup accelerator, startups will gain brand legitimization and help the entrepreneurial firm establishing contacts and raising money (Wise and Valliere, 2014). However, despite the growing interest in startup accelerator from stakeholders in entrepreneurial ecosystems, there is little to be known on their unique characteristic. The startup accelerator differs from incubation service through which it focuses on intangible, knowledge intensive, and support services aiming to accelerate new entrepreneurial ventures by providing various services such as education, training and mentoring to cohorts of new ventures in a certain period of time (Cohen and Hochberg, 2014). Both model, the incubator and startup accelerator, provide intangible service, however there are certain specific features that differentiate startup accelerator from the existing incubator (Isabelle, 2013). This primarily differentiation features that sets startup accelerator a part from an incubators are, firstly these organizations do not provide physical resources over a long period of time usually between 3-6 months. Second, they typically offer pre-seed capital and usually exchange for equity. Third, these organizations are closely connected to business angels or individual investors as a next step of investment rather than venture capitalist. Fourth, it is within their interest to focus more on startups or early-stage ventures for which it is less risky to invest do to be technology oriented and not capital intensive startups. Fifth, these accelerator model aims to develop the business aspect of the venture, which hopefully will turn startups to be investment ready businesses. All in which startup are provided by series of intensive mentoring sessions and networking opportunities, while also providing them with peer-to-peer support environment and entrepreneurial culture (Christiansen, 2009).

Various study in the past suggest that startup accelerator considered as an evolution of the incubation model (Wise and Valliere, 2014), however, future analysis in which particular characteristics and key features differs remains short. Following previous study on accelerator (Cohen and Hochberg, 2014; Miller and Bound, 2011) we examine the accelerator in much detail by introducing the design lens as systematic methodological approach to study the startup accelerator phenomenon. This study addressed the gap in the literature of incubator and accelerator by providing a theorized approach and contextualized the differences of new incubation model that are currently being adopted in an emerging economy country, Indonesia.

Design Elements and Themes of Startup Accelerators

The design elements of startup accelerator previously have been studied by Pauwels et al., (2016), which consist of 5 key parameters of the accelerator. These design elements are program package, strategic focus, selection process, funding structure, and alumni relations. The first element of accelerator is the program package which refers to all the services provided by the accelerator to its portfolio startup participating in the program. These package consist of tailored and planned mentoring services, curriculum training program, regular counselling service, organizations of demo days or investor days, share working space, and investments opportunities. The second element of an accelerator is the strategic focus, which refers to the strategic decision concerning with industry, sector and geographical operations. The third element is selection process into the accelerator program. The selection process usually conducted in a multi-staged selection process which is organized in a period of time using online open call platform, use external screening, and team as the primary selection criterion. The funding structure is the fourth design element of accelerator which refers to the funding structure. The funding structure of accelerator is diverse but mainly can be classified into 4 type investor funding, corporate funding, public funding and alternative revenue. The last design element is the alumni relation which known to be one of the most important element of an accelerator. Accelerator spends a lot of effort

in networking their portfolio startup with the alumni companies as source of mentors and possible investors.

According to Pauwels et al., (2016) the design themes of accelerator consist of three main themes namely the ecosystem builder, the deal-flow maker, and the welfare simulator. The different theme of accelerators introduced provide as a concrete tool to study incubation models and its evolution. The ecosystem builder theme accelerator refers as accelerator which has been formed by corporate who wishes to developed an ecosystem of product or services to its customer or the corporate stakeholder. The accelerator network here is therefore exclusively oriented towards the corporate potential or existing customer base. Furthermore, the deal-flow maker accelerator refers to accelerator which received its funding from investors, angels, or corporate venture capital. This theme accelerator usually has a clear objective to identify and offers promising startup for investment opportunities to its partners. The third themed accelerator of welfare simulator refers to accelerator which is formed and backed by government. The objective of welfare simulator accelerator is to stimulate startup activities within a region, fostering economic growth and usually characterized with a specific domain of technology.

