

Strategic Agility and Organizational Resilience in Malaysian Higher Education: An Integrative Review of Capabilities, Performance, and Institutional Adaptation

Syed Ahmed Salman¹, Hasina Akhtar Beg¹, Mokana Muthu Kumarasamy², V Mohana Sundari³

¹School of Business and Management, Lincoln University College, Petaling Jaya, Selangor, Malaysia
Petaling Jaya, Selangor, Malaysia

²Faculty of Business and Management, UCSI University, Malaysia

³SRM Institute of Science and Technology, India

DOI: <https://doi.org/10.47772/IJRISS.2026.100900114>

Received: 31 August 2026; Accepted: 05 September 2026; Published: 02 October 2026

ABSTRACT

Malaysian higher education institutions are facing technological transformation, greater competitiveness, shifting student expectations, globalization, and ongoing disruptive changes. This integrative study investigates how strategic agility and organizational resilience might help higher education institutions cope with such challenges and maintain organizational success. Instead of comparing agility and resilience, the review concludes that strategic agility is the ability to recognize environmental change, make timely strategic decisions, and reorganize resources, whereas organizational resilience includes foreseeing, coping, adapting, and recovering from adversity. This review builds on published research on strategic management and resilience, as well as relevant empirical investigations on Malaysian private higher education. It also combines existing strategic-management and resilience literature with verifiable empirical data on Malaysian private higher education. The Malaysian data suggests that technology, people, and organizational skills are major predictors of strategic agility, and that strategic agility is favorably associated to organizational success. Related findings demonstrate the importance of organizational learning, as well as strategic agility's role in modulating the link between people-related abilities and performance. The research proposes an integrated framework in which environmental sensing, organizational learning, people skills, technology, leadership, and resource reconfiguration promote strategic agility while redundancy, preparedness, adaptive capacity, and stakeholder relationships improve resilience. Although these attributes are complementary, they should not be expected to provide equal results. This review helps to define their conceptual bounds and suggests a research strategy for Malaysian higher education that includes more rigorous data on public universities, resilience, longitudinal impacts, and the interaction between agility and resilience.

Keywords: strategic agility; organizational resilience; higher education; Malaysia; organizational performance; dynamic capabilities

INTRODUCTION

Under the operational circumstances of universities, strategic continuity and progressive integration with rapid changes are essential. The rise of digital technologies, shifting student expectations, global competitiveness, financial challenges, and unforeseen changes have made it more crucial for Higher Education Institutions (HEIs) to have the institutional capacity to adjust and maintain their primary academic purpose. Organizational resilience and strategic agility are two ideas that are significant to this problem. Although both deal with uncertainty, they shouldn't be merged into a single framework because they have separate organizational issues.

A company's capacity to recognize and react swiftly to strategic changes and modify resources appropriately is known as strategic agility (Doz & Kosonen, 2010; Teece, Peteraf, & Leih, 2016). Conversely, organizational

resilience is about anticipating, managing disruption, adapting, and recovering from the situation without interfering with essential operations (Lengnick-Hall, Beck, & Lengnick-Hall, 2011; Linnenluecke, 2017; Duchek, 2020). In higher education, this difference is quite significant. Even if an organization implements new programs or technologies quickly, it may not be prepared for a major change. However, in order to maintain continuity in the midst of a crisis, it might not be necessary to be highly agile in order to spot and seize fresh chances.

A significant and a well-informed foundation for empirical research has been strategic agility in Malaysia's private higher education sector. Chan and Muthuveloo (2021) found strategic agility to be the critical factor between organizational antecedents and performance in their research of private HEIs in Malaysia. In related studies, they found that organizational capabilities, such as environmental scanning, marketing, and organizational learning, had a significant impact on strategic agility (Chan & Muthuveloo, 2020a), and that strategic agility was a mediator between people and organizational performance (Chan & Muthuveloo, 2022). The literature is still inconsistent with regard to the focus of the empirical studies reported; for example, agility has been the subject of more direct empirical studies than strategic or organizational resilience in Malaysian HEIs.

