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# Transforming the Roots of Competitive Advantage: The New Strategy of ASEAN Firms Post-COVID-19

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## ABSTRACT

Research has identified factors like dynamic capabilities and distinctive competencies that contribute to competitive advantages. However, these factors often underperform in turbulent situations like the current global pandemic, making it hard to maintain a competitive edge. This study aims to establish a new foundation for competitive advantage post-pandemic. We hypothesize that pandemic leadership and resilience systems enhance the link between distinctive competencies and competitive advantage. Using structural equation modeling on a sample of 200 ASEAN multinational firms, we found a positive relationship between dynamic capabilities and competitive advantage via distinctive competencies. Additionally, pandemic leadership and resilience systems beneficially moderate this relationship. The study contributes to the literature by highlighting the critical roles of pandemic leadership and resilience systems in sustaining competitive advantage during crises.

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*Keywords: pandemic leadership, resilience system, competitive advantage, distinctive competencies, dynamic capabilities.*

## 1. INTRODUCTION

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Competitive advantage remains a primary goal for firms and a central theme in strategic management research (Helfat&Peteraf, 2009). Several factors, including dynamic capabilities and distinctive competencies, are recognised as influential in achieving this advantage (Hill, 2017; Eisenhardt & Martin, 2000; Priem & Butler, 2001; Wang & Ahmed, 2007). Notably, dynamic capabilities play a significant role in shaping distinctive competencies (Hill, 2017). It is vital to evaluate these competencies and their impact on a company's competitiveness (Camisón& Villar, 2014). Distinctive competencies are the unique strengths that distinguish a business from its competitors, enabling it to offer products at substantially lower costs (Porter, 1980). Consequently, cultivating these competencies is crucial for securing a competitive edge (Hill, 2017).

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Nonetheless, the pandemic has exacerbated the difficulty of maintaining such an advantage (D'Aveni, Dagnino, & Smith, 2010). Under typical conditions, the traditional model of competitive advantage holds true, but it reacts differently during crises like the current pandemic. A pandemic, defined as a global virus outbreak affecting a vast population (Porta, 2014), has profoundly altered the global economic and commercial landscape. For instance,

35 the aviation industry drastically reduced flights in response to rising infection rates and travel  
36 restrictions. Many industries have experienced significant distress, with stock markets  
37 showing signs of collapse. Governments have responded by increasing stimulus funding to  
38 mitigate the economic disruptions caused by supply chain blockages and lost business. The  
39 pandemic's impact underscores the need to reassess traditional competitive advantage  
40 models and adapt to the changing environment.

41 During the COVID-19 pandemic, ASEAN firms faced significant challenges and  
42 economic downturns, disrupting supply chains, reducing consumer demand, and causing  
43 operational difficulties across various sectors. This adversity spurred many ASEAN  
44 companies to adapt their strategies to the new normal. Firms had to balance economic  
45 performance (Anggara&Pramuka, 2020) with necessary restrictions. While many companies  
46 struggled, some leveraged the crisis to improve performance or transform business models,  
47 demonstrating that highly resilient firms might hold a competitive advantage (Accenture,  
48 2020).

49 This study introduces innovative foundations for competitive advantage tailored to  
50 pandemic conditions, asserting that dynamic capabilities and distinctive competencies alone  
51 are inadequate. Crisis management theory highlights that crises, as emotionally charged  
52 public events, can trigger adverse stakeholder reactions, jeopardising a firm's financial  
53 health, reputation, or survival, and therefore demand specialised leadership (James &  
54 Wooten, 2005). While dynamic capabilities are crucial in stable environments, the pandemic  
55 has unveiled significant shortcomings in many businesses' resilience systems. Numerous  
56 firms have succumbed due to a lack of resilience—the ability to sustain normal operations  
57 during crises with minimal disruption to key functions. Effective crisis leadership requires  
58 swift crisis response, prioritising employee health and safety while ensuring the continuity of  
59 critical processes and systems (Accenture, 2020). Remarkably, Accenture's research (2020)  
60 reveals that only about 10% of businesses have truly mastered resilience.