METHODS OF RESEARCH

This research employed an inductive, multiple case study design as a research strategy (Eisenhardt and Grabner, 2007; Tracy, 2010) to answer the 'how' research question. A theoretical snowball sampling approach (Yin, 2013) is chosen considering accelerator is relatively an unexplored subject under study. By focusing on cases which comply with the definition of accelerator by which an organization that offers program for early ventures to apply for and provides with office spaces, networking and financing events, dedicated mentoring and business coaching, and visits from serial entrepreneurs and at the end of the program offers a demo day event (Miller and Bound, 2011). Using that criteria, this study identified an initial 10 accelerators in Indonesia. However, among the 10 accelerator identified for the study, only 4 accelerator agreed to participate in the study by providing the informants needed in the study (See fig 1). By relying on accelerators that provides with expert judgments, our sampling approach can facilitate access to rich insights about accelerator key design features rather than focusing on established performance indicator. This research used interview and archival data. The primary data source was gathered through interview with managing directors/ manager, mentor or business coach and startup joined to the accelerator program from 4 accelerators selected during early 2018. The interview guide was developed from the key design element and construct of startup accelerator from (Pauwels, et al., 2016).

The informants were asked about 5 design element consists of the program package, the strategic focus, selection process, funding structure and alumni relationship. The process was conducted through online conference call and email were exchange for further data gathering. Interview was conducted ranging from 1 to 1.5 hours to verify and supplemented the response. Furthermore, an additional archival data from various sources including news article, internal event reports, company website and presentations were used in the study which also served as triangulation sources to validate emerging insights. The secondary data sources were important source of information to help contextualized the multiple case history of accelerator. The data analysis of this study consists of several stages. In order to present data to be easily understood, the steps of data analysis for this study employed The Interactive Model Analysis from Miles and Huberman (2007), which divides steps in data analysis activities with several parts, namely data collection, reduction, presenting, and drawing conclusions or verification.

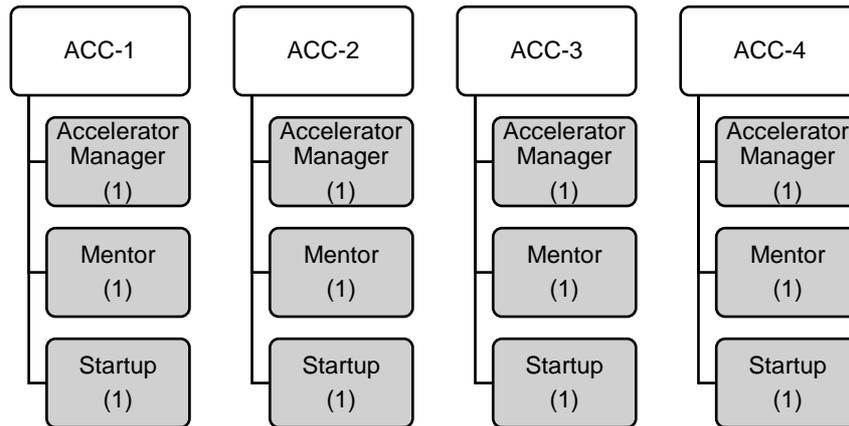


Figure 1 – Startup accelerator and key informant
Note: ACC refers to accelerator case study

RESULTS AND DISCUSSION

The following results will be presented in two sections. The first section of this paper will discuss the result regarding the general information of the four accelerator program presented in the case study. The second part of the paper will be presenting the comparisons of the five design elements of the startup accelerator proposed by Pauwels et al., (2016). By presenting the result with incase and between case results, this paper will attempt to describe the similarities and differences in the design elements of the accelerator in Indonesia.

Based on the general information of the accelerators in the case study, the result shows that the presented accelerators had certain components in common to one another, but also allows some differences as well (see table 1). The four case study presented in this research are accelerators that have been initiated from different institution background. These cases in this study are accelerators from a university led program, a national government funded program, a private accelerator and lastly from a corporate managed accelerator. The four accelerators in the case study found to have several commonalities such as program or training curriculum in the topics of business model, lean startup, product development, marketing, and financial. Thus, this correspond with Cohen & Hotchberg, (2014) which state that the intensive and diversity of training program provided by accelerators is known to be essential and often a primary reason why startups participate into the program. Aside from this several general commonalities, the four accelerators studied also found to have distinctive features in their general characteristic (see table 1 for more detail).

