Dexteropreneurship: A Study of Ambidexterity Entrepreneurship, Conceptualization and Research Agenda

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Abstract

Dexteropreneurship is a new concept that supplies a new view of the ambidexterity of entrepreneurship and thinking that can reveal the configuration of proactive, innovative, and risk-taking in the ambidexterity of an entrepreneur's activities. Based on the topic' novelty, there has been no term' conceptualization and a merged view of dexteropreneurship. The purpose of this paper is to discuss dexteropreneurship through a Systematic Literature Review (SLR), which develop a conceptualization that purpose to have a better understanding of how entrepreneurs balance exploratory and exploitative processes and how to configure entrepreneurship to support exploitation and exploitation. Derived from this, this paper aims to provide literature based on conceptualization providing a practical implementation for practitioners along with a research agenda that is a valuable contribution to new paradigms and possible future research of dexteropreneurship.

Kevwords

Dexteropreneurship, ambidexterity, entrepreneurship, systematic literature review, SME

1. Introduction

One of the business fields in Indonesia that are currently being affected by the pandemic is SMEs in various sectors (Pramono et al. 2021). Even the education sector, which can be categorized as a formal business, has been affected by this pandemic (Priyono, Nursyamsiah, and Darmawan 2019). When viewed from the population, SMEs dominate $\pm 70\%$ of the workforce in Indonesia. On the other hand, SMEs are the driving force of the country's economy, and there are positive and negative contributors to Indonesia's GDP.

The phenomenon that occurs in the business sphere where SMEs or startups and small companies show high mortality rates because SMEs are generally less resilient to crises, more financially fragile with more restructuring to access funding, and more dependent on domestic economic growth than large companies with international operations. However, companies that survived the first years were also many who ended up succeeding or unsuccessful, but their survival remained at risk. For large companies do not guarantee to survive and escape failure. There are many

observations of this kind because as the company or organization ages, it becomes more comfortable with inertia and suffers from lane dependency and is afraid to take high risks

The study of exploitation and exploration generally refers to two concepts as mutually exclusive systems (Malik, Boyle, and Mitchell 2017). That is, the two systems are two contradictory things both in value and purpose where exploitation is based on efficiency while exploration is based on innovation, and both compete for scarce resources (Asif 2017). So, choosing between the two creates difficulties for the organization. For organizations that are more inclined to exploitation will suffer inertia while organizations that lean more towards exploration activities will be burdened at the cost of experimentation without benefiting from that activity. That's why previous literature suggests the use of exploitation and exploration in a balanced manner (Müller, Påske, and Rodil 2019; Volery, Mueller, and von Siemens 2015).

Ambidexterity has two opposing poles: exploitation and exploration. On the one hand, exploitation focuses on existing customers or markets. On the other hand, exploratory focus on creative and innovative aspects including new methods, new knowledge, experimentation, flexibility, and diverse thinking. Ambidexterity is a bipartisan concept that involves exploitative and exploratory methods at the same time, or paradoxically together to be able to encompass efficiency, flexibility, stability, adaptation, and so on. Ironically until now, there are still many businesses or companies that dwell on the problem of 'current' because fixated on monthly targets and triggers from competitors who are increasingly arriving make too focused with continuous improvement mindset so that they forget to align with the condition of the 'future', which requires a view of a continuous innovation mindset (Brix 2019).

He & Wong believes that ambidexterity is the strategic logic for solving this problem. Palm believes that an organization's long-term success often depends on its ability to take advantage of current opportunities while exploring new opportunities, through exploitation, the company will take actions such as improvement, efficiency, selection, and implantation, where exploitation activities are related to mechanistic structures, routines, bureaucracies, and stable markets. Exploration refers to activities such as search, variation, experimentation, risk-taking, flexibility, and discovery that are associated with structures' organic, radical change, improvisation, autonomy, and learning through experimentation (Dhir and Dhir 2018; Palm and Lilja 2017; Pertusa-Ortega and Molina-Azorín 2018a).

