# THE ROLE OF STRATEGIC AGILITY ON SUSTAINABLE COMPETITIVE ADVANTAGE OF PRIVATE HIGHER EDUCATION INSTITUTIONS

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### Abstract

Insofar as a few researchers have studied the effect of strategic agility (SA) adoption as a technique for enabling sustainable competitive advantage (SCA) in higher education institutions (HEIs). In this regard, this study will examine the extent to which SCA enhances SA and the factors influencing the adoption of these techniques in the context of HEIs, using the dynamic capabilities theory (Tallon et al., 2019; Păunescu et al., 2018). This study aims to explore the highest-order firm's capabilities, leadership capability, entrepreneurial capability, information technology (IT) capability, and alliance management capability, based on the perspective of dynamic capability theory as factors that influence SA and SCA with a systematic review approach to address all research topics in this study. Therefore, the primary objectives of this research are to investigate the adoption of SA practices among private HEIs in Indonesia and its effect on SCA in the context of dynamic capabilities by using a systematic review approach. The results show that the SA method will be the right instrument to achieve SCA in private HEIs in Indonesia. SCA can be utilized for HEIs organizations achieve sustainable and long-term performance.

**Keywords:** Strategic Agility, Sustainable Competitive Advantage, Dynamic Capabilities, Higher Education, Systematic Review

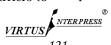
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### 1. INTRODUCTION

Today, all businesses, including higher education institutions (HEIs), operate in a digital economy. According to Chaiprasit and Swierczek (2011) and Sambamurthy et al. (2003), each organization in the digital economy age confronts unique barriers to

reaching a sustainable competitive advantage (SCA) due to the globalization, intangibility, and interconnection of the business environment. According to Teece (2012), enterprises can sustain and expand their competitive advantage by layering dynamic capabilities on top of conventional capabilities. The volatile business environment has



affected businesses' performance, as they are unprepared to deal with disruptive developments and uncertainty. It is no longer sufficient for firms to own solely valuable, scarce, and incomparable resources and competencies in order to acquire a competitive edge (Barney, 1991). It is clear that enterprises will require dynamic capabilities in the future to protect themselves from the tumultuous business environment (Teece et al., 1997).

It was stated that strong dynamic capabilities produced by a higher degree of capabilities by difficult-to-copy resources anchored the foundation for achieving and maintaining a competitive edge. Past studies argued that higherlevel capabilities such as leadership capability, entrepreneurial capability, information technology (IT) capability, and alliance management capability could lead private HEIs to attain their SCA, which in turn develops an SCA (Ramsden, 1998; Pucciarelli & Kaplan, 2016; Foss & Foss, 2009; Schilke, 2014; Schreiner et al., 2009). As such, the SCA difficulties in private HEIs in Indonesia may be resolved by combining those elements with strategic agility (SA) techniques. Previous research on SA practices lacked a focus on HEIs and utilized a very fragmented structure. Dynamic capabilities enable organizations to achieve SCA by effectively utilizing their capabilities, competencies, and resources. In reality, a strategy fails when a corporation fails to connect its SCA, where relevancy between the product, customer demands, and core capabilities is required (Teece et al., 2016). Dynamic skills, in this context, are inextricably linked to strategic management since they represent how firms create and preserve competitive advantages. Thus, from the perspective of private HEIs in Indonesia, it is vital to research whether dynamic capabilities and SA practices may help improve SCA at private HEIs in Indonesia and what factors influence the adoption of SA practices. With the advent of dynamic capacities and SA practices, SCA in private HEIs will expand, resulting in sustainability and competitive advantages for private HEIs with superior performance (Grove & Clouse, 2018; El Kaddouri & Ajeeb, 2021).

In comparison to the United States, Indonesian higher education is a comparatively recent development. While higher education in the United States began in the 17th century, the history of Indonesian higher education is defined by the Dutch founding of higher education institutions in the early twentieth century. While higher education in Indonesia is younger than in the United States, the sector has had tremendous growth and development, particularly in terms of institutions and enrolments. Beginning with two public HEIs and 1,600 students in the early years following Indonesia's independence in Indonesian higher education has grown to include 4,621 institutions of varying institutional types (university, institute, school of higher learning, academy, polytechnic, and community college), enrolling approximately 8.3 million students and awarding over 308,607 academic degrees.

