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Article

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Global Business & Finance Review (GBFR)

Provided in Cooperation with:

People & Global Business Association (P&GBA), Seoul

Suggested Citation: Hamsal, Mohammad; Sri Bramantoro Abdinagoro; Zulkarnain, Arif; Leonandri, Dino Gustaf; Ichsan, Mohammad (2022): The impact of organizational resilience on hotel performance during pandemic COVID-19, Global Business & Finance Review (GBFR), ISSN 2384-1648, People & Global Business Association (P&GBA), Seoul, Vol. 27, Iss. 1, pp. 1-15, https://doi.org/10.17549/gbfr.2022.27.1.1

This Version is available at: https://hdl.handle.net/10419/305833

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GLOBAL BUSINESS & FINANCE REVIEW, Volume. 27 Issue. 1 (FEBRUARY 2022), 1-15 pISSN 1088-6931 / eISSN 2384-1648 | Https://doi.org/10.17549/gbfr.2022.27.1.1 © 2022 People and Global Business Association

GLOBAL BUSINESS & FINANCE REVIEW

www.gbfrjournal.org

The Impact of Organizational Resilience on Hotel Performance during Pandemic COVID-19

Mohammad Hamsal^a, Sri Bramantoro Abdinagoro^a, Arif Zulkarnain^b, Dino Gustaf Leonandri^c, Mohammad Ichsan^{d†}

ABSTRACT

Purpose: This study aims to examine the impact of dynamic capabilities and organizational resilience on firm performance driven by environmental turbulence of the hotel industry in Indonesia during the pandemic COVID-19. **Design/methodology/approach:** Herein, an integrated conceptual framework is developed and then tested using survey data from a cross-section of 194 hotels using structural equation modelling.

Findings: The result of this research reveals that environmental turbulence significantly affects dynamic capabilities empirically. In other words, the dynamic capabilities affect organizational resilience, however, there is no significant effect from organizational resilience to hotel performance. This shows an indication of survival mode in the hotel industry in Indonesia.

Research limitations/implications: This study extends theoretically the concept of organizational resilience in the context of environmental turbulence especially during pandemic COVID-19. Practical implication of this study justifies that during such crisis, it is imperative for the organizations to focus on survival rather than financial performance.

Originality/value: This study introduces the antecedents of organizational resilience, namely the dynamic capabilities and environmental turbulence in the context of pandemic COVID-19. It also advances the knowledge on how the hotel industry can be managed during that period.

Keywords: Environmental turbulence, Dynamic capabilities, Organizational resilience, and Firm performance, Pandemic, COVID-19, Hotel

I. Introduction

There is a growing interest in the discussion on the cruciality of organizational resilience as there are

Received: Sep. 6, 2021; Revised: Nov. 3, 2021; Accepted: Nov. 16, 2021

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notable changes in the dynamism landscape mainly caused by natural disasters and human-made hazards (Jiang et al., 2019; Martinelli et al., 2018; Prayag et al., 2019; Sahebjamnia et al., 2018) and economic instability and disruptive technologies (Bell, 2019). Environmental changes expose the organizations to significant opportunities for success and growth and substantial threats and challenges (Burnard et al., 2018).



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Natural disasters, human-made hazards, pandemic diseases, terrorist attacks, and political and economic instability can pose a significant threat to organizations in their endeavor to sustain and grow (Bell, 2019; Burnard et al., 2018; Martinelli et al., 2018).

The current pandemic disease from a new coronavirus (COVID-19) has been shaking the world economy and corporate entities (Bapuji et al., 2020; Corbet et al., 2020). It was started at the end of 2019 in a Wuhan province in China before it infected every part of the world (Bapuii et al., 2020). Without exception, Indonesia reported the first two COVID-19 cases on March 2, 2020 (Tosepu et al., 2020). As of May 24, 2020, the cases have increased to 22,271 in 34 provinces (The Indonesian COVID-19 Task Force, 2020). The COVID-19 pandemic strikes Indonesia's economy almost in all sectors, evidenced by the fall of Indonesia's Rupiah currency and Indonesia Composite Index (PwC Indonesia, 2020). Indonesia's government policy to apply social distancing and encourage working from home causes business organizations to rely on online platforms and digital activities to survive (Potia et al., 2020; PwC Indonesia, 2020). One of the concerns raised during this disruption is the availability of telecommunication systems to ensure that businesses can keep running (Potia et al., 2020; PwC Indonesia, 2020). Telecommunication and information technology (IT) providers (vendors) as technology partners to the service providers (operators) play a crucial role in this pandemic situation (Baig et al., 2020; Sallomi, 2020). During the pandemic, technology providers face new challenges such as limited physical on-site from engineer staff to prevent the emerging outbreak and new work shift arrangements to minimize crowd while ensuring support availability (PwC Indonesia, 2020). Therefore, it is worth elaborating further on how telecommunication and IT providers face crises and disasters and achieve organizational resilience to sustain the firm performance.