This imbalance requires a conceptual clarity and careful analysis. The current review therefore does not state conclusions on particular universities or unsupported performance percentages, nor are causal effects claimed which are not supported by the evidence. It incorporates all Malaysian studies that can be traced with international scholarly research to identify that which is known, that which is reasonably inferred and that which is lacking in evidence.

REVIEW OBJECTIVES

- To explain the conceptual differences and the complementarity between strategic agility and organizational resilience in higher education.
- To synthesize evidence on the antecedents and performance implications of strategic agility in Malaysian higher education.
- To determine the conditions within the organizations that could foster the resilience of universities, without claiming unsupported empirical effects to Malaysian institutions.
- To develop an integrated conceptual framework and a focused research agenda for higher education in Malaysia.

REVIEW APPROACH AND EVIDENCE BOUNDARIES

This is not a PRISMA-style systematic review, but rather an integrative literature review. A systematic review must include a complete search history, a count of each database searched regardless of whether more than one was used, exclusion of duplications, documentation of full-text exclusions and a defensible final study set. It is not possible to reconstruct those elements without undertaking new searches in the earlier manuscript. The revised paper does not claim that the number of studies specified is a systematic sample of studies.

The review focuses on the peer-reviewed, traceable, and directly relevant publications on strategic agility, organizational resilience, dynamic capabilities, and higher education. The empirical studies of Chan and Muthuveloo has a specific focus on strategic agility and organizational performance in Malaysian private HEIs, which is considered relevant for Malaysia HEI strategic agility and performance. Conceptual studies from established literature are used to provide an interpretation of resilience and dynamic capabilities in cases where there is limited evidence in Malaysia. Claims are limited, or where they are not verifiable with a source mentioned, they are omitted from the present text. Institution-specific examples and numerical effects from the previous manuscript have been left out.

There are two benefits to this method. First, it shields the validity of the synthesis from wider theoretical interpretation, and direct evidence relating to Malaysia. Second, it makes evident the true research gap. Malaysian literature offers relevant empirical evidence for strategic agility in private HEIs, but far less for the

effects of agility and resilience together, and neither for organizational resilience per se nor for the comparison with public universities.

Theoretical Foundations

Strategic Agility

Strategic agility involves how quickly and accurately an organization discover changes and transform those discoveries into organized strategic responses. According to Doz and Kosonen (2010) strategic sensitivity, strategic leadership unity and the fluidity of resources are reinforcing pillars of strategic agility. Agility is also linked to dynamic capabilities, such as sensing opportunities and threats, seizing opportunities, and transforming or reconfiguring organizational assets, by Teece et al. (2016).

A strategic sensitivity in a university setting may be paying attention to student needs, technological developments, employer expectations, new regulations and procedures, as well as new ways of producing knowledge. The unity of leadership relates to the capacity of institutional leaders to reach and implement decisions in a unified way. Resource fluidity involves the ability to move resources, such as personnel, budgets, technology and organizational focus. These dimensions offer a more defensible conceptualization than just considering agility as speed. Rush and lack of strategic thinking can result in disadvantage rather than advantage.

Organizational Resilience

Organizational resilience has shifted from a focus on recovery to a capability approach that involves anticipation, coping, adaptation and learning. Resilience is an organizational capacity, which can be cultivated, according to Lengnick-Hall et al., (2011). There are many traditions that study resilience and no single uniform definition, as illustrated by Linnenluecke (2017). Ducheck (2020) provides a capability-based conceptualization based on anticipation, coping, and adaptation.

Resilience for HEIs is more than just surviving an event. It's about getting through it. It encompasses preparedness, continuity of critical academic and administrative operations, flexibility of resources, learning from disruption and the ability to adapt institutional arrangements post-disruption. Finally, Williams et al. (2017) show that the linkage between resilience research and crisis management is important, as the role of the organization in times of crisis is shaped by its reactions before, during and after the crisis.

Dynamic Capabilities and Organizational Ambidexterity

Dynamic capabilities theory is a bridge that can help connect agility and resilience. Teece, Pisano and Shuen (1997) suggest that organizations in dynamic environments need to have the ability to integrate competences, build and re-configure external and internal resources. Later, Teece (2007) elaborates on the Sensing, Seizing and Transforming. Agility can be seen as an external indicator of these processes within an organization, and resilience involves carrying on, recovering and adapting when the change is a challenge.

