

ORGANIZATIONAL RESILIENCE IN THE FACE OF DISRUPTIVE FORCES: A MODEL FOR BUILDING ROBUSTNESS OF FIRMS IN FINANCIAL SERVICES SECTOR

W.K.S. Karunaratna¹, D. D. Mahesh², S.W.S.B.Dasanayaka³, and
G.D.Samarasinghe⁴

^{1,2,3} *Department of Management of Technology, University of Moratuwa*

⁴ *Department of Industrial Management, University of Moratuwa*

Emails: 1sudarshan.sk82@gmail.com, 2ddmahesh100@gmail.com

Abstract

Highly dynamic and turbulent business environments of today demand almost all the organizations in the world to be more resilient than ever before. Resilience has become the new buzzword in today's world, with the advent of various disruptive forces and suddenly emerged pandemics, such as COVID-19. Among the industrial sectors that are destined to be under the pressure of those disruptions, health services sector and financial services sector are of utmost importance. Therefore, organizations need to be more robust or resilient and in order to do so, they have to formulate appropriate corporate and business strategies after identifying the drivers or sources contributing towards the emergence of the resilience in an organizational context. Based on the prevailing theoretical underpinnings from prior literature sources, this paper proposes a conceptual framework to further understand the antecedents of organizational resilience in order to enhance the overall

business performance of the firms in the financial services industry in Sri Lanka. In this conceptual model, sources of organizational resilience are classified as resilient leadership, resilient organizational culture, adaptation capacity, organizational capacity and managerial capabilities. The proposed organizational resilience conceptual framework will also pave the way for various theoretical and empirical implications.

Key Words: organizational resilience, disruptive forces, adaptation capacity, organizational and managerial capabilities, financial services sector

1. Introduction

Resilience theory is a multifaceted field of study that has been dealt with by sociologists, educators and many other parties over the past few decades. Even though it has been evolving over the past 80 years, it has enjoyed a renaissance in the recent few decades. It is said that the emergence of resilience theory is directly associated with a decrease in emphasis on pathology and an increase in emphasis on strengths (Rak and Patterson, 1996). To put it simply, resilience theory argues that it's not the nature of adversity that is most important, but how we deal with it successfully. It deals with the strengths that people and systems demonstrate that enable them to overcome that adversity. Resilience theory currently addresses various entities such as individuals, families, communities, organizations and policies. The main focus of this research study is the resilience associated with organizations (especially business organizations), that is called "Organizational Resilience (OR)". According to Kantur and Say (2012), while the concept of resilience is widely used and discussed in disaster and crisis

management literature, the literature on OR is growing in a disjointed manner in organizational studies.

According to Denyer (2017), OR is the strength of an organization to anticipate, prepare for, respond and adapt to abrupt disruptions in order to survive and prosper. Duchek (2020) suggests three successive phases of the resilience process (see Figure 1) and argues that organizations with resilient characteristics respond not only to the past (reactive action) or to the current issues (concurrent action), but also to the future (anticipatory action).

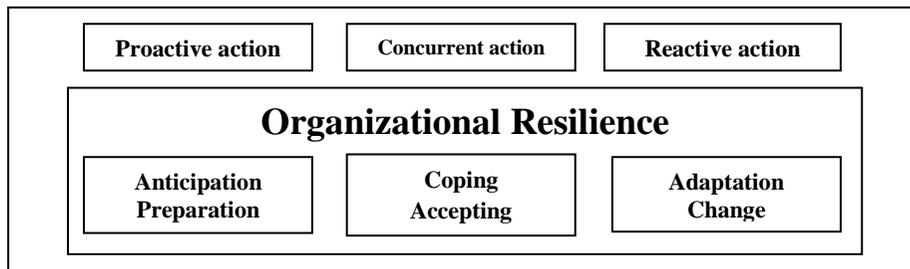


Figure 1: A capability-based approach (simplified) for organizational resilience

Source: Adapted from Duchek (2020)