Conceived as a solution for various businesses to survive the intense competition, some experts and experts explain the outcome based on research and evaluations from various companies that have applied the concept of ambidexterity. According to Claussa in his journal presents some empirical evidence that shows the benefits of exploration and exploitation: 1) Leadership or good management; 2) innovative capabilities; 3) the ability to learn and transform or even reconfigure; 4) significantly also affects financial performance; 5) influence performance agility through operational responsiveness, especially also improving marketing and technology capabilities (Claussa Thomas, Kraus Sascha, Kallinger Lukas Friedrich, M. Bican Peter, Brem Alexander 2016).

As McGrath & O'Toole says, the best solution for companies to deal with the pace of market change is to innovative implementation that strategies to improve organizational performance or effectiveness. Where business performance is linked to profitability, sales growth, and market share so that it is no doubt ambidexterity can be one way out so that the company or organization can adapt to the environment, strive to explore new avenues, and able to utilize the existing competencies, and also at the same time be able to navigate a dynamic environment (Pertusa-Ortega and Molina-Azorín 2018b).

Furthermore, what becomes interesting for researchers is any industry or field that can apply the concept of ambidexterity, given the variety of types of businesses that exist. Ambidexterity approach can apply to many industries such as the financial technology sector, the banking sector, the marketing sector, and the mobile device industry not only that, in the institution of the socio-political sector (Chng, Hieu, and Huy 2019), ambidexterity can handle the complexity of logic such as dealing with the shortcomings of the old-school bureaucratic system and economic logic that focuses on the present (Diab and Mohamed Metwally 2019).

Úbeda-García, argues that in the hospitality sector, the application of ambidexterity has positive ramifications on hotel HR and its performance. Then Maijanen & Virta argue that ambidexterity in the media industry was able to improve operational and managerial capabilities (Maijanen and Virta 2017). Alcalde-Heras proves SMEs successfully develop ambidexterity through collaboration with external partners that illustrate that cooperation has a significant impact. The

research of 200 IT companies in China successfully implemented dexterity by producing higher relational performance due to IT standardization and a flexible corporate climate based on ambidexterity (Chi et al. 2017).

Experts have made a consensus on the preponderance of exploration and exploitation in the process of innovation within the company. In conjunction with exploration activities to achieve innovation speed, companies must strive to find new resources, make variations, and always conduct experiments. The influence of organizational ambidexterity on entrepreneurial orientation with innovation orientation as one of its dimensions and have link between ambidexterity's ability to innovate. Unequivocally that an organization's ability to scan current and future market information will improve its understanding of customer needs that are likely to change. This conception will enhance the level of adjustment of the company to the products it produces. SMEs if have ability to explore (with the dimensions of entrepreneurial orientation and entrepreneurial value) and exploit (with the dimensions of investing in internal resources, knowledge resources, organizational learning, developmental changes, and transition change) together, the performance will increase. However, the opposite is stated by Tuan (2016) who found the influence of organizational ambidexterity on entrepreneurial orientation (Tuan 2016).

For this outcome, the main research question is: What is the background information on the research topic? How has dexteropreneurship been conceptualized in prior studies? What are the practical guidelines existing for the implementation of Dextereopreneurship? The main contribution of this research is to provide dexteropreneurship concept and in-depth analysis of existing implementation guidelines for academics.

2. Literature Review

According to John Maier, ambidexterity is the word "ambidextrous" derived from the Latin root "Ambi", meaning "both", and "dexter", meaning "right" or "profitable". So, "ambidextrous" literally means "both are true" or "both are profitable". This requires the use of the dominant hand to make additional changes and using the other hand to cope with major changes in the environment. This is then equivalent to using both hands for individuals, on the one hand, to perform exploitation and along with the other side to explore. The way organizations handle ambidexterity is by strategic choice. Companies may choose to run exploits in a single unit, for example in an R&D team, as well as in a specialized exploration group. Choices around an organizational structure are strategic decisions all at once. According to Duncan, Gibson, and Birkinshaw, ambidexterity is defined as an organization's ability to be aligned and efficient in managing current business demands, as well as adaptive to environmental change (Asif 2017).

