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Fostering organisational resilience in print and media industry in Sri Lanka: The role of dynamic capability and strategic orientation

Nalinda Nuwan¹, Mohd Shukri² and Ali Khatibi²

¹Office on Missing Persons,
No. 40, Buthgamuwa Road, Rajagiriya, Sri Lanka

nalinda.n@bms.ac.lk

²Graduate School of Management, Management & Science University,
University Drive, Off Persiaran Olahraga, Section 13, 40100 Shah Alam, Malaysia

Abstract

Organisational resilience has gained significant prominence as a result of unprecedented shocks in the corporate marketplace, where print and media enterprises are particularly vulnerable. Therefore, print and media enterprises are required to develop organisational resilience strategically, focusing on fostering business resilience. In this context, the theory of dynamic capability offers a framework for print and media enterprise leaders to navigate capabilities toward potential opportunities. This research provides an extensive framework to examine the relationship between organisational resilience and dynamic capability. Primary data were gathered from 300 print and media enterprise leaders in Sri Lanka using a structured questionnaire. The data was analysed using SPSS and AMOS. The findings indicate that a well-combined set of dynamic capabilities, centered around seizing new opportunities, has a significant effect on improving company resilience in the PME sector. Moreover, strategic orientation plays a significant role as a mediator between dynamic capability and organisational resilience. A key finding of this study further reveals that company characteristics and market conditions also have a considerable effect on fostering organisational resilience. The study suggests that older print and media enterprises must adopt a more strategic orientation and reforms must be implemented to enhance company resilience in the print and media industry in Sri Lanka.

Keywords: organisational resilience, dynamic capability, strategic orientation, print and media enterprises, business leaders

1. Introduction

Print media is an incredible instrument that works best when combined with other advertising and marketing channels. The success of the advertising sector is strongly dependent on the formulation of strategies and the way they are navigated. Although there has been steady expansion in recent decades, the industry as a whole is facing unprecedented challenges due to alarming technological advancements and market uncertainty. However, organisational resilience (OR) is required to establish a strategic road map in order to effectively manage the obstacles it faces, grasp opportunities for growth and maintain a competitive advantage in the ever-changing advertising landscape. Therefore, the print and media industry needs OR to overcome the challenges it faces and thrive in a

continually changing market. Organisational resilience is a multidisciplinary concept with different meanings and aspects depending on context (Duchek and Raetze, 2020; Saad, et al., 2021). Based on prior studies, OR is a capacity that allows businesses to foresee and survive changes by modifying their business processes, making it essential to their long-term viability and success (Granig and Hilgarter, 2020; Kantur and Iseri-Say, 2012). According to Annarelli and Nonino (2016), resilience is an organisational characteristic that is connected to strategic awareness and enables businesses to deal with shocks proactively. Furthermore, OR can assist companies in dealing with disruptive occurrences and expediting recovery (Annarelli and Nonino, 2016). According to Duchek, Raetze and Scheuch (2020), previous research generally examined OR in terms of an organisation's ability to restore itself to its original

condition. However, it is increasingly acknowledged as a dynamic process that requires enterprises to actively engage in controlling disruptions (Duchek, Raetze and Scheuch (2020); Burnard and Bhamra, 2019). Consequently, Linnenlucke, et al. (2011) opines that resilience has two dimensions: the first relates to an organisation's ability to cope with disruptions, while the second refers to its ability to recover and return to its normal condition. Conversely, the idea of resilience is seldom restricted to replication and recuperation, as scholars stress the role of preparation and planning to foster OR (Zighan and Ruel, 2021; Lisdiono, et al., 2022; Iborra, Safón and Dolz, 2020; Sahebjamnia, Torabi and Mansouri, 2015). Considering the preceding perspectives, OR, on the other hand, is distinct from adaptation, agility, flexibility, improvisation, recovery, redundancy and robustness. Resilience is the organisation's reaction to damage, emphasizing the ability to recover and develop in a context of uncertainty, discontinuity and emergency (Xiao and Cao, 2017). According to Xiao and Cao (2017), OR has three specific capabilities:

- 1) Resilience focuses on survival, adaptation, bounce-back and development in the face of adversity.
- 2) Resilience is a capability that develops in the face of a discontinuous, evolving internal and external environment.
- 3) OR is a multi-level concept that includes organisational resources, routines and processes.

In this article, OR is described as an organisation's ability to return to its previous state or to learn a new skill in the face of adversity.

In the light of these concerns, OR is a companies ability to anticipate potentially unfavorable events and resist by adapting possible counter measures and recovering by restoring the organisation or a situation where it bounces back to normalcy (Burnard and Bhamra, 2019; Umoh, Amah and Wokocha, 2013). The ability of companies to absorb shock by developing a resistance mechanism in the face of various disruptions that arise in the corporate context may be a measure of how prepared the organisation is for unanticipated occurrences (Umoh, Amah and Wokocha, 2013; Yuan, et al., 2022). Scholars have long suggested OR should be explored according to the context on which resources and capacity depend (Lengnick-Hall and Beck, 2011;). Nonetheless, OR skills in print and media enterprises (PMEs) have been largely ignored and even fewer studies have been conducted to better understand how strategic decisions contribute to OR in an uncertain economic environment. The environment in which PMEs presently operate is undergoing rapid change and upheaval, which will have an influence on how

these businesses expand and compete. Consequently, PMEs confront significant problems in maintaining competitiveness in volatile market condition due to limited human capital, minimal strategies, organisational and financial resources and skills. On the other hand, PMEs are more adaptable to shifting circumstances than large enterprises (Detarsio, North, and Ormaetxea, 2013; Corvello, et al., 2022). Leaders are overburdened by day-to-day operations and are under pressure to delegate and integrate new avenues (Van Bruysteg, et al., 2008; Fadahunsi, 2022). Limited access to information and markets, insufficient access to skills and technology, insufficient access to finance and poor strategic management direction are key obstacles. In order to meet this issue, some scholars advise that businesses acquire dynamic capability (DC) to renew, reconfigure and adjust existing firm-specific resources in response to the rapidly changing environment (Teece, Pisano and Shuen, 1997). Organisational resilience is a critical component of crisis management and DC also goes hand in hand. The study on the concept and assessment of OR, on the other hand, is still in its early stages. To present, research on OR has given contradicting results, making it impossible to provide clear guidance for business leaders to apply proper strategies. The role of leadership is critical in actively facilitating resilience to manage crises and concentrate on recovery (James, Wooten and Dushek, 2011). However, very limited studies have been conducted on how leaders create strategic resilience (SR) in the print and media industry. Moreover, organisational framework for navigating strategies towards company resilience is also somewhat unclear (Andersson, et al., 2019). In light of the above concern, PME leaders have a bigger role in navigating strategies towards OR. Therefore, it is necessarily worthwhile to study the relationship between DC, strategic orientation (SO) and OR.

2. Theory

According to Annarelli and Nonino (2016), OR may primarily be divided into dynamic resilience and static resilience. Static resilience is about strategic efforts for resilience based on managing internal and external resources, whereas dynamic resilience focuses on DC that enables businesses to manage unanticipated challenges and hazards (Annarelli and Nonino, 2016). The concepts of proactive resilience and reactive resilience coexist with static resilience, dynamic resilience, according to Hall, et al. (2018). According to Somers (2009), proactive resilience refers to purposeful actions that increase the ability to deal with future risks, whereas reactive resilience refers to the organisation's ability to bounce back to its regular condition without suffering significant harm or loss. Pre-disaster environments call for proactive resilience,

whereas post-disaster environments call for reactive resilience (Wildavsky, 1988). According to Somers (2009), proactive and reactive views are frequently used to define and describe OR. These perspectives are more relevant from a practical standpoint and are frequently employed in various research (e.g. Bode and Macdonald, 2016; Lengnick-Hall and Beck, 2011; Linnenluecke, et al., 2012; McManus, et al., 2008; Sawalha, 2015; Fadahunsi, 2022; Seville et al., 2008). In addition, Linnenluecke, Griffiths and Winn (2012) argued that it is critical to include both viewpoints on OR in a single research on OR since it can provide light on how the two forms of OR interact to one another in various fields or circumstances. In this study, proactive OR and reactive OR are the two ways that OR is characterized.

