

Developing an Organizational Resilience Model for Engineering Consulting Companies in Indonesia: New Findings from a Leadership and Organizational Culture Perspective

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ABSTRACT

The National Association of Indonesian Consultants (INKINDO) stated that almost 25% of engineering consulting companies went bankrupt due to the Covid-19 pandemic, while the rest struggled to survive. This study aims to identify the organizational resilience factors and develop the organizational resilience preliminary framework for engineering consulting companies from a leadership and organizational culture perspective. The qualitative method is chosen by interviews with key persons from engineering consulting companies established for more than 25 years. Then, a recent literature review is conducted to explore the indicators used to assess organizational resilience from a leadership and organizational culture perspective. From the interview, new indicators are found: resource orchestration, risk-taking, and egalitarianism as new indicators from the leadership and reward system and organizational formality level as new indicators from an organizational culture perspective.

KEYWORDS: *engineering consulting company, leadership, organizational culture, organizational resilience.*

JEL CLASSIFICATION: *M10, M14*

1. INTRODUCTION

The COVID-19 pandemic has tremendously affected and led to the collapse of many companies in various sectors, including the construction services sector. In Indonesia, the construction services sector is vital as it contributes 10.48% of Indonesia's gross domestic product in the fourth quarter of 2021 (*Indikator Konstruksi, Triwulan IV-2021, 2022*). Unfortunately, approximately 2,700 engineering consulting companies (ECC) in Indonesia were reported to be negatively affected or bankrupt by the COVID-19 pandemic. The National Association of Indonesian Consultants (INKINDO) also revealed that nearly 80% of the companies in its association faced capital and financial problems due to the COVID-19 pandemic (Gunawan, 2020). Moreover, 27% of this figure has even closed, and only 10% had survived the pandemic (Hartati, 2020). This situation arose because the government refocused the budget for development activities to handle COVID-19 (Ridho, 2020). The uncertainty surrounding the pandemic also worsened its prospects. In 2021, Indonesia experienced various challenges in managing the COVID-19 pandemic. The first wave of COVID-19 occurred in January, followed by a second wave in July. With the spike in COVID-19, many people have lost their families and relatives (Harsono, 2021). Throughout 2021, based on a survey conducted by INKINDO, 27% of the ECC closed, 35% of the ECC had laid off permanent employees, and 80% of the ECC experienced capital and financial difficulties

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(ID, 2022). Through this phenomenon, it can be concluded that companies must be resilient to survive, adapt successfully, and thrive in the face of change and uncertainty caused by severe and improbable crises or disruptions.

Resilience is defined as the ability to survive, adapt, and thrive in the face of adversity. A company's resilience is complex, as it depends on the resilience of its people, products, processes, assets, markets, and communities (Fiksel, 2015). Organizations must be able to adapt and respond to unforeseen shocks to survive and seize opportunities (Herbane, 2019). Businesses must transform into learning organizations fundamentally different from the traditionally centralized, standardized, and fear-based codified hierarchical systems (Fry, 2003). This is particularly important given the global economic shift from manufacturing to a knowledge-based economy (Nurunnabi, 2017). Moreover, every organization is distinct and shaped over time by its inception and evolution. As a result, each firm must build tailored resilience solutions (Tengblad & Oudhuis, 2018). To be a resilient company, ECC leaders must also be able to tailor a strategy that fits the firm's unique characteristics. They must acknowledge that ECC's strength depends on the high standard of competence and strong knowledge of its human resources. Their works are also closely related to the safety factor. Leadership is therefore crucial in this situation.

Tsai (2011) described that the fundamental principles of an organization begin with its leadership, which then becomes a leadership style. Leaders' behavior and ideas will guide the subordinates, making both sides' behavior more and more similar. A strong corporate culture emerges when a company's behavior, values, and beliefs are consistent. Leaders must understand their role in preserving corporate culture. As a result, people in the organization will behave consistently, eliminating conflicts, and ensuring a positive work environment for employees.

Indonesia is a developing country that actively builds infrastructure to support national economic growth. ECC has a critical role in every national development infrastructure project cycle, from project identification, planning, implementation management, supervision, and development programs' evaluation stage. ECC work carries considerable risks in terms of material & non-material aspects related to timeliness, energy requirements, maintaining trust and the company's credibility. The sustainability of ECC is highly dependent on the projects obtained. The annual INKINDO survey of 2020 on the COVID-19 pandemic revealed that most ECCs are threatened with bankruptcy due to the reallocation of the project's budget from the government, a state-owned enterprise, and private clients (*Survei Dampak Covid-19 Terhadap Konsultan*, 2020).

In the face of a disaster, company resilience is determined by its resources, leadership, and organizational culture. Unfortunately, ECC lacks empirical study or practice on resiliency, especially from an organizational perspective. The organizational resilience (OR) method has never been specifically devised on how ECC deals with crises. Meanwhile, in Indonesia, several are found to endure for more than 25 years. They can survive through decades of crises, such as the Economic Crisis in 1998, the global financial crisis/Subprime Mortgage/Lehman brothers in 2008, and the digital transformation era. This research will determine the factors or indicators that influence OR and develop the preliminary OR model for ECC from a leadership and organizational culture perspective associated with the Indonesian context.

