Analysis Of Ambidexterity Management Strategy On Startup

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Abstract: As technology changes so rapidly that aims to make it easier for consumers to create new patterns, businesses must be able to adjust and take advantage of these changes. This change is called the disruption era, where companies must have the ability to explore and exploit or often called the ability of ambidexterity to continue to grow. Companies that have the ability to explore and exploit are called ambidextrous companies.

This study aims to analyze what are the drivers, barriers, and mechanisms for implementing ambidexterity in 3 technology startups in Yogyakarta. The research method is qualitative with plural case studies using interviews. The results showed that the drivers for ambidexterity consisted of forming strategic alliances, company flexibility, and collective decision making. Ambidexterity barriers namely competition to form markets, input & manufacturing costs, market development needs, incremental change focus, and limited R&D. In addition, ideally in the mechanism of implementing ambidexterity in a company must combine 3 approaches namely structural, sequential, and behavioral integration.

Keywords: Case Study, Exploration, Exploitation, Ambidexterity, Startup

I. INTRODUCTION

An organization in the era of disruption must support the ability and exploitation or often called the ability of ambidexterity (March, 1991). The process of exploratory learning includes "search, risk search, variety, experiment, game, discovery, discovery", on the other hand exploitative requires "choice, refinement, efficiency, selection, production, implementation, execution" (March, 1991). Furthermore, exploitation and exploration have been published by Ardichvili et al. (2003); Auh & Menguc (2005); Brady & Davies (2004); Holmqvist (2004); Ireland & Webb (2007); and Rodan (2005), in addition to providing a wealth of

information related to the development of the concept of organizational ambition (Tushman & O'Reilly, 1996). Tushman & O'Reilly (1996) asked companies that have the ability to consult and exploit the so-called ambidextrous companies.

An organization that can develop new skills from existing skills to be more innovative (Tushman & O'Reilly, 1996; O'Reilly & Tushman, 2004), in turn serves to improve its long-term performance (Zi-Lin & Poh-Kam, 2004). According to (Andriopoulos & Lewis, 2009) ambidexterity is an ability in organizations that is widely praised, but very rarely achieved. He & Wong (2004) revealed that ambidexterity has positive implications for company performance, especially in organizations or technology companies (Wang & Rafiq, 2014).

Ambidexterity can work better in some companies, but not in other companies. Voss & Voss (2013) found that product ambiguity (product exploitation & exploration) and market ambidexterity (product exploitation & exploration) had a positive impact on older and larger companies, but not on companies that were young and smaller. Ebben & Johnson (2005) revealed that limited resources for small manufacturing companies rather than larger manufacturing companies, should not pursue ambidexterity because it can cause performance to be worse. Small manufacturing companies should focus more on efficiency strategies or can also implement flexibility strategies. Pursuing ambidexterity may have an impact on the weakening of limited resources in small companies (Voss & Voss. 2013).

Resources are the main driver of ambidexterity in large companies (Kyriakopoulos and Moorman, 2004; Raisch & Birkinshaw, 2008). In contrast, the main constraints on SMEs relate to resources (Lubatkin et al., 2006). Limited resources in SMEs make it necessary to be creative to pursue organizational ambition of diversity (Kauppila, 2010), to balance exploration and exploitation (Lavie & Rosenkopf, 2006). Another key driver for ambidexterity is high management. Jansen et al. (2008) explain that the role of senior executives in balancing the conflicting forces in

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ambidextrous organizations. A high level of management in SMEs will have a stronger influence on company development than on large companies.

Assink (2006) explains the lack of competence & infrastructure both internal and external can barriers innovation in the company. Sfirtsis & Moenaert (2010) presents three inhibiting facts to achieve ambidexterity, namely knowledge-based, cognitive, and organizational barriers. Other barriers discussed in the literature such as lack of individual motivation, lack of trust in recruitment, the presence of internal and external rules that inhibit (Kalgovas et al., 2014).

The literature has identified mechanisms that facilitate the application of ambidexterity such as structural and temporal separations such as: Gupta et al. (1999); Simsek et al. (2009); and Tushman & O'Reilly (1996). As for organizational culture (Wang & Rafiq, 2014) and behavioral context (Gibson & Birkinshaw, 2004). However, this mechanism often applies to large and well-established companies, but not necessarily for SMEs due to lack of resources (Lubatkin et al., 2006).

In Indonesia the latest research related to ambidexterity is still small, for example research conducted by Ikhsan et al. (2017) in the context of SMEs, Kusumastuti et al. (2018) in the context of one company, Kusumastuti (2018) in the context of a family company, and research in the context of startups does not yet exist. So that encourages researchers to investigate further in the context of startup which consists of the nature of organizational ambition, the main drivers force, barriers and mechanisms, because there is still a scarcity of research related to ambitionxterity in developing countries like Indonesia. Interestingly, Indonesia is currently the 5th largest startup producing country in the world with 2,074 startups, Canada 2,489 startups, British 4,900 startups, India 6,179 startups, and the United States 46,600 startups (Startup Ranking, 2019).

II. LITERATUR REVIEW

A. AMBIDEXTERITY DRIVERS

Resources are the main driver of ambidexterity in large companies (Kyriakopoulos & Moorman, 2004; Raisch & Birkinshaw, 2008). Lubatkin et al. (2006) argue that top management in SMEs has a strategic role in operations, so that it will facilitate the integration of exploration and exploitation by synchronizing collaborative behavior. Gibson (2004) revealed a number of factors driving ambidexterity such as having ambitious individuals taking initiatives and being able to take opportunities outside their own work boundaries, having individuals who can work together and cooperatively, having individuals who always build internal relationships, and have multitasking abilities. Company flexibility, collective decision making, and collaboration enable the formation of organizational ambition (Senaratne & Wang, 2018).