Dynamic capability and OR are interconnected concepts that have their roots in several theories and have gained significance throughout the last decades. The two most well-known theories in strategic and operational management are the subject of this study. An explanation of how businesses adjust to quickly changing setting is given by the DC and OR viewpoints (Siguaw, Simpson and Enz, 2006). According to Pavlou and El Sawy (2011), the boundary conditions of the constructs have come under greater examination from strategy and management researchers. This is especially true when it comes to print and media context as the leaders of SMEs have to navigate the right balance of strategies in accordance with company characteristic and market condition in particular when the market is highly uncertain. Similarly, to how the alignment of DC and OR is critical for survival in turbulent environments (as the level of turbulence increases, more of these capabilities are required), the planning and strategy associated with such implementation must be considered.

When opportunities are recognized, SME leaders need to gain advantage by reconfiguring the resources in the company when the market and/or technology inevitably undergo another transformation (Teece, Pisano and Shuen, 1997). This is the foundation of the DC, which goes hand in hand with SME sector resilience. Numerous researches conducted in western and European Nations have revealed significant correlations between DC and adaptability as a metric for OR. Itkien, et al. (2015), focused their research on Slovenian service companies in order to study the impact of DCs on service innovation. They used a comparative analysis study design to acquire data from existing literature (secondary data). They found that DCs are critical for service-oriented organisations because they allow companies to detect market opportunities and customer requirements to foster OR, act on those possibilities by arranging existing

resources and gain a competitive market advantage in the long run. Furthermore, Morales, et al. (2019) stated that OR is heavily reliant on leaders' ability and capability to develop effective responses and achieve satisfactory recovery to crises caused by disruptive events and DC co-exists with the perspectives of proactive resilience and reactive resilience. Manfield and Newey (2018) define resilience as a portfolio of skills that includes diverse capability responses to various threats, disorder and direction (bounce-back or bounce-forward). Various capacities created by leaders to promote OR have been studied in various studies. Organisational resilience is derived from organisational skills (Douglas, 2021) and is linked to managerial procedures of efficiently managing and distributing primary resources through DC (Weaven, et al., 2021; Barghersad and Zobel, 2021). Furthermore, recognizing valued resources and competencies is critical for an organisation to work towards and respond to disruptions proactively (Sullivan-Taylor and Branicki, 2011; Jia, et al., 2020). Additionally, when the leaders of organisations navigate DC, well-established activities across departments and management competence can aid in mitigating disruptive occurrences (Paul, Parthasarathy and Gupta, 2017). It is important to highlight that large enterprises frequently have more capacity to respond to and recover from disruptive events since they have access to more resources (Barghersad and Zobel, 2021). However, SMEs are often less efficient in terms of OR than large enterprises due to possible resource and capacity limits (Sullivan-Taylor and Branicki, 2011). Therefore, developing a DC is especially vital for SME sector companies in emerging nations, given their tumultuous and unusual settings. Despite increased interest in the dynamic capacity viewpoint, most studies remain theoretical and conceptual and additional empirical research is needed to explore and validate this approach (Levin, 2006). As a result, conversations about how organisations generate DC remain under-developed. Therefore, SO as a mediator may give a source that helps organisations establish DC in rapidly changing contexts to foster long-term resilience.

Strategic orientation refers to the processes, practices, principles and decision-making styles that guide enterprises' activities, particularly in the context of the external environment and corporate development, to significantly influence competitive advantage and OR (Jantunen, et al., 2008; Crovini, Santoro and Ossola, 2021). Companies must actively monitor their rivals in a highly competitive market to grasp their relative position in the market in comparison to that of rivals (Han, Kim and Srivas, 1998; Al-Kwafi, Farha and Zaraket, 2020). In this light, the SO is a key factor that plays a significant role between DC and OR in exceptional performance in developing econo-

mies. Strategic orientation is concerned with how businesses should connect with their external surroundings, such as clients, rivals and technology (Day, 1994; Gatignon and Xuereb, 1997; Lin and Kunnathur, 2019). Once opportunities are identified, it is crucial to assess how well the external environment and strategic choices align from an external perspective. Dynamic capability, on the other hand, provides a deeper understanding on how to combine and reenergize corporate resources and capabilities in a new manner. Organisational resilience is defined by Annarelli and Nonino (2016) and Annarelli, Battistella and Nonino,(2020) as the company’s ability to survive disruptions and unanticipated changes based on its strategic awareness and cooperation between internal and external capabilities. Despite the variety of resilience measures, adaptability and agility are recognized as determinants of SO and used in this study as the indicators of OR. In order to develop DCs, companies should acquire, allocate and use resources according to their strategic direction. Therefore, combining these two techniques offer fresh perspectives on how SO influences internal processes like resource reconfiguration and modification. However, existing literature does not address the significance of SO and DC in establishing OR amid economic uncertainty when PMEs are considered, indicating a large study vacuum. In order to address these research gaps, this article examines the effects of DC on SOs in the context of PMEs of Sri Lanka by focusing particularly on company characters and market situation to foster OR.

3. Methods

A framework for this study was set up and offered as the overall research plan in order to achieve the primary goal of our investigation. Accordingly, the overall research design process consisted of four steps, including the identification of primary data sources, data collection and data analysis. Sri Lanka lacks an established and up-to-date PME list in terms of the identification of the right PMs for this research. The

Ministry of Industries and the Chamber of Commerce, however, have different lists of PMEs. Consequently, companies that fall under PME were carefully selected and entered into one database by removing some multiple entries and this final list ended up with 1 438 PMEs for the study as the target audience. In the literature, the response rate was 35 % and 857 questionnaires were distributed among PME leaders to select 300 responses. Literature further highlighted that common method variance (CMV) is one of the key issues that need to be managed in terms of achieving high accuracy of raw data. In terms of avoiding CMV problems, however, one tactic is to gather data from several sources within the same organisation (Wall and Wood, 2005). More precisely, this involves choosing multiple key informants who respond to questions that better suit their areas of expertise or about which they are more knowledgeable (Huselid and Becker, 2000). To increase our understanding of the causes of OR, this study therefore proposes a multiple-key informant method for data collection. Accordingly, the owner of each PME unit was contacted by phone and explained the primary objective of the survey. In this process, in addition to the owner manager of PME unit, one of the leaders from this category was asked to be nominated, such as the CEO, Managing Director, Director, Finance Manager and Accountant. Based on the sample size calculation, a simple random sampling process was used to select 150 PMEs and 300 PME leaders from a newly created list. Accordingly, the illustration in Figure 1 describes the whole identifying procedure.