61 This study delves into the influence of pandemic leadership and resilience systems on  
62 the interplay between distinctive competencies and competitive advantage. It aims to discern  
63 whether these factors facilitate or impede a company's recovery and ongoing competitive  
64 edge. Furthermore, the study investigates how the pandemic has altered the dynamics  
65 between dynamic capabilities, distinctive competencies, and competitive advantage, as well  
66 as the pivotal role of pandemic leadership and resilience systems in the post-pandemic  
67 landscape. The principal aim of this study is to craft a transformation model for the  
68 foundations of competitive advantage in the wake of the COVID-19 pandemic. From these  
69 overarching goals, four specific objectives emerge: (1) to scrutinise the impact of dynamic  
70 capabilities on distinctive competencies; (2) to assess how distinctive competencies  
71 influence competitive advantage; (3) to examine the moderating effect of resilience systems  
72 on the relationship between distinctive competencies and competitive advantage; and (4) to  
73 evaluate the moderating role of pandemic leadership on the relationship between distinctive  
74 competencies and competitive advantage.

## 75 **2. METHODS**

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77 Conducting an empirical exploration across ASEAN nations, this study engaged  
78 companies spanning diverse sectors including agriculture, mining, manufacturing, consumer  
79 goods, construction, finance, and more. The research employed purposive sampling,  
80 focusing on multinational corporations due to their heightened exposure to global market  
81 constraints and the substantial impact of the pandemic on their operations. The study  
82 gathered responses from 200 ASEAN multinational firms through an online survey.  
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84 The sample size determination adhered to the 10-times method, which calculates  
 85 sample size based on ten times the estimated number of indicators and paths (Hair, Hult,  
 86 Ringle, & Sarstedt, 2017). Data collection was conducted using an online questionnaire.  
 87 Structural Equation Modeling (SEM) via SmartPLS was employed to scrutinise the  
 88 hypotheses. Rigorous checks for sampling bias were ensured through a one-sample t-test,  
 89 following methodologies by Hair, Anderson, Babin, and Black (2019), and Elfil and Negida  
 90 (2017). Furthermore, Harman's single factor test was utilised to confirm the absence of  
 91 common method bias, aligning with guidelines from Aguirre, Miguel, and Hu (2019), and  
 92 Podsakoff & McKenzie (2003). This study aims to forge an innovative framework for  
 93 competitive advantage, meticulously tailored to navigate the unprecedented challenges  
 94 posed by the pandemic.

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 96 Dynamic Capabilities encompass the ability of an organisation to effectively integrate,  
 97 develop, and reorganise its resources to respond to changing environments (Teece et al.,  
 98 1997; Hill et al., 2017). This concept is structured around three key dimensions: absorptive  
 99 capacity, adaptive capacity, and innovative capacity, which collectively enable firms to  
 100 navigate uncertainties and seize new opportunities in dynamic markets. Distinctive  
 101 Competency refers to the unique strengths of a company that enable it to differentiate itself  
 102 and offer products or services at significantly lower costs compared to competitors (Porter,  
 103 1979; Hill et al., 2017). These competencies are evident across four primary dimensions:  
 104 new market entry strategies, operational efficiencies, product and service innovation, and  
 105 safety standards. They underline a firm's capacity to carve out a distinct niche and sustain a  
 106 competitive edge in diverse market conditions.

