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Dynamic Dominant Logic: Its Stimuli and Firm Performance

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ABSTRACT

The tension between regulatory and technical contexts contributes to the complexity of today's banking competitive landscape and triggers many firms to question their prevailing dominant logic. During this tension, dynamic dominant logic is proposed as a cohering competing logics that enable firms to scan a broader environmental sign to seize the opportunities while anticipating the risks. However, it is not clear how a dominant logic could retain harmony with the paradox that makes it dynamic. Thus, this study conceptualizes organizational rejuvenation as enhancing strategy execution and competitive position through internal process changes. Moreover, in the context of Indonesian commercial banks, this study elucidates the stimuli that generate dynamic dominant logic and its relationship to firm performance. Using covariance-based structural equation modeling through parceling, the results revealed the beneficial inertia of the technical pattern of action when spurred by senior management's complex problem-solving and the organization's adaptive capacity in the face of VUCA.

JEL Classifications: L250, O310

Keywords: dynamic dominant logic, complex problem-solving behavior, adaptive capacity, VUCA, firm performance

I. INTRODUCTION

The rapid growth of technology forces the hegemony of prevailing banking industrial logic (Li et al., 2017). The world has to accept a new reality, where strategic plans typically work are becoming obsolete and dynamic adaptability is vital to deal with environmental changes. The tension between rapid technological growth and regulation has added to the complexity, which has increased volatility and uncertainty, thus creating ambiguity (VUCA) as a strategic challenge for every organization (Du and Chen, 2018). Common realities have made a stance for VUCA (Baran and Woznyj, 2021) as the new competitive landscape even for isomorphic institutional industries such as banking services.

Nowadays, as Hodgson (1998), the banking landscape appears tranquil, but there are currents whirling and transforming the industrial structure. Firms that cannot anticipate the present competitive situation face both opportunities and risks (Withers et al., 2018). Especially in emerging economies, where the institutional backdrop shapes firms' economic actions (Gao et al., 2017). With rapid isomorphism, profit-enhancing innovations become competitive necessities rather than sources of competitive advantage (Bettis, 2000). This condition seems to limit the success of imitation as a strategic plan. Fast reactions to successful innovations are necessary but not sufficient (Posen and Martignoni, 2017).

According to McKinsey and Company (2019), new entrants and technological advances have eroded bank margins. Banking must reinvent itself to become faster, more agile, customer-centric, and more purposeful in its innovation. A profitable business and robust growth trajectory are required in this new disruptive landscape (Ferraris et al., 2019; O'Leary, 2013; Westerman et al., 2011). In turn, it shifts the banking industrial logic from the old dominance into the new one. Referring to Ashby (1956), an organization's internal environment must compensate for its external environment. To respond to change, organizations under VUCA must go "beyond its prevailing dominant logic" to align with current industrial logic (Bettis et al., 2011; Thorén and Vendel, 2018). In this situation, firms need dynamic dominant logic that has the ability to scan and identify a larger range of environmental changes by retaining its strategic variety or continuum of logics (Bettis et al., 2011). Thus, firms can adjust to changes in their environment that are either foreseeable or unexpected.

Despite rich and insightful results from previous studies, dominant logic has generally been studied by ignoring how strategic decisions are made (Englemann et al., 2020). This study, in contrast, takes place in a paradox context between the tension of a highly regulated industry during the digital transformation era, which theorizes dynamic dominant logic by stimulation from several contingencies to examine dominant logic roles in strategic decision-making. To describe this type of dominant logic, the development of dynamic dominant logic research is focused on bridging its antecedents (i.e., stimuli) and its relationship with performance (Franke and Zu Knyphausen-Aufsess, 2014). In this case, the factors that stimulate the dynamic dominant logic should be exploited and help firms compensate for the paradox of variance when their environment changes (Cunha and Putnam, 2019).

Further, although Bettis et al. (2011) propose exploring a dominant logic built of cohering competing logics. But it is not clear how a dominant logic could retain harmony with the paradox that makes it dynamic. More precisely, competing logic that neutralizes

the contradiction of dominant logic (i.e., double-edged nature) as a filter and blindness over different knowledge structures has never been exploited. Therefore, this study fills two gaps in dominant logic study. First, only a few studies have examined dynamic dominant logic's "stimuli" (Bettis et al., 2011; Franke and Zu Knyphausen-Aufsess, 2014). Second, prior studies on "dynamic dominant logic," which "neutralizes the double-edged nature of dominant logic" in achieving firm performance, have been lacking empirical attention (Bettis et al., 2011; Kuratko and Audretsch, 2009; Obloj et al., 2010).

To connect these gaps, this study underlines Engelmann et al. (2020). They posit the dominant logic concept is closely related to strategic cognition, which manifests the cognitive structure of organizational members with strategic choices and actions. With its self-similar nature, dominant logic creates patterns of action that are visible across units within an organization. Indeed, it is fascinating to see the tension between the disruptive movement of financial technology (fintech) companies and the institutional cage of a highly regulated sector, which then influences the formation of dynamic dominant logic within banks as the incumbent. Thus, this study aims to build a model of dynamic dominant logic stimuli and its impact on firm performance.

In achieving this purpose, this study explicates organizational rejuvenation as the process to improve the strategy execution and competitive position through changing its internal operations (Covin and Miles, 1999) by elucidates (1) how complex problem-solving behavior of senior managements reinforce the development dynamic dominant logic, (2) how adaptive capacity can promote dynamic dominant logic ability to balance the paradox of variance from competing logics, (3) how VUCA in the digital transformation era stimulates dynamic dominant logic, and (4) how dynamic dominant logic leads to the business conceptualization and critical resource allocation decisions in achieving firm performance. Thus, this study is expected to give a contribution to the seminal "*dominant logic*" perspective of Prahalad and Bettis (1986) under a VUCA during the digital transformation era (Du and Chen, 2018; Gregory et al., 2015; Schallmo et al., 2017).

II. LITERATURE REVIEW

A. Diverging Concepts of Dominant Logic

The concept of dominant logic is characterized by "*equifinality*" because certain dominant logic is suited to their respective environments and, at specific points of time, always shows "*idiosyncratic local optimum*," which reflects firms' internal and external fitness (Bettis and Prahalad 1995; Franke and Zu Knyphausen-Aufsess, 2014). Siggelkow (2001) proposes that maintaining a continuous fit between the dominant logic and its environment is necessary to create superior performance. Further, no apparent misfits can be noticed in the case of "*fit-conserving*" change (i.e., the deterministic approach) because prevailing dominant logic remains unbroken. In contrast, "*fit-destroying*" changes (i.e., the proactive approach), which suppresses performance and distorts perceptions, provokes internal reconfiguration to quickly achieve a better fit between the firm and its environment through rapid reaction and adaptation. These characteristics are "*rooted in contingency theory*" that assumes a better fit between internal and external contingencies while exploring conditions to choose between

integration and differentiation as a competing demand within a complex organization (Volberda et al., 2012; Zhang et al., 2016).

Not only equifinality, but dominant logic is also closely related to the complex adaptive system (CAS), which views managerial cognition as essentially "*representationistic*" where "*the world is pregiven and predefined*" (Von Krogh and Ross, 1996). Coherent with Carlisle and McMillan (2006), as a dynamic system, from the standpoint of complexity, firms as an organization comprised of people or agents (as an individual, team, and any other intra-organizational properties) who learn and adapt, self-organize or even exploit and explore in varying degrees to environmental changes. Schwenk (1984) points out that complexity and ambiguity are responsible for difficulties in formulating firms' strategies since human information processing capacity is limited. All underlying assumptions, as mentioned above, are corresponding with Prahalad and Betis (1986). They characterized complex problem-solving behavior as a source of dominant logic that expresses a simple way of defining and managing the world, which is connected to the literature on CAS (Bettis and Prahalad, 1995). Likewise, dominant logic represents the self-similar process within the organization (Von Krogh and Roos, 1996; Von Krogh et al., 2000; Schraven et al., 2015) as a critical characteristic of CAS (Engelmann et al., 2020; McDaniel, 2007; Morel and Ramanujam, 1999).