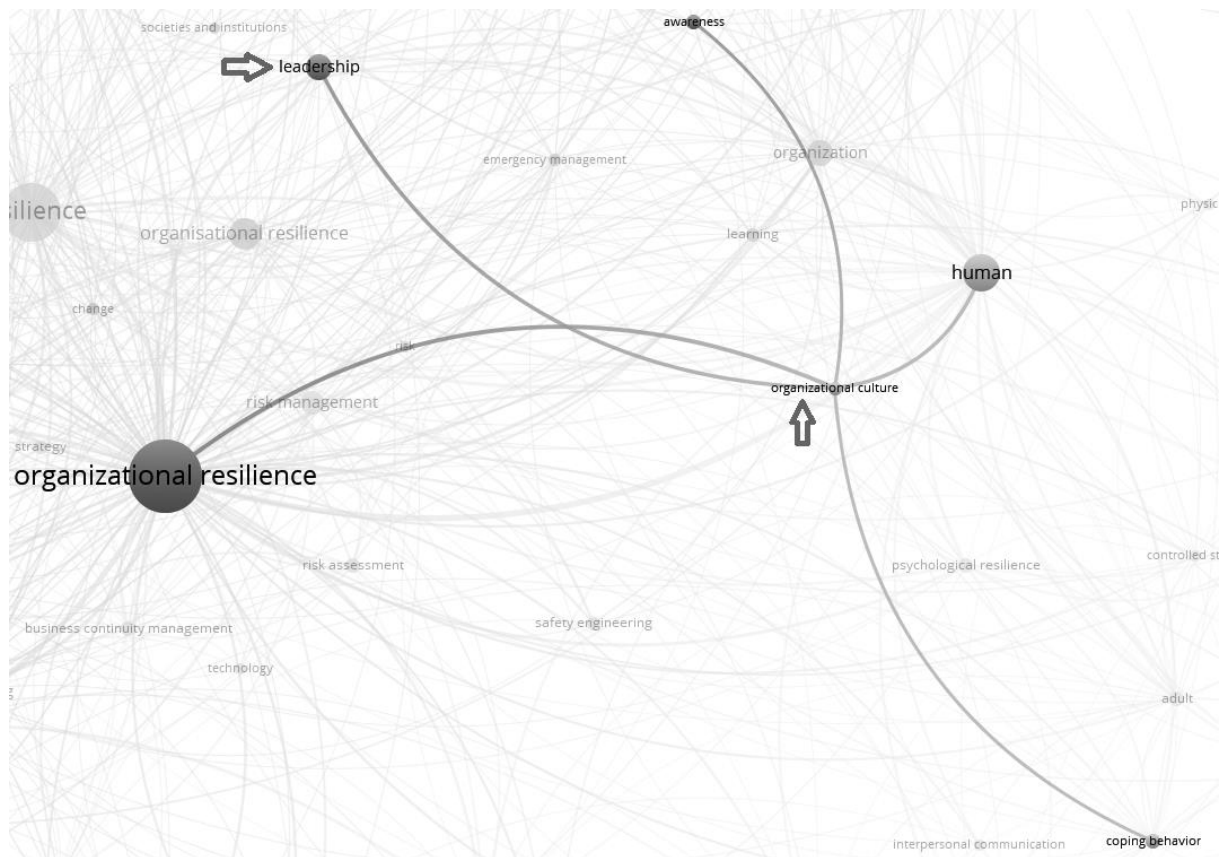


Figure 2. Research position of OR, Leadership and Organizational Culture in the Recent Decade
 Source: made by authors

We zoomed in on Figure 1 to Figure 2 and found a distance between OR, leadership, and organizational culture. In contrast, there is much literature on the separate topics of OR in an academic environment, and few studies attempt to observe any correlations between these concepts.

2.1. Organizational Resilience

Annarelli & Nonino (2016) defined OR as a company's ability to anticipate and respond to disruptions and unexpected events through strategic awareness and linked operational management of adverse shocks. The basis of dynamic resilience is managing disruptions and unexpected events to minimize negative consequences and maximize the organization's recovery speed to its original or new, more desirable state. Static resilience is derived from preparedness and preventive measures to reduce the likelihood and severity of threats. On the other hand, dynamic resilience is based on managing disruptions and unexpected events to minimize negative consequences and maximize the organization's speed of recovery to its original or new, more desirable state.

In the literature on business and management, there are five different research lines on resilience: (1) external threat responses, (2) organizational reliability, (3) workforce strengths, (4) business model customization, and (5) strong supply chains (Linnenluecke, 2017). Each of the five streams defines, thinks about, and perceives resilience differently. Organizational resilience is a common theme in all five resilience research domains. The focus is on skills, processes, learning, and culture; to put it another way, the organization is more informal and

processual. Linnenluecke's five suggested resilience research topic streams are all geared toward crisis management, with little attention to proactivity.

Barasa et al. (2018) determined that resilience was previously described as an ability of the system to achieve its goals against adversity. The ability of a system to adapt and transform, as well as its ability to withstand shocks, was highlighted in selected resilience concept papers. Physical resources, preparation and planning, information management, accompaniment paths and redundancy, governance processes, leadership practices, organizational culture, human capital, social networks, and collaboration were affected. From Barasa et al. (2018), we can conclude that leadership practices and organizational culture are two factors that influence OR.

2.2. Leadership and Organizational Resilience

Even in difficult times, an organization with strong leaders and a clear vision of its goals can make quick and sound decisions. It has strong management practices and fosters a company culture that encourages goal achievement. There are four dimensions of leadership: a clear vision of goals, decisions that are quick and level-headed even in difficult situations, strong management systems, and cultivating a company culture that encourages the realization of its goals (Pascua & Richards, 2018).