B. AMBIDEXTERITY BARRIERS

Assink (2006) explains the lack of competence and infrastructure both internal and external can barriers innovation in the company. Sfirtsis & Moenaert (2010) presents three barriers facts to achieve ambidexterity, namely knowledge-based, cognitive, and organizational barriers. Sfirtsis & Moenaert (2010) based on knowledge such as witnesses to knowledge so that it is difficult to detect, while cognitive based such as differences in attitudes barriers communication, and based on organizational barriers such as intra-organizational boundaries. Gibson (2004) explains several factors that can barriers ambition in an organization, such as individuals who do not have the initiative and do not want to take opportunities outside their own work boundaries, individuals who are unable to cooperate and are not cooperative, are not conducive to the internal relations of the organization, and does not have multitasking capabilities. The lack of company flexibility, individualistic decision making, and not establishing cooperation either internally or externally is an obstacle to the formation of organizational ambition (Senaratne & Wang, 2018).

C. APPROACH TO AMBIDEXTERITY

Papachroni et al. (2016) explained that in order to achieve organizational ambiguity, it is necessary to recognize and manage various kinds of tension at each level. The approach to managing tensions towards organizational ambiguity is grouped as follows:

a. STRUCTURAL APPROACH

O'Reilly & Thusman (2004) stress the important role of top management in managing the tensions that arise between exploration and exploitation. In order to integrate each structurally separate unit, it is necessary to have social integration and the behavior of the top management team in ensuring coherence in the balance of resources (Lubatkin et al., 2006).

b. PARALLEL APPROACH

Parallel structure or can also be called sequential is a form of secondary structure such as project teams or networks, allowing organizations to switch to structures that suit the needs of exploration or exploitation in the context of a single business unit.

c. TEMPORAL BALANCING

Temporal or behavioral integration is defined as a long period of stability interspersed with brief revolutionary changes (Devins & Kähr, 2010), recommended in cases of large problems in the company's competitive environment (Volberda, 1996) or as a simultaneous alternative to balance exploration and exploitation (Geerts et al., 2010; Siggelkow & Levinthal, 2003).

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d. CONTEXTUAL APPROACH

Ghoshal & Bartlett (1994) revealed that the contextual approach considers ambidexterity to emerge through the context of organizational business units, involving a combination of performance management by stretching target combinations with values and supporting processes to help individuals achieve their targets (Gibson & Birkinshaw, 2004).

III. RESEARCH METHODS

This research uses a qualitative research method with plural case studies with research objects of 3 startups located in Yogyakarta, consisting of Lunasbos (CEO), Kawan Messanger (Director), and Nicola Indonesia (CEO). Data collection methods in this study used interviews by recording the speakers' voices.

DATA ANALYSIS

In this study, data analysis was divided into 2 years based on Eisenhardt (1989) who grouped the analysis to overcome the flood of excess data as follows:

a. WITHIN-CASE ANALYSIS

Within-case analysis generally involves writing detailed case studies for each incident in each case. Independent analysis of various cases allows researchers to avoid mistakes due to too much data.

b. CROSS-CASE SEARCH FOR PATTERNS

Cross-case search for patterns is driven by the fact that there are some cases where researchers over generalize. They jump to conclusions based on limited data (Kahneman & Tversky, 1973), they are overly influenced by reality (Nisbett and Ross, 1980), or more elite respondents (Miles & Huberman, 1984), ignoring the basic statistical nature (Kahneman & Tversky, 1973), or sometimes they accidentally fall for unclear evidence (Nisbett & Ross, 1980). The danger of researchers reaching premature and even false conclusions as a result of biased information processing. According to Hidenori (2016) there are 3 ways to prevent bias:

- ✓ Separate cases into categories & see similarities within each group the differences between groups.
- ✓ Divide cases into pairs for comparison, then look for differences between similar cases and for similarities between cases that appear different.
- ✓ Divide data according to data sources & deepen heterogeneous data insights.

IV. RESULT

Empirical findings in the field are described using withincase analysis techniques as follows:

A. EMPIRICAL FINDINGS AT THE LUNASBOS STARTUP

a. DRIVERS OF ORGANIZATIONAL AMBIDEXTERITY

Company Flexibility

With high company flexibility, it allows company organizations to explore and exploit (Wei et al., 2014). As illustrated in the following interview:

"We have special times for meetings [...]. Sometimes we gather day, night, or morning [....]. In the process of developing applications we conduct surveys to users [....] ". (CEO, Lunasbos).

"Our team has the flexibility to work, sometimes they do it at home or dikos [...]. In the introduction of applications in the community we always ask for criticism and suggestions for the application [...]". (Managing Director Messanger).

"Even though we have offices, flexibility still exists. For example the technical team is free to come and go home at any time [....] ". (CEO of Nicola Indonesia).

Collective Decision Making

A company that seeks to develop and commercialize new technological innovations requires organizational units to work together (Taylor & Helfat, 2009). As illustrated in the following interview:

"In making decisions we discuss it together in a forum [...]". (CEO of Lunasbos).

"The pattern of decision making is still collective, so we discuss it together [...]". (Managing Director Messanger).

"Decision making in our direction has led to a transition to decentralization [...]. Each division discusses the focus of the project being carried out, and the CEO is limited to knowing his progress [....] ''. (CEO of Nicola Indonesia).

Form Strategic Alliances

Companies that are able to balance exploration and exploitation through alliances gain profits and market values (Lavie et al., 2011). An interview with Lunasbos will illustrate this:

"We certainly have a strategic alliance [...]. We collaborate with startups engaged in finance, operations for application development [....] ". (CEO of Lunasbos).

"As business develops, we see the need for strategic

"As business develops, we see the need for strategic alliances, both private and government [....]' '. (Managing Director Messanger).

"We always try to scale up with various alternatives, one of them is with an alliance [...]. We have so far had alliances in the field of marketing spread across East Kalimantan, Riau, Yogyakarta [...] ''. (CEO of Nicola Indonesia).

Limited Competition In Industry

Competitors in a limited industry will be very profitable for the company. As illustrated in the following interview:

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"Actually, our competitors are applications that are engaged in finance [...]. Interestingly Lunasbos has a special segmentation on accounts receivable debt [....] ". (CEO of Lunasbos).