Private colleges have complete discretion over their tuition prices for all programs and courses. On the contrary, public institutions lack this kind of authority. Tuition prices at these institutions are fixed and centrally regulated by the government, with the exception of autonomous institutions, most likely top public research universities, which have the authority to set their own tuition rates but must obtain government permission. government funds primarily support public institutions, private institutions rely substantially on tuition fees. They are, however, still eligible for government assistance. When demand for instructors emerges, the government assigns (civil servant) teachers to teach at private institutions. Additionally, the government provides scholarships to administration and teaching staff at private universities. This study aims to explore the highestorder firm's capabilities, namely leadership capability, entrepreneurial capability, IT capability, and alliance management capability, based on the perspective of dynamic capability theory as a factor that influences SA as well as SCA. Therefore. the primary objectives of this research are to investigate the adoption of SA practices among private HEIs in and its effect on SCA in the context of dynamic capabilities by using a systematic review approach.

The structure of this paper is structured as follows: Section 2 reviews the literature covering dynamic ability theory, strategic agility, and sustainable competitive advantage. Section 3 analyzes the methodology used to conduct empirical research. Section 4 describes the results obtained from the research. Section 5 contains a discussion that departs from the other variables investigated in examining SCA in HEIs. Section 6 is the conclusion section of the study.

### 2. LITERATURE REVIEW

### 2.1. Dynamic capability theory

Dynamic capabilities as a strategic management theory originated out of frustration with the static outlook of the resource-based view. Building resources takes time. Once installed, they must be secured with isolating measures to prevent them from being stolen or replicated. This long-term perspective appears incompatible with high-speed markets. According to dynamic capability theory, it is the ability to acquire or rearrange resources that provides a competitive edge rapidly. Teece et al. (1997) describe dynamic capabilities as "a firm's capacity to integrate, build, and reconfigure internal and external capabilities in response to dynamically changing circumstances" (p. 516). Capabilities or competencies refer to the activities in which a company excels, whereas core competencies refer those critical to the firm's competitive performance. Capabilities, on the other hand, remain a type of resource. Barney (1991) broadens the definition of resources to include all of the firm's assets, capacities, organizational processes, firm qualities, information, and knowledge. Hedberg et al. (2000) broaden the definition of resources to encompass external partners, networks, and other virtual resources that assist the firm, while Helfat et al. (2009) take a similar position, stating the "resource base" of an organization includes tangible, intangible, and human assets (or resources)

as well as capabilities which the organization owns, controls or has access to on a preferential basis. An organization needs not to own a resource or capability for it to comprise part of the resource base.

Numerous researchers have defined dynamic capabilities as higher-order capabilities that have an effect on the development of operational capabilities. It is a collection of simpler capabilities and associated routines. Thus, dynamic capabilities are defined as an organization's capacity to continuously create, expand, or modify its resource and capability bases in response to environmental changes (Helfat et al., 2009).

**Table 1.** Data from private HEIs in Indonesia, 2019

Variables	Institutions	Study program	Students	Lecturers
University	552	8.970	2.872.994	105.890
Institute	102	850	205.070	8.432
School of higher learning	1.424	4.100	1.103.182	49.078
Academy	851	1.037	138.844	12.211
Community college	30	56	1.056	83
Polytechnic	170	664	89.615	6.110

Source: Ministry of Research, Technology, and Higher Education of Indonesia (2019).

enhanced capabilities the ability to develop more unique and sophisticated engines capable of driving a higher degree of propulsion. As a result, this results in the formation of a cluster of competencies that gradually provides mechanisms for repeating propulsion and is capable of sustaining competitive advantage. On the other hand, Leonard-Barton (1992) suggested that competencies run the risk of becoming the principal impediment to innovation. Indeed, first-level dynamic capabilities are composed of sophisticated routines and varying degrees of predictable behaviour that are prone to preservation. First-level capabilities tend to harden and deplete a firm's capacity for adapting, inventing, and channeling its resources to assure favorable industry alignment and exceptional performance.