The primary data was gathered through an online survey approach with a 43 items structured questionnaire that was circulated to PME leaders via Google Forms. Items for every construct were also adapted from previous research. The conceptual framework in Figure 2, which includes three exogenous factors, two mediating variables and one dependent variable, was developed in accordance with theory and literature to achieve the study’s ultimate purpose. These mediating variables are favored by OR, which focuses

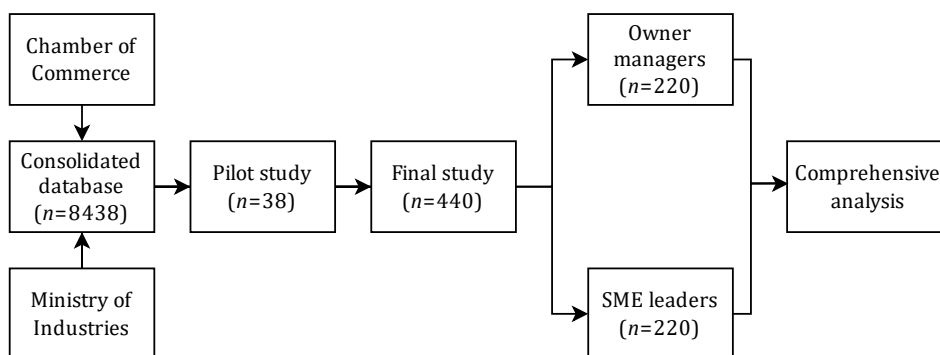


Figure 1: Summary of identification procedure

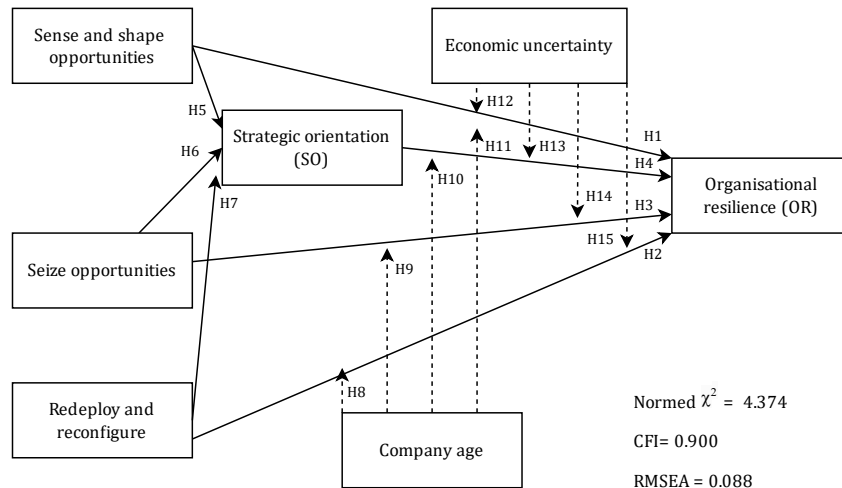


Figure 2: Conceptual framework

on enhancing firms' capacity to identify and reconfigure the need for responding to changing environmental situations. Organisational resilience is a significant factor in helping firms deal with SO of the firm and that goes hand in hand with characteristics of the firm and market situation (Lengnick-Hall and Beck, 2011; Teece, 2020). The following conceptual framework was constructed in line with the theory and the literature including three independent variables, one mediating variable and two moderating variables to achieve the overall objective of the study.

3.1 Hypotheses

In line with the objectives and above conceptual frame (Figure 2), the following hypotheses were formulated.

H1: Sensing and shaping opportunities has significant positive effect on OR.

H2: Seizing opportunities has significant positive effect on OR.

H3: Redeploying and reconfigure has significant positive effect on OR.

H4: Strategic orientation has significant positive effect on OR.

H5: Strategic orientation mediates the relationship between sensing and shaping opportunities and OR.

H6: Strategic orientation mediates the relationship between seize opportunities and OR.

H7: Strategic orientation mediates the relationship between reconfiguring opportunities and OR.

H8: Company age moderates the relationship between sensing and shaping opportunities and OR.

H9: Company age moderates the relationship between seizing opportunities and OR.

H10: Company age moderates the relationship between SO and OR.

H11: Company age moderates the relationship between redeploying and reconfiguring opportunities and OR.

H12: Economic uncertainty moderates the relationship between sensing and shaping opportunities and OR.

H13: Economic uncertainty moderates the relationship between SO and OR.

H14: Economic uncertainty moderates the relationship between seizing opportunities and OR.

H15: Economic uncertainty moderates the relationship between redeploying and reconfiguring opportunities and OR.

3.2 Data analysis

Data analysis process in this study was performed in three steps: In step (1), a preliminary analysis of the scale was performed by exploratory factor analysis (EFA) using maximum likelihood and varimax rotation through SPSS. In step (2), further validating the factor structure, which was the output of EFA sent to CFA conducted through AMOS. Step (3) was performed in order to test the hypotheses by assessing the structural model related to OR using AMOS. Accordingly, the results of EFA analysis are provided in Table 1.

Table 1: Exploratory factor analysis results

Kaiser-Meyer-Olkin measure of sampling adequacy.		0.843
Bartlett's test of sphericity	Approx. chi-square	3607.237
	Degrees of freedom	120
	P	0.000

4. Results

Based on the results of EFA analysis presented in Table 1, the Kaiser-Meyer-Olkin value exceeded 0.50, indicating that the sampling adequacy criteria were met. The Bartlett's test of sphericity was statistically significant ($P < 0.05$), suggesting that the correlation matrix significantly differs from an identity matrix, as expected. Consequently, the components were classified into eight categories, as outlined in Appendix 1. The results of the EFA confirmed an eight-factor solution, with all items loading above 0.5 on their respective factors. This solution accounted for 75.4 % of the total variance. The EFA findings demonstrated a high level of factor validity. To further validate these findings, a CFA was conducted.

The initial CFA model, shown in Figure 3, provided a graphical representation of the factors. The CFA results confirmed that the factors exhibit a high degree of validity. Additionally, further tests were carried out to assess reliability, convergent validity and discriminant validity. Based on the results in Table 2, the fit indices demonstrate that the model shows a good fit, with strong validity and reliability. The fit statistics include χ^2 (chi-squared test), df (degrees of freedom), RMSEA (root mean square error of approximation), SRMR (standardized root mean square residual), GFI (goodness of fit) and CFI (comparative fit index). The accepted and recommended values based on the suggestions of Hu and Bentler (1999); Browne and Cudeck (1992); Cline, Huckaby and Zullo, (2023) are as follows: $\chi^2 / df < 5$, $RMSEA < 0.08$, $SRMR < 0.05$, $CFI > 0.90$. All items standardized factor loadings were above 0.60 and AVE (average variance extracted) was also above 0.50.