"Actually, our competitors are chat applications and e-commers [...]. But we have our own segmentation in working on a niche market that is by combining chat and e-commer [....]. So far in Indonesia there are no applications like us [....] ". (Managing Director Messanger).

b. ORGANIZATIONAL AMBIDEXTERITY BARRIERS FACTORS

Competition Forms The Market

Competition to form a market is a challenge faced to realize organizational barriers of diversity, as illustrated below:

"We have competitors in startup with application providers in the financial sector [....]. So far we have a clear market segment, namely in accounts receivable payables [...] ". (CEO of Lunasbos).

"Our competitors in shaping the market are chat and e-commer applications, but actually we already have a clear market segment or niche by combining chat and e-commer [....]. The service concept we have so far is still the first in Indonesia [....]. We want to focus on introducing users, seeing that the market is still wide [....] ". (Managing Director Messanger]

"We have many competitors in this business, but we can differentiate through segmentation and service to users [....]. So that we do not directly head to head with competitors [....]. The market is still wide for us to develop in various regions [....] ". (CEO of Nicola Indonesia).

Input And Manufacturing Costs

Costs are a component of reducing company income if not managed properly, thus becoming barriers to the realization of ambidexterity. As illustrated in the following interview:

"So far, our biggest cost is in HR, which is the salary [....]. Then the server costs [....] ". (CEO of Lunasbos).

"We have drained a lot of costs to promote by way of socialization to the regions, and to take part in exhibitions about IT [...]". (Managing Director Messanger).

"We have a lot of money in HR, which is related to salary and team capacity improvement by attending training [....]. Marketing costs are also quite large, in which there are transportation and accommodation costs [....] ". (CEO of Nicola Indonesia)

Market Development Needs

The need for market development if not managed properly will be barriers to the realization of ambition in the organization. As illustrated in the following interview:

"In the future, we want to develop other applications to create new markets [...]. The development is still related to

finance [....]. We also anticipate new competitors [...] ". (CEO of Lunasbos).

"After the application development process is complete, we continue to penetrate the market to work on the existing potential, so that users understand the benefits of the products we develop [....]. We also analyze what the market needs [....] ". (Managing Director Messanger).

"We are currently developing a platform that can later be leased to the private sector or government, so we have recurring income [...]. For our development, we invest a lot in HR so that R&D becomes stronger [....] ". (CEO of Nicola Indonesia).

Focus On Incremental Change

Companies that focus on gradual change can be barriers to the realization of organizational ambition. Companies tend to be exploitation oriented. As illustrated in the interview below:

"So far we have focused on sustainable growth by slowly improving our applications so that users are comfortable [...]. We have not thought about acquiring [...]". (CEO of Lunasbos).

"For application development so far, just keep it there [....]. We are focusing on developing markets by collaborating with various parties, both private and government [....] ". (Managing Director Messanger).

"In the future we will still work on and develop markets in various villages, because the market is still potential [...]. We must maintain team solidity, so that these targets can be achieved [....]. We are interested in the acquisition [.....] ". (CEO of Nicola Indonesia).

R&D Limited

The existence of limitations of research & development (R&D) can be barriers to the realization of ambition in organizations, as illustrated in the following interview:

"Actually, we are lacking one more for HR in developing R&D [....]. We are currently still operating according to existing HR [....] ". (CEO of Lunasbos).

"In the future, we will improve R&D in accordance with the needs for innovation and market penetration [....]. For the time being, we are optimizing what is available, while at the same time reducing costs for salaries [....]. (Managing Director Messanger).

"Our R&D capability is sufficient now, but in the future it will certainly be lacking [...]. We invest a lot in R&D considering that there are many competitors of [...]. So that the capital requirements in R&D are pretty much [....] ". (CEO of Nicola Indonesia).

The findings of the empirical study are then integrated into the graph below:

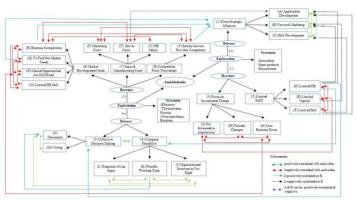


Figure 1: Map of Ambidexterity Drivers & Barries Factor Integration Interaction of all cases

V. DISCUSSION

Based on empirical findings, the researcher identifies dominant patterns that appear compact at the 3 startups as in the table below:

Ambidexterity Factor	Ketegori	Startup		
		A	В	C
Driver	Company			
	Flexibility	High	High	High
	Collective Decision			
	Making	High	High	Medium
	Form Strategic			
	Alliances	High	Medium	High
Barriers	Competition forms			
	the market	High	Medium	High
	Input and			
	Manufacturing			
	Costs	High	High	High
	Market			
	Development			
	Needs	High	High	High
	Focus of			
	Incremental Change	High	High	High
	R&D Limited	High	High	High

Table 1: Core Findings and Dominant Patterns in Each Case
To be able to present the data of case findings in the field
carried out completed conceptually and enable the complex
data interrelated visually presented in Figure 2 Stages of the
Research Process:

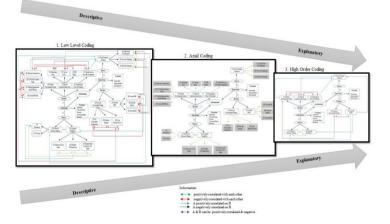


Figure 2: Stages of the Research Process

Based on Figure 2 the analysis starts from a large map that summarizes the whole, and the purpose of this stage is to provide a case description or low level coding stage. At the low level coding stage, the function is to identify all dimensions relevant to the research topic. The next step, axial coding, is used to identify the causal relationship between dimensions. The final stage in this analysis eliminates other concepts that only leave important concepts for contextual understanding, or commonly called the high order coding stage. These important concepts are investigated to understand each other's effects and on innovation activities, which are positive (as an impetus) or negative (as an obstacle). To be able to see the detailed findings of these important concept cases, it can be seen in Figure 3:

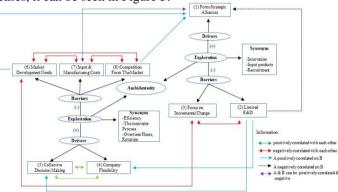


Figure 3: High Order Coding for Drivers & Barriers Factor
Ambidexterity

If you read Figure 3 from the top right, i.e. from ambidexterity driving factors seen from exploration, there is forming a strategic alliance (1). Forming strategic alliances (1) aiming at application development, forming marketing networks, and developing HR skills so that companies become more established in business and able to compete. Forming strategic aliation (1) can be positively and negatively correlated to input & manufacturing cost efficiency (7), this happens for application development as startup A (Lunasbos) does. The existence of competition to form a market (8) provides a positive correlation to form a strategic alliance (1), so that the company can continue to be sustainable in the face of existing competitors.