The quick spread of the COVID-19 pandemic in the last few months creates turbulence in the business environment and threatens business continuity (Bapuji et al., 2020). The situation should awaken organizations' awareness that they live in a volatile

and uncertain business environment (Bapuji et al., 2020; Bell, 2019). Therefore, organizations must cultivate several practical strategies and mechanisms to be resilient to turbulences and seize opportunities emerging from the environmental dynamism (Bell, 2019; Jiang et al., 2019; Prayag et al., 2019).

The dynamic capability has been considered in the literature as the source of organizational resilience since it ables to integrate, build, and reconfigure internal and external resources to address dynamics in the environment (Barreto, 2009; Jiang et al., 2019; Teece et al., 1997; C. L. Wang & Ahmed, 2007). Resilience covers the preparation against external environmental changes and how the organization dynamically allocates and reconfigures resources during and after the changes to recover (Jiang et al., 2019). However, there are still debates regarding the effect and position of environmental turbulence on dynamic capability and organizational resilience. Karna et al. (Karna et al., 2016) demonstrate that environmental factor moderates the relationship between dynamic capability and firm performance. However, Li and Liu (D. Li & Liu, 2014) and Bitencourt et al. (Bitencourt et al., 2020) argue that environmental dynamism is a driver rather than a moderator of dynamic capability. Other studies by Sahebiamnia et al. (Sahebiamnia et al., 2018) and Burnard et al. (Burnard et al., 2018) argue that environmental turbulence can drive organizations to develop resilience to ensure organizational life. However, another study by Jiang et al. (Jiang et al., 2019) positions environmental turbulence as the stimulator that upgrades regular operational routines into new operational routines. After several rounds of market selection, these new operational routines will construct organizational resilience. Therefore, there is no direct relationship between environmental turbulence and organizational resilience.

Furthermore, little is known about the relationship between three variables within a single analysis. Therefore, this study examines the role of environmental turbulence and dynamic capability on organizational resilience of the hotel industry in Indonesia using a crosssectional survey. Our research questions are as follows:

- **RQ1.** Is there any direct effect of environmental turbulence on organizational resilience?
- **RQ2.** Does dynamic capability play a mediating role in the environmental turbulence-organizational resilience relationship?
- **RQ3.** What is the effect of organizational resilience on perceived firm performance?

Furthermore, previous studies in this area mainly focus on organizations operating in developed economies, and little is known about hotels' dynamic capability and organizational resilience in developing economies such as Indonesia. Since there are significant differences in how organizations operate and strive within both countries, broadening the analysis will enhance the theoretical lens and close the gap in the literature.

The content of the paper is organized in the following structure. We first discuss the theoretical background that leads to our hypotheses in the literature review section. Then, we described the research method and our empirical design, followed by a discussion of the results. Finally, we summarize with a discussion of study limitations and our research results' theoretical and managerial implications.

II. Literature Review

A. Organizational Resilience and Firm Performance

Firm performance is the center of strategic management and the main focus for scholars and practitioners as the organization's prime objective is to achieve performance improvement (Venkatraman & Ramanujam, 1986; Williams, 2018). Achieving performance improvement is proven to become more difficult as the organization's competitive advantage has become significantly harder to sustain in a highly dynamic environment (Wiggins & Ruefli, 2005). In this study, the firm performance is defined as the extent of success of the organization at generating a high level of financial and non-financial performance that consists

of sales revenue, profit margins, cash flow, market share, products and services quality improvement, and customer satisfaction. This conceptualization is derived from Kenneth Le Meunier-FitzHugh (2009; 2011), Williams (Williams, 2018), and Simon et al. (2015) to cover financial and broader operational criteria and focus on business-to-business context.