In this regard, higher-level dynamic capabilities are comprised of competencies that replace fossilized components within the mechanism of first-level capabilities with more robust, novel, and flexible components that enable the firm to overcome the gravitational pull of mediocrity and failure.

## 2.2. Strategic agility

The term "strategic agility" first appears in Roth (1996), where it is still used in a manufacturing context. SA, according to Roth (1996), is "the capacity to manufacture the right things at the right time and the right price" (p. 30). She highlights economies of knowledge as a driving force behind SA, allowing businesses to leverage business acumen, competent people, and modern technologies to constantly identify, assimilate, and utilize new knowledge more efficiently and effectively than the competitors.

Organizational success, especially in the field of education, is still assessed from performance achievements and tends to measure from the university's profitability side (Trainor, 2012). Social media technological innovations are still often seen from the side of communication relations trying to explore more without the distribution of content as a form of dynamic change. Dynamic changes require speed and flexibility and do not only focus on the profitability of higher education institutions (Nafei, 2016). Strategic agility emphasizes high speed and flexibility as the main attributes in adapting to increasingly dynamic environmental changes. The strategic agility of an organization requires the organization to constantly transform in the face of economic innovation and business competition turmoil through competitive quality products and services (Guesalaga, 2016). This strategic agility quickly grow performance gains with a differentiation strategy through readiness in the process of adopting social media technology innovations.

Long (2000) was the first to approach SA strategically. He defines SA as "not only the ability to adapt fast to changing conditions and emerging possibilities but also the ability to focus on a single, clear strategic objective" (p. 38). He frames the concept as a means of resolving the gap between the intended and actual strategy. SA continually adapts the intended strategy produced through strategic planning to changing environmental conditions, resulting in a more direct link to the implemented, realized strategy. Long (2000) identifies seven components of SA: client knowledge, capability knowledge, vision clarity, shared leadership, competitor insight, strategic target selection, and action. Additionally, he notes that SA is a trait of entrepreneurs. To be clear, Teece et al. (2016) refer to SA as organizational agility or agility. Tallon et al. (2019) screened the literature for perspectives on SA. The timeline below, taken from Table 2, provides an outline of the evolution of the notion of SA.

Research	Characterization of SA	Theoretical lens
Sambamurthy et al. (2003)	The ability to rapidly identify market opportunities.	Resource and capability building; dynamic capability
Overby et al. (2006)	The ability to sense changes and react rapidly.	Dynamic capability
Nazir and Pinsonneault (2012)	The ability to sense and respond to internal and external change.	Electronic integration perspective
Lowry and Wilson (2016)	The ability to respond to market changes using IT as a strategic enabler.	Contingency theory
Queiroz et al. (2018)	The ability to detect and react to threats and opportunities.	Dynamic capability
Ravichandran (2018)	ichandran (2018) The capability to enable firm performance by using IT competence and innovation.	
Kale et al. (2019)	SA is a mediator to improve firm performance.	Mediating perspective
Ahammad et al. (2020)	SA is the ability to rediscover the strategy influenced by external change.	Organizational capability

According to Ashrafi et al. (2019), SA substantially correlates with transformation. The writers assert that SA is indisputable in altering a business and enhancing its performance. Doz Kosonen According to and transformation is a pillar of SA. According to the authors, SA possesses three critical skills that contribute to an organization's renewal: strategy sensitivity, leadership cohesion, and resource mobility. Guinan et al. (2019) suggest that when an organization embraces change as part of its organizational strategy, it will have an effect on competition, politics, and internal operations. Tan et al. (2017)recognize transformation performance as components of SA.

Ravichandran (2018) substantiate the notion that SA is an organizational competence. SA is viewed as a mediator between absorptive ability and business performance by Kale et al. (2019). The authors demonstrate that SA has a favorable effect on company performance. Ashrafi et al. (2019) suggest that SA has a greater impact on an organization when the environment is turbulent, i.e., when the business environment is changing. Ahammad et al. (2020) take a fresh look at SA. They view it as a capacity for reshaping and profiting from external forces. According to Shin et al. (2015), responding to external developments can result in new opportunities for the company. This thesis argues that an organization's awareness of internal and external issues must be balanced. Kumkale (2016) emphasizes the need for a corporation to capture both internal and external viewpoints, which entails collecting feedback and market information on a continuous basis. Păunescu et al. (2018) suggest that strategic planning and management must be incorporated into a business plan.