There's an important caution emphasized by organizational ambidexterity. It is important for universities to find new opportunities, but also make the best of existing capabilities (O'Reilly & Tushman, 2008, 2013). Agility ought not to be equated with continuous change. The strategic challenge is to integrate adaptation into enough continuity, reliability and institutional identity.

Strategic Agility and Organizational Resilience in Malaysian Higher Education 4.1 Direct Empirical Evidence

This review found the most robust evidence from Malaysian research on private HEIs. Based on the research conducted by Chan and Muthuveloo (2021) on 155 Malaysian private HEIs, the technology was found to be a strong antecedent to strategic agility, as was organizational capabilities, and people, with strategic agility being a central role in organizational performance. The study is important because it takes the discussion beyond conceptual advocacy and examines the strategic agility in the context of higher education in Malaysia.

The study by Chan and Muthuveloo (2020a) took an empirical approach to investigating the capabilities of Malaysian private HEIs in strategic agility. Environmental scanning, marketing and organizational learning were identified as significant drivers of strategic agility, which was significantly related to organizational performance. Organizational learning was a specific area identified as being of importance and needing managerial attention in the importance-performance analysis.

Technology, organizational capabilities, and people were also found to be important by Chan and Muthuveloo (2020b) in the case of private HEIs and strategic agility was also identified as an important factor for organizational performance. The results also highlight the importance of technology not as a means of an automated resolution, as its value depends on the context of the organization and the ability to effectively implement it.

Furthermore, Chan and Muthuveloo (2022) found the link between people and organizational performance to be an indirect one. They suggest that strategic agility is an important mediator between people-related resources and performance, implying that people-related resources can positively influence performance when they are transformed into an institutional capacity to respond and adapt. This is theoretically relevant since it moves the focus away from "resource possession" and towards "resource orchestration".

What the Malaysian Evidence Does Not Establish

Studies available should not be over-extended in terms of design and context. While much of the direct evidence relates to private HEIs, it cannot be assumed that this can be transferred to Malaysian public universities where governance, funding, accountability and policy arrangements differ. The research also does not demonstrate that all types of agility result in any betterment on all aspects of university performance, nor does it prove specific improvements in student satisfaction, research funding, faster programme approval, or faster recovery from crisis, unless those outcomes were specifically measured. These boundaries must be maintained in a publication ready synthesis.

Organizational Resilience in Higher Education

The literature sources here (evidence verified by the Malaysian HEIs) do not follow the same trend of being more developed in relation to strategic agility as to organizational resilience. The right way, then, is to apply existing resilience theory and to come up with propositions for the Malaysian context, instead of claiming unverified local effects as findings.

There is a need for universities to identify vulnerabilities prior to them becoming crises. These can involve scenario analysis, risk monitoring, financial stress testing, cyber-risk assessment and continuity planning. Also, there is a need to consider coping capacity when there is disruption. Decision making processes, communication systems, digital infrastructure, buffers of resources, etc., are needed for institutions to maintain the ability to provide essential teaching, research, and student support and administration. Furthermore, disruption must be followed with adaptation. When organizations learn from events and change routines as opposed to just return to the pre-crisis version, resilience is reinforced (Duchek, 2020).

In theory, resource diversity is also important. A reliance on a limited range of income, technologies, suppliers, and capabilities can make them more vulnerable. Yet, the notion of the need for diversification to enhance university resilience in Malaysia needs to be tested empirically. This also applies to stakeholder relations, leadership frameworks and organizational culture. Although theory suggests good reasons for investigating these elements, they have to be measured in magnitude, and causal effects in the context of Malaysian HEIs cannot be invented or assumed.

Integrating Strategic Agility and Resilience

Both strategic agility and strategic resilience respond to environmental change and complement each other, partly differently. The focus of agility is on sensing, timely commitment and reconfiguration of resources.