Why has OR become a crucial topic today? Answering this question, Kowsar et al (2019) assert that OR is one of the issues or topics that has attracted expert attention in recent years, because of increasing disruptions of the organizational processes with various political, economic, social, natural and human crises. Madni and Jackson (2009) describe two types of disruptions namely, 1) External Disruptions and 2) Systemic disruptions. The most common examples of external disruptions are natural disasters, such as tsunamis, earthquakes, and floods, and pandemics like COVID-19. On the other hand, a systemic

disruption can be defined as a disruption that is relating to function, capability or capacity and the sources of these disruptions encompass human beings, automated systems, and various combinations of these two. Apart from this classification, they also show a categorization based on predictability, i.e. Predictable vs. Unpredictable Disruptions. Thus, with a host of disruptive forces contributing consistently to a dynamic and perhaps turbulent business environment, OR has gained salience in recent years.

If we concentrate on the current situation, the entire world is struggling with the COVID-19 pandemic that is influencing almost every aspect of the world, including business organizations in various industrial sectors. However, the direct repercussions of this pandemic could be clearly observed in several industries such as health, financial services.

The main concern of this study is the financial services industry and its functions as the mechanism to provide financial services to individuals and corporations in an economy. In Sri Lanka, the financial services industry includes the regulatory authorities (i.e. Central Bank of Sri Lanka) and other institutions such as commercial banks, specialized banks, finance companies, leasing companies, insurance companies, pension and provident funds, rural banks, thrift and credit co-operative societies, primary dealers, stock brokers, securities market intermediaries, and unit trusts (Central Bank of Sri Lanka, 2013). According to its annual report, the Sri Lankan Central Bank (2019) indicates that the financial services sector contributed approximately 14.2% of Sri Lanka's GDP in 2019. This sector is vulnerable to the consequences of COVID-19 and, as a result of that organizations in the financial services industry were compelled to adhere to strict policy

decisions taken by the government. Further, the traditional financial institutions are forced to face the intensive competition created by FinTech firms as those firms are coming up with new financial solutions such as payment methods and applications, etc.

1.1 Research Problem and Objectives

To date, several studies have been performed by research scholars (e.g. Pal et al, 2013; Kantur and Say, 2015; Kowsar et al, 2019; Morales et al, 2019) to identify the antecedents or sources of OR. Even though they have been successful in coming up with a set of sources of resilience, there is no consensus among their findings. Further, OR has been studied extensively in other industrial contexts such as health care, manufacturing, etc, but little or no attention has been paid to OR in financial sector organizations. In other words, there is a lack of earlier studies to investigate the more relevant and realistic sources of OR in relation to the financial services landscape. Thus, we could identify a niche or a gap in this research area and this situation led to the conduct of a research study aiming to offer solutions for effective management of extreme events in financial institutions by investigating the antecedents or sources of OR. Accordingly, this study was carried out to formulate a framework to better answer the problem *“What are the key predictors or sources of the concept of OR in the context of the financial services industry of Sri Lanka?”*

The major objectives of the study were, 1) to formulate a framework that shows the concept of OR and its key predictors in the context of the financial services industry and 2) to provide future researchers with a model in their future research studies (they may adopt the same model proposed by this study or adapt it with certain revisions depending on their context-specific reasons).

1.2 Scope of the Framework

The theoretical scope of this study consists of four independent variables, one dependent variable and two controlled variables and a detailed explanation of these variables are mentioned in the literature review section of this paper. On the other hand, financial sector has been selected as the empirical scope. As illustrated extensively in the previous paragraphs, the financial services industry has undergone fundamental changes in the past and with emerging disruptive forces, that situation has been aggravated drastically. As a result of these changes and forces, financial institutions have adjusted their product/service offerings and have entered into new markets.

This paper has four sections. The next section describes the theoretical background of OR and related concepts influencing it. The third section presents the details of the research design under the methodology and finally, conclusions and implications are given in the fourth section.