In a complex adaptive environment, dominant logic always looks for equilibrium with its environment through adaptation. Carlisle and McMillan (2006) argue that in CAS, response to existing environmental conditions is determined by how the complexity in the system takes them through the self-organizing process. Further, as they purport, the paradox of incremental and radical changes becomes an outcome of CAS and does not separate between the long- and short-term orientation since it is appropriately self-organizing. This characteristic of dominant logic is "*rooted in evolutionary theory*" that argues based on problem-oriented and intended processes of searching and learning. In particular, to be directed at seeking profits cumulatively and path-dependently, based on failures in the past (Nelson and Winter, 1982; Vergne and Durand, 2011).

Referring to Hitt et al. (2000), in a rapidly changing environment (fostering by the rapid growth of technology), maintaining long-term predictions' accuracy is tough provoking. Compared to the open system's argument, an organization as a CAS is an "*exchange*" of systems, agents, or instruments related to the existence of catalysts and feedback responses that place protection and adaptation as the basic principles of the system (Brown and Eisenhardt, 1997). It is characterized by different end states, which may be achieved due to sensitivity to the initial setting (Konlechner et al., 2018; Schneider and Somers, 2006). This "*path dependency*" of a CAS (rather than conflicted) is complementary to the open system, which posits that "*equifinality*" is the main property of the systems. This term means the identical final state reached from differing settings and variability of paths (Fainshmidt et al., 2019; Katz and Kahn, 1978).

From another point of view, dominant logic is associated with the variance suppressions that occur at numerous stages of analysis (Bettis et al., 2011). As an example, while increasing homogenization between firms at the organizational and industrial level is a result of isomorphism (DiMaggio and Powell, 1983) and competition – selection (Hannan and Freeman, 1977), similar beliefs and behaviors also occur in strategic groups level (Reger and Huff, 1993) and created homogenization (Porac et al., 1989). In very nature, dominant logic tends to suppress variance along with senior managements behaviors that only adopt a particular worldview (e.g., heuristics, beliefs, paradigms).

Over time, formal structures and routines will be developed to compensate for the increased complexity (Bettis et al., 2011; O'Shannassy, 2016; Pitelis and Wagner, 2019). In this case, dominant logic starts to "*condense*" into noticeable organizational footprints. These features then become a formal standard, categorized, and accelerate decision making according to business needs. Its focus on what is considered a major problem and set priorities congruent with firms' strategic imperatives. In short, firms embodied the dominant logic in directing concerns and situating decisions for people all over the organization (Von Krogh and Roos, 1996). Through constant fortification, "*condensation*" can transfer to the phase that is considered "*fossilization*."

As a shared belief, "*a rigid physical footprint*" of dominant logic will drive the organization inactively moving and responding to a certain extent of environmental changes (Bettis et al., 2011). This characteristic of dominant logic is "*rooted in social cognitive psychology*" or "*behavioral view*" that argues decision-makers in an organization as humans combine automatic routine and intelligent goal-setting and problem-solving. At the same time, it includes motivation and emotion to solve the problem based on their paradigm, beliefs, cultural symbol system, and a social aspect (Augier, 2013; Levinthal, 2011; Powell et al., 2011).

B. Dynamic Dominant Logic as a Paradox of Variance

While past successful behavior tends to fossilize the dominant logic, changing or adding the dominant logic is neither something easy nor impossible. Firms need to understand that their accumulated intellectual capital will devaluate over time (Prahalad, 2004). In line with Aggarwal et al. (2016), appropriate stimuli are needed to support organizational adaptation effectively. In other words, without proper stimulation, a firm cannot preserve the harmony between prevailing dominant logic and the current environmental changes. In this regard, Chakravarthy (1982) emphasizes the importance of "*adaptive ability*" to succeed in the adaptation process by balancing existing environmental changes.

By its nature, dominant logic develops and evolves (Bettis et al., 2011). To some extent, dominant logic elements compete due to the external pressure for change while enacting inertia that creates resistance to change (Ginsberg, 1988; Wright et al., 2008). In this circumstance, when new digital technologies alter each critical business aspect, including products, processes, and embedded values (Matt et al., 2015). This nature of dominant logic then directs firm resource allocation decisions, strategy formulation, targeting, monitoring, and controlling business unit performance (Grant, 1988; O'Shannassy, 2016).

Considering this, Bettis et al. (2011) propose the importance of "*variance generation*" (i.e., efforts to increase variance) to compensate for the "*variance suppression*" produced by dominant logic to improve its adaptive ability. While variance generation promotes exploration, variance suppression fosters exploitation. Likewise, Hitt and Reed (2000) in Hitt et al. (2002) purport a dynamic dominant logic is one of a dominant logic type that flexibly revisits the senior management conceptualization in compensating the environmental changes (Kuratko and Audretsch, 2009). Therefore, when a dynamic balance between variance generation and suppression is viable, firms must cultivate some elements of logic that may compete in terms of concept and strategic orientation as collective patterns of how things are typically done (Engelmann et al., 2020).

Based on Obloj et al. (2010) and Bettis et al. (2011), this study defines dynamic dominant logic (DL) as the way firms conceptualize and make critical resource allocation decisions through an opportunity-seeking information filter and advantage-seeking behaviors embedded in organizational learning and routines. It has four dimensions: proactiveness, external orientation, learning, and routine (Table 1).

Table 1
Dynamic Dominant Logic Dimensions

Dimension (**Code**)	Definition	Reference (s)
External orientation (**EXO**)	How a firm looks to their environment when scanning for information and perceive opportunities or threats primarily.	Obloj et al. (2010)
Proactiveness (**PRO**)	How firm views managerial choices (*e.g.*, strategic or not) and the speed with which these choices were translated into action – thus, this element involved the proactive or reactive nature of choice.	
Learning (**LRN**)	How firm reacts to disruptions and setbacks.	
Routine (**RTN**)	The degree to which learning is transformed into routines.	

III. METHODOLOGY

A. First Stimuli: Complex Problem-Solving Behavior of Senior Managements

Daft and Weick (1984) define organizations as interpretation systems in which "*senior managements bring together and interpret information for the system as a whole.*" Actions taken by the organization are characterized as schemes for the interpretation of managers based on their operational experience in a firm and industry (Daniels et al., 2002; Huff, 1982; McDonald and Westphal, 2003). Unfortunately, the human mind is relatively limited in formulating and finding solutions to complex problems, given the capacity to assemble all complex problems within the objective rationality framework (Brown, 2004; Simon, 1957). Under this circumstance, the existing knowledge is insufficient, where cognitive, emotional, and social resources are also necessary for solving complex problems (Fischer et al., 2012; Frensch and Funke, 1995).

Gavetti (2005) posits that complex problem-solving behavior relates to "*the complex system*," which offers the interactive system. Furthermore, Dorner and Funke (2017) describe the attributes of a complex system as (a) complexity of the problem situation; (b) connectivity and mutual dependencies (inter-dependencies) between involved variables; (c) dynamics of the situation; (d) intransparency about the involved variables and their current values; and (e) politely (the Greek term for "*many goals*"). This combination is analogous to volatility, uncertainty, complexity, ambiguity (i.e., VUCA). Congruently, this study defines complex problem-solving behavior as a collection of self-regulated psychological processes and activities necessary in dynamic environments to achieve ill-defined goals that routines cannot reach (Dorner and Funke, 2017). Hence, the complex problem-solving behavior in this study consists of two dimensions. The first is a cognitive simplification, and the second is cognitive bias (Table 2).

As emergent parts of the CAS, dynamic dominant logic aggregates actors'

interactions, creating complex and adaptive behavior organizational forms (Boal and Schlutz, 2007; Pitelis and Wagner, 2019). Such aggregation collects simple individual behavioral features and combines them to generate complex coordinated patterns of group behaviors that adapt and change to environmental settings (Ramus et al., 2016). Prahalad and Bettis (1986) contend that dominant logic is correspondingly influenced by availability heuristic on decision making and problem-solving processes within an organization. Thus, the first hypothesis is built as follow:

H1: Complex problem-solving behavior (CP) positively stimulates dynamic dominant logic (DL).