Limited Research & Development (R&D) (2) becomes an exploratory barriers to the realization of organizational ambition. Limited R&D (2) is due to limited human resources, limited capital, and limited skills of human resources owned. Limited R&D (2) causes companies to focus on incremental changes (3) due to the lack of alternative strategic choices, so it tends to focus on the core business to make changes regularly as happened at startup A (Lunasbos), B (Comrades Messanger), and C (Nicola Indonesia). Limited R&D (2) negatively correlates to the formation of strategic alliances (1), this is caused when HR, capital, and skills are limited to the R&D component causing efforts to form strategic alliances (1) to be suboptimal for example for application development, network marketing, and development skill. Limited R&D (2) can positively correlate to company flexibility (4), this is due to limited HR encouraging one another to get to know each other and become close, so that the organizational structure is

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not rigid. R & D is limited (2) positively correlated to collective decision making (5) due to the lack of human resources, so as to encourage the realization of organizational ambition.

The focus of incremental change (3) becomes barriers to organizational ambidexterity for exploration. The focus of incremental change (3) is due to the company's lack of interest in acquisitions, changes or innovations that are carried out regularly, and focus on the core business. The focus of incremental change (3) is negatively correlated with limited R&D (2) which both can barriers the realization of ambitionxterity, this is because limited R&D can be caused by limited HR, capital, and skills so as to make companies not dare to take big risks. The focus of incremental change (3) negatively correlates with market development needs (6) this is caused when too focused on the core business, while competitors always innovate disruption and consumers move, then the company will be left behind or unable to compete.

Company flexibility (4) drives the realization of organizational ambition of exploitation. Company flexibility (4) generally occurs in organizations or companies that have a small number of teams (under 20) which is reflected in the organizational structure that is not rigid between superiors & subordinates, working time is flexible or not fixed at certain hours, and responsive input from users or its customers. Company flexibility (4) positively correlates with collective decision making (5), this is due to the small number of teams or human resources so that communication patterns have no distance between one another. Company flexibility (4) has a positive influence from limited R&D (2) because when there are limitations HR encourages flexible patterns in the organization's operations, so as not to be too shackled by a rigid organizational structure, so that the organization will optimize limited HR by various alternative strategy choices.

Collective decision making (5) drives the realization of organizational ambition of exploitation. Collective decision making (5) occurs in organizations or companies where the relationship between one team member and another is generally family-based or still close, which usually occurs because the number of teams is small like startups. Collective decision making (5) is reflected in decision making through discussion or using voting when in a forum, this has a positive impact to minimize errors in decision making. Collective decision making (5) positively correlates with the flexibility of the company (4), this is mainly driven by the company's organizational structure that is not rigid, so that it makes a close personal relationship so it often makes decisions by discussion. Collective decision making (5) gets positive impetus from limited R&D (2), because limited R&D is the same as limited HR, limited HR encourages closeness to one another so that ultimately implicates the discussion in making decisions.

Market development needs (6) are a barriers to the realization of organizational ambition of exploitation. Market development needs (6) occur when a company sees that there is still a large market potential to be developed so that there is a need to search for innovations in accordance with market needs, but is constrained by limited HR skills and the number of competitors of similar business. Market development needs

(6) are negatively correlated with input & manufacturing costs (7) which are barriers to organizational ambition, this happens when developing a market, it will be followed by increased costs, such as marketing costs, server costs, and HR salaries. Market development needs (6) are also negatively correlated with competition to form markets (8) which barriers ambidexterity can be realized. Competition to form markets (8) which is reflected by the presence of competitors in similar industries increasingly makes the needs of market development (6) difficult to fulfill. Market development needs (6) are positively correlated with forming strategic alliances (1), this is due to knowing market needs in tight business competition a strategic alliance is needed to be able to create added value through cooperation and minimize the negative impact of similar competitors.

The cost of input & manufacturing (7) is barriers to the realization of organizational ambition of exploitation. Input & manufacturing costs (7) become the most important part for the company's sustainability in generating profits. If the company is able to reduce costs or improve efficiency, the opportunity for sustainability in the long run will be realized. Input & manufacturing costs (7) found in case findings are reflected in marketing costs, server costs, and HR salaries. Input & manufacturing costs (7) are negatively correlated to market development needs (6), this is because when market development needs increase it will increase input & manufacturing costs, if not properly controlled, it will greatly affect the company's sustainability. Input & manufacturing costs (7) negatively correlate to competition to form a market (8), this is caused when competition forms a market to increase due to competitors, defensive steps will be followed to retain consumers for example increasing marketing costs, server costs to improve service quality compared to competitors, and provide salary increases to motivate teams. Input & manufacturing costs (7) positively and negatively correlated with each other to form a strategic alliance (1), this is because when forming a strategic alliance (1) for application development, marketing networks, and skill development will certainly increase the cost of input and manufacturing (7), but when it is successful in forming a strategic alliance (1) it will certainly reduce the costs of input & manufacturing (7) so that it becomes more efficient.