Recently, the cruciality of resilience for organizations facing crises and disasters is irrefutable (Jiang et al., 2019; Martinelli et al., 2018). However, achieving organizational resilience is challenging since it requires the development of new competencies and attitudes within conflicting agendas and priorities of organizational silos (Bell, 2019). Whereas, to be resilient in a rapidly changing environment, organizations require a more holistic and adaptive approach covering broader organizations (Bell, 2019). Prayag et al. (Prayag et al., 2019) define organizational resilience as the perceived capacity of organizations to adapt to disturbances and seize opportunities emerging from the changing environment. Another study defines organizational resilience as an organization's ability to persist and withstand external environmental changes (preparation), mitigate and cope with negative effects caused by the changes (response), and bounce forward to a new state for better future performance (recovery) (Jiang et al., 2019). Organizational resilience is operationalized as a two-dimensional construct with thirteen indicators derived from previous studies (A. V. Lee et al., 2013; Orchiston et al., 2016; Prayag et al., 2019).

Organizational resilience is crucial in maintaining long-term organization survival since it enables the organization to adjust its management structure, process, and practices (Börekçi et al., 2014; Jiang et al., 2019). The indispensable ability to prepare for, respond to and recover from the environmental turbulence (Somers, 2009; G. Wang et al., 2019). Organizational resilience is required to ensure the continuity and sustainability of the business (Martinelli et al., 2018).

A study by Yu et al. (Yu et al., 2019) demonstrates a positive effect of supply chain resilience on financial performance on Chinese manufacturing companies. Furthermore, resilience enables organizations to manage change effectively, thereby restoring operation and operation improvement later (Pereira et al., 2014; Scholten et al., 2014). Furthermore, organization resilience enables the organization to quickly and precisely respond to business environment changes and contributes to firm performance (Bode et al., 2011). Therefore, based on the above arguments, we hypothesize that:

Hypothesis 1 (H1): Organizational resilience has a positive and direct impact on firm performance.

B. Dynamic Capabilities and Organizational Resilience

How organizations demonstrate resilience in preparing and responding to environmental turbulences and how organizations develop capacities to achieve that resilience are still becoming debates in the management literature (Linnenluecke, 2017). The previous study suggests that to achieve resilience, organizations need to develop individual resilience (people), systems resilience (processes), and supply chain resilience (Hall et al., 2017). This study develops dynamic capabilities approach to achieve organizational resilience by arguing that organizations need to leverage both internal and external resources to increase the capacity to sense, shape, and seize opportunities and combine and reconfiguring assets.

Dynamic capability theory became a dominant research interest after the seminal publication of Teece et al. (Teece et al., 1997). The motivation for dynamic capability development is the argument that RBV is inadequate to satisfy the organization's competitive advantage in dynamics and rapidly changing environments (Barreto, 2009; Priem & Butler, 2001). Eisenhardt and Martin (2000) defines dynamic capabilities as the firm's activities that utilize resources mainly in the processes of integrating, reconfiguring, gaining and releasing resources. On the other hand, Teece et al. (1997, p. 515) define dynamic capabilities as the firm's ability to integrate, build, and reconfigure internal and external competencies to accommodate

rapidly changing environments. Therefore, dynamic capabilities are intrinsically associated with market dynamism (Jiang et al., 2019; C. L. Wang & Ahmed, 2007). Eisenhardt and Martin (Eisenhardt & Martin, 2000) emphasize that dynamic capabilities are related to how rapidly organizations can create new knowledge based on environmental change. Teece et al. (Teece et al., 1997) build their conception of dynamic capabilities around six main elements; nature, role, context, creation and development, outcome, and heterogeneity: that underline their theoretical foundation (Barreto, 2009). Furthermore, in a more recent publication, Teece et al. (Teece, 2007) explicate dynamic capabilities can be segregated into the capacity (a) to sense and shape opportunities and threats, (b) to seize opportunities, and (c) to maintain competitiveness utilizing enhancing, combining, protecting, and, reconfiguring intangible and tangible assets of the business enterprise (Barreto, 2009). In this study, dynamic capabilities are operationalized as a fourdimensional construct: sensing capability, learning capability, integrating capability, and coordinating capability (Hernández-Linares et al., 2018).

Augier & Teece (Augier & Teece, 2009) and Paton et al. (Paton et al., 2000) suggest building up dynamic capabilities to achieve organizational resilience. Jiang et al. (Jiang et al., 2019) argue that dynamic capabilities promote organizational resilience as it optimizes and integrates its slack resources into its functions and processes and upgrades its operational routines. Dynamic capabilities play a crucial role in enhancing the organizational resilience of retail entrepreneurs according to the temporal phase of the natural disaster (Martinelli et al., 2018). Dynamic capabilities can enhance SMEs' adaptation and resilience to maintain competitiveness in turbulent environments (Kurtz & Varvakis, 2016). Therefore, it is reasonable to hypothesize:

Hypothesis 2 (H2): Dynamic capability has a positive and direct impact on organizational resilience.