Establishing a social network of support in times of need is important for developing a leader's resilience. The current method of growing them should be reconsidered. Access to trusted peers and colleagues, time to reflect and collaborate with professional peers and colleagues, and transformational development opportunities that require less social isolation and more opportunities for collaboration are all critical aspects of recruiting and retaining resilient leaders (Ledesma, 2014). Leaders are expected to influence organizational transformation by increasing followers' motivation. Idealized influence, inspiring motivation, intellectual stimulation, and individualized concern are four independent but interrelated elements that can be recognized in such a leadership style (Valero et al., 2015).

Boin et al. (2013) elucidate a comprehensive framework to assess the work that crisis leaders must do, based on key tasks: sensemaking to process information from environmental cues to promote a collective understanding of the crisis, decision-making and facilitating effective coordination among various parties, meaning-making to provide an interpretation of the situation and to bring authentic hope and confidence to stakeholders. The framework also elaborates on the executive task of crisis management, which are:

1. Leaders develop, facilitate, and practice a sensemaking method;
2. Leaders carefully consider which decisions they should make and whether they did so after some form of due process;
3. Facilitate effective cooperation and intervene when it is lacking or dysfunctional. Actively monitor the status of critical (life-sustaining) systems and their interconnections;
4. Provide a clear interpretation of the crisis and explain how they planned to lead their community out of it;
5. Actively collaborate with their communications professionals to ensure they have timely and accurate information for public dissemination;
6. Allow for reflection on the consequences of chosen actions;
7. Actively participate in crisis preparations.

Strielkowski et al. (2022) identified that leaders who can develop strategies, policies, and programs that promote social and organizational sustainability while driving economic

success and performance are in high demand (both essential economic aspects). Resilient leaders are willing to change their organization and industry and have the courage to question established practices. Businesses that use sustainable practices as a business strategy will succeed in the long run. They are reducing the situation's complexity to make targeted decisions and operations that turn sustainability into a competitive advantage. Table 1 summarizes the indicators found in the literature review on leadership related to OR.

Table 1. Indicators of Leadership related to OR

AUTHOR	LEADERSHIP INDICATORS
Pascua & Chang-Richards, 2018	Clear vision of goals Strong management systems Decisions that are quick and level-headed even in difficult situations Cultivating a company culture that encourages the realization of its goals
Ledesma, 2014	Access to trusted peers and colleagues Time to reflect and collaborate with professional peers and colleagues Transformational development opportunities that necessitate less social isolation and more opportunities for collaboration are all critical aspects of recruiting and retaining resilient leaders
Valero et al., 2015	Idealized influence Inspiring motivation Intellectual stimulation individualized concern
Boin et al., 2013	Leaders develop, facilitate, and practice a sensemaking method Leaders carefully consider which decisions they should make and whether they did so after some form of due process Facilitate effective cooperation and intervene when it is lacking or dysfunctional. Actively monitor the status of critical (life-sustaining) systems and their interconnections Provide a clear interpretation of the crisis and explain how they planned to lead their community out of it Actively collaborate with their communications professionals to ensure they had timely and accurate information for public dissemination Allow for reflection on the consequences of chosen actions Actively participate in crisis preparations
Madi Odeh et al., 2021	Encourages people to see changes in their surroundings as opportunities

Source: made by authors

2.3. Organizational Culture And Organizational Resilience

Tsait (2011) described that employees’ deeply rooted beliefs and the expected value of their work, which influence their attitudes and behavior, are all examples of organizational culture. Because it embodies the values, beliefs, and behavioral standards that individuals in a firm use to give meaning to the conditions they experience, organizational culture influences employee and leader attitudes and behavior. Understanding the fundamental concepts of the company can help you avoid internal conflicts.

Organizational culture (OC) is the total of group consciousness, such as core beliefs, mindsets, behaviors, and values, shared by the organization members and considered effective when organizations solve the problems of external adjustment and internal integration

(Schein, 2008). The organization has resilience only when organizational resilience is embedded in the organizational culture (Elwood, 2009). Beliefs and values become two important variables in the formation of the OC. As defined by Mees et al. (2016), OC is the fundamental assumption about the world and the values that guide organizational life; thus, shared assumptions, beliefs, and values are emphasized.

There are three indicators of organizational culture: effective partnerships, disclosure of information, and organizational cohesion (Yang & Cheng, 2020). Organizational culture encompasses a set of ideas shared by all members of an organization that become one of the three factors that define an organization's capabilities: (1) the members' good understanding of the benefits of sustainability; (2) informing employees regarding the executed sustainability programs; and (3) comparing internal strategies to competitors (Gabler et al., 2015).

Organizational culture also fully constructs the network perspective sub-construct and the compromise and involvement subconstruct. The network perspective consists of five variables (Morales et al., 2019): (1) Management cultivates long-term relationships with suppliers and maintains loyal relationships with customers. (2) In a crisis, the company receives assistance from other parts of the organization, resources, and plans. (3) The company establishes relationships with other organizations to strengthen and develop the industry. (4) The members are aware of the need to strengthen the industrial sector and build barriers to prevent newcomers from entering. (5) The members can take time out of their working day to practice how to respond in a crisis. Further, Morales et al. (2019) inferred that compromise and involvement consist of three variables: (1) Some resources are constantly dedicated to training and re-training personnel to operate the technical system efficiently in an emergency. (2) The organization has a sense of teamwork with deep trust and wellbeing. (3) Employees are emboldened to move between departments or try different positions to gain experience. The summary of the indicators found in the literature review for the organizational culture related to OR is shown in Table 2.