2. Literature Review

Enterprise resilience is a key capacity to guarantee enterprises' long-term continuity and researchers have identified over 70 disruptive events and over 400 preventive actions (Sanchis, 2020). The Irish Management Institute (2020) suggests that organizations can view resilience through three stages; coping, adaptation and anticipation. Denyer (2017) identified four ways of thinking about OR: preventive management, mindfulness, performance enhancement and adaptive innovation. Morales et al (2019) states that the organizational culture has a high influence on the adaptability of organization to resilience. Duchek (2020) proposes three consecutive phases of resilience (anticipation, coping and adaptation) and offers an overview of the

underlying capacities that together shape OR. Koronis and Ponis (2018) highlight the need of strategic configurations towards the construction of a resilience culture and development of supporting social capital in organizations.

2.1 Resilience Dimensions

Similar to the other meanings of resilience, there are a variety of concepts of resilience. Patterson and Kelleher (2005) identify three dimensions of resilience: interpretation, resilience and action. The perception aspect of resilience describes how people, families, organizations and culture view current and potential adversity. Resilience capacity is the capacity of individuals, communities, organizations or societies to deal with adversity. Finally, actions refer to those actions needed to become more resilient in the face of adversity. A similar description of resilience dimensions is given by Luthar et al. (2000) as a two-dimensional concept concerning the visibility of adversity and the positive effects of the change of adversity. In addition, researchers emphasize the interconnected processes – between the person and the environment and between risk and protective factors – as critical underpinnings for the creation of resilience (Masten, 2001; Padron, Waxman, and Huang, 1999). A triadic model of resilience is defined by Garmezy (1991) as Garmezy's Triadic Model of Resilience, which is seen as a generally accepted ecological framework for understanding the resilience cycle. Proposed by McManus (2007), resilience related to organizations identified two dimensions, namely planning and adaptive capacity. The dimension of planning within OR consists of the following five indicators: planning strategies, participation in exercises, proactive posture, capability and capacity of external resources, and recovery priorities. When control

variables are concerned, firm age and firm size have shown a significant impact on organizational attributes (Ghafoorifard, 2014; Kipesha, 2013).

The review of literature revealed that OR has a significant association with the antecedents such as resilient leadership, resilient organizational culture, adaptation capacity and organizational capacity and managerial capabilities.

3. Methodology

A thorough review of more than 50 papers published in high-end publications in the literature of organizational studies paved the way for the identification of 26 variables and four main groups relating to OR and finally, we observed that our identifications coincided with the constructs of the predictor model introduced by Morales et al. (2019). They had organized the constructs under two levels, namely, the organizational level and the individual level. However, our focus during this study was only on the constructs at the organizational level. Accordingly, we could identify four main and more context-specific sources of OR. They are resilient leadership, resilient organizational culture, adaptation capacity and organizational capacity, and managerial capabilities. Thereafter, the industrial applicability of the selected four constructs was further confirmed through three interview discussions conducted with three experts in the financial services industry. Apart from these four variables, two control variables have been newly introduced as their unchanging state allows the relationships between the other variables to be tested in order to be better realized. This study adopted review and syntheses of literature with a content analysis procedure to identify the key constructs,

variables and their relationships, which gave rise to the conceptual framework described in the following section.

3.1 Proposed Conceptual Framework

In Figure 2, the proposed conceptual framework (theoretical model) to represent the relationships among the selected antecedents or sources and the central concept OR at the firm level is shown.