107 Competitive Advantage denotes the superior value and profitability achieved by a firm  
 108 compared to its rivals (Porter, 1979; Hill et al., 2017). It is assessed through both financial  
 109 metrics and broader strategic perspectives, encompassing factors that enhance market  
 110 positioning, customer loyalty, and operational efficiency. Pandemic Leadership emerges as a  
 111 critical leadership style tailored to effectively manage crises such as pandemics (James &  
 112 Wooten, 2005). This approach is characterised by its focus on early signal detection,  
 113 proactive preparation and prevention measures, swift containment and damage control  
 114 strategies, robust business recovery plans, and continuous learning and adaptation to  
 115 evolving challenges. System Resilience describes a system's ability to maintain essential  
 116 operations and functions during significant disruptions, minimising the impact on critical  
 117 business processes (Jacson, 2014; Duchek, 2020). It involves adopting resilient  
 118 technologies and fostering organisational flexibility to swiftly adapt to unforeseen disruptions  
 119 and maintain operational continuity.

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122 **3. RESULTS AND DISCUSSION**

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124 This study has performed Common Method Bias (CMB) with Harman's single factor  
 125 score to evaluate bias instrument.

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**Table 1. Representative Test**

Variable	t statistics	value	Sig. value	
Distinctive Competencies	1.872	20	0.063	No Bias Issues
Pandemic Leadership	1.580	23	0.116	No Bias Issues
Resilience system	-.296	24	0.767	No Bias Issues
Competitive Advantage	1.199	21	0.232	No Bias Issues

128 Source: Primary data processed, 2024

129 Table 1 is indicating that it is representative of the population being studied (Sig. > 0.05  
130 suggests statistical significance in this context). It also suggests that there is no significant  
131 bias observed in both the sample chosen and the instrument used for data collection. Bias in  
132 research can occur in various forms, such as sampling bias where the sample does not  
133 accurately represent the entire population, or method bias where the measurement  
134 instrument affects the responses given by participants. The reference to Aguirre, Miguel, &  
135 Hu (2019) and Podsakoff & McKenzie (2003) likely pertains to methods used to detect and  
136 mitigate such biases in research studies.

137 In addition to validating the sample's representativeness and addressing potential  
138 biases through statistical significance testing (Sig. > 0.05), this study also employed the  
139 Harman's single factor test. According to Podsakoff and McKenzie (2003), this test is crucial  
140 for assessing common method bias, where responses may be influenced by the  
141 measurement instrument rather than the constructs being studied. The Harman's single  
142 factor test examines whether a single factor accounts for a majority of the variance in the  
143 data. If one factor explains more than 50% of the total variance, it suggests that common  
144 method bias might be influencing the results. In this study, the variance accounted for by the  
145 single factor was found to be 25.174%, well below the threshold of 50%. This finding  
146 indicates that the study's data does not exhibit significant common method bias, affirming  
147 the reliability of the responses and ensuring that the data is suitable for further detailed  
148 analysis and interpretation. It underscores the rigorous methodological approach taken to  
149 maintain the validity and integrity of the study's findings.

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**Table 2. Convergent Validity**

		LF	AVE	CR		
Competitive Advantage	CA3	0.698				
	CA4	0.490				
	CA5	0.733	0.425	0.812		
	CA6	0.747				
	CA7	0.701				
	CA8	0.485				
Distinctive Competencies	DiC1	0.716				
	DiC2	0.753				
	DiC3	0.734	0.524	0.846		
	DiC4	0.682				
	DiC5	0.735				
Pandemic Leadership	PL1	0.747				
	PL2	0.706				
	PL3	0.789	0.654	0.918		
	PL4	0.774				
	PL5	0.747				
	PL6	0.834				
Resilience system	SR1	0.760				
	SR2	0.855			0.588	0.895
	SR3	0.896				
	SR4	0.790				

	LF	AVE	CR
SR5	0.824		
SR6	0.713		
Predictive Relevance (Q2)		0.213	
Goodness of Fit (GoF)		0.382	