Table 2. Indicators for OC related to OR

Author	Organizational Culture (OC) Indicators
Tsai (2011)	Employees' deeply rooted beliefs The expected value of employees' work, which influences their attitudes and behavior
Schein (2008)	The sum of group consciousness
Mees et al. (2016)	Shared assumptions, beliefs, and values
Yang & Cheng (2020)	Effective partnerships, information disclosure, and organizational cohesion
Gabler et al. (2015)	Members' good understanding of the benefits of sustainability Informing employees regarding the executed sustainability programs Comparing internal strategies to competitors'
Morales et al. (2019)	Perspective network and compromise and involvement

Source: made by authors

2.3. Leadership, Organizational Culture, and Organizational Resilience

Tsai (2011) defined organizational culture as the belief that can make employees know what to do and what not to do, including practices, beliefs, values, and assumptions about their work. The fundamental principles of an organization begin with its leadership, which then evolves into a leadership style. These ideals and the leaders' behavior will guide subordinates and align the behavior of both parties more closely. Organizational culture emerges when

strong, consistent behaviors, values, and beliefs are established. Leaders must understand their role in preserving an organization's culture. This, in turn, would ensure that members of the organization behave consistently, reduce conflict, and promote a healthy work environment for employees (Tsait, 2011).

The role of variables related to the development of the OR, with a strong influence on organizational culture and the ability to organize and manage operations, is explained by resilient leadership. These three contributors, the drivers of adaptability, are directly related to the development of resilience (Morales et al., 2019).

Due to the strong association with the workforce, leadership in the sense of a "person" may not be the best approach. Viewing leadership as a "process" works better, with leaders seen as part of an organizational culture in which they frequently interact with their followers. This later emphasis on the interaction between leaders and their followers in leadership research is beneficial (Odeh et al., 2021). Organizational resilience and performance are mediated by resilient leadership and organizational culture (Suryaningtyas et al., 2019). The concept of adaptive culture is critical in determining organizational resilience because it describes how leaders and employees approach a crisis with an opportunistic mindset.

The relationship between leadership, organizational culture, and OR continues to be discussed among scholars. The following factors impacted organizational resilience (Barasa et al., 2018a): material resources, preparation and planning, information management, trajectories and redundancy, governance processes, leadership practices, organizational culture, human capital, social networks, and collaboration. The two cultural practices are identified as critical to organizational resilience. The first is an organization's attitude in the face of daily and acute challenges. The ability of leaders and other employees to approach challenges from an opportunistic standpoint is critical to resilience. Resilient organizations view challenges as learning opportunities and use experiences to develop skills that improve their resilience. Second, resilient organizations foster innovation and creativity. Mafabi (2013) investigated the resilience of 51 Ugandan public companies to unspecified chronic crises and discovered that encouraging employees to generate new ideas improves organizational resilience.

Furthermore, Mafabi (2013) explained that employees in groups with terrible innovative climates have become sheltered and closed off and are reluctant to provide new and innovative thoughts for fear of being fired. A creative climate is considered necessary to create an appropriate environment for overall organizational adjustment and transformation when facing adversity. Resilient businesses foster creativity by allowing time and resources for experimentation, rewarding invention, allowing for error, and fostering an environment where employees feel comfortable sharing new ideas.

From the explanation of the literature above, we can describe the relationship between leadership, OC, and OR in Figure 3.

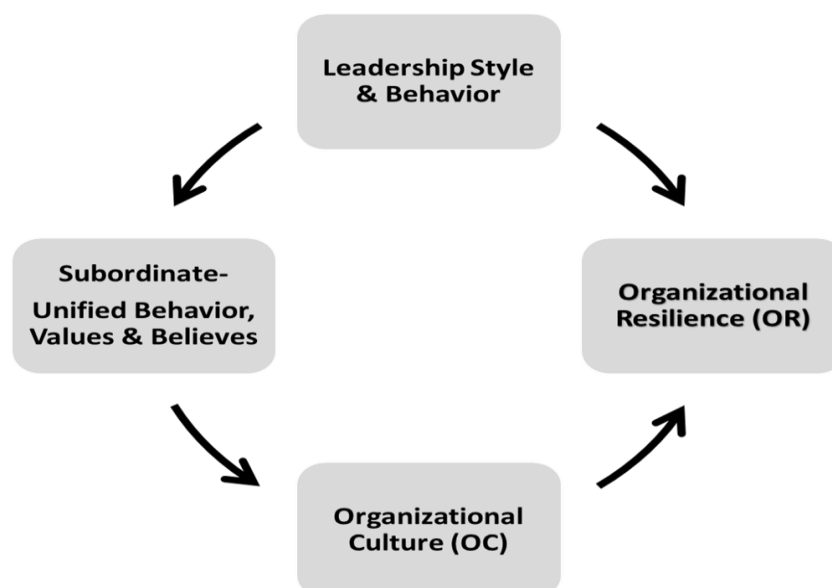


Figure 3. Relationship between Leadership, OC, and OR
 Source: made by authors

3. RESEARCH METHOD

3.1. Research Design and Protocols

This study uses a qualitative approach for data collection by conducting interviews with four key persons from four ECCs (in pseudonym): PT. EB, PT. SAB, PT. ECJ, and PT. RP. These companies were selected as they have survived decades of crises such as the economic crisis of 1998, the global financial crisis/the subprime mortgage crisis/the Lehman brothers’ bankruptcy in 2008, and the digital transformation era. Meanwhile, the key persons were selected for the interview based on several considerations shown in Table 3. We believe that the founder, top management, or senior manager is the person who knows the most about the company’s journey.