# 2.3. Sustainable competitive advantage

When a business is able to retain a competitive advantage, it is considered to have SCA. According Barney (1991), "firms achieve persistent competitive advantages by implementing strategies that capitalize on their internal strengths, respond environmental opportunities, and mitigate while avoiding external dangers internal weaknesses" (p. 99). SCA, he continued, occurs when a firm "implements a value-creating strategy that is not being deployed concurrently by any present or potential competitors and when these other firms are unable to replicate the benefits of these strategies" (p. 102). Becker and Huselid (2006) asserted that a company's ability to differentiate its products and/or services and maintain above-average financial performance over time enables it to sustain a competitive edge. Grant (2005) thought that competitive advantage could be sustained in three ways: through resource and capability durability, transferability or imitation, and replicability.

When a business outperforms other businesses in the same market, it has a competitive edge. According to Barney and MacKey (2005), SCA exists when a firm is pursuing a value-creating strategy that is not being pursued concurrently by any existing or potential competitors and when these or other firms are unable to duplicate the benefits of this strategy. Grant (2005), despite the lack of a formal definition, contributed to the notion by stating that in order to get an SCA, buyers must perceive a discernible difference between a firm's product or service offering and that of competitors. This distinction must be attributable to the firm's resource capability that others do not. Additionally, Grant (2005) stated that the key to creating a competitive edge is for the firm to be able to foresee the activities of competitors in the market over time and to match the firm's resources to the gaps in the industry. This competitive advantage will be maintained if competitors are unable or unwilling to bridge existing gaps.

Hoffman (2000) provides a formal, conceptual definition of SCA as follows: "SCA is the sustained benefit of implementing some novel value-creating strategy that is not being implemented concurrently by any current or potential competitors, combined with the inability of competitors to duplicate the benefits of this strategy" (p. 1). Barney and MacKey (2005) suggested that not all company resources are susceptible to an SCA; rather, they must possess four characteristics: rarity, value, inability to be copied, and inability to be substituted. Hoffman (2000) argued that intangible resources might be more suitable for achieving an SCA than tangible ones.

# 3. RESEARCH METHOD

In this study, the focus is to examine the extent to which SCA improves SA and the factors that influence the application of this technique in the context of HEIs, using the dynamic capability theory. The goal is to explore the highest level of enterprise capabilities, namely leadership capabilities, entrepreneurial capabilities, IT capabilities, and

capabilities management based the perspective of dynamic capability theory as factors that influence SA and SCA with a systematic review approach to answer all research topics. As previously stated, this research began with a focus on the challenges faced by private HEIs, with the goal of identifying appropriate methodologies or procedures that could give a solution to those challenges. To find a solution, a systematic review of the literature on SA was conducted, and an adequate theory of dynamic capacities was utilized to explain the enhancement of SCA in private HEIs and establish the underlying framework and other pertinent frameworks for the study. The researcher has developed acceptable research questions to address the research objectives using the given theoretical framework. The researcher employed a systematic review approach to address all of the research topics in this study. The first phase of the study aimed to create SCA measurements in the context of private HEIs and to gain a thorough understanding of SCA in private HEIs, while the second phase addressed all of the study's issues regarding dynamic capacities, SA practices, and SCA in private HEIs.

### 4. RESULTS

Doz and Kosonen (2008a, 2008b, 2010) refined the concept of SA. They define strategically agile businesses as those that are capable of "making quick turns and transforming themselves without losing momentum" (Doz & Kosonen, 2008a, p. 11). They assert that SA has three dimensions: strategy sensitivity, leadership cohesion, and resource mobility. Strategic sensitivity entails knowledge of external trends paired a collaborative internal strategy process. It is proactive in character, involving an open strategy process, increased strategic vigilance, and highquality internal communication. When a new strategic circumstance is observed, leadership unity (also known as collective commitment) enables the senior management team to make decisive decisions quickly. These dimensions are illustrated in Figure 1, which was modified by Doz and Kosonen (2008a). Doz and Kosonen (2008b) assert that all three are necessary for a business to be strategically agile. In a nutshell, agility equals sensitivity multiplied by unity multiplied by fluidity.