Table 2
Complex Problem-Solving Behavior Dimensions

Dimension (**Code**)	Definition	Reference(s)
Cognitive simplification (**SIM**)	Cognitive processes simplify the decision-making heuristic and deliver a solution based on the paradigm and what worked before.	Prahalad and Bettis (1986), and Schwenk (1984)
Cognitive bias (**BIA**)	Availability heuristic that leads people to make decisions by using information that can easily be brought to mind.	Tversky and Kahneman (1973)

B. Second Stimuli: Adaptive Capacity of an Organization

Adaptive capacity is a relative and dynamic organizational resource. It refers to the firm's ability to handle unfamiliar upcoming conditions (Lengnick-Hall and Beck, 2005; Staber and Sydow, 2002) through multiple cognitive flexibilities of strategic decision-makers (Laureiro-Martinez and Brusoni, 2018). The adaptive capacity allows organizations to keep pace with environmental change through organizational learning, which involves breaking down obsolete "*old*" routines into "*new*" ones. In a broader range as a combination of adaptive abilities, adaptive capacity reflects "*self-adaptive behavior of routines under conditions of external change*" (Aggarwal et al., 2016).

Adaptive capacity has an interactive state on environment-organization relation that has an objective to harmonize paradox (i.e., opportunity-seeking information filter and advantage-seeking routines), which acknowledges potential rigidities in the open structure of the organizational system (Holmqvist, 2003; Staber and Sydow, 2002). McCann (2009) posits that focusing only on agility without heeding resilience is dangerous given the high level of uncertainty. Meanwhile, emphasizing resiliency by excluding agility will also make the organization slow in responding to environmental changes, which will impact performance decline. Therefore, adaptive capacity is defined as the amount and variety of resources and skills possessed and available for maintaining viability and growth relative to the requirements posed by the environment (McCann, 2009). It has two dimensions, agility, and resiliency (Table 3).

To cure the blinders of dominant logic (Prahalad, 2004), adaptive capacity revitalizes existing dominant logic by intercepting its fossilization into organizational cognitive processes and routines. Through the learning approach (Argyris and Schon, 1978), adaptive capacity as higher-order learning allows organizations to question and even change existing organizational goals that have been set and develop a new ideology of decision-making approaches (*e.g.*, prevailing dominant logic).

Table 3
Adaptive Capacity Dimensions

Dimension (**Code**)	Definition	Reference(s)
Agility (**AGI**)	The capacity for moving quickly, flexibly, and decisively in anticipating, initiating, and taking advantage of opportunities and avoiding any negative consequences of change.	McCann (2009)
Resiliency (**RES**)	The capacity to resist, absorb and respond, even reinvent if required, in response to fast and/or disruptive change cannot be avoided.	

Firms with adequate adaptive capacity can reconfigure themselves rapidly in a changing environment instead of just identifying current needs by exploiting available resources (Aggarwal et al., 2016). Because it aimed to utilize slack resources and exploit ambiguity (Staber and Sydow, 2002), adaptive capacity revitalizes dominant logic sustainably and makes it dynamic in managing tension with ambiguous schemes (Haffar and Searcy, 2019). Accordingly, this study develops the second hypothesis as follow:

H2: Adaptive capacity (AC) positively stimulates dynamic dominant logic (DL)

C. Third Stimuli: VUCA as Banking New Realities

As Mack et al. (2016), VUCA was born due to rapid technological growth and makes the difficulties in predicting the future due to a lack of knowledge about "*the basic rules of the game*." Since the world has become more connected, industry boundaries have become unclear, resulting from increased environmental dynamics, fostering uncertainty (Dobbs et al., 2016). With simpler and cheaper products and services offered, fintech companies have changed customers' needs and preferences, thus ultimately increasing the threat to banks as incumbent (OECD, 2020). Amid tight regulations in the banking industry, digital transformation has presented its own challenges to financial market players, especially banks, which in turn increases complexity (Liu et al., 2011). Hence, with a shorter products and services life cycle, the banking level of competition increased.

In another view, senior management actively better understands and recognizes changes representing their subjective environment, coupled with their central consciousness (Fiol and O'Connor, 2003). Correspondingly, Cyert and March (1963) posit that senior management will adopt organizational posture according to their perception of the environment by considering goals set by their organization. Meanwhile, Hambrick (1982) argues that selective environmental scanning by senior management can support the creation of timely decision-making. Hereafter, organizations interact with their external environment as open systems to suffice the resources needed in attempting their goals (Pfeffer and Salancik, 1978; Siggelkow, 2001; Scott and Davis, 2007).

Following Morris et al. (2008), the term "*external environment*" is used to classify everything outside the organization. Each domain of the external environment has crucial implications for how tasks are completed inside the organization (i.e., the internal environment). In this state, the dynamic dominant logic is associated with the dynamic context during the digital transformation era. Thus, this study defines VUCA (VA) as a volatile, uncertain, complex, and ambiguous external environment (Bennett and Lemoine, 2014). This variable consists of 5 (five) dimensions: competitiveness, dynamism, hostility, technology, and regulatory (Table 4).

Table 4
VUCA Dimensions

Dimension (**Code**)	Definition	Reference(s)
Competitiveness (**COM**)	The degree of competition is reflected in the number of competitors and the number of areas in which there is a competition that has been associated with intense pressures for higher efficiency and lower prices that lead to tighter margins and less organizational slack.	Matusik and Hill (1998), Miller (1987), and Zahra (1996)
Dynamism (**DYN**)	The rate of change and the degree of instability of the environment.	Dess and Beard (1984)
Hostility (**HOS**)	Precarious industry settings, harsh, overwhelming business climates, and the relative lack of exploitable opportunities generally demand fast reactions.	Covin and Slevin (1989), and Mintzberg (1979)
Technology (**TEC**)	The degree of accelerated development of new technologies, rapid product obsolescence, and greater difficulty in protecting intellectual property.	Morris *et al.* (2008)
Regulatory (**REG**)	The degree to which an administrative and legal process is designed to limit excessive competition to promote stability by coercive isomorphism means that regulated firms become more similar over time through the adaptation of similar features, forced imitation, and/or indoctrination from the normative dimension.	DiMaggio and Powell (1983, 1991), and Kim and Prescott (2005)

In correspondingly with Von Krogh et al. (2000), dynamic dominant logic is an emergent aspect of complex organizations adapting to the environment (Bettis and Prahalad, 1995). As a dominant logic, dynamic dominant logic substantially affects how organizations strategize and impact performance (Bergman et al., 2015). Therefore, as the critical part of strategy-making, dynamic dominant logic is also influenced by environmental attributes such as uncertainty, complexity, and dynamics (Du and Chen, 2018). Subsequently, this study develops the third hypothesis as follow:

H3: VUCA (VA) positively stimulates dynamic dominant logic (DL)

D. Firm Performance as a Proxy of Technical Fitness

Referring to Peteraf and Barney (2003), firms with competitive advantages can create benefits relative to the economic costs of exploiting resources better than their competitors. Barney (1991) states that resource-based strategies can exploit existing opportunities or mitigate threats to improve firm performance. In other words, combining valuable and rare resources does not create the best-performing firm, but exploiting the combination more effectively does. Thus, technical fitness is achieved when routines or capabilities can perform tasks as its proposed function relative to its cost-effectively (Helfat et al., 2007; Laaksonen and Peltoniemi, 2016; Teece, 2014).

Regarding the research context, there are various alternative parameters to assess bank performance using traditional statistical methods to investigate its economy of scope and scale (Kosmidou et al., 2006). Banks as a firm must ensure that the indicators they use can manifest all strategic elements, including aligning objectives, strategies, and implementation, effectively to sustain their competitive advantage. Therefore, an integrative method is essential to assess a broader bank performance, including

productivity and efficiency related to financial and non-financial indicators (i.e., customer perspective, internal, and learning and growth).