Table 3. Criteria for Selected Companies and Key Persons

Company	Key Person
ECC has been established for over 25 years and has survived various crises.	Founder/top management level (CEO/COO) or senior manager who has joined the company for more than 25 years.

Source: made by authors

The researcher conducts face-to-face, telephone, or focus group interviews. These interviews consist of open-ended, unstructured questions to elicit the participants’ views and opinions (Creswell & Creswell, 2018). The questions that were asked to the key persons are shown in Table 4.

Table 4. Interview Script

OPEN QUESTIONS
How was the company's journey (Profile, History, Experiences)?
What was the most challenging crisis the company has ever experienced?
How to survive? (strategy, efforts, challenges, decisions)
How does management motivate employees during a crisis?
Does the management facilitate activities that can upgrade employees' knowledge?
Does the management shares & deploy the values, goals and objectives to the employees?
Do you have any support from other organizations to strengthen & develop the company?

Source: made by authors

3.2. Research Analysis

Due to the pandemic, the interview was conducted by telephone or the Zoom platform. The interview results were then transcribed, analyzed, and coded using NVivo. NVivo is a data analysis software to analyze qualitative data (Creswell & Creswell, 2018). Data analysis results are linked to the transcribed interview. The analysis is expected to uncover OR factors and propose the initial OR framework from a leadership and organizational culture perspective for the ECC in Indonesia.

4. RESULTS

In Indonesia, some ECCs already exist and still endure for more than 25 years. They have survived through the decades with some crises or turbulence like the economic crisis in 1998, the global financial crisis/Subprime Mortgage/Lehman brothers in 2008, the digital transformation era, and now the COVID-19 pandemic.

The first interview was with the PT. EB's Chief Operating Officer (COO) on October 13th, 2021. EB was established in 1980 in Bandung as an Indonesian-National engineering consulting company with a multi-disciplinary in-house resource in Architecture, Civil/Structural, Mechanical/Piping, and Electrical/Telecommunication /Control Engineering capabilities. EB now provides services to clients throughout the country and globally (i.e., Malaysia, South Korea, Vietnam, Australia, Philippines, Timor Leste, Nigeria, Singapore, Congo-Africa, etc.). Unlike other companies that mostly collapsed on economic crises affected by the political reformation in 1998, EB made a high profit due to the raising of the USD exchange rate. EB had some projects with USD payments, so they survived and even thrived.

He further explains that EB has been through many crises, but the hardest one is the COVID-19 pandemic. Some big projects are being held and canceled by clients. This condition forces the management to release some policies as a rescue effort, such as re-arranging the working hours (50% of employees work from home and 50% work from the office), eliminating employees' allowances, and cutting off some routine operational costs. Another effort is not to directly accept projects funded by the government institution to avoid payment failure. This year, 70% of EB projects come from private institutions, and about 30% are from State-Owned Enterprise Institutions. He further said that in order to survive, the company must have financial ability, good product/services, good networking with stakeholders, high-risk takers, a high spirit to survive, and a high spirit of learning new things and focusing on services. Interestingly, he said that shared values are also a factor that caused PT EB to survive. Integration, professionalism, and honesty are the values instilled by the board of directors of the team.

The second interview was with a Project Manager/Railway Senior Engineer of PT. JCM on November 3rd, 2020. JCM was founded in 1983 as a construction management division/subsidiary of a locally owned enterprise belonging to the DKI Regional Government. JCM has collaborated with Japanese companies such as Nippon Koei for LRT and MRT engineering design. He explained that those are the two hardest crises that they have experienced. First in 1998, PT. JCM was almost bankrupt when the Economic crisis in Indonesia happened, impacted by the Political Reformation. However, it can survive because of its status as a subsidiary of a local government-owned enterprise.

The second crisis is the pandemic of COVID-19 that we are experiencing right now. Some big projects are being held and canceled due to the pandemic. The top management of JCM has carried out several efforts such as employee layoff, billing rate adjustments for the experts, re-arrangement of the working hours, elimination of the allowances for employees, and cutting off some routine operational costs. Employees lay off, and billing rate adjustment for the experts has another "bad" side effect. PT JCM must adjust the experts' qualifications with the "adjustment" rate that it can afford, so it hired some experts who are not capable & not perform to conduct and finish the project. This policy resulted in several clients being disappointed and complaining. He further said that ECC's human resources must have strong knowledge, high skill, and a good attitude to survive. Strong knowledge will also generate good innovation.

The third interview was with PT. SE, which has established in 1952, on September 23rd, 2021. The key person is the President Director of PT. SE. He said that some factors that should be met and fulfilled according to OR are: 1. Sense of belonging, 2. Experiences so that clients no longer doubt the competence of PT. SE. 3. Flexibility to client requests, 4. Collaboration. PT. SE often collaborates with other companies in carrying out work, such as conducting a consortium in pursuing job tenders so that the company's qualification requirements can complement each other, 5. Networking, PT. SE has a strong network with ministries and government institutions. PT. SE is often asked to be an arranger and conductor for their projects, starting from making Term of Reference, preparing, and coordinating the team and all resources, from internal and external PT. SE, to carry out the work. PT. SE uses internal and external resources as a strategy to get the project. In this case, we can see that PT. SE practices resource orchestration. Organizing resources is crucial in the development and implementation of various business strategies.