Resilience is all about anticipation, absorption, coping, recovery and adaptation. A university is not necessarily agile, but it can be. A university can be resilient, but it can be strategically agile as well.

The most helpful integration is to regard the two as complementary capabilities of an organization. Environmental scanning and strategic sensitivity enable institutions to identify opportunities and threats, while prompt decisions are enabled by leadership coordination. Organizational learning enables institutions to make sense of their experience. Resources are provided by people and technology through which decisions are enacted. The ability to reconfigure is provided by the fluidity of the resources, and continuous functioning is supported by preparedness and redundancy. All these mechanisms can enhance performance, but their impacts may be contingent upon environment turbulence, governance, and institutional type and resource availability.

This integrated approach also removes one of the most common conceptual misunderstandings which imply that resilience is not the opposite of agility. Transformation is a part of resilience and at the same time agility contributes to resilience when its reconfiguration enables the institution to respond quickly to disruption. Meanwhile, too much adaptation in a short period of time can reduce the consistency, cause change fatigue, or wear down effective routines. The correlation can then be complementary but not necessarily positive.

PROPOSED INTEGRATIVE FRAMEWORK

The review helps to formulate a three-layer framework. The first layer includes enabling conditions such as environmental scanning, organizational learning, people capability, technology, leadership coordination and access to reconfigurable resources. The second layer consists of two elements namely, strategic agility and organizational resilience, which are differently connected. The third layer is related to the outcomes of the universities, including organizational effectiveness, sustainability, teaching continuity, innovation, stakeholder value and financial viability. Contextual features such as institutional type, governance arrangements and environmental turbulence should be considered as conditions of the context and not as assumed effects.

Layer	Constructs	Role in the framework	Evidence status
Enablers	Environmental scanning; organizational learning; people; technology; leadership; reconfigurable resources	Provide information, coordination, knowledge, and resources required for adaptation.	Direct Malaysian support is strongest for technology, people, organizational capabilities, environmental scanning, marketing, and organizational learning.
Core capability 1	Strategic agility	Supports timely sensing, strategic decision-making, and resource reconfiguration.	Observed directly in Malaysian private HEIs.
Core capability 2	Organizational resilience	Supports anticipation, coping, continuity, recovery, and adaptation under adversity.	Strong international theoretical support. Malaysia-specific HEI evidence requires further empirical development.
Outcomes	Organizational performance; sustainability; innovation; continuity; stakeholder value	Potential consequences of effective capability deployment.	Organizational performance has direct Malaysian evidence in private HEIs. Further outcomes need outcome-specific testing.
Context	Institutional type; governance; environmental turbulence; resource constraints	May strengthen, weaken, or alter capability-performance relationships.	Proposed as research conditions. Not presented as established causal effects.

Figure 1. Conceptual logic of the revised review

ENABLING CONDITIONS Environmental scanning • Organizational learning • People • Technology • Leadership • Reconfigurable resources
INTERACTING ORGANIZATIONAL CAPABILITIES Strategic Agility ↔ Organizational Resilience
POTENTIAL UNIVERSITY OUTCOMES Organizational performance • Sustainability • Innovation • Continuity • Stakeholder value

DISCUSSION

The updated synthesis proves to be a more robust and defensible interpretation of the Malaysian literature than a claim that agility and resilience lead to better university performance. First, there is direct empirical evidence of strategic agility in the Malaysian private sector in higher education. According to the studies conducted by Chan and Muthuveloo, agility is linked to organizational resources, capabilities and it is also associated with organizational performance. This gives a credible empirical support to the concept of strategic agility as a significant management capacity in Malaysian private HEIs.

Moreover, resources seem to count in terms of capabilities, not in terms of possession. Technology, people and organizational capabilities are strategically valuable if institutions are able to capitalize on them by sensing change and responding effectively. This is aligned with the dynamic capabilities theory (Teece et al., 1997; Teece, 2007) and is supported by the results that strategic agility acts as a buffer between people and organizational performance (Chan & Muthuveloo, 2022).