Therefore, it is a valid indication of good convergent validity. Another evidence of convergent validity is that the maximum shared variance was less than the respective average variance extracted for all dimensions. The Cronbach alpha and composite reliability for all constructs were above 0.70. Hence the results of the study can be established that the considered constructs have good reliability. However, testing

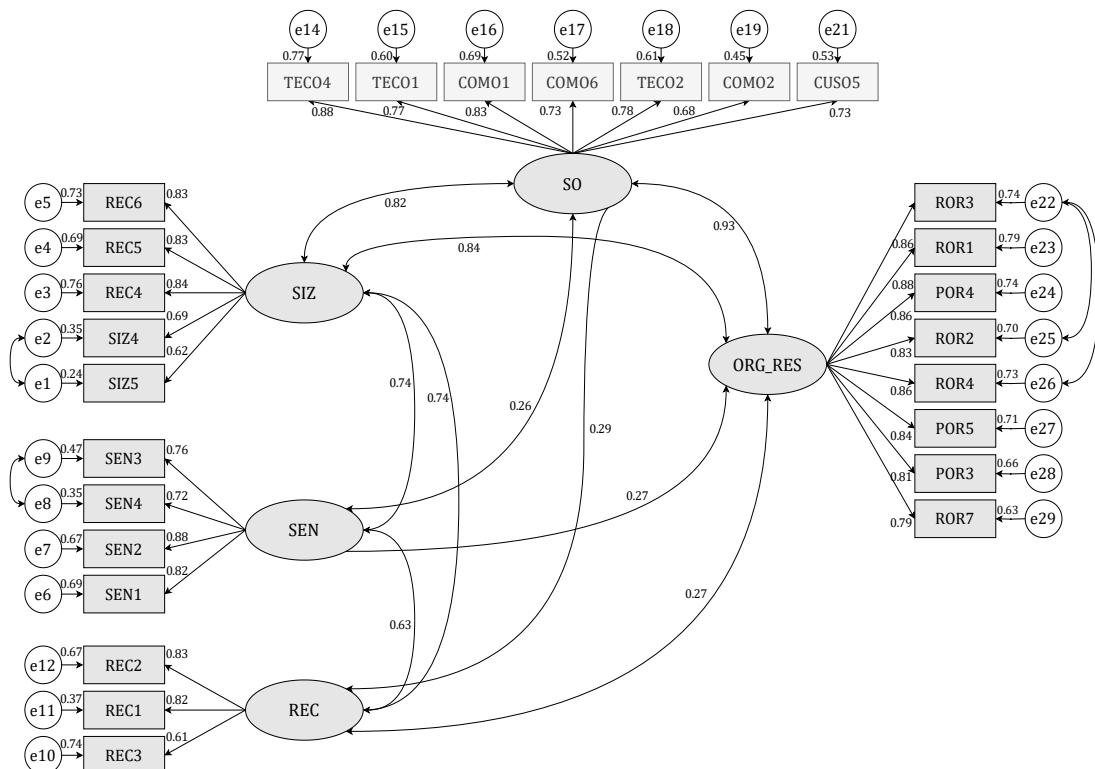


Figure 3: Confirmatory factor analysis model

Table 2: Reliability and convergent validity

Variables	Items	Standardized factor loadings	Cronbach alpha	Composite reliability	Average variance extracted	Maximum shared variance
Sense and shape opportunities	SEN5	0.534	0.88	0.719	0.632	0.168
	SEN4	0.715				
	SEN1	0.815				
	SEN3	0.757				
	SEN2	0.875				
Redeploy and reconfigure	REC3	0.609	0.792	0.708	0.524	0.128
	REC2	0.829				
	REC1	0.82				
Seize opportunities	SIZ4	0.688	0.879	0.729	0.693	0.356
	REC5	0.834				
	REC6	0.832				
	REC4	0.839				
	SIZ5	0.622				
	SEN6	0.687				
Strategic orientation	TECO4	0.877	0.918	0.796	0.615	0.356
	TECO1	0.773				
	COMO1	0.834				
	COMO6	0.725				
	TECO2	0.776				
	COMO2	0.682				
	CUSO5	0.725				
Organisational resilience	ROR3	0.863	0.953	0.893	0.683	0.168
	ROR1	0.888				
	POR4	0.861				
	ROR2	0.827				
	ROR4	0.858				
	POR5	0.843				
	POR3	0.814				
	ROR7	0.787				

Model fitness: $\chi^2 = 1342.822$; $df = 307$; $\chi^2 / df = 4.374$; RMSEA = 0.088; SRMR = 0.0447; GFI = 0.826; CFI = 0.904

Table 3: Discriminant validity

	Sense and shape opportunities	Redeploy and reconfigure	Seize opportunities	Strategic orientation	Organisational resilience
Sense and shape opportunities	0.795				
Redeploy and reconfigure	0.358	0.731			
Seize opportunities	0.340	0.296	0.832		
Strategic orientation	0.410	0.305	0.400	0.827	
Organisational resilience	0.284	0.146	0.597	0.319	0.785

discriminant validity was also required in this process. Based on the analysis of Table 3, the Fornell and Larcker (1981) criteria were used in terms of testing discriminant validity. The values in the diagonal were square root of AVE and other values were inter-variable correlation. The basic requirement was that the diagonal bold values should be higher than other values in its respective row and column,

which was met as can be seen in the Table 3. Thus, it can be confirmed that the considered variables have good discriminant validity as well. In addition to the Fornell and Larcker test, the HTMT ratio (hetero-trait-monotrait ratio of correlations) was also tested and all values were lower than 0.85. Accordingly, the model has met all criteria required for the reliability and validity of the model.

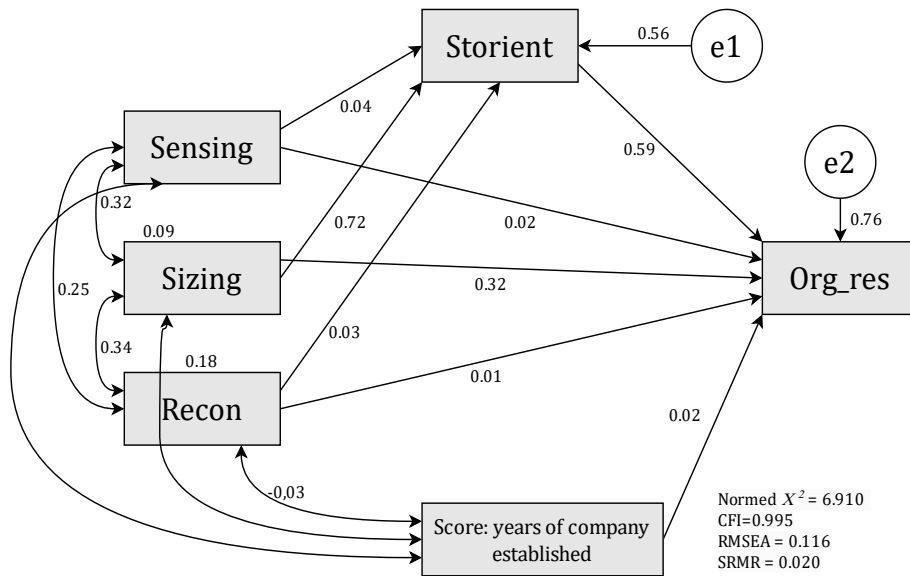


Figure 4: Proposed structural model

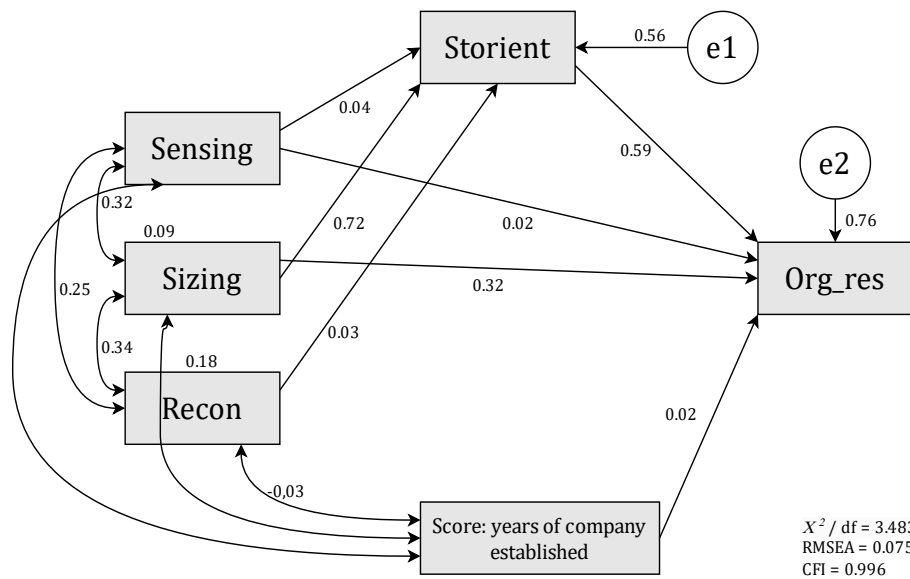


Figure 5: Tested structural model

Table 4: Hypothesis testing

H. No.	Paths	Estimate	S.E.	C.R.	P	Remarks
H1	Sensing and shaping → Organisational resilience	0.015	0.023	0.653	0.514	Not supported
H2	Seizing and shaping → Organisational resilience	0.362	0.041	8.925	0.000	Supported
H3	Redeploying and reconfiguring → Organisational resilience	0.027	0.031	0.868	0.386	Not supported
H4	Strategic orientation → Organisational resilience	0.578	0.034	16.794	0.001	Supported