Competition to form markets (8) is barriers to the realization of organizational ambitivity which is formed by exploitation. Competition to form a market (8) is an important thing that companies must do to minimize the negative impact of competitors in the industry. Competition to form a market (8) negatively correlates to market development needs (6) to the realization of ambidexterity, because competition against competitors requires skilled HR & knows what consumers need so as not to move to competitors and all of that is also a barrier to market development needs (6). Likewise, the costs of input & manufacturing (7) are negatively correlated to competition to form a market (8), thus barriers the realization of organizational ambition. This is due, when there is an increase in competition to form a market (8) as a result the emergence of new competitors will increase input & manufacturing costs (7) to fight it, for example through increased marketing costs, server costs, and increased salary

expenses due to increased human resources to face competition to form markets. Competition forms the market (8) encourages a positive correlation with forming strategic alliances (1), thereby encouraging the realization of organizational ambition, because many competitors encourage companies to form mutually beneficial cooperation with each other so that it can also increase the company's competitiveness in facing competitors in the industry.

VI. CONCLUSION

In the previous section it was mentioned that this study aims to find out what are the main drivers, inhibitors, and mechanisms for implementing organizational ambitionxterity at startup. Based on the results of the analysis of case studies of empirical findings, this research concludes that:

A. DRIVERS AND BARRIERS FACTORS OF ORGANIZATIONAL AMBIDEXTERITY

- ✓ The main drivers force for ambidexterity in 3 startups (Lunasbos, Kawan Messanger, and Nicola Indonesia), namely forming strategic alliances, company flexibility, and collective decision making. There is also a high level dominant pattern for company flexibility occurring in all three startups. The high level dominant pattern for collective decision making was found at startup Lunasbos and Kawan Messanger, while Nicola Indonesia was still in the middle level. The dominant pattern of empirical findings for high levels in forming strategic alliances was found at Lunasbos and Nicola Indonesia startups, while Kawan Messanger was still in the middle level.
- ✓ The main barriers factors of ambidexterity in 3 startups (Lunasbos, Kawan Messanger, and Nicola Indonesia), namely competition to form markets, input & manufacturing costs, market development needs, focus on incremental change, and limited R&D. The high level dominant pattern found for competition to form the market occurred at startup Lunasbos and Nicola Indonesia, while Comrade Messanger was still in the middle level. High level dominant patterns for input & manufacturing costs, market development needs, incremental change focus, and compact limited R&D were found in all three startups.

B. MECHANISMS OF IMPLEMENTING ORGANIZATIONAL AMBIDEXTERITY AT STARTUP

Basically, no company adopts exactly whether it uses structural, sequential, and behavioral integration approaches in the process of applying ambidexterity mechanisms. Ideally in a company must adopt the three approaches to be integrated so that ambidexterity can be realized. However, in every company there is always one approach that is more dominant to use compared to the other approaches. In the case study at startup that becomes more dominant is the behavioral integration approach, where in this approach each individual

in the company must have the ability to explore and exploit. However, this does not mean that the structural and sequential approach is not applied, because at certain times it still requires that approach. For example, when dealing with the government, the banking sector and especially when dealing with formal law, a structural approach would be used. Then, at certain times also will apply a sequential approach. For example, when there is a request from an investor to work on a large project, the allocation of resources will be focused on the project so that it is completed quickly regardless of its position.

REFERENCES

- [1] Adler, P.S., Goldoftas, B. and Levine, D. (1999). Flexibility versus efficiency? A case study of model changeovers in the Toyota production system. Organization Science, 10(43), 43–68.
- [2] Alcalde-Heras, H., Iturrioz-Landart, C., & Aragon-Amonarriz, C. (2019). SME ambidexterity during economic recessions: the role of managerial external capabilities. Management Decision, 57(1), 21–40.
- [3] Andriopoulos, C. and Lewis, M. (2009). Exploitation-exploration tensions and organizational ambidexterity: managing paradoxes of innovation. Organization Science, 20(4), 696–717.
- [4] Ardichvili, A., Cardozo, R., & Ray, S. (2003). A theory of entrepreneurial opportunity identification and development. Journal of Business Venturing, Vol. 18, 105–123.
- [5] Arikunto, S. (2010). Prosedur Penelitian Suatu pendekatan Praktek. Jakarta: Rineka Cipta.
- [6] Assink, M. (2006). Inhibitors of disruptive innovation capability: a conceptual model. European Journal of Innovation Management, 9(2), 215–233.
- [7] Atuahene-Gima, K. (2005). Resolving the capability-rigidity paradox in new product innovation. Journal of Marketing, 69(4), 61–83.
- [8] Auh, S. and Menguc, B. (2005). Balancing exploration and exploitation: the moderating role of competitive intensity. Journal of Business Research, Vol. 58(No.12), 1652–1661.
- [9] Baker, J., Parasuraman, A., Grewal, D., & Voss, G. B. (2002). The influence of multiple store environment cues on perceived merchandise value and patronage intentions. Journal of Marketing, 66(2), 120–141.
- [10] Baykal, E. (2019). Family Firms and the Effects of Organizational Culture on Their Innovation. In E. Carvalho, Joao Conrado de Amorim & Sabino & M.C.B. (Eds.), Strategy and Superior Performance of Micro and Small Businesses in Volatile Economies (pp. 207–226).
- [11] Benner, M. J., & Tushman, M. L. (2003). Exploitation, exploration, and process management: The productivity dilemma revisited. Academy of Management Review, 28(2), 238–256.
- [12] Benner, M.J. and Tushman, M. (2003). Exploitation, exploration, and process management: the productivity