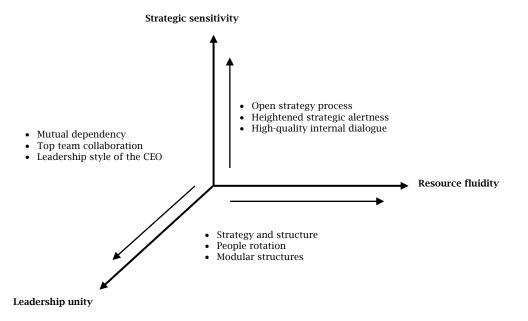


Figure 1. Dimensions of strategic agility

Source: Doz and Kosonen (2008a).

Doz and Kosonen (2010) discovered five common underlying variables for each of the three dimensions two years later. Each component represents a certain form of leadership action that contributes to SA. Anticipating, for example, improves strategic awareness by generating notions about how customers might use future products and services. By communicating strategic assumptions and hypotheses throughout the leadership team, dialogue strengthens leadership unity.

**Table 3.** Strategic agility framework

### Strategic sensitivity

- 1. Anticipating Sharpening foresight by exploring future usage concepts.
- 2. Experimenting Gaining insight through probing and testing.
- 3. Distancing Gaining perspective by distancing from day-to-day operations.
- 4. Abstracting Gaining generality by restating business models in conceptual terms.
- . Reframing Seeing the need for business model renewal.

### Leadership unity/Collective commitment

- 6. Dialoguing Surfacing and sharing assumptions and hypotheses
- 7. Revealing Making personal motives and aspirations explicit.
- 8. Integrating Building interdependencies through a common agenda.
   9. Aligning Sharing a common interest beyond incentives.
- 10. Caring Providing empathy and compassion.

### Resource fluidity

- 11. Decoupling Gaining flexibility by organizing as distinct, autonomous, but well-coordinated entities.
- 12. Modularizing Assembling and disassembling business systems and processes.
- 13. Dissociating Separating resource use from resource ownership and negotiating access.
- 14. Switching Using multiple business models and infrastructures.
- 15. Grafting Importing business models from acquired companies

Source: Doz and Kosonen (2010).

Most recently, Doz (2020) re-examined the framework from a human resources (HR) viewpoint, identifying potential HR levers for enhancing an organization's SA. Competitive advantage is cited as a factor acting against SA in this case. "Agility elicits concerns about a lack of direction and commitment, an inability to develop competitive advantage, and the potential of needless tiredness due to hyper-reactivity" (Doz, 2020, p. 1). These remarks serve as an additional impetus for the current investigation.

Perhaps most importantly for this study, Kumkale (2016) contends that SA is a tool for establishing competitive advantage and organizations must leverage their competitive advantages while developing their strategies. Competitive advantage can be acquired through supply chain management, product development, manufacturing and marketing processes, logistical operations, innovation, and agreements (such as sales or technological licensing agreements). business's resources, capabilities, competencies, and the manner in which they are implemented, all contribute to its competitive edge.

Competitive advantage refers capabilities, resources, relationships, and actions that enable a corporation to avoid industry risks and capitalize on opportunities. Barney (1991) contends that in order for a corporation to obtain an SCA, its resources (financial, organizational, and human) must exhibit four characteristics. These characteristics include: being valued. heing uncommon, being unique, and being unreplaceable.

Additionally, SA is a distinct entity or capital. the identification facilitates opportunities, the exchange and activation of complementary global resources, and the capture of local values. As a result, competitive advantage and remodeling are conceivable (Fourné et al., 2014). Renovation and repetition of competitive advantage can also be termed as a competitive advantage. However, it can be noted that certain businesses that have grown in size are encountering difficulties with their flexibility and pace. Thus, whenorganizations strategically agile, thev a competitive edge and enhance their performance, and an SCA will offer them a competitive advantage (Kumkale, 2016).