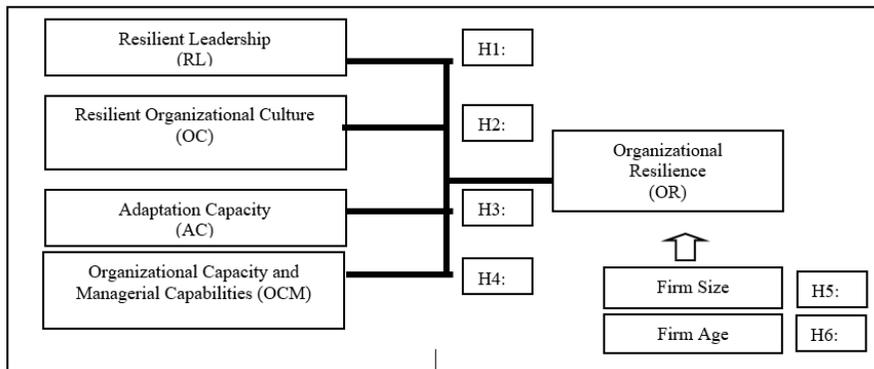


Figure 2: The conceptual framework (primary model) proposed for organizational resilience and its antecedents at organizational level

Source: Developed by Authors based on literature review

3.2 Measurement of the Variables (Operationalization of constructs)

Hypotheses of the study (Hypothesis development)

Based on the conceptual framework developed in Figure 2 above, the following hypotheses could be derived:

H1: RL is a significant predictor of OR.

H2: OC is a significant predictor of OR.

H3: AC is a significant predictor of OR.

H4: OCM is a significant predictor of OR.

In addition to these main hypotheses, the following sub-hypotheses could also be shown with regard to the controlled variables as they play a pivotal role in any organization-based study.

H5: Firm size has a significant impact on OR.

H6: Firm age has a significant impact on OR.

The constructs used in this study are operationalized as shown in Table 1.

Table1: Operationalization of constructs

Construct	Dimensions	Indicators	Sources
Resilient Leadership	Vision sharing	Management's enthusiasm towards the company philosophy and goal setting	Morales et al.(2019)
		Personnel's expectation about management's effectiveness during a crisis	
	Leadership	Management leading through example	Morales et al.(2019)
		Leaders' precision and clarity when communicating	
	Leaders' behavior as teachers and coaches		
		Leaders are back and ready to work and go beyond the interests of the leader, for the good of the team and the organization.	
		Leaders think and behave creatively to be confident of the success of the company and demonstrate their devotion to the philosophy of the company	
Management of change		Employees are assured that the goals set for recovery will be sufficient	Morales et al.(2019)
		Leaders speak frankly about crisis situations and all kinds of disturbances	
		The organization has the potential to rapidly adjust normal business practices to adapt to a crisis or disruptive event	
		Leaders are mindful of the strengths of individuals and actively encourage their growth and use of their personal	

		capabilities	
Resilient Organization al Culture	Perspective network	Management establishes long-term relationships with vendors and loyally handles clients	Morales et al.(2019)
		In the case of a disaster, the corporation will receive assistance from other areas of the business, money and plans	
		The business is developing partnerships with other organizations to improve and grow the industry	
		Personnel are aware of the need to improve the manufacturing sector and to build barriers to avoid new entrances	
		Staff will take time out of their working day to learn how to respond to a crisis	
	Compromise and involvement	Resources are continually devoted to the training and retraining of workers in order to operate the technical infrastructure effectively in the event of an emergency	Morales et al.(2019)
		The company has a sense of cohesion that has deeply ingrained feelings of confidence and well-being	
		Employees of the business are allowed to switch between various departments or seek new roles to gain experience	
Adaptation Capacity		The company is diligent in improving its plans	Morales et al.(2019)
		The company shall identify and review methods for the management of disturbances	
		The company has ample preparation to draw up maps and roadmaps to handle risks	
		The agency has a range of policies with a diverse perspective on coping with emergencies	
		The company has the potential to restructure itself in the event of a crisis	
		The company is capable of dealing with	