Accordingly, this study defines firm performance (FP) as a measure of the firm success in doing business as a reflection of its organizational outcomes (the domain of financial and operational) (Kaplan and Norton, 1992; Lebas, 1995; Venkatraman and Ramanujam, 1986). FP consists of four dimensions: financial performance, customer performance, internal process performance, and learning and growth performance. This study used secondary data to measure five financial performances, while the other 12 non-financial performances are subjective measures (Table 5).

Table 5
Firm Performance Dimensions

Dimension (**Code**)	Definition	Reference(s)
Financial performance (**FIN**)	The identification of a few relevant high-level financial measures (*i.e.*, the secondary data of asset growth, ROA, BOPO, NIM, and NPL).	Kaplan and Norton (1992), Venkatraman and Ramanujam (1986), and Wu et al. (2012)
Customer performance (**CUS**)	The identification of non-financial measures that answer the question, "*What is important to our customers and stakeholders?"*	
Internal process performance (**INT**)	The identification of non-financial measures that answer the question, "*What must this study excel at?"*	
Learning and growth performance (**LNG**)	The identification of non-financial measures that answer the question, "*How can this study continue to improve, create value and innovate?"*	

Dynamic dominant logics may enhance performance by facilitating strategic fit and alignment (Fainshmidt et al., 2019; Tamayo-Torres et al., 2016; Zajac et al., 2000; Zatzick et al., 2012) and stimulate distinct strategic action for particular firm paths dependently (Dierickx and Cool, 1989; Jugdev and Thomas, 2002; Kor and Mahoney, 2004). Therefore, dynamic dominant logic always manifests the fitness between a firm's internal and external contingencies shows an idiosyncratic local optimum in the performance landscape (Bettis and Prahalad 1995; Siggelkow 2001) and lead to different firms' performance levels. Thus, this pattern of action would explain the dynamic dominant logic's "*beneficial inertia*" link in attempting firms' technical fitness.

Miles and Cameron (1982) argue that inertia can benefit a firm, and senior management must understand their distinctive competencies. More efficient routines will lead to superior economic performance in the innovating organization—in the current idiom, economic rents (Peteraf and Barney, 2003). Peteraf (1993) argues that the firm's unique resources, historically accumulated and inimitable, are the only potential sources of sustainable competitive advantage. According to these arguments, the fourth hypothesis is:

H4: Dynamic dominant logic (DL) positively affects firm performance (FP)

IV. RESEARCH METHODS

A. Sample and Data Collection

This study focuses on the digital transformation era (Nadkarni and Prügl, 2021). While dealing with the paradox of digital transformation within the institutional cage as a highly regulated sector (Gregory et al., 2015), Indonesian banks seem "*more exposed*" by increasing competitive pressure from fintech companies and digital marketplace businesses. In particular, they interact directly with the tasks environment in achieving their business goal. Therefore, this study involved Indonesian commercial banks as the unit of analysis.

Bilingual questionnaires (Bahasa and English) were distributed and collected through several methods, either in electronic form or printed documents that were directly delivered/picked up or some of them through face-to-face meetings with respondents as credible representatives of the bank. A total of 115 questionnaires were distributed to the population, and 72 questionnaires were returned (a response rate of 62,61%). The collected questionnaires were checked and selected for their completeness to obtain questionnaires containing data that meet the statistical requirements (valid). Bartlett et al. (2001, p.48), using Cochran's (1977) sample size formula, create a table that contains the minimum sample size needed to represent a population or to be generalized to a population. This table concluded that for a population of 115 banks, a minimum sample size of 63 banks is required (interpolation and rounding results). Therefore, this sample size of 72 banks represents the population of Indonesian commercial banks and 93.2% of assets in 2018 (Otoritas Jasa Keuangan, 2018). After collecting the questionnaire, the secondary data was used to measure the financial performance (FP) dimensions that were gathered from banks' annual reports through their website. The profile of 72 banks participating in this study is grouped according to several characteristics (Table 6).

Table 6
Firms Profile

Categories	Sample	Population	% of Population	Proportion (%)
Banks' license (Tier-1 Capital)				
BUKU 4 (*eq.* > USD 2B)	5	5	100.00%	6.94%
BUKU 3 (*eq.* USD 0.3B–2B)	19	28	67.86%	26.39%
BUKU 2 (*eq.* USD 0.07B–0.3B)	34	60	56.67%	47.22%
BUKU 1 (*eq.* < USD 0.07B)	14	22	63.64%	19.44%
TOTAL	**72**	**115**	**62.61%**	**100.00%**
Banks' assets *(in IDR)*				
> 50T (*eq.* USD 3.3B)	23	30	76.67%	31.94%
11-50T (*eq.* USD 0.7–3.3B)	28	45	62.22%	38.89%
< 10T (*eq.* USD 0.7B)	21	40	52.50%	29.17%
TOTAL	**72**	**115**	**62.61%**	**100.00%**
Banks' group				
State-owned	4	4	100.00%	5.56%
Regional development bank	26	27	96.30%	36.11%
Private	29	63	46.03%	40.28%
Joint venture	10	12	83.33%	13.89%
Foreign	3	9	33.33%	4.17%
TOTAL	**72**	**115**	**62.61%**	**100.00%**

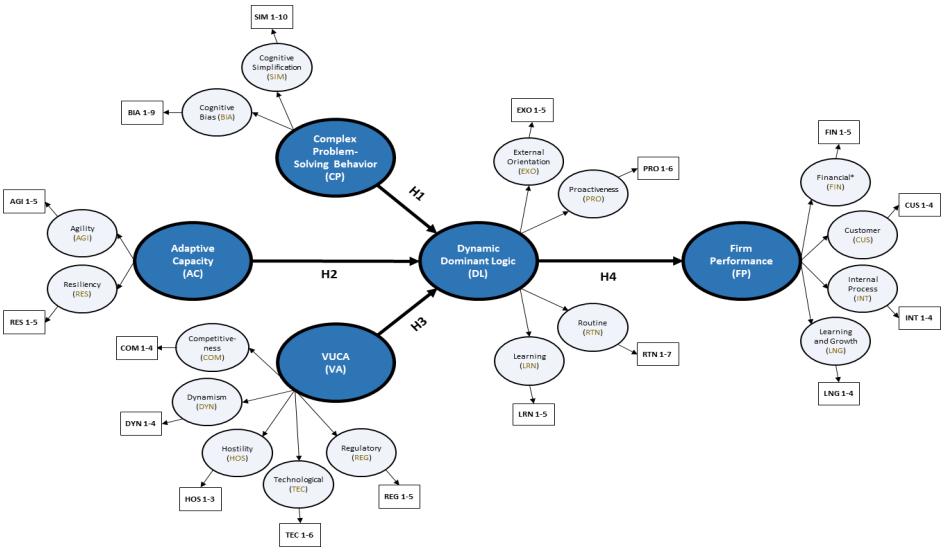
** USD 1 is equal to IDR 15K*

B. Measurement

This study used all four constructs included in the conceptual research framework as latent variables. While the operationalization of the variables is a process to transform conceptual variables into statistically measurable indicators (Cooper and Schindler, 2008), this study processed each of these operating variables based on steps as follows: (1) defined each construct as a latent variable, (2) identified the dimensions that were reflected in each construct, and (3) explored the measurement items or indicators for each dimension variable and developed the questionnaire.