The fourth interview was with the President Director of PT RP and was conducted on December 9th, 2021. In 1991, PT RP was founded to contribute to all aspects of development activities and create job opportunities. Based on this notion, the company has emerged as a design and engineering consulting company in compliance with the government policy to cater to a generation of the workforce. Located in Bandung, the capital of West Java, Indonesia, PT RP grows as an ECC specializing in planning, architecture, and engineering. PT RP services cover public projects such as Airports, stadiums & Sports, Public Hospitals, Low-Cost housing, Government and BUMN Offices, and Special Projects (mosques, Islamic centers, Art & Cultural centers).

Currently, PT RP has completed more than 300 projects in Indonesia. They already experienced some crises, i.e., in early 2000 when the company sank due to the impact of the monetary crisis. PT RP's strategy is taking advantage of one of the founders who still holds a strategic position at ITB to get a loan. So they got a loan from the bank then, and the director directly increased the employee's salary, so they were excited, and their performance was significantly boosted. During the COVID-19 pandemic in 2020-2021, PT RP executed the salary bonus to its employee. The director also works very hard. He believes that if we work hard, blessings will come along. PT RP is unique. In this pandemic, their income has

increased significantly, and the company thrives. The director said that this condition is because they carry out the significant/strategic project from the government, so the budget reallocation policy does not impact the project. PT RP applies a simple organizational structure, where only one director and the managerial positions are directly under him. This structure makes the company more "liquid" and can speed up the decision-making process.

The results of the interview with the four respondents/key persons are analyzed using NVivo software (Figure 4). We found that there are five new factors of OR for ECC from leadership and organizational culture, those are resource orchestration, risk taker, and egalitarianism as new indicators for leadership for resilience, and reward system and organizational formality level as new indicators from an organizational culture perspective (in grey circle nodes).

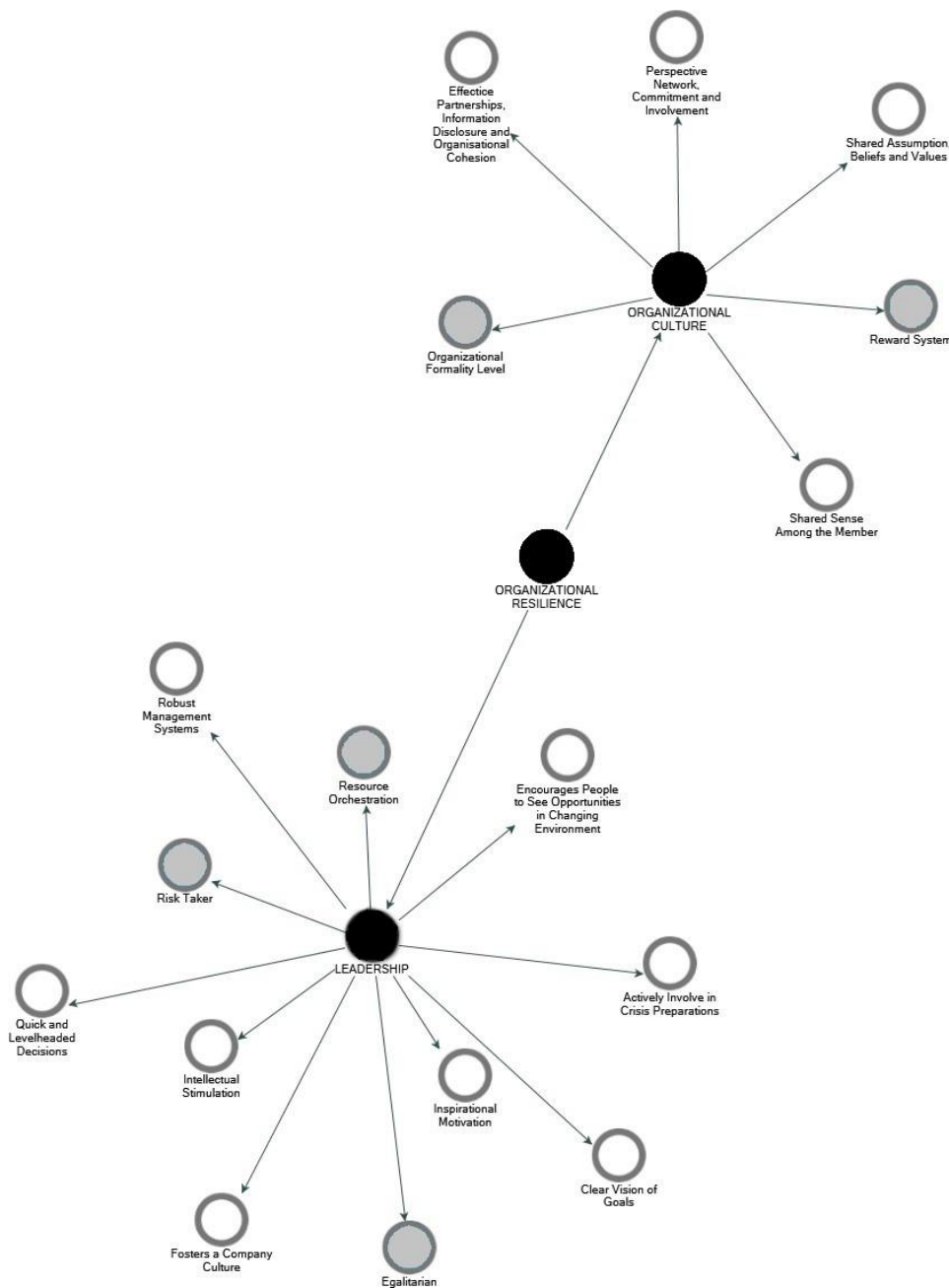


Figure 4. Factors of OR from leadership & organizational culture perspective based on the preliminary interview