		<p>complicated problems with the intention of taking advantage of them</p> <p>The company handles danger adequately after the disturbance and ensures a smooth operation</p> <p>Within the company, you collaborate with all the employees, irrespective of departmental boundaries, to get the job done</p> <p>In the event of issues, decision-makers have sufficient and timely details</p> <p>Many of the areas are very autonomous and capable of making decisions.</p>	
Organizational Capacity and Managerial Capabilities	Functions and responsibilities	<p>Leaders are aware of financial risks and possible benefits resulting from insurance and other forms of financial assistance in the event of a crisis</p> <p>Someone pays attention every day to what happens in the world where the organization is located</p> <p>Workers with authority shall always be available in the event of disturbance</p> <p>Company-wide staff is familiar with projects outside their own jobs</p>	Morales et al.(2019)
	Innovation and creativity	<p>Leaders build a philosophy and corporate culture that is passionate about challenges, pursuing resilience, versatility in adaptation, creativity and strategy</p> <p>The culture of the company is optimistic, creative, emotional and smart leaders</p> <p>The company helps its staff and encourages creativity and risk-taking</p>	Morales et al.(2019)
	Robustness	<p>Standing straight and preserving its position</p> <p>Success in generating diverse solutions</p> <p>Showing resistance to the end in order not to lose</p> <p>Not giving up and continuing its path</p>	Kanturand Say (2015)
	Organizational Resilience		

	Agility	Rapidly taking action	
		Developing alternatives in order to benefit from negative circumstances	
		Agility in taking required action when needed	
	Integrity	A place where all the employees are engaged to do what is required from them	
		Success in acting as a whole with all of its employees	
Firm size		Total assets	Kipesha (2013), Ghafoorifard (2014)
Firm age		Number of years since commencement	Kipesha (2013)

Source: Developed by Authors based on literature review

4. Conclusions and Implications

One of the main objectives of the study was to formulate a framework that shows the concept of OR and its key predictors in the context of the financial services industry and that task has already been accomplished. The second main objective was to provide the future researchers with a model in their future research studies and we believe that this will be available to them for their applications, once this paper is published. Therefore, we could conclude that through the compilation of this paper, we were able to bridge a gap in the discipline of OR with a special reference to the financial services sector including banks, finance companies, leasing companies and so on.

Our proposed framework model has theoretical and practical implications for both researchers and practitioners. For researchers, this model suggests the types of the variables that need to be included in future empirical tests of the relationship between antecedents and

OR, especially in the financial services industry. Further, the model extends understanding of the controlling effect of firm size and firm age on the main outcome variable. Practitioners, on the other hand, could use the proposed model to refine their thinking pattern and mindset about the concept of OR and its constituents. The main contribution of this paper is to encourage managers to take a due consideration on the relationship between underlying key factors and OR.

When it comes to the limitations of this study, the conceptual framework proposed by this paper has not been proved yet by collecting empirical data. In order to prove the model, it is needed to perform some empirical studies in the future. Based on our recommended model and earlier research studies, research hypotheses are established. Therefore, the next step of this study is to design a questionnaire based on the operationalization table presented, which will be applied for pilot study data collection in Sri Lankan financial services sector. Therefore, the researchers as well as practitioners will have more empirical evidence associated to the fundamental theory behind the OR, thereby improving understanding of the relationships among key concepts. The above model could be taken as a preliminary idea, especially since the impact of each construct needs to be determined, and the overall follow-up also needs to be adjusted, refined and improved in work by future researchers.

Acknowledgement

We would like to express our gratitude to the resource persons who provided their valuable insights and the authors/researchers who provided their support by sending the full text versions of their research papers, in the circumstances where the full texts are not available in the database.

References

Central Bank of Sri Lanka. (2013). *About the Financial System*. Retrieved from https://www.cbsl.gov.lk/en/About_the_Financial_System

Central Bank of Sri Lanka. (2019). *Annual Report 2019*. Retrieved from <https://www.cbsl.gov.lk/en/publications/economic-and-financial-reports/annual-reports/annual-report-2019>

Denyer, D. (2017). Organizational Resilience: A summary of academic evidence, business insights and new thinking. *BSI and Cranfield School of Management*, 8-25. Retrieved July 7, 2020 from <https://www.cranfield.ac.uk/som/case-studies/organizational-resilience-a-summary-of-academic-evidence-business-insights-and-new-thinking>.