Measurement items were developed based on previous empirical literature and input from experts also practitioners to enrich knowledge gained from literature in which was conducted with some stakeholders of the Indonesian banking industry and used for the measurement items development. In addition, a pre-test to 46 respondents was performed to ensure that the participants understood the developed measurement items. Consequently, this study used only validated items to measure the constructs. Except for secondary data used in FIN dimension's indicators in FP measurement, a six-level Likert Scale is used for other indicators to measure the dimensions of constructs. This study used an even number of scales to avoid neutral opinions or attitudes (such as "*neither agree nor disagree*") when answering the questionnaires (Wakita et al., 2012). Furthermore, some questions are in reverse scoring format to minimize the problems of inattention and acquiescence. Hereafter, the secondary data, which is a financial dimension of FP variables, were inverted to support further data analysis, namely 1/BOPO and 1/NPL, while the rest were in their original form, namely AGR, ROA, and NIM. Hence, the results of the operationalization of the construct as latent variables were then combined and produce a complete research model, as depicted in Figure 1.

Figure 1
The Complete Research Model with Second-order CFA



C. Data Analysis

After transforming conceptual variables into statistically measurable indicators, as the first step, a descriptive analysis was conducted to grasp the level of conformity of the data (distribution, mean, and variance) using the Percent of Maximum Possible (Cohen et al., 1999) supported by the SPSS 23. Percent of Maximum Possible (POMP) is commonly used as an alternative score standardization in psychology research (Fischer and Milfont, 2010). The interval scale of 1 to 6 was used for primary data obtained from measurement indicators. Number 1 indicates strongly disagree (very low), and number 6 indicates strongly agree (very high). To help understand or interpret the average results and standard deviations of variables, the interval scale (1–6) has also been transformed to POMP scores, which have a scale of 0–100.

As the second step, this study used the Structural Equation Model (SEM) as the analytical multivariate instrument that examines a series of dependency relationships between variables. This analysis is usually used if any dependent variable becomes an independent variable in the next dependency relationship. Considering this study aims to estimate research models with reflective measurement models or factor models, covariance-based SEM supported by LISREL 8.8 and SPSS 23 was used as the analysis test (Rouse and Corbitt, 2008; Rigdon et al., 2017). Following Anderson and Gerbing (1988), a two-stage method for data analysis was used, including (1) measurement model analysis and (2) structural model analysis.

In general, the measurement model analysis consisted of the following steps (Hair et al., 2013): (1) overall model fit test, (2) validity and reliability test, (3) Latent Variable Score (LVS) calculation, and (4) transformation of the measurement model into a simplified measurement model through parceling using LVS (Bandalos, 2002; Rhemtulla, 2016). The overall model fit used the Goodness of Fit Indices (GOFI) values consisting of the good fit criteria: RMSEA ≤ 0.08, NNFI ≥ 0.90, CFI ≥ 0.90, SRMR≤ 0.08, GFI ≥ 0.90, and Norm $\chi^2 \leq 2$ (Hair et al., 2013). The validity test used Standardized Factor Loading (SFL), and SFL ≥ 0.50 represents good validity (Hair et al., 2013; Igbaria et al., 1997). For measurement, items or indicators whose SFL < 0.50 were excluded from the model. As for the reliability, the test used Construct Reliability (CR) and Variance Extracted (VE), where CR ≥ 0.70 and VE ≥ 0.50 show good reliability, while CR ≥ 0.60 and VE < 0.50 show adequate good reliability (Fornell and Larcker, 1981). After completed, the LVS calculation of the dimensions was performed and followed by an analysis of the measurement model of the latent variable with the LVS indicator of the related dimensions (Jöreskog, 2000; Jöreskog et al., 2006). Then, all constructs which were previously latent variables were transformed into observable variables or indicators—any latent variable, which was the 2nd order CFA, transformed into the 1st order CFA. As the final stage, this study performed structural model analysis as a hypothesis test and determined whether the data supported the model.

V. RESULTS

A. Descriptive Analysis

The primary and secondary data characteristics were displayed as means and standard deviations for the constructs and their dimensions. In this case, the mean of each construct

was obtained from the simple average of the dimensions. Then, the mean of each dimension was obtained from the simple average of the indicator. Hereafter, the average and standard deviation of primary data from the five constructs and its dimensions and secondary data from the FIN dimension are shown in Table 7. The average value according to POMP scores is as follows: 4 constructs (CP, AC, VA, and FP) in the range (66.67–83.33), which means the level of conformity between respondents' answers and statements in the average questionnaire was "*high*," while the remaining (DL) averaged at a "*somewhat high*" level of conformity (50.01–66.66).

Table 7
POMP Results

Construct; Dimension	Mean (Scale 1 - 6)	Standard Dev. (Scale 1 -6)	Mean* (Scale 0 - 100)	Standard Dev.* (Scale 0 - 100)
		Primary Data		
CP	**4.59**	**0.23**	**71.82**	**4.53**
SIM	4.54	0.22	70.92	4.37
BIA	4.63	0.35	72.72	6.92
AC	**4.43**	**0.46**	**68.68**	**9.20**
AGI	4.41	0.53	68.14	10.66
RES	4.46	0.45	69.22	8.95
VA	**4.66**	**0.25**	**73.19**	**4.98**
COM	4.77	0.35	75.49	6.93
DYN	4.41	0.44	68.23	8.76
HOS	4.28	0.45	65.65	9.03
TEC	4.55	0.41	71.02	8.2
REG	5.28	0.30	85.56	6.02
DL	**4.32**	**0.32**	**66.43**	**6.39**
EXO	4.17	0.39	63.33	7.83
PRO	4.28	0.40	65.58	8.07
LRN	4.39	0.46	67.78	9.26
RTN	4,45	0.35	69.05	6.94
FP	**4.57**	**0.54**	**71.29**	**10.93**
CUS	4.46	0.59	69.24	11.80
INT	4.50	0.57	70.00	11.49
LNG	4.73	0.47	74.62	9.50
		Secondary Data (FP ➔ FIN)		
AGR	14.75%	22.21%	-	-
ROA	1.69%	2.00%	-	-
1/BOPO	1.20%	1.25%	-	-
NIM	6.36%	4.00%	-	-
1/NPL	0.55%	0.53%	-	-

**POMP Score*

B. Measurement Model Analysis

As shown in Table 8, from the execution of the first and second steps, the second-order measurement model has produced 17 dimensions with their valid indicators. The measurement model produced 7 dimensions (EXO, PRO, LRN, RTN, DYN, HOS, FIN) with a degree of freedom (df) = 0. Therefore, the overall model fit is "*perfect.*" While the 8 of 10 remaining dimensions demonstrate "*good fit*" (BIA, AGI, RES, TEC, REG, CUS,

INT, LNG), the last remaining 2 demonstrates "*adequate good fit*" (SIM, COM). Moreover, all of 17 dimensions have "*good validity*" (SFL ≥ 0.50), while 16 of 17 dimensions have "*good reliability*" (CR ≥ 0.70 and VE ≥ 0.50), namely SIM, AGI, RES, COM, DYN, HOS, TEC, REG, EXO, PRO, LRN, RTN, FIN, CUS, INT, LNG. Thus, the last dimension has "*adequate good reliability*" (CR ≥ 0.60 and VE < 0.50), namely BIA. The measurement model of constructs, *i.e.*, CP, AC, VA, DL, and FP, previously the second-order measurement model or the 2nd order CFA, was then transformed into the first-order measurement model or 1st order CFA.