According to O'Reilly and Tushman, Raisch and Birkinshaw, Evan defines "ambidexterity" as an organization's ability to concomitantly develop learning processes by captivating in experimentation while combining with current goals, through refinement, efficiency, and robust practical implementation. This ambidexterity leads to technological and administrative innovations. Organizational ambidexterity is essential to achieving a wide range of innovations; However, its role in encouraging administrative innovation (relating to processes, people, and business models) is comparatively being studied (Malik et al. 2017).

Ambidexterity is the organizations' ability to simultaneously engage in controversial activities that seek and discover new knowledge (i.e., exploration) while updating and building on existing knowledge (i.e., exploitation). Important work on exploration (research, discovery, self-knowledge, and innovation) and exploitation (efficiency, control, certainty, and limitation of variables) provides a basis for understanding both directions. "The fundamental problem of any organization is to make proper use of life survival, and at the same time to expend sufficient energy for research to ensure its survival into the future (Ramachandran, Lengnick-Hall, and Badrinarayanan 2019).

The benefits of managing projects that involve some forms of transition are analyzed. This means that institutions should place sufficient emphasis on managing and reducing the tensions that arise between exploration to ensure a future life (eg idea formulation) and exploitation to ensure the today performance. An important factor in the relationship between exploration and exploitation is how the activities are integrated. The term "balance" can be misleading if it indicates that exploration and exploitation in moderation and in equal quantities is always desirable (Revilla and Rodríguez-Prado 2018).

Elsewhere, researchers argue that exploration factors are generally smaller, scattered, and flexible than exploitation factors. In the field of integrity, researchers support the need to link exploration and exploitation to create value. It is the responsibility of management to integrate logic into two activities in different units. An organizational environment that combines "restraint, discipline, support, and trust" promotes ambiguity. Critics of integrating perspectives argue

that the choice between exploration and exploitation is usually a sustainable path exploration tends to be followed by more exploration and vice versa. However, if exploration and exploitation are conceptualized or put together as a continuum, the two approaches can be combined. Thus, differentiation and integration become complementary. Some researchers suggest that individuals, especially managers who often solve the problem of exploration and exploitation paradoxes could become ambidextrous (Dranev, Izosimova, and Meissner 2020; Lee and Kreiser 2018).

Based on the above exposure, it can be concluded that the application of exploration and exploitation or applying ambidexterity in business development can provide benefits in the form of short- and long-term innovation. By the main concept of ambidexterity is that this duality will be successful if it can be implemented by all parties in the organization (members of the organization). This means that an ambidextrous organization is a culture created in the organization and can create an atmosphere of creativity owned by all members of the organization because innovation must be managed properly to continue to be sustainable. Innovation must be done continuously to become a habit so that innovation takes place in the short- and long-term actions.

The application of ambidexterity has a significant positive influence, but many companies are unable to achieve ambidexterity because exploration and exploitation activities are related to two different types of logic and a mature readiness is required. It is important to know that the concept of ambidexterity is directly proportional to the level of organization, where different levels of the organization can interpret different dimensions in the success and agility of ambidexterity, meaning that the success of the application of ambidexterity depends on the level of the organization and according to the context of each organization. Where ambidexterity is management and market-oriented based on the empowerment of its resources (including previous experience, financial and human resources), competitive position, management capabilities, and strategic intentions.

Therefore, at a higher organizational level, where there are great opportunities and pressures but adequate and financial resources that tend to be stable, innovation is interpreted more broadly, in contrast to lower organizational levels and small businesses. But it is not an absolute rule because if the company or business can adopt long-term and maintain short-term survival, have openness to every possibility and constraint, and accept diversity, coherence, have high spirit and discipline, then even if the business or small company can overcome and achieve ambidexterity well.

Small companies (SME) face global challenges characterized by uncertainty, a high compliment, and rapid technological change. This requires exploration and exploration entrepreneurially. Entrepreneurs who want to succeed need the ability and know-how to opportunities exploration and exploitation. Conceptually, ambidexterity entrepreneurship is concerned with an entrepreneur's ability to align his managerial abilities efficiently while simultaneously exporting and exploiting (Sudarti et al. 2019). Other literature says that managerial ability is necessary for organizations to become more adaptive to environmental change (Mayanja et al. 2021). An ambidextrous organization demonstrates the ability to explore new opportunities and can exploit existing competencies so that the organization can ultimately improve performance and competitiveness (Hansen, Wicki, and Schaltegger 2019).