Duchek, S. (2020). Organizational resilience: a capability-based conceptualization. *Business Research*, 1-32. <https://doi.org/10.1007/s40485-019-0085-7>

Garmezy, N. (1991). Resiliency and vulnerability to adverse developmental outcomes associated with poverty. *American Behavioural Scientist*, 34, 416-430. <https://doi.org/10.1177/0002764291034004003>.

Ghafoorifard, Mahdi. (2014). Assessing the Relationship between Firm Size, Age and Financial Performance in Listed Companies on Tehran Stock Exchange. 2. 2345-3974.

Irish Management Institute. (2020). Building a resilient organization. Retrieved July 5, 2020 From <https://www.imi.ie/wp-content/uploads/2020/04/IMI-Building-a-Resilient-Organisation-2020.pdf>.

Kantur, D, and Say, A . (2015). Measuring organizational resilience: a scale development. *Journal of Business Economics and Finance*, 456-472. DOI: 10.17261/Pressacademia.2015313066

Kantur, D., & İşeri-Say, A., (2012). Organizational resilience: A conceptual integrative framework. *Journal of Management and Organization*. 18. 762-773. 10.5172/jmo.2012.18.6.762.

Kipasha, Erasmus. (2013). Impact of Size and Age on Firm Performance: Evidences from Microfinance Institutions in Tanzania. *Research Journal of Finance and Accounting*. 4: 105-116.

Koronis, E. and Ponis, S. (2018). Better than before: the resilient organization in crisis mode. *Journal of Business Strategy*. <https://doi.org/10.111108/JBS-10-2016-0124>

Kowsar Z, Nedaei A, and Seyednaghavi M. (2019) Effective Factors and Consequences of Organizational Resilience. *IQBQ*; 23 (4) :1-22
URL: <http://journals.modares.ac.ir/article-19-25631-en.html>

Luthar, S. S. and Cicchetti, D. and Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, 71(3), 543-562. <https://doi.org/10.1111/1467-8624.00164>.

Madni, A., & Jackson, S. (2009). Towards a Conceptual Framework for Resilience Engineering. *Systems Journal, IEEE*. 3. 181 - 191. 10.1109/JSYST.2009.2017397.

Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, 56, 227-238. <https://doi.org/10.1037/0003-066x.56.3.227>.

Morales, S. N., Martínez, L. R., Gómez, J. A. H., López, R. R., & Torres-Argüelles, V. (2019). Predictors of organizational resilience by factorial analysis. *International Journal of Engineering Business Management*. <https://doi.org/10.1177/1847979019837046>

McManus, S. (2007). *Organizational resilience in New Zealand* (Doctoral thesis, University of Canterbury, Christchurch, NZ). <http://www.resorgs.org.nz/Publications>.

Padron, Y. N., Waxman, H. C., & Huang, S. L. (1999). Classroom behavior and learning environment differences between resilient and non-resilient elementary school students. *Journal of Education for Student Placed At Risk*, 4(1), 63-81. <https://doi.org/10.1207/s15327671espr04015>.

Pal, R., Torstensson, H., & Mattila, H. (2013). Antecedents of organizational resilience in economic crises—An empirical study of Swedish textile and clothing SMEs. *International Journal of Production Economics*, 147. 10.1016/j.ijpe.2013.02.031.

Patterson, J. L., & Kelleher, P. (2005). *Resilient school leaders: Strategies for turning adversity into achievement*. ASCD.

Rak, C., & Patterson, L. (1996). Promoting resilience in at-risk children. *Journal of Counseling and Development*, 74(4), 368-373. Available: <http://www.valdosta.peachnet.edu/~whuitt/psy702/files/resbuild.html>

Sanchis, R., Canetta, L., & Poler, R. (2020). A Conceptual Reference Framework for Enterprise Resilience Enhancement. *Sustainability*, 12(4),1464.<https://doi.org/10.3390/su12041464>.