Model fitness: $X^2 = 6.9$, $df = 2$, $X^2 / df = 3.48$, $RMSEA = 0.075$, $SRMR = 0.026$, $GFI = 0.995$, $CFI = 0.996$

S.E. = standardized estimate, C.R. = critical rate, P as used above

Table 5: Mediation analysis

H.No	Relationship	Direct effect	Indirect effect	Confidence interval		P	Conclusion
				Lower bond	Upper bond		
H5	Sense and shape opportunities → Strategic orientation → Organisational resilience	0.028	0.0456	-0.014	0.133	0.325	No mediation effect – not supported
H6	Seize opportunities → Strategic orientation → Organisational resilience	0.252	0.8207	0.581	0.985	0.000	Partial mediation – supported
H7	Redeploy and reconfigure → Strategic orientation → Organisational resilience	-0,030	0.0152	-0.047	0.086	0.258	No mediation effect – not supported

5. Analysis of the structural model

In order to study the relationship between DC, SO and OR the structural equation modeling was used by means of AMOS path analysis by imputing the factor score from CFA. The graphical representation of the structural model is represented in Figure 4. Results indicated a good fit for the model presented including RMR (root mean square residual) of 0.026, GFI of 0.970 and CFI of 0.995. However, the RMSEA failed to achieve the desired values as RMSEA should be less than 0.08 to achieve model fitness. Moreover, the χ^2 / df value was also above 5. Therefore, the proposed model was retested after removing the diagonal relationship between redeploying and reconfiguring and OR. Accordingly, the results indicate that by the new model, OR in print and media sector is 76 % explained by the factors of DC and SO, which means that the new model is successful and applicable for hypothesis testing. However, the model was further modified as per the scheme in Figure 5. Results related to the newly tested model (Figure 5)

indicated a good fit for the model presented including SRMR of 0.026, GFI of 0.995 and CFI of 0.996. Further, the generalizability of the model indicates a RMSEA of 0.075 and a χ^2 / df value of 3.48, which achieved the high level of model fitness. Accordingly, hypotheses were tested as shown in Table 4.

Hypotheses resulting based on path analysis (Table 4) showed that seizing opportunity is positively and significantly associated with OR ($\beta = 0.362, P < 0.05$) which means that seizing new opportunities in print and media industry leads to foster OR. Moreover, SO is also positively and significantly associated with OR ($\beta = 0.578, P < 0.05$). In other words, a good combination of customer orientation, competitor orientation and technology orientation enhances the resiliency of PMEs. However, other two constructs (sensing and shaping and redeploying and reconfiguring) are insignificantly associated with OR. Based on these results, alternative hypothesis was accepted for H2 and H4 and null hypothesis was accepted for H1 and H3.

Table 6: Moderation testing

H. No.	Moderating effect	Estimate	S.E.	C.R.	P	Remarks
H8	Interaction sensing and shaping * company age → OR	.025	.026	.967	.334	Not Supported
H9	Interaction seizing opportunities * company age → OR	.001	.022	1.97	.002	Supported
H10	Interaction SO * company age → OR	.059	.024	2.477	.013	Supported
H11	Interaction reconfiguring oppotunities * company age → OR	.003	.026	.117	.907	Not Supported
H12	Interaction sensing and shaping * economic uncertainty → OR	-.002	.025	-.087	.930	Not Supported
H13	Interaction SO * economic uncertainty → OR	.848	.038	22.202	.000	Supported
H14	Interaction seizing opportunities * economic uncertainty → OR	-.031	.025	-1.979	.000	Supported
H15	Interaction redeploying and reconfiguring * economic uncertainty → OR	0.030	0.026	1.150	0.250	Not supported

5.1 The role of strategic orientation between dynamic capabilities and organizational resilience

The mediation analysis was performed by treating three meta capabilities of dynamic capability as independent variables, OR as dependent variable and SO as mediator. The mediation analysis was based on the analysis of indirect effects based on the guideline by Baron and Kenny (1986) classical approach. Accordingly, mediation analysis was tested by using the direct and indirect effects based on bootstrap procedures (500 samples) and bias-corrected bootstrap confidence interval (95 %). The results are provided in the Table 5.

In accordance with the results shown in Table 5, it becomes visible that SO is partially mediating the relationship between seizing opportunity and OR as indirect effects are statistically significant ($\beta = 0.82, P < 0.05$), which means that PME resilience is possible to achieve by seizing opportunities at the right time through SO. Based on these results, alternative hypothesis was accepted only for H6 and null hypothesis was accepted for other hypotheses H5 and H7.

5.2 Analysis of company age and economic uncertainty as moderators

The moderation analysis was performed by treating sensing and shaping, seizing and redeploying and reconfiguring as independent variables, OR as dependent variable and company age and economic uncertainty as moderator variables. The results were calculated by creating interaction terms from standardized score of variables using SPSS.

In this study, two moderating effects (company age and economic uncertainty) were tested with DC and OR. According to Table 6, the analysis suggests that the company’s growth strengthens the positive relationship between size and opportunities (OR), indicating that as the company matures, it must seize new opportunities. Moreover, findings reveal that economic uncertainty strengthens the positive relationship between seizing

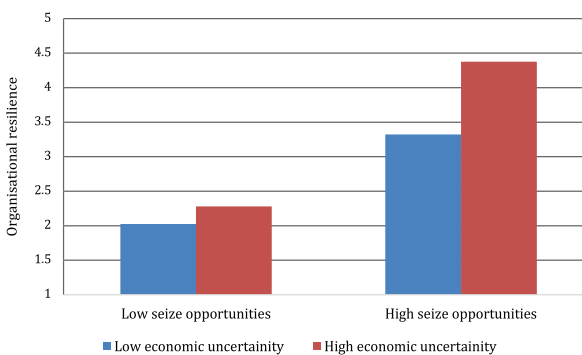


Figure 6: Company age moderates OR and seizing.

opportunities and OR. The graphical representation of both impacts is provided in Figures 6 and 7.

Analysis of Figures 6 and 7 highlights that the age of the company and economic uncertainty both strengthen the relationship between SO and OR. In other words, SO is mostly required for older PMEs. Accordingly, alternative hypotheses were accepted for H9, H10, H13 and H14, which indicate that there was statistical support for the moderating role of company age and economic uncertainty on seizing opportunity, SO and OR.