3. Methods

The methodology that used in this study is the systematic literature review. According to Paré, Guy, Marie-Claude Trudel, Mirou Jaana, and Spyros Kitsiou, the systematic literature review is an important characteristic of academic research. By reviewing the relevant literature, will have a better understanding of the depth of the paper and be able to identify the gaps for further exploration. By summarizing, analyzing, and synthesizing a group of related literature, we can test specific hypotheses and/or develop new theories. We can also evaluate the validity and quality of existing work against criteria for uncovering weaknesses, inconsistencies, and contradictions (Xiao and Watson 2019). According to Sascha Kraus, Matthias Breier, Sonia Dasí-Rodríguez, Systematic Literature Review is a review of existing literature that follows a transparent and reproducible methodology in finding, assessing its quality, and synthesizing it, with a high level of objectivity (Kraus, Breier, and Dasí-Rodríguez 2020). According to Cooper, a systematic literature review aims to address research objectives by identifying, critically evaluating, synthesizing, and integrating relevant research findings (Bozer, Organizational, and 2018 2018).

4. Data Collection

A systematic literature review (SLR), as a systematic method of identification, evaluation and synthesis existing literature that produced by researcher or scholars. SLR is a relatively new type of method that researched based on collecting and evaluating literature data using qualitative and quantitative approach. SLR while have limitation, but

with clearly defined topic and using specific research questions are beneficial for researcher (Diab and Mohamed Metwally 2019). This research focusses on dexteropreneurship with defined review question (Table 1). Based on the rule's elements in Table 1, conclude three stages: First, using quantitative method using search term on each database, Second, using qualitative method that have selected articles based on titles and abstract that meet the criteria; Third, finalization analysis, according to research questions that consist of 29 articles. Each articles have unique identification Pxx. The three stages of SLR processes can be seen in figure 1.

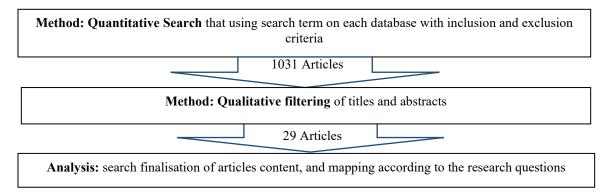


Figure 1. SLR Process

Table 1. SLR Rules Elements

SLR Rules Elements	Translated into Our Research	
1. Research Question	What is research questions on Dexteropreneurship?	
	• Q1: What is the background information about the literature sample?	
	• Q2: How has dexteropreneurship been conceptualized in prior studies?	
	• Q3: What are practical guidelines for Dextereopreneurship	
	implementation?	
2. Sources searched	Selected peer-reviewed databases, the most relevant context and commonly used in SLRs:	
	IEEE Explore	
	• Scopus	
	Web of Science	
	Google Scholar	
3. Search terms	Keyword search for the article being studied:	
	 "ambidexterity" and "entrepreneurship" 	
	"ambidextrous" and "entrepreneurs"	
4. Search strategy	Peer-reviewed journals, conference papers	
	• Publication date limitation between 2017 – 2021	
	Restricted subject area 'business management'	
5. Inclusion criteria	• Articles will be included if hold a combination of the search terms, defined	
	in the search queries.	
6. Exclusion criteria	Without full access will be excluded	
	Exclude articles that written not in English	
7. Quality-criteria	Only peer-reviewed articles	
	• Validity and comprehensive that conceptually address ambidexterity	
	entrepreneurship	

This research holds three research questions and listed in the above table. Research question 1, served as an introduction to provide the study with background information about the literature sample. Next, research question 2, aimed to have a better understanding of dexteropreneurship. The third research question discussed the practical aspects

of dexteropreneurship implementation. To better scope the domain, we found three sub-questions of this research question:

- 1. What is the background information about the literature sample?
- 2. How has ambidexterity entrepreneurship (dexteropreneurship) been conceptualized in prior studies?
- 3. What is practical guidelines for the Dextereopreneurship' implementation?