C. Environmental Turbulence, Dynamic Capability, and Organizational Resilience

Environmental turbulence and constant changes characterize the contemporary business environment (Menguc & Auh, 2006; Turulja & Bajgoric, 2019), including the telecommunication industry (Balashova & Gromova, 2017; Z. Li, 2018). In this study, environmental turbulence is defined as the rate of unpredictability and highly varied events which occur in the environment in which a particular industry operates (Turulja & Bajgoric, 2019). It consists of three dimensions market turbulence, technology turbulence, and pandemic turbulence, as described in the following:

- Market turbulence is the rate of change in the composition of customers or their preferences for products and services (Turulja & Bajgoric, 2019; Wong, 2014).
- Institutional turbulence is the degree of complexity and uncertainty of government policies in their industrial sectors (Liu et al., 2019).
- Pandemic turbulence is a public health crisis characterized by decisional urgency, high uncertainty, health information scarcity, and threat (Lai, 2012; S. T. Lee, 2014).

Environmental turbulence is related to contingency (Turulja & Bajgoric, 2019). Therefore, there is no best structure or strategy, and that one structure or strategy may have different effects under different environmental conditions (Calantone et al., 2003). Therefore, this study lays its foundation on contingency theory that suggests that organizations' performance is maximized when conformity between organizations' capabilities and characteristics with contingencies (Morton & Hu, 2008).

The primary focus of contingency theory is the flexible responses of the organizations in dealing with environmental turbulence (Turulja & Bajgoric, 2019). Therefore, it is closely related to dynamic capability theory that argues that organizations' superior performance depends on their ability to sense and seize opportunities and integrate, build, and reconfigure internal and external competencies to address dynamic environments (Teece, 2007; Teece et al., 1997).

Wang and Ahmed (C. L. Wang & Ahmed, 2007) and Li and Liu (D. Li & Liu, 2014) argue that organizations must develop dynamic capabilities in a highly dynamic environment and develop core competencies in a relatively stable environment. Therefore, this study argues that environmental turbulence is a driver of dynamic capabilities instead of a moderator. Teece et al., (Teece et al., 1997), Teece (Teece, 2007), and Andreeva and Ritala (Andreeva & Ritala, 2016) argue that dynamic capabilities are generated when organizations are faced with a rapidly changing environment, which implies the driving role of environmental turbulence on dynamic capabilities. In a hyper-competitive environment characterized by intense and rapid competitive moves, organizations need to improve their awareness in sensing opportunities and threats and maintain competitiveness by building and reconfiguring the organizations' resources (Andreeva & Ritala, 2016; D. Li & Liu, 2014; Oktemgil & Greenley, 1997; Wiggins & Ruefli, 2005). Schindehutte and Morris (Schindehutte & Morris, 2001) argue that organizations will increase their sensitivity and strive for a higher level of dynamic capabilities to overcome it when the environment is turbulent.

Bitencourt et al. (Bitencourt et al., 2020) demonstrate that environmental dynamism is one of the elements besides resources, knowledge, and learning, and alliances that stimulate dynamic capabilities. When turbulence occurs, organizations will rely more on their dynamic capabilities in enhancing their products or services since dynamic capabilities help to integrate, build, and reconfigure internal and external competencies (Bitencourt et al., 2020). Furthermore, environmental turbulence creates changes in the competitive landscape that affect the organizations to update the way in competing and satisfying customers' requirements (Drnevich & Kriauciunas, 2011). Therefore, environmental turbulence is considered an essential antecedent of dynamic capabilities (Schilke et al., 2018). When the environment becomes more active, organizations will need to cultivate their abilities and invest more in dynamic capabilities than stable conditions (Karna et al., 2016). Other studies elaborate on the role of environmental dynamism and uncertainty as external

environmental factors that become the source of dynamic capabilities (Fawcett et al., 2011; Killen et al., 2012; Piening, 2013). Therefore, it is reasonable to hypothesize:

Hypothesis 3 (H3): Environmental turbulence has a positive and direct impact on dynamic capability.