Table 8
Overall Model Fit, Validity and Reliability of the Dimensions as 1st Order CFA

Construct; Dimension	**Indicators**	**Valid Indicators**	**CR** *(≥ 0.70)*	**VE** *(≥ 0.50)*	**RMSEA** *(≤ 0.08)*	**NNFI** *(≥ 0.90)*	**CFI** *(≥ 0.90)*	**SRMR** *(≤ 0.05)*	**GFI** *(≥ 0.90)*	**Norm χ^2** *(≤ 2)*
				CP						
SIM	SIM1–SIM10	SIM2, SIM5, SIM9	0.78	0.54	0.00	1.14	1.00	0.30	0.82	0.00
BIA	BIA1–BIA9	BIA2, BIA5 – BIA9	0.82	0.44	0.00	1.08	1.00	0.04	0.95	0.00
				AC						
AGI	AGI1–AGI5	AGI1, AGI2, AGI3, AGI4, AGI5	0.89	0.62	0.00	1.04	1.00	0.03	0.93	0.00
RES	RES1–RES5	RES1, RES2, RES3, RES4, RES5	0.84	0.52	0.00	1.05	1.00	0.03	0.97	0.00
				VA						
COM	COM1–COM4	COM1, COM2, COM3	0.79	0.56	0.00	1.06	1.00	0.11	0.93	0.00
DYN	DYN1–DYN4	DYN2, DYN3	0.78	0.64	---------- df=0 ----------					
HOS	HOS1–HOS3	HOS3	1.00	1.00	---------- df=0 ----------					
TEC	TEC1 – TEC6	TEC2, TEC3, TEC5, TEC6	0.81	0.53	0.00	1.08	1.00	0.03	0.97	0.00
REG	REG1 – REG6	REG2, REG4, REG5	0.77	0.54	0.00	1.09	1.00	0.03	0.99	0.00
				DL						
EXO	EXO1–EXO5	EXO2, EXO3, EXO4	0.85	0.67	---------- df=0 ----------					
PRO	PRO1–PRO6	PRO4, PRO5, PRO6	0.78	0.54	---------- df=0 ----------					
LRN	LRN1–LRN5	LRN1, LRN4, LRN5	0.78	0.56	---------- df=0 ----------					
RTN	RTN1–RTN7	RTN1, RTN2, RTN5	0.84	0.52	---------- df=0 ----------					
				FP						
FIN	ZAGR, ZROA, Z1PERBOPO, ZNIM, Z1PERNPL	ZROA, Z1PERBOPO, ZNIM	0.88	0.71	---------- df=0 ----------					
CUS	CUS1–CUS4	CUS1-CUS4	0.85	0.59	0.00	1.04	1.00	0.01	0.99	0.00
INT	INT1–INT4	INT1-INT4	0.87	0.62	0.00	1.04	1.00	0.02	0.98	0.00
LNG	LNG1–LNG4	LNG1-LNG4	0.85	0.59	0.00	1.04	1.00	0.02	0.98	0.00

As shown in Table 9, the first-order measurement model has produced 1 GOFI, *i.e.*, SRMR, demonstrates "*marginal fit*," whereas the remaining 5 GOFIs (RMSEA, NNFI, CFI, GFI, and Norm χ^2) demonstrate "*good fit*." Accordingly, the overall model fit of 1st order CFA is "*good*." Further, all constructs (CP, AC, DL, and FP) have "*good validity*" (SFL ≥ 0.50). Further, while CP, AC, DL, and FP have "*good reliability*" (CR ≥ 0.70 and VE ≥ 0.50), VA have "*adequate good reliability*" (CR ≥ 0.60 and VE < 0.50).

Table 9
Overall Model Fit, Validity and Reliability of the Constructs as 1st Order CFA

Construct; Indicator	**Validity** *(SFL)*	**CR** *(≥ 0.70)*	**VE** *(≥ 0.50)*	**RMSEA** *(≤ 0.08)*	**NNFI** *(≥ 0.90)*	**CFI** *(≥ 0.90)*	**SRMR** *(≤ 0.05)*	**GFI** *(≥ 0.90)*	**Norm χ^2** *(≤ 2)*
1st Order CFA				0.00	1.11	1.00	0.15	0.92	0.00
CP		0.89	0.80						
SIM	1.00								
BIA	0.77								
AC		0.79	0.66						
AGI	0.56								
RES	1.00								
VA		0.79	0.45						
COM	0.60								
DYN	1.00								
HOS	0.55								
TEC	0.51								
REG	0.56								
DL		0.86	0.66						
EXO	0.90								
PRO	0.79								
LRN	0.72								
RTN	0.82								
FP		0.92	0.74						
FIN	0.86								
CUS	0.81								
INT	0.90								
LNG	0.87								

C. Structural Model Analysis

Previous measurement model analysis transformed CP, AC, VA, DL, and FP from the 2nd order CFA to the 1st order CFA. These five 1st order CFA constructs were then used to transform or simplify the structural model with the measurement model 2nd order CFA depicted in Figure 1 into the structural model with measurement model 1st order CFA, as depicted in Figure 2.

As shown in Table 10, although there are 2 GOFI values, namely SRMR and GFI, that demonstrate a "*marginal fit*," the remaining 5 GOFIs demonstrate a "*good fit*." Thus, the overall model fit from the structural model with 1st order CFA can be concluded as "*good*." Statistical test results of the path relationship between latent variables show four relationships tested, and 3 of 4 relationships have a t-test that is significantly positive (H1, H2, H4). In contrast, the one last remaining relationship is not significant (H3) (see Table 11).

Figure 2
The Simplified Structural Model with First-order CFA

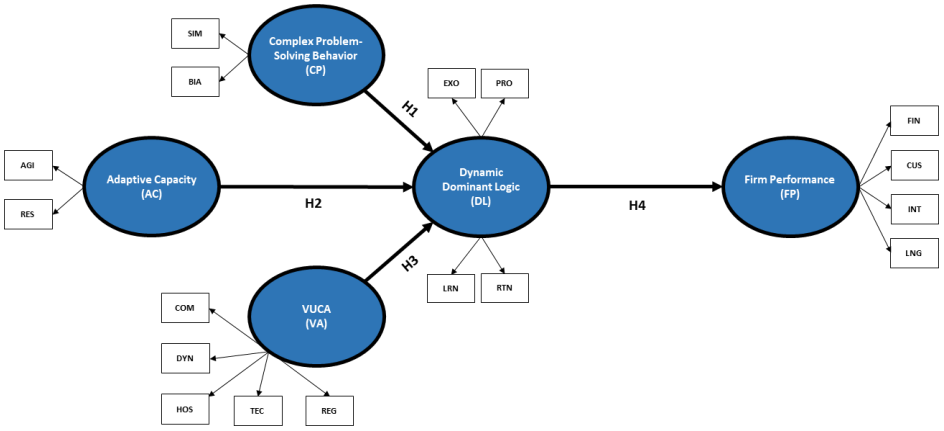


Table 10
Complete Model Fit Results

Model Fit Index	Cut-off values	Measured value
RMSEA	≤ 0.08	0.00*
NNFI	≥ 0.90	1.11*
CFI	≥ 0.90	1.00*
IFI	≥ 0.90	1.09*
SRMR	≤ 0.05	0.22
GFI	≥ 0.90	0.84
Norm χ^2	≤ 2	0.00*

** Good Fit*

Table 11
Hypothesis Test Results

Path	t-value*	Coefficient	Results	Conclusion
CP → DL	3.63	0.45	Significant Positive	H1 Accepted
AC → DL	12.90	0.79	Significant Positive	H2 Accepted
VA → DL	1.85	0.03	Not Significant	H3 Rejected
DL → FP	6.41	0.60	Significant Positive	H4 Accepted

** t-value ≥ 1.96 (Significant)*

VI. DISCUSSION

This study explains the stimulation of dynamic dominant logic and its impact on firm performance during the digital transformation era. While confirming three research hypotheses (i.e., H1, H2, H4), this study only partially proved the research model (see Figure 2) since the direct effect of VUCA over dynamic dominant logic (H3) is not significant. However, regarding Table 10, the results show a good level of statistical compatibility. Therefore, several factors may cause the relationships of variables in the study.

A. Complex Problem-Solving Behavior Stimulation on Dynamic Dominant Logic

This study found that the complex problem-solving behavior of senior management reinforces the development of dynamic dominant logic (Bettis et al., 2011; Obloj and Pratt, 2005; Prahalad and Bettis, 1986) since the data support H1. Considering Gavetti et al. (2005), a decision-makers experience and their learning from failures may provide the ability to recognize patterns of complex problems. During the recent digital transformation, the disruption from fintech companies pressurizes banks and makes them face a complex situation (Verhoef et al., 2021). Thus, senior decision-makers use cognitive behavior to overcome complex problems since the disruption has changed the interaction pattern between customers and incumbents (Sebastian et al., 2017). With difficulty to predict results based on limited data and information, banks, as the incumbent, then involve their senior management in combining reasoning and thinking within current uncertain reality (Dorner and Funke, 2017).