5. Results and Discussion

5.1. The background information

First, a summary of the evolution of the paper studied, followed by the form of publication and research methodology used. This summary shows the development of Dexteropreneurhip (Ambidexterity Entrepreneurship) research to the extent to which it can be seen in figure 2. The topic of ambidexterity entrepreneurship is still a topic always discussed and seen peaking in 2019 compared to the previous year, as well as the year after. Furthermore, if you look at the type of publication, the sample literature of this study is dominated by journal articles (21 papers), followed by four conference papers, two book articles, and two theses.

Figure 3 shows the most widely used methodology is a survey (20 papers), followed by literature review and case study (3 papers each). The 3 papers literature review in this research sample emphasizes the relationship between entrepreneurship orientation, exploration, and exploitation and shows that the role of entrepreneurs in the implementation of ambidexterity whether it is contextual or structural.

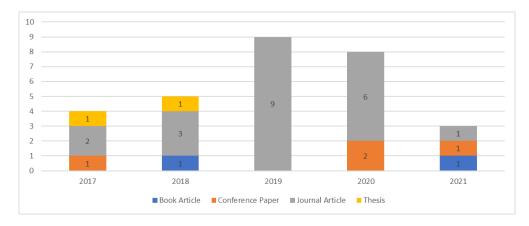


Figure 2. Publication types 2017-2021 (n = 29)

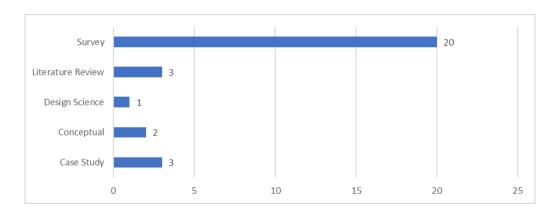


Figure 3. Research method in the literature sample (n = 29)

Figure 4 shows that the most researched research centers are Malaysia (5 papers), followed by the United Kingdom as many as three papers, then Indonesia, Spain, and Sweden (2 papers each). There is nothing dominant from what institutions the research is conducted, this reflects that this topic is an interesting discussion not only in Southeast Asia (Malaysia and Indonesia) but also discussed across countries and continents. (i.e., Europe, Africa, and East Asia). This topic shows how interesting it is to be researched when discussed across different countries, cultures, and business contexts concerning being able to provide a much better picture of ambidexterity entrepreneurship.

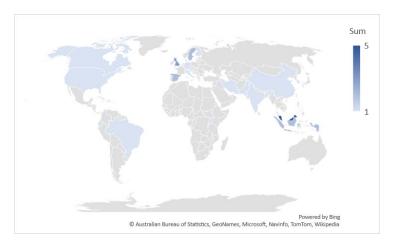


Figure 4. World distribution research canters (n=29)

5.2 Conceptualization of Dexteropreneurship

Since ambidexterity entrepreneurship has become a new concept in management research, this study reveals that the definition of ambidexterity entrepreneurship in this research sample literature is in at least two research streams, namely:

The first research stream sees ambidexterity entrepreneurship as a behavioral orientation, where the orientation of the entrepreneur's behavior combines activities related to exploration and exploitation over a period. Exploration activities involve looking for new market needs and the tech opportunities that require the development of new technology and new knowledge. On the other hand, exploitation activities are focused on the production efficiency of existing product-market positions that require the use of existing knowledge (P01). Entrepreneurs tend to prioritize exploitation over exploration because of the latter being less certain and taking longer to complete. Entrepreneurs who can allocate balanced resources for exploration and exploitation are considered ambidextrous.

The second research stream sees ambidexterity entrepreneurship as an ability, arguably as "the ability to use and perfect existing knowledge (exploitation) while also creating " new knowledge to address the lack or absence of knowledge identified in the execution of work (exploration)" (P07). Theory can be simplified when entrepreneurial orientation (EO) equivalent concepts with how to achieve efficiency or can be exploited and as entrepreneurs respond to the importance of innovation and can take risks or can be called exploration (P08). EO represents an important means that firms can employ to facilitate higher levels of ambidexterity (P05) and the success of entrepreneurs depends on how involved in recognizing opportunities (exploration) and exploitation of knowledge. (P06). Flexible thinking is required to implement contextual or structural ambidexterity based on the context of the firm (P11)

The third research stream sees ambidexterity entrepreneurship as an activity. exploration and exploitation activity undertaken by entrepreneurs at various levels of the organization and when entrepreneurs can effectively balance exploration and exploration it will push the organization into ambidextrous (P14). An ambidextrous entrepreneur is expected to captivate knowledge intermediaries' activities to enhance exploration and exploitation activities in their current business. Knowledge brokers can be internal and external to the company. In the field of technology, engagement with knowledge intermediary activities is needed higher attentions because it requires a more advanced level of technical knowledge and knowledge, as well as business acumen and competence to market products (P04).