Also, resilience must remain analytically separate. While the literature on resilience focuses on anticipation, coping, adaptation, and learning in the face of adversity (Linnenluecke, 2017; Duchek, 2020), the literature on strategic-agility in Malaysia focuses mainly on responsiveness and performance. If we did not include the constructs without the measurement, there would be conceptual ambiguity. The purpose of this review, therefore, is not to establish an empirically validated Malaysian agility-resilience-performance chain but to highlight a theoretically sound relationship that needs to be further tested.

Furthermore, there is a large public private evidence gap identified. The data of private HEIs are important but not necessarily representative of the public HEIs. There are varying levels of autonomy, regulation, funding and accountability for public HEIs. Before coming to sector-wide conclusions regarding Malaysian universities, comparisons of them are required.

Lastly, the relationship between stability and change needs to be explored more, particularly with regard to the literary context. Organizational ambidexterity implies that there is a need for both exploration and exploitation within organization (O'Reilly & Tushman, 2013). Universities that are responsive with the risk of compromising their stability of academic and governance processes can cause instability. The effects of agility should therefore be explored in future studies, as well as in which conditions, at which level, and in combination with which resilience mechanisms.

Theoretical Contributions

This review produces three bounded theoretical contributions. First, it shows that relationship between strategic agility and organizational resilience is related, but not comparable. This distinction avoids conceptual overlap and helps to make measurement more accurate in future research in higher education.

Secondly, it connects the evidence on strategic agility from Malaysia with the dynamic capabilities' perspective. The importance of environmental scanning, organizational learning, people, technology and other organizational capabilities for agility provides evidence for an interpretation that performance is dependent on how those resources are orchestrated and reconfigured, and not on the possession of the resources alone.

Third, the review adds resilience as a complementary capability and elucidates the empirical work necessary for more robust theoretical assertions. The framework does not assert that resilience effects have been demonstrated in Malaysian universities but it presents testable relationships between agility and resilience, institutional context and performance. This helps to develop more focused research.

Practical Implications

University leaders should be investing in capabilities, not one-off projects, as the evidence indicates. The effect of digital technology for performance is greater in the presence of organizational learning, competent human resources, environmental sensing, and the ability to restructure resources. Technology achievement should, not be confused with strategic agility.

Key staff can enhance strategic awareness by creating systematic systems to track student needs, employer needs, competitor actions, regulatory shifts, and technological advancements. Cross-functional analysis and reduced information-to-decision cycles can help to increase responsiveness, but it is important to test the impact rather than take it for granted.

In addition, universities should set up resilience arrangements on their own, distinct from their growth and innovation programs. Essential functions can be safeguarded by business continuity planning, cyber preparedness, financial risk monitoring, knowledge redundancy, succession planning and post event learning. These recommendations are based on the resilience theory and are suggested practices, and not claims that specific numerical benefits have been secured at specific Malaysian universities.

The evidence gap is a factor for policymakers. Policy at sector level should not make comprehensive conclusions about findings from private HEIs that would be applicable to public universities. Research and data collection to support comparison across institutional types would give greater underpinning to policies for institutional adaptability and sustainability.

LIMITATIONS AND FUTURE RESEARCH

Main constraint is the lack of uniformity in the evidence base. There is direct empirical evidence on strategic agility in Malaysian private HEIs but the verified literature for this review offers much less direct evidence of organizational resilience in Malaysian universities. The paper thus makes a distinction between empirical findings and theory-based propositions.

Strategic agility and organizational resilience should be evaluated concurrently, with validated yet separate instruments in future research. Longitudinal designs are especially significant because cross-sectional associations do not allow for the determination if agility or resilience leads to later performance or vice versa. Comparative analyses should include both public and private universities, and look at how governance autonomy, resource dependence, institutional size and environmental changes shape the relationships.

Disaggregation of university performance should also be done in the future. Organizational performance has multiple dimensions and the associations can vary by financial sustainability, quality of teaching, student experience, research accomplishments, innovation, staff outcomes, as well as stakeholder value. Researchers should be careful not to substitute direct measurement by vague terms such as better performance.