Referring to social cognitive psychology, with the difficulty of predicting causality between contingent variables, senior managements will simplify their complexity within the framework of limited rationality and under their social awareness (Von Krogh and Roos, 1996; Schraven et al., 2015). Meanwhile, the cognitive bias of senior management, especially regarding their habit of prioritizing information and current situations, also contributes to solving complex problems during rapid technological change. This simplification process and cognitive bias on complex problems stimulate the dynamic dominant logic reinforcement amid the existing paradoxes. Thus, several explanations are derived as follows.

First, complex problem solving is closer to behavioral decision making by relying on incomplete data and information than rational decision making (Cyert and March, 1963; March and Simon, 1958). Referring to Prahalad and Bettis (1986), the reinforcement of dynamic dominant logic is based on senior management cognitive processes intended to simplify complex problems and create problem-solving based on previous paradigms and successes. Through pattern recognition, senior management as decision-makers tries to provide solutions to overcome data limitations and information and insight into their current competitive landscape. As Arend (2020) underscored, strategic decisions rely heavily on ambiguous data and less uniformity in categorizing them as relevant information. In particular, strategic decisions are given various evaluation criteria, where results are not immediately visible along with the existing complexity (Thoren and Vendel, 2019). Therefore, senior management is a distinct skill and has an essential contribution to the success and failure of a firm.

Second, senior management can also be stated as the collection of key individuals or dominant coalition, which has a vital role in shaping the firm's direction and management (Prahalad and Bettis, 1986). This coalition ultimately directed the allocation of critical resources to achieve the expected organizational goals (Donaldson and Lorsch, 1983; Kunc and Morecroft, 2010; Schraven et al., 2015). However, the emergence of uncertainty, difficulty in predicting, and the presence of surprises that are strengthened by social interaction in an organization will create a system called adaptive complex (Simon, 1991). Under these circumstances, firms as organizations will face complexity and ambiguity, which will ultimately encourage heuristic bias by senior decision-makers (Tversky and Kahneman, 1974) to make decisions by using information that can quickly be brought to mind in facing uncertainty. Therefore, in constructing a prediction during

the digital transformation era, senior management uses their state of knowledge to create hypotheses about predictive factors then weigh and integrate them as part of their complex problem-solving behavior.

B. Adaptive Capacity Stimulation on Dynamic Dominant Logic

Since the data support H2, this study found that adaptive capacity as an intangible organizational resource positively affects dynamic dominant logic. Therefore, this empirical result supports Bettis et al. (2011), who underlines the importance of today's organizations in having a greater variety of action or variance to make the dominant logic more adaptive. Since rapid growth in technology has increased the variety and moved beyond prevailing dominant logic, firms as an organization need to cultivate their adaptive capacity to promote dynamic dominant logic in balancing the paradox of variance from competing logics (Schraven et al., 2015). Thus, adaptive capacity inherently makes a broader adaptive property of dynamic dominant logic since it develops and evolves due to learning and organizational effort in maintaining variance required during the recent digital transformation.

According to the evolutionary theory, firms create distinct patterns in responding to environmental changes based on learning from past failures (Su and McNamara, 2012). In the face of complexity and ambiguity, prevailing dominant logic hinders firms' response to the environmental changes because it maintains a status quo, where what has worked becomes the basis for dealing with changes. This trait arises when an organization as a CAS is in equilibrium and makes their behavior becomes repetitive (Bettis and Prahalad, 1995). With the presence of adaptive capacity, dynamic routines promote break-up and the revitalization of prevailing dominant logic (Franke and Zu Knyphausen-Aufsess, 2014) in encountering rapid technological change. Several possible explanations have embraced these findings.

First, adaptive capacity, through its higher-order learning, may promotively make continual adjustments to the prevailing decision-making paradigm, and in this case, stimulate dominant logic to become dynamic (Franke and Zu Knyphausen-Aufsess, 2014). With this capacity, firms can interact dynamically with their environment, reactively build resiliency and proactively manage complexity and uncertainty (Lei et al., 1996). In contrast, if firms rely solely on lower-order learning, the prevailing dominant logic cannot be revitalized since it increases inertia due to firms' past success (Su and McNamara, 2012). As another view, adaptive capacity can reconfigure how a firm interprets and acts by a continuous rejuvenation of dominant logic. When neglected, cognitive blind spots owned by senior management as well as core rigidity held by firms will inhibit the formation of adaptive dominant logic abilities. In fact, their distinctive nature, which tends to inhibit flexibility and create organizational inertia (Tripsas and Gavetti, 2000; Gilbert, 2005; Wang and Wang, 2017).

Second, as Hedberg (1981) cited by Prahalad and Bettis (1986), firms must increase experimental ability, calibrate the sensitivity to environmental changes, reconfigure the contingency factors, and achieve the dynamic balance between the effects of stabilization and destabilization. In this circumstance, firms' capacity to proactively advance opportunities and avoid any harmful consequences of change determines their agility to promote destabilization of prevailing dominant logic. In contrast, the resiliency that defines firms' reactive moves in response to any environmental change that cannot

be avoided promotes the stabilization of prevailing dominant logic. As a result, by achieving a dynamic balance between the paradox, adaptive capacity stimulates dynamic dominant logic (Bettis et al., 2011).

C. VUCA Stimulation on Dynamic Dominant Logic

This study found the path coefficient from VA to DL (0.03) explains the role of VUCA in stimulating dynamic dominant logic. However, under the criteria of significance, the t-value is 1.85, H3 is rejected. Accordingly, this study cannot empirically prove the effect of VUCA in stimulating dynamic dominant logic during the digital transformation era. Surprisingly, our finding contradicts Von Krogh et al. (2000), who argue that the firm's environment is closely related to the development of dominant logic. This result also opposes Franke and Zu Knyphausen-Aufsess (2014). They contend that each domain of the external environment has a critical impact on the formation of dominant logic in initiating internal and external fit. Despite this, some possible explanations are as follows.

First, as Horburn and Bergh (2006) proposed, firms in a highly regulated industry mobilize their resources to ensure that regulations issued by regulatory bodies make adequate support for their business continuity. Furthermore, firms exert indirect influence to build opinions that can affect regulatory bodies' policies, such as the executives and legislative parties. Second, Covin and Slevin (1989) highlighted that firms in hostile conditions adopt more innovations than benign environments. Based on another view, Sirmon et al. (2007) posit that dynamism from rapid technological changes can suppress existing business continuity by changing the order of products and business processes. Although in the digital transformation era, disruption by fintech companies has shifted the establishment of existing products and processes in the banking industry, the potential threats that exist have been limited by strict regulations. This is in line with DiMaggio and Powell (2000) and Shi and Connelly (2018), who believe that isomorphism has made institutions more uniform and puts pressure on industry players to adopt existing standards to face the new normal based on its episodes.

Third, according to Johnson and Hoopes (2003), cognitive limitations prevent senior management from obtaining perfect rationality, where the reality is ultimately a compound belief of industry members. In this case, due to the high mutual awareness in the banking industry, external factors are something that is perceived as normal and accepted. Fourth, Surty and Scheepers (2019) have faith that the organization is an open system where dynamism is one of the environmental contingencies strengthening how they should act through leadership practices in response to change. In this term, the stimulation from senior managements' complex problem-solving behavior is more effective in nourishing the dynamic dominant logic than the external environment (i.e., VUCA).

D. Dynamic Dominant Logic Impact on Firm Performance

Since the data support H4, this study found that dynamic dominant logic positively affects firm performance (Bergman et al., 2015; Obloj et al., 2010). As predicted, firms are assumed to always seek conformity with their technical, environmental conditions, as well as changes in the customer needs, competitive settings, and other characteristics of the task environment. In fact, digital transformation delivers the "*new realities*" for all

sectors of the economy and adjusts the decision in networked systems (Bouée and Schaible, 2015 in Schallmo et al., 2017). In addition, the rise of devices for mobile connectivity (e.g., social media) that promote the expansion of social networks (Nadkarni and Prügl, 2021; Westerman et al., 2011) has created the "*new normal*" in how consumers behave their needs. In this circumstance, the faster the strategic decision making (i.e., to compensate the new normal), the better the firm's profitability and growth by achieving technical fitness (Teece, 2018). Several argumentations can be derived in the following ways.