Environmental turbulence such as natural disasters and human-made hazards are argued to be the driving forces for contemporary organizations to build organizational resilience to ensure business continuity (Sahebjamnia et al., 2018). Various endogenous and exogenous factors that create threat and disruption affect how organizations respond to such a threat to survive (Burnard et al., 2018). There is growing evidence that organizations are forced to develop resilience to comprehensively prevail over complex, disruptive events, mainly when large-scale incidents occur (Gibson & Tarrant, 2010). In the supply chain context, Yu et al. (Yu et al., 2019) find that dynamism in the supply chain has a significant positive effect on supply chain resilience. The dynamic events in the supply chain, such as volume spikes and operation re-configuration after disruption, drive organizations to enhance resilience capabilities to overcome these changes (Yu et al., 2019). Therefore, it is reasonable to hypothesize:

Hypothesis 4 (H4): Environmental turbulence has a positive and direct impact on organizational resilience.

Based on the above elucidation, the proposed research model is shown in Figure 1 below.

III. Research Method

A. Data collection

Research data were collected via a questionnaire distributed through electronic format (Google Form) directly delivered to the respondents due to social distancing enforcement by the government. The respondents were the executive management level of the hotel, including Board of Director, CxO, Sales or Marketing Head, Country Manager, General Manager, and Senior Manager of the selected companies. They were believed to have sufficient knowledge of both company strategy and the business process of the company.

The unit analysis is hotels that run their business operation in Indonesia, and they are categorized based on star ratings (1 star up to 5 stars) and local and international hotel network chains. There are 196 responses from the distributed survey. However, 2 of them are not valid, so the total final data are from 194 responses. The data demography is as shown in Table 1.

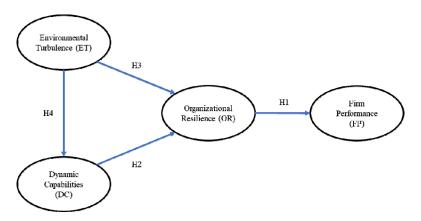


Figure 1. The Proposed Research Model and Hypotheses

Table 1. Demographic Profiles of the Sample (n=194)

| No. | Demographic Profile | n | (%) |
|-----|------------------------------|-----|-----|
| 1. | Gender | | |
| | Male | 35 | 82% |
| | Female | 159 | 18% |
| 2. | Age | | |
| | <30 | 7 | 4% |
| | >60 | 5 | 3% |
| | 30-39 | 27 | 14% |
| | 40-49 | 91 | 47% |
| | 50-59 | 64 | 33% |
| 3. | Position | | |
| | Owner | 4 | 2% |
| | Member of Board of Directors | 26 | 13% |
| | Vice President | 6 | 3% |
| | General Manager | 81 | 42% |
| | Manager | 45 | 23% |
| | Others | 32 | 16% |
| 4. | Network chains | | |
| | International | 55 | 28% |
| | Local | 134 | 69% |
| | Others | 5 | 3% |
| 5. | Hotel ratings | | |
| | 1 Star | 8 | 4% |
| | 2 Star | 18 | 9% |
| | 3 Star | 54 | 28% |
| | 4 Star | 88 | 45% |
| | 5 Star | 23 | 12% |
| | Others | 3 | 2% |

B. Measures

This research uses 5-item Likert scales to measure the respective variables in the form of statements. The range of the scales is from 1 ('strongly disagree') to 5 ('strongly agree'). Appendix 1 presents the scale items for construct measurement.

C. Data analysis

The structural equation modeling (SEM) approach was used referred to Anderson and Gerbing (1988).

It consists of a measurement model and a causal structural model. The model is analyzed using LISREL 8.8 to examine the measurement model and to test the hypotheses.

Measurement model analysis is performed to obtain a valid and reliable measurement model to be used in a structural model in the next stage. There are three things that should be analyzed during estimation: validity, reliability, and overall model fit (Goodness of Fit Index (GOFI). In order to assess the validity and reliability of the construct, construct validity and reliability is performed using Second-order CFA analyzes the fitness of the simplified first-order latent variable score of each construct as shown in Table 2.

Based on the analysis, it is found that the calculated Pearson Correlation Coefficient is bigger than the table value for n=194 (0.140) and it proves that the items are valid. Furthermore, the calculated Cronbach Alpha is 0.939 that is bigger than 0.7 as a threshold of a minimum acceptable value (Hair et al., 2010).