Table 2. Overview papers associated with behavioural orientation, ability, and activity

Ambidexterity entrepreneurship as a behavioural	P01; P02; P03; P09; P16; P17; P23; P24; P27; P28
orientation	
Ambidexterity entrepreneurship as an ability	P05; P06; P07; P08; P09; P10; P11; P15; P18; P20; P26;
	P29
Ambidexterity entrepreneurship as an activity	P04; P12; P13; P14; P19; P21; P22; P25

Entrepreneur's ambidexterity are considered to be a personal attribute that refers to the ability to carry out exploration and exploitation activities simultaneously. Individual innovativeness, proactiveness, and risk-taking critical setting up ambidextrous behaviour. The entrepreneur's ambidexterity is is difficult to obtain because it requires the best balance between two opposing activities, so there is a connection between entrepreneurial orientation, exploitation, and exploration and would make the organization able to expand their competitive intelligence mechanism to find the answer to the changing environment. Entrepreneur ambidexterity able to obtain new knowledge and skill themselves and reach out to perform their task dan achieve their goals (P07). Ambidexterity entrepreneurship confirms performing configuration that proactiveness, innovativeness, and risk-taking present in the ambidexterity activities (P03). Ambidexterity activities involve the ability to find new market needs and new market opportunities which is require technological development (exploration) and know how to produce efficiently and get market positioning using existing knowledge (exploitation). Since the entrepreneur needed to behave proactively, be innovative, and take the risk, for upcoming unknown future, high-level pressure, and changing environment.

Practical guidelines exist for the implementation of Dextereopreneurship

To structure the guidelines for practitioners, how dexteropreneurship can become more explorative. The SLR analysis has supplied essential insights into the topic of dextereopreneurship. First, discussing the dexteropreneurship findings, before continue discussing limitation of this research and proposing research agenda related with a concrete suggestion for future research.

Empirical research on ambidexterity mostly studies on the organization level than individual level entrepreneurship and ambidexterity connected. Entrepreneurs recognised opportunities while others do not, and these abilities may differ among them differently because of information availability. Scarce literature about dexteropreneurship may open opportunities for investigating how entrepreneur conduct ambidexterity in the project-based situation, high-level pressure, dynamic environment, which may allow us to advance theory on dexteropreneurship. Existing works of the literature suggest that considering some contingency factors such as the type of organization, and how the entrepreneur may affect the industry, and the level of contribution that they make for strategic decisions. However, relying on accumulated knowledge has disadvantages, as it can limit the chances of discovery. For example, the accumulation of knowledge will lead consistency behaviour of actions resulting entrepreneurial action and decision making won't be creative and tend to be unanimous. Procedures within company follow an ordered pattern because of using earlier references, while transformation of environment are unpredictable and disorganized.

6. Conclusion

The Systematic Literature Review (SLR) has provided a deeper look at Dexteropreneurship. This paper first discusses the findings based on previous literature, then begins to map the limitations of discussion, and finally offers a new concept of dexteropreneurship to help researchers in preparing for future research directions. According to the literature sample of 29 papers, this paper provides a concept that can be used to explain the dexteropreneurship of organizational funds and how organizations can approach exploratory and exploitative.

The main limitation of this paper is to use the SLR protocol which may not detect the relevant paper in this study, which is irrelevant when it comes to meeting the protocol steps in the search for relevant literature. The second limitation is the time limit of only 5 years, namely from 2017 to 2021, is a consideration that the topic is still new and up to date on the problems faced today. Despite all this, this paper makes a valuable contribution to new paradigms and future research possibilities on the topic of dexteropreneurship

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