First, dominant logic tends to create inertia (Prahalad, 2004). Inertia is not always interpreted as a negative since it is also beneficial when "*firms have resources that equilibrate external pressures to change*" (Teece, 2012; Zajac et al., 2000). This argumentation is also congruent with Gavetti et al. (2005) and Grant (1988). They both argue that superior performance could be promoted by similarities in administrative structures, processes, and systems, along with the efficiency that arises from the replication of dominant logic across all appropriate business elements. In turn, it enhances intuitive decision-making opportunities through shared dominant schemes.

Second, Peteraf (1993) and, Peteraf and Barney (2003) posits firm resources that are unique, historically accumulated, and cannot be imitated by competitors are the only possible foundations of sustainable competitive advantage. In this view, dynamic dominant logic is a strategic asset whereas distinct in isolating mechanisms as deeply rooted intangible organizational resource that is hard to imitate, path dependency, socially complex, and causally ambiguous (Jugdev and Thomas, 2002). From another perspective, inertia creates from dominant logic is relative to environmental change and depends on how an organization can maintain its speed of reorganization to offset the rate of environmental changes (Hannan and Freeman, 1984). Consequently, the more efficient routines, the more it leads to superior economic performance (Zollo and Winter, 2002). Moreover, Volberda et al. (2012) found that firms must maintain a meta-fit between contingent and institutional factors when facing environmental changes (see also Ashby, 1956). By ensuring a balanced arrangement between the two, firms secure their performance amidst the pressures of environmental changes. In this case, a perfect institutional fit will only give better results for a firm when facing a stable environment.

VII. CONCLUSION

By focusing on the dominant logic perspective during recent digital transformation, this study aimed to build a model of dynamic dominant logic's stimuli and its impact on firm performance. In conclusion, this study filled the identified gaps in two ways. *First*, this study has confirmed the stimuli that affect dynamic dominant logic. *Second*, this study has made empirical support for the dynamic dominant logic and its relationship to firm performance.

As a profound understanding, when faced with rapid technological growth that disrupts the industrial order, banks need to cultivate a dynamic dominant logic in compensating for external variances, even when dealing with various homogenizing forces to get a better meta-fit. During the digital transformation era, technological augmentation is likely to advance firm performance radically. This technology improvement is addressed to gain new knowledge by emphasizing reliable data-oriented initiatives and, in turn, reimagining business models and operations. Therefore, dynamic

dominant logic must be intact to drive this digital transformation as a strategy and combine the banking business model elements that create sustainable competitive advantage by facilitating technical fitness.

Since dynamic dominant logic is an emergent property of CAS, senior management of a firm as a "*key set of individuals*" (i.e., dominant coalition) has a significant impetus on developing a "*repertoire of tools*" associated with complex problem-solving behaviors and adaptive capacity. Hence, each field of the external environment also has perilous consequences for how things are completed inside the organization. At this point, self-adaptive dominant logic (i.e., dynamic dominant logic) is envisioned to maintain strategic variation within organizations and a logics continuum that offsets the diversity of their external environment during the digital transformation era. Lastly, contributions, limitations, and future research direction for this study are described in the following.

A. Theoretical Contributions and Practical Implications

The results have several theoretical contributions. First, this study developed new dimensions and measurements for complex problem-solving behavior related to the dominant logic view while developing new dimensions for VUCA during the tension of homogenizing forces amid the rapid technological growth. Second, by redefining Obloj et al. (2010) dominant logic constructs, this study encompasses theory in the strategic management field by providing empirical ground for dynamic dominant logic in decomposing its stimuli and impact on firm performance as a pattern of action during the digital transformation era (Bettis et al., 2011; Franke and Zu Knyphausen-Aufses, 2014). Third, this study also provides explanatory support of the concept of multiple dominant logic by reconfiguring dynamic dominant logic with the paradox of variance suppression and generation simultaneously as competing logics dimensions (Bettis et al., 2011). Therefore, this study also makes an empirical ground for Engelmann et al. (2020), who contend the need to study the combination of dominant logic's cognitive and manifested dimensions as a holistic empirical operationalization. In particular, by accepting the paradox between variance generation (i.e., external orientation and proactiveness dimensions) and variance suppression (i.e., learning and routine dimensions). Hereafter, this effort will assign further not just in finding ways to map such broad trends of dominant logic research, but in "*collaborating the scholars*" to capture an idea "*of how dynamic dominant logic*" underpins to enrich further research in the strategic management field.

The results also spring several practical implications. *First*, based on the upper-echelon perspectives, the organization reflects senior management based on the strategy chosen and performance achieved (Hambrick and Mason, 1984; Schriber and Löwstedt, 2018). Since dynamic dominant logic is stimulated by the complex problem-solving behavior of senior management, their common sensemaking processes can provide faster and better solutions based on pattern recognition to solve complex problems during the digital transformation era. As the third of 2025's top 10 skills based on the World Economic Forum (2020), however, solving complex problems is insufficient without being supported by an adaptive capacity that simultaneously provides defense on existing competitive advantages while seizing opportunities from current environmental changes. Without it, prevailing dominant logic cannot compensate for the tension between

institutional legitimacy and contingencies, thus failing to create an optimal balance between the two (Campanella et al., 2020). Because, in a drastic environmental change driven by technology, institutional fit alone is not enough to endure pressure on banks' performance. Banks as firms also need to ensure the suitability of their contingencies (Jeong and Kim, 2019; Volberda et al., 2012).

Second, from another perspective, disruptive moves by fintech are not eliminate banking prevailing industrial logic that already exists. The prevailing industrial logic will experience an incremental shift with the existing institutional barrier while forming a new in responding to competitive structural changes (Zhang et al., 2016). Hence, banks can balance the old and new industrial logic with the particular stimuli and nourish strategic variance by cultivating dynamic dominant logic. For example, the business automation process offered by fintech as disruptors includes all digital banking products and services, adding new industrial logic on how a bank's business can be run in a radically simple way while providing better risk management in practice. Meanwhile, fintech has limited access to markets with large transaction values due to the scarcity of resources compared to banks as incumbents, including regulatory limitations. However, the innovations that have been created by fintech have changed the paradigm of existing banking transactions, while regulatory adjustments are only a matter of time (Shi and Connelly, 2018).

B. Limitation and Future Research

This study includes several limitations that might be exploited to serve as a theoretical springboard to launch future research. Most of these limitations are related to this study's intentional design and structure and affect the generalization of the findings. Overall, this study was intentionally designed to have a relatively narrow focus on the context of Indonesian commercial banks. Correspondingly with Nadkarni and Barr (2008), this study only analyzes a single industry where environmental factors are considered less effective in showing their influence on strategic action. In turn, it limits the general applicability of the insights produced by this study to domains other than this context. Future research will need broader, highly regulated industry players to provide better empirical support, including insurance and investment banking companies.

As Nadkarni and Prugl (2021) mentioned, digital transformation is concerned about technologies and people within an organization, especially senior managers empowered with transformative forces. It is interesting to examine the leadership style that is presumably fit to assure the digital transformation strategy. Future research will disentangle the main role of leaders in overcoming the burdened "*old*" technology while reinventing the prevailing bureaucratic structures and their core rigidities. Lastly, in a similar view, Verhoef et al. (2021) explicate the three-stage of digital transformation, that consist (1) digitization, (2) digitalization, and (3) digital transformation. Future research must enrich the body of knowledge from the dynamic dominant logic role in nourishing each digital transformation phase. In this circumstance, dynamic dominant logic distinct punctuated equilibrium in advancing each stage of adaptation.

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