152 Source: Primary data processed, 2024

153 The study established a threshold of 0.40 for the loading factor (LF), which assesses  
154 the strength of relationship between each item and its underlying construct (Guadagnoli  
155 & Velicer, 1988). Table 2 presented all loading factors exceeding this threshold, affirming the  
156 suitability of most items. However, items CA1 and CA2 were excluded from further analysis  
157 due to their inadequate loading factors, indicating they did not effectively measure the  
158 construct of competitive advantage. Average Variance Extracted (AVE) measures the  
159 proportion of variance captured by a construct's items relative to measurement error.  
160 According to Fornell and Larcker (1981), an AVE above 0.5 is desirable for robust construct  
161 definition. Despite competitive advantage showing an AVE of 0.4, slightly below the  
162 threshold, other constructs met or exceeded the criterion, ensuring reliable  
163 measurement. Composite Reliability (CR) evaluates the internal consistency of items within a  
164 construct, with a CR above 0.7 indicating satisfactory reliability (Fornell & Larcker, 1981).  
165 The study confirmed that all constructs surpassed this threshold, underscoring the reliability  
166 of the measurement model despite the lower AVE for competitive advantage.

167 Q2 assesses the predictive relevance of a model's constructs, with a value exceeding  
168 0.15 suggesting moderate predictive power (Hair et al., 2019). Here, a Q2 value of 0.213  
169 indicated that the model effectively predicted its endogenous variables, supporting their  
170 significant contributions to the study's outcomes. Goodness-of-Fit (GoF) evaluates the overall  
171 fit of the structural model to the data. A GoF value above 0.36 signifies a well-fitting model  
172 (Latan & Ghozali, 2015; Tenenhaus et al., 2004). The study reported a GoF value of 0.382,  
173 indicating that the observed constructs align well with the proposed model, substantiating its  
174 validity for further analysis. In summary, through rigorous statistical analyses and adherence  
175 to established thresholds, the study ensured the validity and reliability of its measurement  
176 model. These findings support the robustness of the study's results and underscore its  
177 suitability for detailed analysis and interpretation within the research context.

178 The hypothesis was evaluated by bootstrapping function in Smart-PLS. The results are  
179 illustrated in the following Figure 1.



197 companies that successfully harness these capabilities can establish distinctive  
198 competencies that drive competitive advantage. Camisón & Villar (2014) further highlight the  
199 significance of identifying and cultivating these distinctive competencies, which are specific  
200 capabilities closely tied to core business functions, enabling firms to differentiate themselves  
201 in the marketplace.

202 Distinctive competencies play a pivotal role in business strategy, influencing either cost  
203 reduction or differentiation strategies across primary and support activities such as logistics,  
204 operations, marketing, sales, service, and technology (Porter, 1985). The specific  
205 competencies developed by an organisation depend on its core business and strategic goals  
206 (Ceglinski, 2020). Particularly in the context of pandemic survival, organisations must  
207 cultivate unique capabilities to navigate challenges effectively. Organisations equipped with  
208 strong dynamic capabilities can swiftly respond to environmental changes, identify critical  
209 factors, innovate decision-making processes, reallocate resources, and effectively  
210 coordinate functions (Law et al., 1998). These capabilities are crucial for adapting and  
211 developing distinctive competencies during crises like pandemics, where environmental  
212 dynamism requires continuous enhancement of core competencies (Teece et al., 1997;  
213 Eisenhardt & Martin, 2000). The study underscores that enhancing distinctive competencies  
214 during a pandemic can lead to a substantial 30.8% increase in competitive advantage.  
215 Distinctive competencies, defined by Porter (1980) as unique strengths enabling  
216 differentiation or cost leadership, are pivotal for achieving and sustaining competitiveness  
217 (Hill et al., 2017). However, the unpredictable nature of pandemics, coupled with global  
218 challenges like climate change and financial crises, intensifies the difficulty of acquiring and  
219 maintaining competitive advantage (D'Aveni et al., 2010). Such environments necessitate  
220 specific competencies to adapt and derive sustainable advantages (Li and Liu, 2012).