Source: made by authors

5. DISCUSSION

From the literature review and preliminary interviews, we found new factors that can be developed into the pre-conceptual model for OR in ECC from a leadership and organizational culture perspective, as shown in Figure 4. The grey-colored block is the factor that we proposed for OR in ECC. It can be seen that several main aspects must be fulfilled to be resilient.

As shown in Figure 4, several factors or indicators influencing the leadership of the literature review match the interview result. These are: 1) clear vision of goals, 2) robust management systems, 3) quick and levelheaded decisions, 4) inspirational motivation, 5) intellectual stimulation, 6) actively involving themselves in crisis preparations, and 7) encouraging people to see opportunities in changing environments. Meanwhile, three indicators emerge only from the interview: 1) risk-taker, 2) egalitarianism, and 3) resource orchestration.

Most respondents said that a leader should be a high-risk taker, since the ECC's character highly depends on the projects obtained. Therefore, leaders should dare to pursue projects with all their efforts and risks. For example, the top management of PT EB and PT RP propose bank loans to carry out the project smoothly. Meanwhile, PT RP confidently designed a COVID-19 hospital within a month, which became their leading project. The president director of PT SE also dared to take a risk when they had to finance all operational costs during the bidding or tender process, even though there was no certainty whether PT SE would win the bidding or tender.

Egalitarianism is another new indicator of leadership in the ECC. In PT RP, there is no complex bureaucracy between an employee at the top or middle management level. The CEO can communicate directly with the drafters without permission from the project leader. Office workers could directly talk to the CEO if there are complaints about the treatment from the General Affairs Manager. Egalitarianism ideals are associated with equality, equity, and diversity (Arday, 2018). Leaders with an egalitarian style usually seek to develop a solid working relationship with everyone in the organization and include everyone in even the most crucial decisions.

Resource orchestration is also a new indicator found for leadership in ECC. PT SE is often asked to be an arranger and conductor for all their projects, starting from constructing the terms of reference, preparing and coordinating the team and all resources, from internal and external PT. SE, to carry out the work. PT. SE utilizes its internal and external resources as a strategy to obtain the project. In this case, we can see that PT. SE practices resource orchestration. Resource orchestration is essential in developing and implementing a variety of firm strategies. We identify the breadth of resource orchestration by investigating its impact and implications for company strategy, business strategies, and competitive challenges in industries (Sirmon et al., 2011).

Some factors or indicators of the literature review also match the interview results for organizational culture. These are 1) effective partnerships, 2) information disclosure and organizational cohesion, 3) shared sense among the member, 4) perspective network, commitment, and involvement, and 5) shared assumptions, beliefs, and values. Meanwhile, two indicators emerge only from the interview, and those are: 1) organizational formality level and 2) reward system. We can see the interview results in Table 5 below.

Table 5. Interview’s Results

	Indicators Match from Literature Review	New Indicators found
OC	The sum of group consciousness Shared assumptions, beliefs, and values Effective partnerships, information disclosure, and organizational cohesion Perspective network and compromise and involvement	Reward System Organizational formality level
Leadership	Clear vision of goals Strong management systems Decisions that are quick and level-headed even in difficult situations Cultivating a company culture that encourages the realization of its goals Inspiring motivation Intellectual stimulation Actively participate in crisis preparations Encourages people to see changes in their surroundings as opportunities	Risk Taker Resource Orchestration Egalitarian

Source: made by authors

From the interview, we can conclude that ECC mostly applies a simple organizational structure, where only one director and the managerial positions are directly under him. The level of organizational formality is relatively low where there is no long hierarchical level between employees and the top management. This kind of structure will make decision-making easier.

The reward system is also a new finding for organizational culture in the ECC. Most respondents believe that the ECC’s most valuable asset is human resources. The ECC has a unique characteristic. The company’s strength depends on the high standard of competence and the strong knowledge of its human resource. Their work is closely related to the safety factor. Their competence should equal a good compensation and reward system to boost their performance significantly. From the interview results, we proposed a pre-conceptual model that can be defined in Figure 5.