In regards to the three design theme of accelerator introduced by Pauwels et al., (2016), the design theme for the presented case study indicates that three of the accelerators falls into the classification of welfare-simulators. The accelerator program of ACC-1, ACC-2, and ACC-3 are accelerators that focus on stimulating start-up activity and foster economic growth in a region. These accelerators select startups in its early stage and often individual entrepreneur is recruited in the program with an idea of a product but not having a clear value proposition yet. The welfare-simulators theme indicates to be consistent with the concept of the accelerator from Wise and Valliere (2014), which an accelerator provides their portfolio ventures with brand legitimization, while startups in the program also have the opportunity to establish a network with mentors and other startups.

In this study, the four accelerators presented have typically the same concept of program package offered in their program (see table 2). There seems to be no major difference in the program package offered by the four accelerators which consist of mentoring service, curriculum or training program, counseling service, and demo day or investor day. However, only ACC-2 and ACC-4 accelerator program appear to provide startups with location service such as co-working space or shared offices during the

acceleration program. Both ACC-1 and ACC-3 suggests that location service was not a concern in the early stage of the venture. In particular, the ACC-3 accelerator offers online training courses and online conference call for mentoring services. In terms of the investment opportunities, both the government and university-led accelerators indicate not taking equity post-graduation of the startup in the acceleration program. These accelerators have a clear goal to only improve startups to become attractive and investment ready for other institution to invest. Both ACC-1 and ACC-2 provide a small amount of seed capital, however, is presented as prize money for the startup to motivate them moving forward. On the other hand, ACC-3 and ACC-4 allocated a small amount of money to portfolio companies after completion of the program only enough to cover the early development phase of the product. In return of the seed money, accelerators take a small portion of shares from the portfolio company and given the opportunity of follow-up money in the future.

Table 1 – General information of accelerators

| GENERAL INFORMATION | PSEUDONYM ACCELERATOR | | | |
|--------------------------------|-----------------------|---------------------|----------------------------|------------------------|
| | ACC-1 | ACC-2 | ACC-3 | ACC-4 |
| Year Establishment | 2016 | 2015 | 2017 | 2015 |
| Initiator | University Led | Government Led | Social-Private | Corporate |
| Funding | University | Public | Sponsors | Internally Self-Funded |
| Duration | 2-3 months | 3-4 months | 4-6 months | 6-7 months |
| Participants | Individual & Teams | Founding Teams | Founder | Founding Teams |
| Cohort Size | N/A | 30 Teams | N/A | 20 Teams |
| Program Structure and Training | Onsite Bootcamp | Online and Bootcamp | Onsite Online and Bootcamp | Onsite Bootcamp |
| Team Building | Yes | No | Yes | No |
| Lean Startup | Yes | Yes | Yes | Yes |
| Business Model | Yes | Yes | Yes | Yes |
| Product Development | Yes | Yes | Yes | Yes |
| Marketing | Yes | Yes | Yes | Yes |
| Financial | Yes | Yes | Yes | Yes |
| Design Theme | Welfare Simulator | Welfare Simulator | Welfare Simulator | Ecosystem Builder |

Table 2 - The design element program package of the accelerators

| Pseudonym Accelerator | Program Package | | | | | |
|-----------------------|-------------------|------------------------------|---------------------|------------------------|------------------|--------------------------|
| | Mentoring Service | Curriculum/ Training Program | Counselling Service | Demo Day/ Investor Day | Location Service | Investment Opportunities |
| ACC-1 | Provide | Provide | Provide | Provide | Not Provide | Non-Equity |
| ACC-2 | Provide | Provide | Provide | Provide | Provide | Non-Equity |
| ACC-3 | Provide | Provide | Provide | Provide | Not Provide | Equity |
| ACC-4 | Provide | Provide | Provide | Provide | Provide | Equity |