It is based on Confirmatory Factor Analysis (CFA) to measure the standardized factor loadings of each constructor each variable. A good rule of thumb is that a standardized loading estimate should be \geq 0.5, and ideally \geq 0.7 (Hair et al., 2010). Whereas, the testing of construct reliability is based on Construct Reliability (CR) and Variance Extracted (AVE) (Fornell & Larcker, 1981; Hair et al., 2010). A construct is considered reliable if the value of CR and VE are ≥ 0.70 and ≥ 0.50 , respectively. This study uses path analysis to test the predicted causal relationships among the variables and determine whether the model provides an acceptable fit to the data. The validity and reliability result in Table 2 demonstrates that all standardized factor loadings (SFL) of the latent variable score (LVS) exceed 0.50 (from 0.79 to 0.99), indicating good validity. In addition, the CR values of the constructs all exceed the 0.70 threshold value (from 0.78 to 0.99), and the VE values for all constructs exceed 0.50 (from 0.65 to 0.99), indicating good reliability.

Table 2. Second-Order CFA

| CEL >0.5 | Еннон | CD > 0.7 | VE > 0.5 | DMCEA <0.00 | GFI≥0.90 |
|-------------|----------------------------|-------------|---|--|----------|
| SFL≥0.5 | EIfOr | CK≥0./ | VE≥0.5 | KIVISEA ≥0.08 | GF1≥0.90 |
| | | | | | |
| | | 0.79 | 0.44 | 0.000 | 1.00 |
| 0.50 - 0.86 | 0.26 - 0.79 | | | | |
| | | | | | |
| | | 0.94 | 0.68 | 0.000 | 0.99 |
| 0.63 - 0.82 | 0.20 - 0.32 | | | | |
| | | | | | |
| | | 0.96 | 0.69 | 0.056 | 0.95 |
| 0.68 - 0.86 | 0.16 - 0.35 | | | | |
| | | | | | |
| | | 0.92 | 0.68 | 0.064 | 0.98 |
| 0.62 - 0.96 | 0.17 - 0.58 | | | | |
| | 0.63 - 0.82 0.68 - 0.86 | 0.50 - 0.86 | 0.79 0.50 - 0.86 0.26 - 0.79 0.94 0.63 - 0.82 0.96 0.68 - 0.86 0.16 - 0.35 | 0.79 0.44 0.50 - 0.86 0.26 - 0.79 0.94 0.68 0.63 - 0.82 0.20 - 0.32 0.96 0.69 0.68 - 0.86 0.16 - 0.35 | 0.79 |

IV. Result

A. Measurement Model

In order to assess the validity and reliability of the construct, construct validity and reliability is performed using Second-order CFA. It analyzes the fitness of the simplified first-order latent variable score. The results of the first-order CFA analysis are summarized in Table 3.

Based on the measurement result as shown in Table 3, it can be seen that only GFI and AGFI fall under moderate fit. Meanwhile, the rest of the indices are a perfect fit. In summary, it can be concluded that the model shows a good fit.

As presented in Table 3, all variables' CFLs (Standardized Factor Loadings) are equal to or higher than 0.5. Hence, all variables have good validity. The reliability of a measurement model is considered good if the Construct Reliability (CR) \geq 0.7 and the Variance Extracted (VE) \geq 0.50. Table 3 analysis also reveals that all variables have good reliability. The table also reveals that RMSEA \leq 0.08 and GFI \geq 0.90, hence, based on GOFI of Measurement Model of RMSEA and GFI, the model shows a good fit.

After adjusting the modification indices of the model, the second-order CFA result is presented in Table 4. Again, the GOFI indicates a good fit of the model.

From Table 4 it can see that the hypothesis test result does not support H1 and H3. However, it supports the H2 and H4. The Dynamic Capabilities has the high effect on Organizational Resilience (OR) with a standardized effect of 0.90. Meanwhile, the Environmental Turbulence (ET) has a moderate effect on Dynamic Capabilities (DC) with a standardized effect of 0.49.

B. Hypothesis testing

The structural model analysis is conducted to determine whether a research hypothesis is accepted or not. The hypothesis is accepted if the absolute t-value > 1.96, with a positive or negative coefficient. The results of hypothesis tests are summarized in Table 4, and the structural equation modelling result is shown in Figure 2.