221 Distinctive competencies play a crucial role in shaping a company's strategic  
222 advantage, offering unique strengths that differentiate it from competitors. According to  
223 Haeckel (1999), even minor advantages in these specific capabilities can lead to significant  
224 strategic gains. For instance, companies with strong distinctive competencies are proactive  
225 during pandemics, actively seeking and interpreting data to better understand their  
226 operational environment (Neill et al., 2007). This proactive approach not only ensures  
227 survival but also enhances service and product quality, fosters innovation in new product  
228 development, and ultimately establishes a competitive edge. Benroider (2002) and Hill et al.  
229 (2017) underscore several essential competencies for companies to navigate and thrive  
230 during pandemics. These include the ability to swiftly adapt to new environmental conditions,  
231 leverage technology effectively, maintain efficient operations and control, ensure consistent  
232 delivery of products/services, and prioritize robust health and safety measures for  
233 employees. Competitive advantage, as defined by Hill et al. (2017), is the primary objective  
234 for businesses, achievable through the cultivation and enhancement of distinctive  
235 competencies. Strengthening these competencies enables companies not only to survive but  
236 also to thrive amidst uncertainties such as pandemics. Therefore, businesses must focus on  
237 developing significant and unique competencies that allow them to adapt, innovate, and  
238 maintain resilience in challenging times.

239 Pandemic leadership plays a crucial role in enhancing the relationship between  
 240 distinctive competence and competitive advantage, as indicated by a 11.9% increase in the  
 241 impact of distinctive competence on competitive advantage when firms adopt pandemic  
 242 leadership during crises. This novel concept, introduced in the study, draws from leadership  
 243 theory and crisis management strategies. Leadership, as defined in leadership theory,  
 244 involves the capability to lead, influence, or direct others effectively (Western, 2007). Crisis  
 245 management leadership, specifically during pandemics, necessitates leaders who can  
 246 organize teams to detect signals, prepare, prevent, contain and mitigate damage, facilitate  
 247 business recovery, and foster organizational learning in response to crises (James, 2005). A  
 248 pandemic leader exemplifies specific leadership abilities essential for navigating disruptions  
 249 and threats posed by pandemics. The study identifies six critical abilities that define  
 250 pandemic leadership, detailed in Table 6. These abilities enable leaders to effectively guide  
 251 their organizations through challenging times, ensuring resilience and strategic advantage in  
 252 the face of crises.

253 **Table 4. Six Abilities of Pandemic Leader**

	Loading Factor
1. Inquisitiveness; a leader should have more capacity than a follower. The willingness to learn and improve is needed to be a great pandemic leader. They learn by doing to master new environments during a pandemic.	0.834
2. Protectiveness; a leader decides to protect the health and safety of employees from the pandemic. The leader thinks that the employee is an essential asset to be protected. A company cannot operate well without human resources.	0.789
3. Agile; the situation has become dynamist during the pandemic. The company faces uncertainty and threatens with a modest decision. A leader may need to make decisions quickly in a pandemic.	0.774
4. Knowledgeable; a leader should know about what he/ she confronts. A leader needs critical thinking and innovation to establish a new model for business recovery.	0.747
5. Awareness; allows a leader to have a situation-aware pandemic and its impact	0.747
6. Transparency; a leader speaks the truth about worst-case scenarios throughout build the prevention system.	0.706

254 Source: Primary data processed, 2024

255 In the context of a pandemic, maintaining present capabilities alone is inadequate for  
 256 sustaining competitive advantage (Li and Liu, 2012). The volatile and rapidly evolving  
 257 environment can erode previously held advantages, necessitating leadership capable of  
 258 managing short-term crises effectively (Venette, 2003). To safeguard a company's distinctive  
 259 competencies during such times, pandemic leaders must possess specific knowledge and  
 260 capabilities to innovate and adapt swiftly. They play a crucial role in creating conditions  
 261 where distinctive competencies can exert a significant influence on competitive  
 262 advantage. Furthermore, enhancing resilience systems significantly enhances the impact of  
 263 distinctive competencies on competitive advantage, increasing it by 13.5% (Willett et al.,  
 264 2019). This underscores the critical role of resilience systems for businesses during

265 pandemics, enabling them to direct their distinctive competencies towards building robust  
 266 resilience frameworks. The global pandemic of 2019 has highlighted the vulnerabilities of  
 267 international and national systems, demonstrating the speed with which disruptions can  
 268 render existing advantages obsolete (D'Aveni et al., 2010; Willett et al., 2019). In such an  
 269 unpredictable environment, merely developing distinctive competencies is insufficient to  
 270 ensure competitive advantage (Li and Liu, 2012).