Oventhal (2016) validates Doz and Kosonen's (2008a) observation that SA has predictive ability for

organizational effectiveness. Prior research on SA has established a favorable and significant association between SA and organizational performance in the US power sports industry. The survey instrument's SA portion included 22 questions with a sample size of 341 respondents. Ofoegbu and Akanbi (2012) produced the original survey instrument, which was modified for use in this dissertation.

# 5. DISCUSSION: OTHER VARIABLES INVESTIGATED IN EXAMINING SCA IN HEIS

Within HEIs, the primary factors affecting contemporary leadership are mass education and the growth of knowledge, the decline of academia as a profession, and a chasm between academic values and culture, which are a direct result of the rise of professional and business-like operations affecting management in HEIs settings (Ramsden, 1998). Ramsden (1998) notes that academic leaders are critical for influencing not only workplace change but also the culture of the work unit for which they are responsible and cites the unique challenge of leadership in the academic environment, which is characterized by "implacable external forces combining with the nature of academic culture" (p. 347).

Rather than focusing exclusively the development of an organization's designated leaders, there are calls to expand investment and promote leadership development for all, as well as to find ways to facilitate the emergence of successful distributed leadership and the formation of informal networks of expertise. Bolden et al. offer five critical interconnected characteristics of effective distributed leadership in higher education, emphasizing the critical role of social, contextual, and temporal elements in achieving leadership engagement. These five elements succinctly summarize the future emphasis on higher education leadership development,

- 1. The importance of individual leaders and the consideration of their unique characteristics, experiences, and preferences, as well as the need for inspirational or visionary leaders during times of change.
- 2. The significance of an organization's social and relational dimensions includes informal

networks, partnerships, and alliances, as well as a shared sense of identity.

- 3. The organizational environment in which leadership happens, for example, the formalization of resource distribution and control.
- 4. The 'contextual' nature of higher education leadership is politicized and vulnerable to external forces
- 5. The ongoing and changing developmental requirements of individuals, groups, and organizations, and the fact that leadership is not a destination for individuals or organizations, but a journey that requires adaptation, transformation, and change.

Moreover, entrepreneurial capability is required to mediate the effect of SA on SCA. It refers to a capability term that refers to an HEIs' ability to out a task or activity in support of its mission. Entrepreneurial capability promotes the transformation of HEIs by sensing and shaping opportunities and by developing specialized heuristics for opportunity appraisal, selection, and exploitation. Entrepreneurial capability is a framework for integrating the literature. It consists of four separate but linked qualities centered on the pursuit of opportunities: detecting, selecting, shaping, and synchronizing. In Table 3, we present an overview of each of these dimensions, their mechanisms, underlying their associated consequences, and pertinent references.

The sensing dimension of entrepreneurial skill is concerned with identifying and imagining market and technical potential both within and outside the bounds of industry, as with cross-border disruptors. Additionally, users are a regular source of fresh opportunity identification. Sensing entails avoiding "vigilance gaps" through the development of a robust peripheral vision that is sensitive to distant, faint, and ambiguous information. Leadership's attitude toward the periphery is critical to cultivating this competence, as is its role in cultivating inquiry and sharing ideas.

Selecting, the second dimension of entrepreneurial competence refers to the firm's capacity to recognize and prioritize which ideas and insights have the potential to become viable possibilities. Selection entails evaluating competing strategy alternatives in order to determine which are worthy of consideration and providing senior executives with scenarios for further action. Whatever strategy is adopted, it is necessary to explore as many innovative ideas as possible and then subject them to thorough analysis and review or prototype and test them.

Shaping, the third component entrepreneurial capability, refers to altering and connecting internal and external elements discovery the facilitate and execution of opportunities. Successful leaders must possess the ability to connect new opportunities the organization's bigger purpose and plan. This ability enables them to connect new changes to the organization's larger purpose and strategy. Shaping demands vision that a the conversation within an organization to the point where the organization's concept is developed or created from scratch.

Finally, synchronization entails regulating the relationship between the internal and exterior components of entrepreneurial capability on a temporal and spatial scale. Internal alignment entails exploring and exploiting possibilities concurrently. External alignment is about synchronizing the actions of HEIs with the pace of the environment and the opening and closing of opportunity windows. Additionally, this may necessitate a dynamic reorganization of organizational talent. While capabilities may be persistent, the coexistence of situations in best-matched states may be highly fleeting.