6. Discussion and implications

The results demonstrated show that a good combination of DCs (sensing and shaping, seizing and redeploying and reconfiguring capabilities) centered around seizing new opportunities have a significant effect on improving the degree of company resilience among PME sector organisations. Moreover, SO plays a significant role as a mediator in between DC and OR. The key finding of this study further revealed that company characteristics and market condition also have a considerable effect in terms of fostering OR. Similarly when it comes to literature, Kanten, et al. (2017), used a structural equation model to analyze data from 176 employees in order to investigate the impact of dynamic capability on organisational agility in the Turkish retail sector. The analysis’s conclusion showed that the merchants’ agility is favorably and strongly influenced by the dynamic capacity characteristics. Additionally, Kanten, et al. (2017) pointed out that in order to foster a companies agility in a quickly evolving business environment with a high degree of uncertainty, DC of detecting, seizing and transforming must be strategically wedded with the companies strategy. The impact of DC on service innovation was also examined by Žitkienė, Kazlauskienė and Deksnys (2015), who concentrated their study on Slovenian service companies. They concluded that DCs are crucial for service-oriented businesses because they

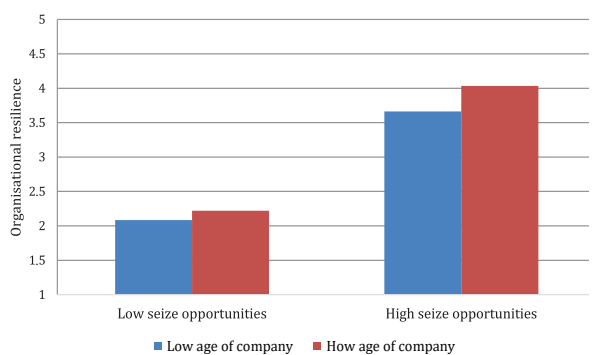


Figure 7: EU moderates OR and seizing.

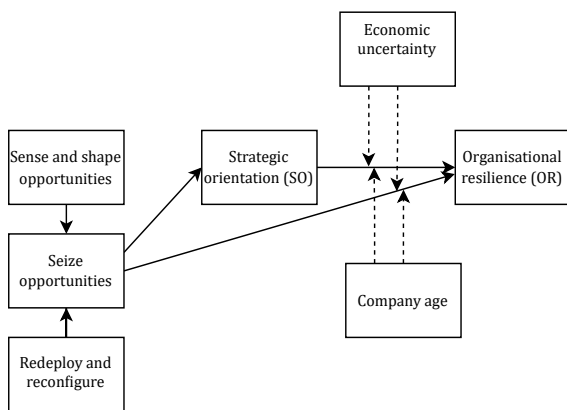


Figure 8: The identified model

enable them to recognize market opportunities and customer needs, seize those opportunities by allocating available resources and gain a competitive edge in the process of company resilience. However, these findings lack clarity on the overall integration of DCs with SO considering the market situation and company characteristics.

The findings of this study articulate several remarkable additions to OR, thus contributing to theory and practice. From the theoretical point of view, this study makes the following contributions. To begin with, this is among the pioneer studies that contribute to the scant research on exploring OR in the field of PMEs in Sri Lanka. In contrast to prior research exploring OR in large and longer-established companies such as multinational enterprises (e.g. Pereira, et al., 2018), the contribution of this research focuses on PME sector, which aims to exploit new ventures in order to survive in the market. This is particularly crucial for service and manufacturing PMEs since they have a high degree of restrictions, such as limited resources as well as capabilities and knowledge that make them fragile in competitive and uncertain markets (Ratten, Ferreira and Fernandes, 2016; Sadeghi and Biancone, 2018; Sukumar, et al., 2020), whereas SO needs to mediate them in order to foster OR in the long run.

Furthermore, findings elaborate that OR is not a stand-alone characteristic but seizes opportunity with the other set of two capabilities that help PMEs remain in the competitive market. Through the lens of DC, the study's findings contribute to existing research by exploring and evaluating three meta-capabilities, along with SO, which address company characteristics and market conditions. Accordingly, the framework shown in Figure 8 was identified and proposed for PME sector particularly in times of economic uncertainty.

Moreover, in relation to the practical implications, the findings of this study highlighted that PMEs need to leverage DC and SO at a more strategic level considering internal and external resources. When the companies are small-scale, inherent resources are also limited, the new market is highly volatile and unknown, SO can enable them to survive in the market (Hagen, Zucchella and Ghauri, 2019). The findings further highlighted that identifying and seizing long-term new business opportunities and seeking survival and growth in uncertain markets paves the way to foster resiliency. Given the ever-changing and dynamic business environment, organizations are continually presented with unanticipated disruptions and problems. As a result of limited resources and a limited capacity to plan for crisis occurrences, PMEs are more exposed to external shocks than larger organizations. As a result, PME leaders have to establish a high degree of OR skills to deal with any future shocks. In this case, being strategically oriented allows PMEs to start with a new concept, test it and monitor competitors activities to make quick decisions to seize untapped opportunities. In this regard, the findings of this study imply that such PME leaders have to extend their present activities while also implementing essential creative efforts in their business processes. As a result, leaders of PMEs can use the most recent techniques as a short-term solution or expand on their R&D operations, which contribute to long-term benefits. Moreover, the findings, on the other hand, emphasize that PME leaders may utilize new knowledge and opportunities to foster resilience.

7. Conclusion

This study empirically demonstrates that dynamic capability, including sensing and shaping, seizing and redeploying and reconfiguring capabilities, significantly enhance the resilience of print media enterprises. Strategic orientation particularly in times of economic uncertain plays a significant role in terms of fostering long term resilience however age of the company also needs to be well considered. The findings concluded that a well-balanced dynamic capability is essential and PME leaders, in particular, have to seize new opportunities in terms of specialized competencies and expertise related to the business process in order to achieve organisational resilience. The findings also revealed that strategic orientation has a crucial role in the relationship between dynamic capability and organisational resilience during highly uncertain economic situations, that older companies (PMEs) have to be more strategically oriented and that reforms must be made in order to build resilience in print media enterprises sector in

Sri Lanka. However, the reconfiguration process or sensing process cannot be done to achieve organisational resilience without the support of strategic orientation. Accordingly, the following three conclusions can be derived:

1) Seizing opportunity is the most important pillar of dynamic capability mobilization of resources to fulfill demands and opportunities, while the other two capacities are interconnected, creating absorptive capacity in the PME sector in times of economic uncertainty.

2) The involvement of strategic orientation is highly essential in PME sector in fostering organisational resilience.

3) Young companies are more prone to adapting strategic orientation quickly than older firms. Therefore, adaptation of strategic orientation is required for matured PMEs.

Findings elaborated that organisational resilience is not a stand-alone characteristic but seizing opportunity with the other set of two capabilities of dynamic capability that help PMEs remain in the competitive market. Hence, through the lens of dynamic capability, the findings of the study enrich the extant research by exploring and evaluating three meta capabilities along with strategic orientation that deal with firm characteristics and market conditions. Accordingly, a newly tested framework (Figure 8) identified and proposed for PME sector particularly in times of economic uncertainty.