Table 3. The Goodness of Fit Index (GOFI)

| Description of Fit Index | Criteria | Result | Interpretation |
|---|-------------|--------|----------------|
| Absolut fit measures | | | |
| Relative x^2 (x^2/df) | 2 to 3 | 1.30 | Perfect fit |
| Root Mean Square Error of Approximation (RMSEA) | ≤ 0.08 | 0.04 | Good fit |
| Goodness of Fit Index (GFI) | ≥ 0.90 | 0.86 | Moderate fit |
| Adjusted Goodness of Fit Index (AGFI) | ≥ 0.90 | 0.82 | Moderate fit |
| Standardized Root Mean Square Residual (SRMR) | ≤ 0.09 | 0.071 | Good fit |
| Incremental fit indices | | | |
| Normed Fit Index (NFI) | ≥ 0.90 | 0.96 | Good fit |
| Non-Normed Fit Index (NNFI) | ≥ 0.90 | 0.99 | Perfect fit |
| Comparative Fit Index (CFI) | ≥ 0.90 | 0.99 | Perfect fit |

Table 4. Significance Test Result on the StructuralMmodel

| Hypotheses | Standardized effect | t-values | Hypothesis testing result |
|---|---------------------|----------|---------------------------|
| H1: Organizational Resilience -> Firm Performance | 0.03 | 0.12 | Not supported |
| H2: Dynamic capabilities (DC) -> Organizational Resilience (OR) | 0.90 | 8.65 | Supported |
| H3: Environmental Turbulence (ET) -> Organizational Resilience (OR) | 0.04 | 0.80 | Not supported |
| H4: Environmental Turbulence (ET) -> Dynamic Capabilities (DC) | 0.49 | 5.74 | Supported |

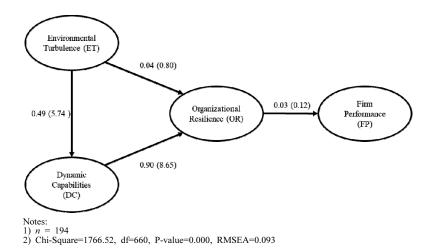


Figure 2. Result of the Research Model

V. Discussion

The COVID-19 has affected every industry across the globe, and the hotel industry is among the hardest

hit, as revealed by a study by McKinsey in the United States (Vik et al., 2020). This is also supported by similar McKinsey's study in 2020, which has shown how the hospitality industry has been among the most hit sectors compared to the others in Spain

(McKinsey & Company, 2020). The analysis of this study results in the growth of the hotel resilience. It does not significantly influence the hotel performance, apart the hotels changed the business models to realize their dynamic capabilities.

The analysed data were taken during the period of June to August 2020, where the COVID-19 cases in Indonesia were among the highest in the world. During that period, the Government of Indonesia released a new policy to rectify the situation by doing strict social distancing to avoid crowds, as this will consequently increase the transmission of COVID-19. This policy caused the closure of international airports in major Indonesian cities, which drove the declination of tourists who visited Indonesia during that period. This phenomenon has affected the declining hotel occupancy rates in Indonesia.

Some hotels have changed their operations into several business activities, such as providing rooms for COVID-19 patients the hospitals could not handle. Some of them even offered catering services directly to households and self-isolation facilities for those who wanted to do self-recovery. This shows that the hotels are eagerly doing any possible business activities in order to cover operation-related costs. Furthermore, some of five stars hotels in Bali Island provided significant hotel tariff discounts. Therefore, they were focusing on survival mode rather than making profits. Besides these efforts to keep surviving, some of them were even initiating to close their operations. This phenomenon explains why there is no significant impact of organizational resilience to the hotel performance in practice.

VI. Conclusion, Limitation and Future Research

A significant crisis like the COVID-19 pandemic has transformed the Indonesian hotel industry and requires hotels to adapt their business to "new normal" conditions. This research contributes to the literature

by refining the pandemic crisis resilience framework within the hotel industry context based on Indonesia hotels' strategic responses. It also serves as a starting point for future discussion and research in this area and extends the research efforts to other industry sectors in multi-country environments.

Interpretation of the findings of this study is subject to some limitations. First, this study is based on a cross-sectional nature and might fail to capture the dynamic of the studied variables. Thus, a longitudinal research design that could uncover these effects may modify the findings of this study. Second, choosing a single industry (hotel) in a single country limits external validity, mainly because of the solution-selling characteristic of a business-to-business relationship. Therefore, care should be exercised when applying and generalizing the results in other industries.