In this volatile era, the IT capability is among the best strategies to cope with the uncertain nature of the digitalized business world. A recent study that integrating technology overall operations improves the performance of the 269 universities mentioned in the 2015 QS Rankings. This clearly indicates the beneficial effects of technology adoption in private HEIs by increasing the efficiency of their administrative processes. More importantly, private HEIs will be able to further enhance their teaching-learning pedagogies and curricula through the incorporation of new teachinglearning approaches that leverage technology, such as an e-learning management platform, a massive open online course (MOOC), and a flipped classroom. According to Arnold et al. (2011), IT creates an information environment that enables integration and operational flexibility, which is defined as the ability to investigate the market and identify chances for action. Meanwhile, Abdullah (2020) validated the existence of a role for strategic management practices in enhancing the interaction capability, between strategy development information technology capability, and human capital heterogeneity in terms of value creation.

Lastly, investigating the role of SCA needs the analysis of alliance management capability. A network or alliance is defined as a close relationship between members that fosters social bonds based on mutual trust, goodwill, and understanding for mutual benefit, and the primary mechanism for coordination in large networks and alliances is a formalized written agreement among members. Nahapiet and Ghoshal demonstrated the evolution of network or alliance links over time. As a result, they foster trust, cooperation, and collaborative action within these communities and serve as significant resources. These factors facilitate knowledge dissemination and transmission among members in an efficient and cost-effective way, as well as provide benefits in terms of information availability, timing, and referrals.

According to Foss and Foss (2009) and Helfat et al. (2009), significant expenditure is necessary to build and maintain an alliance management competence. Investing in an alliance function to assist alliance operations, establishing an alliancespecific intranet database, and hosting regular alliance management workshops are examples of such investments. Meanwhile, Schilke (2014) argued that these expenses might not be entirely justified by the enterprises, as they do not see a necessity for frequent use of alliance management practices. Schreiner et al. (2009) define alliance management capability as a collection of specific "knowledge/skills to address critical issues that individual interfirm arise in managing any

collaboration (...) embodied in the practices and behaviors of individuals" (p. 1395) that consists primary three dimensions: coordination. communication, and bonding. Sarkar et al. (2009) and Schilke and Goerzen (2010) make the first conceptualizations of alliance management capability in the context of alliance portfolio management. They define proactive partnering, relational governance, portfolio, inter-organizational coordination, inter-organizational learning, and alliance transformation as constitutive routines of alliance management capability and provide the first glimpse into the process of alliance management capability.

### 6. CONCLUSION

The results of the study indicate that the SA method, as discussed earlier, will be the right instrument to achieve SCA in private universities in Indonesia in the future. SA practices encompass a diverse range of methodologies and exist in a variety of configurations inside businesses with the purpose of utilizing financial and non-financial information, as well as market-based information. Some of the strategies are well-known and widely used, assisting the firm in achieving SCA, and are influenced by a variety of circumstances, both internal and external. These internal and external factors or competencies can influence the adoption of SA, which is regarded as the best practice due to

heterogeneous. unique, and capabilities of its resources and the organization's ability to see, sense, and transform its resources and capabilities in order to implement new practices in response to a changing environment. However, preceding empirical evidence is sparse. As such, this study will examine the impact of leadership capability, entrepreneurial capability, information technology capability, and alliance management capability on the adoption of SA techniques and subsequent enhancement of SCA in Indonesian private HEIs. This research is important for the future, which focuses on the challenges faced by private HEIs, with the aim of identifying the right methodology or procedure that can provide solutions to these challenges. The aim is to explore the highest-level enterprise capabilities, namely leadership capabilities, entrepreneurial capabilities, IT capabilities, and alliance management capabilities, based on the perspective of dynamic capability theory as factors influencing SA and SCA with a systematic review approach to answer all research topics. The limitation of this study is that the method used uses a systematic review approach to discuss all research topics in this study. Further research needs to be carried out using different methods or approaches to obtain significant results as supporting results. Therefore, the authors strongly encourage research on the same topic as this research with a more convincing approach.

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