271 A business that effectively acquires and maintains resilience demonstrates significant  
 272 performance during crises, adapting through innovative business models (Accenture, 2020).  
 273 Successful adaptation and innovation can create a competitive advantage, crucial for  
 274 navigating challenges like changing consumer behaviors, disrupted supply chains, and  
 275 evolving market routes. Conversely, businesses ill-prepared for such disruptions risk  
 276 collapse, revealing gaps in their resilience systems (Estey, 2020; Accenture,  
 277 2020). Resilience systems refer to an organization's ability to sustain operations during  
 278 crises, minimizing disruptions to business functions and achieving optimal outcomes  
 279 (Hoddinott, 2014). By strategically planning interventions, resilience systems can mitigate  
 280 shocks and enhance overall business performance. In the context of a pandemic, integrating  
 281 new technologies becomes a critical resilience strategy (Béné, 2020). Accenture (2020)  
 282 outlines six foundational building blocks for business resilience: architecture and  
 283 performance, digital workplace, automation, cloud, service continuity, and cybersecurity.  
 284 These blocks are effective when businesses maintain flexibility in their strategies,  
 285 operations, and revenue streams (Accenture, 2020).

286 This study refines Accenture's six-block model to enhance its applicability across  
 287 businesses of varying sizes and industries. It introduces specific parameters and metrics to  
 288 measure the effectiveness of resilience systems, ensuring they are adaptable and robust in  
 289 facing diverse challenges.

290 **Table 5.** The Six-blocks of Resilience system

	Loading Factor
1. Technology adoption	0.760
2. Migration into digital workplace	0.855
3. Data security with cloud system	0.896
4. Organize the goal and build same perception	0.790
5. Establish the company's flexibility	0.824
6. Develop the alternative revenue stream	0.713

291 Source: Primary data processed, 2024

292 According to Accenture (2020), prior to COVID-19, only 10% of leading companies  
 293 had implemented resilience systems. These systems are crucial for ensuring minimal  
 294 disruption to critical business processes and operations during crises. Throughout the  
 295 COVID-19 pandemic, resilience systems have proven instrumental in enabling businesses to  
 296 survive and maintain their competitive advantages (Accenture, 2020). Resilience systems  
 297 are applied across various disciplines, encompassing organizational, social, economic, and  
 298 engineering domains, aimed at preserving a company's performance and competitive edge  
 299 during turbulent times (Hosseini et al., 2016; Hynes et al., 2020; Tarra et al., 2021).

300

301 **4. CONCLUSION**

302 Based on the findings of this study, several significant conclusions emerge regarding  
303 the dynamics of competitive advantage, pandemic leadership, and resilience systems in the  
304 context of the COVID-19 pandemic. Firstly, the study underscores the critical link between  
305 distinctive competencies and competitive advantage, aligning with established competitive  
306 advantage frameworks (Porter, 1979; Hill, 2017). Secondly, it highlights the pivotal role of  
307 pandemic leadership as a moderator, positively influencing the relationship between  
308 distinctive competencies and competitive advantage. Thirdly, the study identifies resilience  
309 systems as a crucial quasi-moderator, demonstrating their essentiality for business  
310 resilience and competitive positioning during the pandemic. These insights underscore the  
311 importance for businesses to integrate robust leadership strategies and resilient systems to  
312 navigate and thrive in volatile environments such as global pandemics.

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