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Appendix 1. Scales items for construct measure

| Construct | Items | Adapted from | |
|---------------------------|--|---|--|
| Firm Performance | Compared to competitors, our organization can achieve | | |
| Financial performance | 1) increased sales revenue. | Simon et al., 2015; Kenneth Le Meunier-FitzHugh, 2011 Simon et al., 2015; Williams, 2018 | |
| | 2) increased profit margins. | | |
| | 3) increased cash flow. | | |
| Non-Financial Performance | 4) increased market share. | | |
| | 5) product and service quality improvement. | | |
| | 6) increased customer satisfaction. | - | |
| Organizational Resilience | | | |
| Planned Resilience | 7) We proactively monitor our industry to have an early warning of emerging issues. | al., 2013); Prayag et al. (Prayag et al., 2019); Orchiston et al. (Orchiston et al., 2016) | |
| | 8) Given how others depend on us, the way we plan for the unexpected is appropriate. | | |
| | 9) Our organization is committed to practicing and testing its emergency plans to ensure they are effective | | |
| | 10) We have a focus on being able to respond to the unexpected. | _ | |
| | 11) We have clearly defined priorities for what is important during and after a crisis. | | |
| Adaptive Resilience | 12) People in our organization are committed to working on a problem until it is resolved. | al., 2013); Prayag et al. (Prayag et al., 2019); Orchiston et al. (Orchiston et al., 2016) | |
| | 13) Our organization maintains sufficient resources to absorb some unexpected change. | | |
| | 14) If key people were unavailable, there are always others who could fill their role. | | |
| | 15) There would be good leadership from within our organization if we were struck by a crisis. | | |
| | 16) We are known for our ability to use knowledge in novel ways. | | |
| Dynamic Capability | | | |
| Sensing Capability | 17) We frequently scan the environment to identify new business opportunities. | Hernández-Linares et al. (Hernández-Linares et al. 2018) | |
| | 18) We periodically review the likely effect of changes in our business environment on customers. | | |
| | 19) We often review our product development efforts to ensure they are in line with what the customers want. | | |
| | 20) We devote a lot of time implementing ideas for new products and improving our existing products. | | |
| Learning Capability | 21) We have effective routines to identify, value, and import new information and knowledge. | (Hernández-Linares et al., | |
| | 22) We have adequate routines to assimilate new information and knowledge. | 2018) | |
| | 23) We are effective in transforming existing information into new knowledge. | | |
| | 24) We are effective in utilizing knowledge into new products. | - | |
| | 25) We are effective in developing new knowledge that has the potential to influence product development. | - | |

Appendix 1. Continued

| Construct | Items | Adapted from | |
|--------------------------|---|--|--|
| Dynamic Capability | | | |
| Integrating Capability | 26) We are forthcoming in contributing our individual input to the group. | (Hernández-Linares et al. | |
| | 27) We have a global understanding of each other's tasks and responsibilities. | 2018) | |
| | 28) We are fully aware of who in the group has specialized skills and knowledge relevant to our work. | | |
| | 29) We carefully interrelate our actions to each other to meet changing conditions. | | |
| | 30) Group members manage to successfully interconnect their activities. | | |
| Coordinating Capability | 31) We ensure that the output of our work is synchronized with the work of others. | (Hernández-Linares et al., | |
| | 32) We ensure an appropriate allocation of resources (e.g., information, time, reports) within our group. | 2018) | |
| | 33) Group members are assigned to tasks commensurate with their task- relevant knowledge and skills. | | |
| | 34) We ensure that there is compatibility between group members expertise and work processes. | | |
| | 35) Overall, our group is well coordinated. | | |
| Environmental Turbulence | | | |
| Market turbulence | 36) In our kind of business, customers' product preferences change quite a bit over time | Kmieciak et al. (Kmieciak et al., 2012); Jaworski and | |
| | 37) In our kind of business, customers are willing to accept new product ideas | 1993); | |
| | 38) New customers tend to have product-related needs that are different from those of our existing customers | Liu et al. (Liu et al., 2019); Turulja and Bajgoric (Turulja & Bajgoric, 2019) | |
| | 39) The customers tend to look for new product all the time | | |
| Technological turbulence | 40) Technological changes provide big opportunities in our industry | Kmieciak et al. (Kmieciak | |
| | 41) A large number of new product ideas have been made possible through technological breakthroughs in our industry | et al., 2012); Liu et al. (Liu et al., 2019); Turulja and Bajgoric (Turulja & | |
| | 42) The technology in our industry is changing rapidly | Bajgoric, 2019) | |
| Pandemic turbulence | 43) In our environment, there is public health crisis that requires decisional urgency | Lai (Lai, 2012); Lee (S. T. Lee, 2014) | |
| | 44) In our environment, there is high public health uncertainty | | |
| | 45) In our environment, there is high public health threat | | |
| | 46) In our environment, there is public health information scarcity | | |

Please indicate how much you agree or disagree with each of the following statements in 5-point Likert scale related to your organization
1-Strongly Disagree, 2-Disagree, 3-Neither agree nor disagree, 4-Agree, 5-Strongly agree