- dilemma revisited. Academy of Management Review, 28(2), 238–256.
- [13] Bogdan, R. dan T. (1992). Pengantar Metode Penelitian Kualitatif (A. Ruchan, ed.). Surabaya: Usaha Nasional.
- [14] Boumgarden, P., Nickerson, J., & Zenger, T. R. (2012). Boumgarden, P., Nickerson, J., & Zenger, T. R. (2012). Sailing into the wind: Exploring the relationships among ambidexterity, vacillation, and organizational performance. Strategic Management Journal, 33(6), 587–610.
- [15]Brady, T., & Davies, A. (2004). Building project capabilities: From exploratory to exploitative learning. Organization Studies, 25(9), 1601–1621. https://doi.org/10.1177/0170840604048002
- [16] Brion, S., Mothe, C., & Sabatier, M. (2010). The impact of organisational context and competences on innovation ambidexterity. International Journal of Innovation Management, 14(02), 151–178.
- [17] Brown, S.L., and K. M. E. (1997). The art of continuous change: Linking complexity theory and time-paced evolution in relentlessly shifting organizations. Administrative Science Quarterly, 42(1), 1–34.
- [18] Brown, S.L. and Eisenhardt, K. (1995). Product development: past research, present findings, and future directions. Academy of Management Review, 20(2), 343–378.
- [19] Carmeli, A. and Halevi, M. (2009). How top management team behavioral integration and behavioral complexity enable organizational ambidexterity: the moderating role of contextual ambidexterity. The Leadership Quarterly, 20(2), 207–218.
- [20] Chang, Y.C., Yang, P.Y. and Chen, M. H. (2009). The determinants of academic research commercial performance: towards an organizational ambidexterity perspective. Research Policy, 38(6), 936–946.
- [21] CNBC Indonesia. (2019). Gairah Decacorn Asia. Retrieved from https://www.youtube.com/watch?v=Qi-JwvEy1UM
- [22] DeVellis, R. F. (2016). Scale development: Theory and applications (Vol.26). Sage publications.
- [23] Devins, G., & Kähr, C. N. (2010). Structuring ambidextrous organizations: Exploitation and exploration as a key for long-term success. In In More than bricks in the wall: Organizational perspectives for sustainable success (pp. 60–67). Gabler.
- [24] Dewar, R. D., Whetten, D. A., & Boje, D. (1980). An examination of the reliability and validity of the Aiken and Hage scales of centralization, formalization, and task routineness. Administrative Science Quarterly, 25(1), 120–128.
- [25] Djamal. (2017). Paradigma Penelitian Kualitatif. Yogyakarta: Mitra Pustaka.
- [26] Duncan, R. (1976). The ambidextrous organization: Designing dual structures for innovation. R. Kilman, L. Pondy, D. Slevin, Eds. The Management of Organizational Design, 1.
- [27] Dyer, J. and Singh, H. (1998). The relational view: cooperative strategy and sources of interorganizational

- competitive advantage. Academy of Management Review, 23(4), 660–679.
- [28] Ebben, J.J. and Johnson, A. C. (2005). Efficiency, flexibility, or both? Evidence linking strategy to performance in small firms. Strategic Management Journal, 26(13), 1249–1259.
- [29] Eisenhardt, K. M. (1989). Building theories from case study research. Academy of Management Review, 14(4), 532–550.
- [30] Emzir. (2012). Metode penelitian pendidikan kuantitatif dan kualitatif. Bandung: Rajagrafindo Persada.
- [31] Geerts, A., Blindenbach-Driessen, F., & Gemmel, P. (2010). Achieving a balance between exploration and exploitation in service firms: A longitudinal study. Academy of Management Proceedings, 2010(1), 1–6.
- [32] Gersick, C. J. (1988). Time and transition in work teams: Toward a new model of group development. Academy of Management Journal, 31(1), 9–41.
- [33] Ghoshal, S., & Bartlett, C. A. (1994). Linking organizational context and managerial action: The dimensions of quality of management. Strategic Management Journal, 52(S2), 91–112.
- [34] Gibson, C.B. and Birkinshaw, J. (2004). The antecedents, consequences, and mediating role of organizational ambidexterity. Academy of Management Journal, 47(2), 209–226.
- [35] Gibson, J. B. & C. (2004). Building Ambidexterity into an Organization. MIT Sloan Management Review, 45(4), 47–55.
- [36] Goldstein, S. G. (1985). Organizational dualism and quality circles. Academy of Management Review, 10(3), 504–517.
- [37] Greenhalgh, T., & Taylor, R. (1997). How to read a paper: Papers that go beyond numbers (qualitative research). BMj, 315(7110), 740–743.
- [38] Gupta, A.K., Smith, K.G. and Shalley, C. (1999). The interplay between exploration and exploitation. Academy of Management Journal, 25(5), 335–350.
- [39] Gupta, A.K., Smith, K.G. and Shalley, C. (2006). The interplay between exploration and exploitation. Academy of Management Journal, 49(4), 693–706.
- [40] Güttel, W. H., & Konlechner, S. W. (2009). Continuously hanging by a thread: Managing contextually ambidextrous organizations. Schmalenbach Business Review, 61(2), 150–172.
- [41] Hage, J., & Aiken, M. (1970). Social change in complex organizations (Vol.41). Random House Trade.
- [42] Harry, M. and Schroeder, R. (2000). Six Sigma: The Breakthrough Management Strategy Revolutionalizing the World's Top Corporations.
- [43] He, Z. and Wong, P. (2004). Exploration vs. exploitation: an empirical test of the ambidexterity hypothesis. Organization Science, 15(4), 481–494.
- [44] Hidenori, S. A. T. O. (2016). Generalization Is Everything, or Is It?: Effectiveness of Case Study Research for Theory Construction. Annals of Business Administrative Science, 15(1).
- [45] Holmqvist, M. (2004). Experiential learning processes of exploitation and exploration within and between