Last but not least, a future systematic review would be possible to be conducted with the support of a preregistered protocol, with final study set reproducible, with clear exclusion rationale, with transparent database search strings, with removal of duplicate studies, and with quality appraisal. Such a review would be better, if the goal is to make exhaustive claims on evidence from Malaysia

CONCLUSION

Strategic agility is an appropriate and empirically validated competency in Malaysian private higher education, especially since it links organizational resources and capabilities to the ability to adapt to changes in the environment. The findings from the existing Malaysian research corroborates the vital role of technology, people, environmental scanning, organizational learning and organizational related capabilities in developing strategic agility, and the relation between strategic agility and organizational performance. Conceptually, organizational resilience is also crucial, although there is still limited higher education evidence available to support this concept in the context of Malaysia. So, the best stake is that agility and resilience need to be tackled as two separate but related traits. Their interaction should be tested in a stronger Malaysian research agenda, compared to public institutions, measured in the longitudinal study, and measured in terms of specific performance outcomes. This review makes it possible to distinguish facts from theoretical statements, which gives a more credible base for research and practice than claims or unknown effects based on numbers from individual institutions.

REFERENCES

1. Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
2. Chan, J. I. L., & Muthuveloo, R. (2020a). Vital organisational capabilities for strategic agility: An empirical study. *Asia-Pacific Journal of Business Administration*, 12(3/4), 223–236. <https://doi.org/10.1108/APJBA-12-2019-0261>
3. Chan, J. I. L., & Muthuveloo, R. (2020b). Critical factors for optimisation of performance: The private higher education context in Malaysia. *International Journal of Agile Systems and Management*, 13(4), 438–463. <https://doi.org/10.1504/IJASM.2020.112342>
4. Chan, J. I. L., & Muthuveloo, R. (2021). Antecedents and influence of strategic agility on organizational performance of private higher education institutions in Malaysia. *Studies in Higher Education*, 46(8), 1726–1739. <https://doi.org/10.1080/03075079.2019.1703131>
5. Chan, J. I. L., & Muthuveloo, R. (2022). Strategic agility: Linking people and organisational performance of private higher learning institutions in Malaysia. *International Journal of Business and Society*, 23(1), 342–358. <https://doi.org/10.33736/ijbs.4616.2022>
6. Doz, Y. L., & Kosonen, M. (2010). Embedding strategic agility: A leadership agenda for accelerating business model renewal. *Long Range Planning*, 43(2–3), 370–382.
7. Duchek, S. (2020). Organizational resilience: A capability-based conceptualization. *Business Research*, 13(1), 215–246.
8. Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: What are they? *Strategic Management Journal*, 21(10–11), 1105–1121.
9. Hamel, G., & Välikangas, L. (2003). The quest for resilience. *Harvard Business Review*, 81(9), 52–63.
10. Lengnick-Hall, C. A., Beck, T. E., & Lengnick-Hall, M. L. (2011). Developing a capacity for organizational resilience through strategic human resource management. *Human Resource Management Review*, 21(3), 243–255.
11. Linnenluecke, M. K. (2017). Resilience in business and management research: A review of influential publications and a research agenda. *International Journal of Management Reviews*, 19(1), 4–30.
12. O'Reilly, C. A., III, & Tushman, M. L. (2008). Ambidexterity as a dynamic capability: Resolving the innovator's dilemma. *Research in Organizational Behavior*, 28, 185–206.
13. O'Reilly, C. A., III, & Tushman, M. L. (2013). Organizational ambidexterity: Past, present, and future. *Academy of Management Perspectives*, 27(4), 324–338.
14. Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350.
15. Teece, D. J., Peteraf, M., & Leih, S. (2016). Dynamic capabilities and organizational agility: Risk, uncertainty, and strategy in the innovation economy. *California Management Review*, 58(4), 13–35.
16. Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509–533.

17. Weber, Y., & Tarba, S. Y. (2014). Strategic agility: A state of the art. *California Management Review*, 56(3), 5–12.
18. Williams, T. A., Gruber, D. A., Sutcliffe, K. M., Shepherd, D. A., & Zhao, E. Y. (2017). Organizational response to adversity: Fusing crisis management and resilience research streams. *Academy of Management Annals*, 11(2), 733–769.