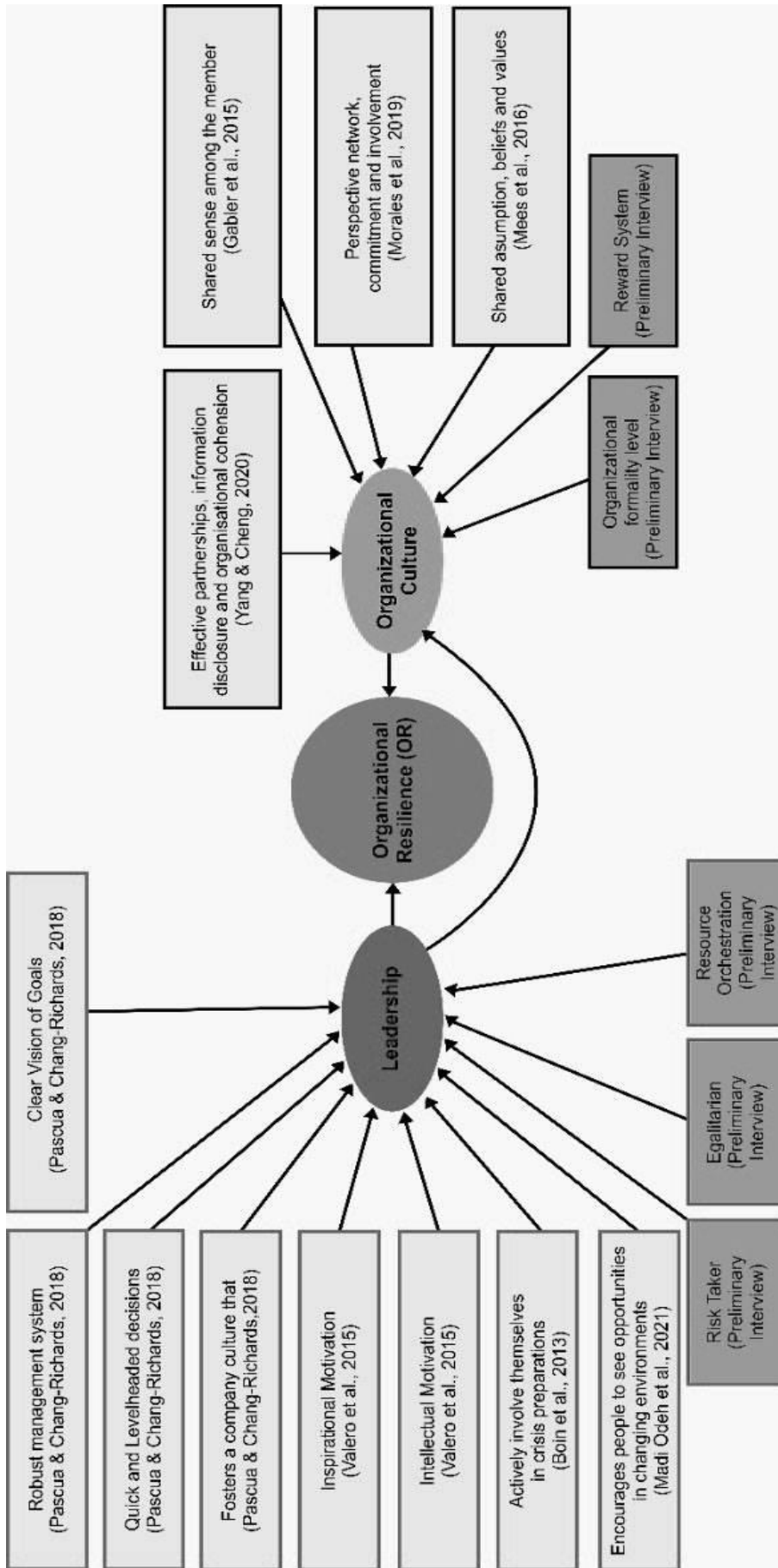


Figure 5. Pre-conceptual model for ECC In Leadership and Organizational Culture Perspective

Source: made by authors

Figure 5 shows that leadership and OC in ECC are determined by some indicators/factors gained from the literature and interviews with the key person. Leadership positively correlates with OC since leaders play a significant role in fostering a company culture and instilling assumptions, beliefs, and values in all company members. Leaders who can harness organizational strengths to address unexpected challenges are capable of overcoming adversity and boosting the OR. A leadership style and behavior that integrates employees' behaviors, values, and beliefs will ensure that members of the organization behave consistently, reduce conflict, and promote a healthy work environment for employees. OC is formed when solid and consistent behaviors, values, and beliefs are established. It will allow the organization to continue operating and maintaining a reliable function in the face of adversity, known as OR.

6. CONCLUSIONS

In the current turbulent economic situation, the study of OR has become essential in management science. While many types of research on OR have been conducted, they are still lacking in empirical data or practice, especially from an organizational perspective. Hence, this research determined to uncover the factors that can influence OR and developed the OR pre-conceptual model for ECC from a leadership and organizational culture perspective associated with the Indonesian context.

From the theoretical literature and in-depth interviews with key persons from four ECCs in Indonesia that have existed for more than 25 years, we found five new factors or indicators of OR for ECC. Resource orchestration, risk takers, and egalitarianism are new indicators of resilient leadership. Meanwhile, organizational formality level and reward system are new indicators from a corporate culture perspective.

We also found that ECC is unique. The ECC's role is critical in every development infrastructure project cycle, from project identification, planning, and supervising to the programs' evaluation stage. Its sustainability is highly dependent on the projects obtained. Thus, these expected results can thus be an ideal standard OR for ECC from a leadership and organizational culture perspective. Based on that, the methodology will guide the researcher in investigating the most suitable methods that must be adapted to improve the OR model for ECC in future research. By determining the factors that influence OR and developing the OR model for ECC from a leadership and organizational culture perspective, this study is expected to help improve the resilience of the construction sector and disaster or crisis recovery associated with the Indonesian context.

This study has limitations, such as a small sample size of ECCs. Since we chose qualitative for the methodology, we find that future research on this study will be conducted using the mixed-method. The proposed pre-conceptual model (Figure 5) will be validated by elaborating it in the questionnaire as a material for the survey research. In survey research, a written questionnaire will be used to gather more profound information about several key person's backgrounds, behaviors, beliefs, or attitudes to enrich the model.

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