- organizations: An empirical study of product development. Organization Science, 15(1), 70–81.
- [46] Ireland, D. and Webb, J. (2007). Strategic entrepreneurship: creating competitive advantage through streams of innovation". Business Horizons, 50(1), 49–59.
- [47] James, S. P. (1980). Participant Observation. Florida: Holt, Rinehart and Winston.
- [48] Jansen, J. J., Tempelaar, M. P., Van den Bosch, F. A., & Volberda, H. W. (2009). Structural differentiation and ambidexterity: The mediating role of integration mechanisms. Organization Science, 20(4), 797–811.
- [49] Jansen, J. J., Van den Bosch, F. A., & Volberda, H. W. (2005). Exploratory innovation, exploitative innovation, and ambidexterity: The impact of environmental and organizational antecedents. Schmalenbach Business Review, 57(4), 351–363.
- [50] Jansen, J.J.P., George, G., van den Bosch, F.A.J. and Volberda, H. (2008). Senior team attributes and organizational ambidexterity: the moderating role of transformational leadership. Journal of Management Studies, 45(5), 982–1007.
- [51] Jansen, J.J.P., van den Bosch, F.A.J. and Volberda, H. (2006). Explorative innovation, exploitative innovation, and performance: effects of organizational antecedents and environmental moderators. Management Science, 52(11), 1661–1674.
- [52] Jaworski, B.J. and Kohli, A. K. (1993). Market orientation: antecedents, and consequences. Journal of Marketing, 23(4), 53–70.
- [53] Junni, P., Sarala, R.M., Taras, V. and Tarba, S. (2013). Organizational ambidexterity: a metaanalysis. Academy of Management Perspectives, 27(4), 299–312.
- [54] K, Y. R. (2015). Studi Kasus : Desain & Metode. Jakarta: PT Raja Grafindo Persada.
- [55] Kahneman, D., & Tversky, A. (1973). On the psychology of prediction. Psychological Review, 80(4), 237.
- [56] Kalgovas, B., Van Toorn, C. and Conboy, K. (2014). Transcending the barriers to ambidexterity: an exploratory study of Australian CIOs. The Proceedings of the European Conference on Information Systems (ECIS), 9–11 June.
- [57] Kasali, R. (2017). Disruption. Jakarta: PT Gramedia Pustaka Utama.
- [58] Kasali, R. (2018). The Great Shifting Series On Disruption (A. Tarigan, ed.). Jakarta: PT Gramedia Pustaka Utama.
- [59] Kauppila, O. P. (2010). Creating ambidexterity by integrating and balancing structurally separate interorganizational partnerships. Strategic Organization, 32(1), 11–22.
- [60] Khairul Ikhsan, Rangga Almahendra, T. B. (2017). Contextual Ambidexterity in SMEs In Indonesia: A Study on How It Mediates Organizational Culture And Firm Performance And How Market Dynamism Influences Its Role On Firm Performance. International Journal of Business and Society, 18(369–390).
- [61] Kortmann, S., Gelhard, C., Zimmermann, C. and Piller, F. T. (2014). Linking strategic flexibility and operational efficiency: the mediating role of ambidextrous operational

- capabilities. Journal of Operations Management, 32(7), 475-490
- [62] Kozakowska-Kedzierska, M. (2018). The Concept of Organizational Ambidexterity As An Example of Paradoxical Strategy. In D. S. A. Tomasz Studzieniecki, Melita Kozina (Ed.), Economic and Social Development: Book of Proceedings (pp. 241–249).
- [63] Kusumastuti, R. (2018). Understanding Social Capital that Leads to Strategic Ambidexterity Pratice in Family Firm Business. Journal of Engineering and Applied Sciences, 13(6), 5317–5321.
- [64] Kyriakopoulos, K. and Moorman, C. (2004). Tradeoffs in marketing exploitation and exploration strategies: the overlooked role of market orientation. International Journal of Research in Marketing, 21(3), 219–240.
- [65] Lavie, D., Kang, J. and Rosenkopf, L. (2011). Balance within and across domains: the performance implications of exploration and exploitation in alliances. Organization Science, 22(6), 1517–1538.
- [66] Lavie, D. and Rosenkopf, L. (2006). Balancing exploration and exploitation in alliance formation. Academy of Management Journal, 49(4), 797–818.
- [67] Lettl, C., Herstatt, C. and Gemuenden, H. G. (2006). Users' contributions to radical innovation: evidence from four cases in the field of medical equipment technology. R&D Management, 36(3), 251–272.
- [68] Lubatkin, M.H., Simsek, Z., Ling, Y.andVeiga, J. . (2006a). Ambidexterity and performance insmall-to medium sized firms: the pivotal role of top management teambe havioral integration. Journal of Management, 32(5), 646–672.
- [69] Lubatkin, M.H., Simsek, Z., Ling, Y.andVeiga, J. . (2006b). Ambidexterity and performance insmall-to medium sized firms: the pivotal role of top management teambe havioral integration. Journal of Management, 32(5), 646–672.
- [70] March, J. (1991). Exploration And Exploitation In Organizational Learning. Organization Science, 2(October), 71–87. https://doi.org/10.1287/orsc.2.1.71
- [71] McCarthy, I. P., & Gordon, B. R. (2011). Achieving contextual ambidexterity in R&D organizations: a management control system approach. R&d Management, 41(3), 240–258.
- [72] Miles, M., & Huberman, A. M. (1984). Qualitative data analysis. Beverly Hill: CA: Sage Publication.
- [73] Moleong, L. (2002). Metodologi Penelitian Kualitatif. Bandung: PT. remaja Rosdakarya.
- [74] Nicholas, J., Ledwith, A. and Bessant, J. (2013). Reframing the search space for radical innovation. Research Technology Management, March–Apri.
- [75] Nisbett, R., & Ross, L. (1980). Human inference: Strategies and shortcomings of social judgment. Englewood Cllff, NJ: Prentice-Hal.
- [76] O'Reilly, C.A. III, and M. L. T. (2004). The ambidextrous organization. Harvard Business Review, 82(4), 74.
- [77] O'Reilly III, C. A., & Tushman, M. L. (2011). Organizational ambidexterity in action: How managers explore and exploit. California Management Review, 53(4), 5–22.