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References

- Al-Kwafi, O.S., Farha, A.K.A. and Zaraket, W.S., 2020. Competitive dynamics between multinational companies and local rivals in emerging markets. *FIIB Business Review*, 9(3), pp. 189–204. <https://doi.org/10.1177/2319714520939673>.
- Andersson, T., Cäker, M., Tengblad, S. and Wickelgren, M., 2019. Building traits for organizational resilience through balancing organizational structures. *Scandinavian Journal of Management*, 35(1), pp. 36–45. <https://doi.org/10.1016/j.scaman.2019.01.001>.
- Annarelli, A. and Nonino, F., 2016. Strategic and operational management of organizational resilience: Current state of research and future directions. *Omega*, 62, pp. 1–18. <https://doi.org/10.1016/j.omega.2015.08.004>.
- Annarelli, A., Battistella, C. and Nonino, F., 2020. Competitive advantage implication of different product service system business models: Consequences of 'not-replicable' capabilities. *Journal of Cleaner Production*, 247: 119121. <https://doi.org/10.1016/j.jclepro.2019.119121>.
- Baghersad, M. and Zobel, C.W., 2021. Organizational resilience to disruption risks: Developing metrics and testing effectiveness of operational strategies. *Risk Analysis*, 42(3), pp. 561–579. <https://doi.org/10.1111/risa.13769>.

8. Recommendations

The findings of the study yield to the following recommendations:

1) Leaders of print media enterprises need to take efforts to strengthen their ability to anticipate probable changes in the highly unpredictable environment. Therefore, leaders have to plan and alter their internal processes to adapt to new changes in terms of building long term resilience.

2) Leaders of print media enterprises in Sri Lanka need to strategically seize new opportunities and capabilities to be more competitive in order to find and gain external information about their market, technology and industry. This will allow print media enterprises to adjust to economic uncertainty swiftly, in keeping with their age and to survive in the market in the long run.

3) Strategic orientation should be well adopted by PME leaders to successfully combine new externally sourced capabilities with current internal capabilities into creative combinations. This will result in mature company seizing untapped opportunities and improved business processes, as well as the company's resilience.

4) Leaders of print media enterprises should monitor potential changes in consumer demands and preferences in order to respond quickly and foster resilience by adjusting procedures to meet the needs of customers, competitors and technology. Therefore, leaders of print media enterprises have a very crucial role to play in seizing the right opportunities at the right time.

- Baron, R.M. and Kenny, D.A., 1986. The moderator–mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), pp.1173–1182. <https://doi.org/10.1037/0022-3514.51.6.1173>.
- Burnard, K.J. and Bhamra, R., 2019. Challenges for organisational resilience. *Continuity & Resilience Review*, 1(1), pp. 17–25. <https://doi.org/10.1108/CRR-01-2019-0008>.
- Corvello, V., Verteramo, S., Nocella, I. and Ammirato, S., 2022. Thrive during a crisis: The role of digital technologies in fostering antifragility in small and medium–sized enterprises. *Journal of Ambient Intelligence and Humanized Computing*, pp. 1–13. <https://doi.org/10.1007/s12652-022-03816-x>.
- Day, G.S., 1994. The capabilities of market–driven organizations. *Journal of Marketing*, 58(4), pp. 37–52. <https://doi.org/10.1177/002224299405800404>.
- Detarsio, R., North, K. and Ormaetxea, M., 2013. Sobrevivir y competir en tiempos de crisis: Casos de estrategias de PYMES argentinas. *Economía Industrial*, 388, pp. 145–154.
- Douglas, S., 2021. Building organizational resilience through human capital management strategy. *Development and Learning in Organizations*, 35(5), pp. 19–21. <https://doi.org/10.1108/dlo-08-2020-0180>.
- Duchek, S., Raetze, S. and Scheuch, I., 2020. The role of diversity in organizational resilience: A theoretical framework. *Business Research*, 13(2), pp. 387–423. <https://doi.org/10.1007/s40685-019-0084-8>.
- Fadahuni, O.A., 2022. Strategies for reducing employee turnover in small and medium enterprises. Doctoral dissertation, Walden University. <https://scholarworks.waldenu.edu/dissertations/13344>.
- Gatignon, H. and Xuereb, J.M., 1997. Strategic orientation of the firm and new product performance. *Journal of Marketing Research*, 34(1), pp. 77–90. <https://doi.org/10.1177/002224379703400107>.
- Granig, P. and Hilgarter, K., 2020. Organisational resilience: A qualitative study about how organisations handle trends and their effects on business models from experts' views. *International Journal of Innovation Science*, 12(5), pp. 525–544. <https://doi.org/10.1108/ijis-06-2020-0086>.
- Hagen, B., Zucchella, A. and Ghauri, P.N., 2019. From fragile to agile: Marketing as a key driver of entrepreneurial internationalization. *International Marketing Review*, 36(2), pp. 260–288. <https://doi.org/10.1108/IMR-01-2018-0023>.
- Han, J.K., Kim, N. and Srivastava, R.K., 1998. Market orientation and organizational performance: Is innovation a missing link? *Journal of Marketing*, 62(4), pp. 30–45.
- Iborra, M., Safón, V. and Dolz, C., 2020. What explains the resilience of SMEs? Ambidexterity capability and strategic consistency. *Long Range Planning*, 53(6), p. 101947. <https://doi.org/10.1016/j.lrp.2019.101947>.
- James, E.H., Wooten, L.P. and Dushek, K., 2011. Crisis management: Informing a new leadership research agenda. *Academy of Management Annals*, 5(1), pp. 455–493. <https://doi.org/10.1080/19416520.2011.589594>.
- Jia, X., Chowdhury, M., Prayag, G. and Chowdhury, M.M.H., 2020. The role of social capital on proactive and reactive resilience of organizations post–disaster. *International Journal of Disaster Risk Reduction*, 48, p. 101614. <https://doi.org/10.1016/j.ijdr.2020.101614>.
- Kanten, P., Kanten, S., Keceli, M. and Zaimoglu, Z., 2017. The antecedents of organizational agility: Organizational structure, dynamic capabilities and customer orientation. *PressAcademia Procedia*, 3(1), pp. 697–706.
- Kantur, D. and Iseri-Say, A., 2012. Organizational resilience: A conceptual integrative framework. *Journal of Management and Organization*, 18(6), pp. 762–773. <https://doi.org/10.1017/S1833367200000420>.
- Lavie, D., 2006. Capability reconfiguration: An analysis of incumbent responses to technological change. *Academy of Management Review*, 31(1), pp. 153–174.
- Lengnick-Hall, C.A., Beck, T.E. and Lengnick-Hall, M.L., 2011. Developing a capacity for organizational resilience through strategic human resource management. *Human Resource Management Review*, 21(3), pp. 243–255. <https://doi.org/10.1016/j.hrmr.2010.07.001>.
- Levin, K.A., 2006. Study design III: Cross–sectional studies. *Evidence–Based Dentistry*, 7(1), pp. 24–25. <https://doi.org/10.1038/sj.ebd.6400375>.
- Lin, C. and Kunnathur, A., 2019. Strategic orientations, developmental culture and big data capability. *Journal of Business Research*, 105, pp. 49–60. <https://doi.org/10.1016/j.jbusres.2019.08.036>.
- Linnenluecke, M.K., Griffiths, A. and Winn, M., 2011. Extreme weather events and the critical importance of anticipatory adaptation and organizational resilience in responding to impacts. *Business Strategy and the Environment*, 21(1), pp. 17–32. <https://doi.org/10.1002/bse.708>.
- Lisdiono, P., Said, J., Yusoff, H. and Hermawan, A.A., 2022. Examining leadership capabilities, risk management practices and organizational resilience: The case of state-owned enterprises in Indonesia. *Sustainability*, 14(10): 6268. <https://doi.org/10.3390/su14106268>.
- McManus, S., Seville, E., Vargo, J. and Brunson, D., 2008. Facilitated process for improving organizational resilience. *Natural Hazards Review*, 9(2), pp. 81–90. [https://doi.org/10.1061/\(ASCE\)1527-6988\(2008\)9:2\(81\)](https://doi.org/10.1061/(ASCE)1527-6988(2008)9:2(81)).
- Morales, S.N., Martínez, L.R., Gómez, J.A.H., López, R.R. and Torres-Argüelles, V., 2019. Predictors of organizational resilience by factorial analysis. *International Journal of Engineering Business Management*, 11, pp. 1–13. <https://doi.org/10.1177/1847979019837046>.