The design elements of strategic focus and selection process from the presented case study of four accelerators show several variations (see table 3). The strategic focus of ACC-1 and ACC-2 indicates to have a generic approach in their industry/ sector focus, compared to ACC-3 and ACC-4 which focus respectively in social entrepreneurship and digital technology. As for the geographical focus, only ACC-1 accelerator program has a local geographical focus, whereas other accelerators are opened nationally with slight variations in their host city. The selection process of the startup teams, prior to joining the program, is collected through a single platform open call registration with a specific time frame. The majority of the accelerator in the study also uses external parties to review the applications, except for ACC-1 which manage the screening process internally. As for the primary selection criterion, both the ACC-1 and ACC-3 accelerator appear in receiving individual as

well as team applicants into the acceleration program. Highlighting ACC-4 accelerator program, their primary selection criterion distinct from other accelerators. Only teams with a prototype and working business model are selected to the program. This selection process indicates that there is only one accelerator in the study consider taking advance stage startup into their accelerator program.

Table 3 – The design element strategic focus and selection process of accelerators

| Pseudonym Accelerator | Strategic Focus | | | Selection Process | | | | |
|-----------------------|-------------------------|--------|--------------------------------------|-----------------------|-------------------|----------|--|-----------|
| | Industry/ Focus | Sector | Geographical Focus | Online Open Call | Use for Screening | External | Primary Criterion | Selection |
| ACC-1 | Generic | | Local University | Student Only Platform | No | | Individual and Team | |
| ACC-2 | Generic | | Locally Organized in Multiple Cities | Open Platform | Yes | | Team with Prototype | |
| ACC-3 | Social Entrepreneurship | | National | Open Platform | Yes | | Individual and Team | |
| ACC-4 | Digital Technology | | National in Multiple Cities | Open Platform | Yes | | Team with Prototype and Business Model | |

Table 4 – The design element funding structure and alumni relations of accelerators

| Pseudonym Accelerator | Funding Structure | | | | Alumni Relations | |
|-----------------------|-------------------|-------------------|----------------|---------------------|------------------|----------------------|
| | Investor Funding | Corporate Funding | Public Funding | Alternative Revenue | Alumni Network | Post Program Support |
| ACC-1 | None | None | Yes | None | Provide | Not Established |
| ACC-2 | None | None | Yes | None | Provide | Provide |
| ACC-3 | Yes | Yes | None | None | Provide | Provide |
| ACC-4 | Yes | Yes | None | None | Provide | Provide |

The fourth and fifth design elements of the accelerator presented in the case study show several commonalities while also showing slight variations among each of them. In the context of the accelerator funding structure, both ACC-1 and ACC-2 specify a typical public-funded accelerator by using public funding for running the accelerator program. On the other hand, both ACC-3 and ACC-4 indicates receiving from both investor and corporate funds for running the startup accelerator program. None of the above accelerators in the study suggested in having other revenue of income. Hence, the alumni relations from all of the accelerator in the study consisted in providing with alumni network for their portfolio startups, although only ACC-1 seems the only that does not provide post-program support (see table 4 for more detail).

CONCLUSION

The accelerator contributes importantly to the vibrancy of an entrepreneurial ecosystem. However, previous research provides very little insight into the accelerator characteristic features and strategies. In this study, we identified the general characteristic from four different accelerators as a new generation of incubation model in Indonesia. By revealing the commonalities and distinctive elements of the accelerators in the presented case study, we identify the heterogeneity of the accelerators operations and strategies. Employing the design elements of the accelerator from previous literature, this study extant the incubation and accelerator literature by presenting a variety of typologies, classifications and confirms the design elements of accelerator proposed by Pauwels, et al., (2016). Although the presented case study reveals only two design themes from the proposed three in the literature, we believed this is because the accelerator is still new in its adoption in the country. However, from this study, the differences between accelerator design elements may

serve as insight for entrepreneurs in deciding which accelerator best fits their organizations. Nevertheless, this paper does not provide the evaluation of the effectiveness among the different design theme. We hope that other researcher in the field may pick up from our study to further analyze the impact of an accelerator program.

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