- [78] Papachroni, A., Heracleous, L., & Paroutis, S. (2016). In pursuit of ambidexterity: Managerial reactions to innovation–efficiency tensions. Human Relations, 69(9), 1791–1822.
- [79] Pettigrew, A. M. (1990). Longitudinal field research on change: Theory and practice. Organization Science, 1(3), 267–292.
- [80] Poerwandari, E. K. (1998). Pendekatan Kualitatif Dalam penelitian Psikologi. Jakarta: Lembaga Pengembanagn Sarana Pengukuran dan Pendidikan Psikologi (LPSP3) Fakultas Psikologi Universitas Indonesia.
- [81] Pope, C., & Mays, N. (1995). Qualitative research: reaching the parts other methods cannot reach: an introduction to qualitative methods in health and health services research. Bmj, 311(6996), 42–45.
- [82] Priyono, A. (2019). Adaptabilitas, Inovasi, dan Internasionalisasi Berbasis Kapabilitas Dinamis: Fokus pada UKM industri kreatif (Edisi 1). Yogyakarta: Ekonisia.
- [83] Raisch, S. and Birkinshaw, J. (2008). Organizational ambidexterity: antecedents, outcomes, and moderators. Journal of Management, 34(3), 375–409.
- [84] Retno Kusumastuti, Azhar Kasim, S. H. (2018). Strategic Ambidexterity Learning of Innovation Activities: A Study of Indonesian Business Group Leader. Policy & Governance Review, 2(1), 70–84.
- [85] Rodan, S. (2005). Exploration and exploitation revisited: extending March's model of mutual learning. Scandinavian Journal of Managemen, 21(4), 407–428.
- [86] Rothaermel, F.T. and Deeds, D. L. (2004). Exploration and exploitation alliances in biotechnology. Strategic Management Journal, 25(3), 201–221.
- [87] Sarkees, M. and Hulland, J. (2009). Innovation and efficiency: it is possible to have it all. Business Horizons, 52(1), 45–55.
- [88] Sato, H. (2016). Generalization Is Everything, or Is It?: Effectiveness of Case Study Research for Theory Construction. Annals of Business Administrative Science, 15(49–58).
- [89] Senaratne, C., & Wang, C. L. (2018). Organisational ambidexterity in UK high-tech SMEs: An exploratory study of key drivers and barriers. Journal of Small Business and Enterprise Development, 25(6), 1025–1050.
- [90] Sfirtsis, T. and Moenaert, R. (2010). Managing the interaction of exploration and exploitation: ambidexterityasahigh order dynamic capability", in Sanchez,R., Heene,A. and Zimmermann,T.E. (Eds), A Focused Issue on Identifying, Building, and Linking Competences. Research in Competence-Based Management, 5, 35–57.
- [91] Sheremata, W. (2000). Centrifugal and centripetal forces in radical new product development under time pressure. Academy of Management Review, 25(2), 389–408.
- [92] Siggelkow, N., & Levinthal, D. A. (2003). Temporarily divide to conquer: Centralized, decentralized, and reintegrated organizational approaches to exploration and adaptation. Organization Science, 14(6), 650–669.
- [93] Simsek, Z., Heavey, C., Veiga, J.F. and Souder, D. (2009). A typology for aligning organizational

- ambidexterity's conceptualizations, antecedents, and outcomes. Journal of Management Studies, 46(5), 864–894.
- [94] Simsek, Z. (2009). Organizational Ambidexterity: Towards a Multilevel Understanding. Journal of Management Studies, 46(4), 597–624.
- [95] Sorensen, J.B. and Stuart, T. (2000). Aging, obsolescence and organizational innovation. Administrative Science Quarterly, 45(1), 81–113.
- [96] Soto-Acosta, P., Popa, S., & Martinez-Conesa, I. (2018). Information technology, knowledge management and environmental dynamism as drivers of innovation ambidexterity: a study in SMEs. Journal of Knowledge Management, 22(4), 824–849.
- [97] Startup Ranking. (2019). Countries. Retrieved from https://www.startupranking.com/countries
- [98] Taylor, A. and Helfat, C. E. (2009). Organizational linkages for surviving technological change: complementary assets, middle management, and ambidexterity. Organization Science, 20(4), 718–739.
- [99] Techinasia. (2015). Apa Itu bisnis Startup? Dan Bagaimana Perkembangannya? Retrieved July 6, 2019, from Techinasia website: https://id.techinasia.com/talk/apa-itu-bisnis-startup-dan-bagaimana-perkembangannya
- [100] Terziovski, M. (2010). Innovation practice and its performance implications in small and medium enterprises (SMEs) in the manufacturing sector: a resource-based view. Strategic Management Journal, 31(8), 892–902.
- [101] Tushman, M.L. and O'Reilly, C. (1996). The ambidextrous organizations: managing evolutionary and revolutionary change. California Management Review, 38(4), 8–30.
- [102] UNIDO. (2013). Industrial development report 2013: sustaining employment growth: the role of manufacturing and structural change. Retrieved July 28, 2019, from www.unido.org/sites/default/files/2013-12/UNIDO_IDR_2013_main_report_0.pdf
- [103] Volberda, H. W. (1996). Toward the flexible form: How to remain vital in hypercompetitive environments. Organization Science, 7(4), 359–374.
- [104] Voss, G.B. and Voss, Z. (2013). Strategic ambidexterity in small and medium-sized enterprises: implementing exploration and exploitation in product and market domains. Organization Science, 24(5), 1459–1477.
- [105] Wang, C.L. and Rafiq, M. (2014). Ambidextrous organizational culture, contextual ambidexterity and new product innovation: a comparative study of UK and Chinese high- tech firms. British Journal of Management, 25(1), 58–76.
- [106] Wei, Z., Yi, Y. and Guo, H. (2014). Organizational learning ambidexterity, strategic flexibility, and new product development. Journal of Product Innovation Management, 31(4), 832–847.
- [107] Wikipedia. (2019). Perusahaan Rintisan. Retrieved July 6, 2019, from https://id.wikipedia.org/wiki/ Perusahaan_rintisan

- [108] Yin, R. K. (1994). Case Study Research: Design and Methods (2nd ed.). California: Sage Publications.
- [109] Zahra, S.A. and Bogner, W. (2000). Technology strategy and software new venture's performance: exploring effect of the competitive environment. Journal of Business Venturing, 15(2), 135–173.
- [110] Zahra, S. (1996). Technology strategy and financial performance: examining the moderating role of the firm's
- competitive environment. Journal of Business Venturing, 11(3), 189–219.
- [111] Zand, D. E. (1974). Collateral organization: A new change strategy. The Journal of Applied Behavioral Science, 10(1), 63–89.
- [112] Zi-Lin, H., and W. P.-K. (2004). Exploration vs. exploitation: An empirical test of the ambidexterity hypothesis. Organization Science, 15(4), 481–494.