- Paul, J., Parthasarathy, S. and Gupta, P., 2017. Exporting challenges of SMEs: A review and future research agenda. *Journal of World Business*, 52(3), pp. 327–342. <https://doi.org/10.1016/j.jwb.2017.01.003>.
- Pavlou, P.A. and El Sawy, O.A., 2011. Understanding the elusive black box of dynamic capabilities. *Decision Sciences*, 42(1), pp. 239–273. <https://doi.org/10.1111/j.1540-5915.2010.00287.x>.
- Pereira, V., Mellahi, K., Temouri, Y., Patnaik, S. and Roohanifar, M., 2018. Investigating dynamic capabilities, agility and knowledge management within EMNEs: Longitudinal evidence from Europe. *Journal of Knowledge Management*, 23(9), pp.1708–1728. <https://doi.org/10.1108/JKM-06-2018-0391>.
- Ratten, V., Ferreira, J. and Fernandes, C., 2016. Entrepreneurial and network knowledge in emerging economies: A study of the Global Entrepreneurship Monitor. *Review of International Business and Strategy*, 26(3), pp.392–409.
- Sadeghi, V.J. and Biancone, P.P., 2018. How micro, small and medium-sized enterprises are driven outward: The superior international trade performance? A multidimensional study on the Italian food sector. *Research in International Business and Finance*, 45, pp.597–606. <https://doi.org/10.1016/j.ribaf.2017.07.136>.
- Siguaw, J.A., Simpson, P.M. and Enz, C.A., 2006. Conceptualizing innovation orientation: A framework for study and integration of innovation research. *Journal of Product Innovation Management*, 23(6), pp. 556–574. <https://doi.org/10.1111/j.1540-5885.2006.00224.x>.
- Saad, M.H., Hagelaar, G., Van Der Velde, G. and Omta, S.W.F., 2021. Conceptualization of SMEs' business resilience: A systematic literature review. *Cogent Business and Management*, 8(1): 1938347, <https://doi.org/10.1080/23311975.2021.1938347>.
- Sahebjamnia, N., Torabi, S.A. and Mansouri, S.A., 2015. Integrated business continuity and disaster recovery planning: Towards organizational resilience. *European Journal of Operational Research*, 242(1), pp. 261–273. <https://doi.org/10.1016/j.ejor.2014.09.055>.
- Siguaw, J.A., Simpson, P.M., & Enz, C.A. 2006. Conceptualizing innovation orientation: A framework for study and integration of innovation research. *Journal of Product Innovation Management*, 23(6), pp. 556–574. <https://doi.org/10.1111/j.1540-5885.2006.00224.x>.
- Somers, S., 2009. Measuring resilience potential: An adaptive strategy for organizational crisis planning. *Journal of Contingencies and Crisis Management*, 17(1), pp. 12–23. <https://doi.org/10.1111/j.1468-5973.2009.00558.x>.
- Sullivan-Taylor, B. and Branicki, L., 2011. Creating resilient SMEs: Why one size might not fit all. *International Journal of Production Research*, 49(18), pp. 5565–5579. <https://doi.org/10.1080/00207543.2011.563837>.
- Sukumar, A., Jafari-Sadeghi, V., Garcia-Perez, A. and Dutta, D.K., 2020. The potential link between corporate innovations and corporate competitiveness: Evidence from IT firms in the UK. *Journal of Knowledge Management*, 24(5), pp.965–983. <https://doi.org/10.1108/JKM-10-2019-0590>.
- Teece, D. J., 2007. Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350.
- Teece, D.J., Pisano, G. and Shuen, A., 1997. Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), pp. 509–533. [https://doi.org/10.1002/\(SICI\)1097-0266\(199708\)18:7<509::AID-SMJ882>3.0.CO;2-Z](https://doi.org/10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z)
- Umoh, G.I., Amah, E. and Wokocha, I.H., 2013. Production improvement function and corporate growth in the Nigerian manufacturing industry. *Industrial Engineering Letters*, 3(9), pp. 3–7 <https://www.iiste.org/Journals/index.php/IEL/article/view/7506>.
- Van Bruystegem, K., Van De Woestyne, M. and Dewettinck, K., 2008. Human resource challenges for growing SMEs: How Flemish entrepreneurs attract, develop and retain employees. *Vlerick Leuven Gent Management School Working Paper Series 2008-24*.
- Weaven, S., Quach, S., Thaichon, P., Frazer, L., Billot, K. and Grace, D., 2021. Surviving an economic downturn: Dynamic capabilities of SMEs. *Journal of Business Research*, 128, pp. 109–123. <https://doi.org/10.1016/j.jbusres.2021.02.009>.
- Wildavsky, A., 1988. Searching for safety. New Brunswick, NJ: Transaction Books.
- Xiao, L. and Cao, H., 2017. Organizational resilience: The theoretical model and research implication. *The 4th Annual International Conference on Information Technology and Applications (ITA 2017)*. ITM Web of Conferences, 12: 04021. <https://doi.org/10.1051/itmconf/20171204021>.
- Yuan, R., Luo, J., Liu, M.J. and Yu, J., 2022. Understanding organizational resilience in a platform-based sharing business: The role of absorptive capacity. *Journal of Business Research*, 141, pp. 85–99. <https://doi.org/10.1016/j.jbusres.2021.11.012>.
- Zighan, S. and Ruel, S., 2021. SMEs' resilience from continuous improvement lenses. *Journal of Entrepreneurship in Emerging Economies*, 15(2), pp. 233–253. <https://doi.org/10.1108/JEEE-06-2021-0235>.
- Žitkienė, R., Kazlauskienė, E. and Deksnys, M., 2015. Dynamic capabilities for service innovation. *Managing sustainable growth: Proceedings of the Joint International Conference / Management International Conference – MIC 2015*, 28–30 May 2015, Portorož, Slovenia. Portorož: University of Primorska, Faculty of Management. ISBN 9789612661816.

Appendix

Table A1: Rotated factor matrix

	Factor							
	1	2	3	4	5	6	7	8
SEN2	0.829							
SEN3	0.820							
SEN1	0.805							
SEN4	0.797							
SEN5	0.695							
SIZ1	0.640							
SIZ3	0.545							
REC4		0.820						
REC6		0.807						
REC5		0.800						
SIZ4		0.766						
SIZ5		0.756						
SEN6		0.694						
REC1			0.860					
REC2			0.859					
REC3			0.718					
LU1				0.813				
LU3				0.768				
STS4				0.747				
STS5				0.739				
LU2				0.733				
STS2					0.838			
STS1					0.824			
LU5					0.790			
LU4					0.779			
RF2						0.912		
RF1						0.901		
RF3						0.771		
TECO4							0.859	
TECO1							0.849	
COM01							0.840	
COM06							0.822	
TECO2							0.822	
COM02							0.786	
COM05							0.770	
CUS05							0.724	
ROR3								0.896
ROR1								0.894
POR4								0.887
ROR2								0.879
ROR4								0.871
POR5								0.844
POR3								0.838
ROR7								0.837

Extraction Method: Maximum Likelihood. Rotation Method: Varimax with Kaiser Normalization. a. Rotation converged in 5 iterations.

