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From Engagement to Competitive Advantage: How Dynamic Academic Capability Emerges in Higher Education Institutions

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Abstract: Higher education institutions face increasingly complex challenges due to digital transformation, the development of artificial intelligence, changes in learning models, and increasing global competition. These conditions require higher education institutions to strengthen their adaptability and competitiveness. This article aims to synthesize the literature on the role of academic engagement capability in building institutional competitive advantage through institutional dynamic academic capability. The study uses a Narrative Literature Review approach to Scopus-indexed articles from 2020–2026 that discuss academic engagement, knowledge creation capability, academic innovation capability, research collaboration capability, dynamic capability, and higher education competitiveness. The synthesis results indicate that academic engagement capability is a strategic resource that drives the formation of knowledge creation capability, academic innovation capability, and research collaboration capability. These three capabilities collectively form institutional dynamic academic capability that enables higher education institutions to identify changes, exploit opportunities, and reconfigure resources sustainably. This article proposes a conceptual framework that explains the process of transforming academic engagement capability into institutional competitive advantage through capability building mechanisms. These findings expand the application of Dynamic Capability Theory in the context of higher education and provide implications for strengthening the competitiveness of higher education institutions.

Keyword: Academic Engagement Capability, Dynamic Capability, Institutional Competitive Advantage, Knowledge Creation Capability, Research Collaboration Capability, Pendidikan Tinggi.

INTRODUCTION

The higher education landscape is undergoing a profound transformation driven by digitalization, advances in artificial intelligence, changing learning models, and intensifying global competition among universities. These developments require higher education institutions to strengthen their adaptive capacity to remain relevant and responsive to the evolving needs of students, industries, governments, and society. Universities are therefore expected not only to produce high-quality graduates and scientific publications but also to

foster innovation, expand collaborative networks, and create sustainable value for society (Castellanos-Reyes, 2020; Farias-Gaytan et al., 2023; Leih & Teece, 2022; Ratajczak, 2024).

The intensification of competition has fundamentally changed the basis of competitive advantage in higher education. Institutional competitiveness is no longer determined primarily by physical assets, financial resources, or student enrolment, but increasingly by the ability to develop, integrate, and strategically utilize knowledge-based resources. Empirical studies consistently demonstrate that intellectual capital, innovation capability, governance quality, and strategic resource configuration play critical roles in strengthening the competitiveness of higher education institutions at both national and international levels (de Wit & Altbach, 2021; Hart & Rodgers, 2024; Wilbers & Brankovic, 2023).

Dynamic Capability Theory provides an appropriate theoretical perspective for explaining how organizations sustain competitiveness in rapidly changing environments. Rather than emphasizing the mere possession of valuable resources, the theory highlights an organization's ability to sense environmental changes, seize emerging opportunities, and continuously reconfigure its resources and competencies. Within higher education, these capabilities enable universities to respond effectively to technological developments, changing labour market demands, accreditation requirements, and evolving stakeholder expectations. Continuous capability renewal, therefore, becomes essential for sustaining institutional competitiveness in dynamic environments (Ali et al., 2024; Ratajczak, 2024; Teece, 2007).

Although studies on dynamic capabilities in higher education have expanded considerably, most have focused on their outcomes, including innovation, digital transformation, and organizational resilience. Comparatively less attention has been devoted to understanding how these capabilities are developed within universities. This issue is particularly important because higher education institutions are knowledge-intensive organizations whose adaptive capacity depends largely on the academic community's ability to generate, develop, integrate, and disseminate knowledge (Ali et al., 2024; Grant, 1996; Li et al., 2025; Perkmann et al., 2021).

Academic engagement capability has the potential to become a strategic resource that supports capability development within higher education institutions. It reflects the active involvement of academics in teaching, research, community service, and institutional development while facilitating knowledge exchange through collaborative research, consultancy, and other forms of interaction with external organizations. Such activities strengthen research productivity, expand external partnerships, and enhance universities' capacity to create and disseminate knowledge (Perkmann et al., 2021). Academic engagement should therefore be viewed not merely as an individual behavioural characteristic but as a strategic organizational capability that contributes to the development of broader institutional capabilities.

Growing empirical evidence further suggests that academic engagement contributes to the development of several organizational capabilities that strengthen institutional adaptability. Through active engagement, universities enhance knowledge creation by promoting collective learning, knowledge sharing, and intellectual capital development. Academic engagement also stimulates academic innovation through the adoption of new practices, digital transformation, and the effective utilization of emerging technologies. At the same time, it reinforces research collaboration capability by expanding professional networks, strengthening inter-institutional partnerships, and facilitating knowledge exchange with external stakeholders. Collectively, these capabilities improve universities' capacity to respond to academic, technological, and societal changes (Farias-Gaytan et al., 2023; Hassan et al., 2024; O'Dwyer et al., 2023; Perkmann et al., 2021).

Despite the growing body of research, studies on academic engagement, knowledge creation capability, academic innovation capability, research collaboration capability, and dynamic capability have largely evolved within separate streams of literature. Existing studies

generally examine these capabilities independently, leaving the mechanism through which they interact to build higher-order organizational capabilities insufficiently explained (Ali et al., 2024; Li et al., 2025; Moektiwibowo & Ali, 2026).

Based on this gap, this article aims to achieve several strategic objectives: 1) to synthesize the literature on the role of academic engagement capability in building knowledge creation capability, academic innovation capability, and research collaboration capability; 2) to analyze how these three elements sequentially form institutional dynamic academic capability as the foundation of institutional competitive advantage; 3) to integrate various streams of literature that have previously developed separately through a narrative literature review approach; and 4) to propose a comprehensive conceptual framework that explains the process of building capability-based competitive advantage in higher education institutions.

METHOD

This study employs a Narrative Literature Review (NLR) approach to synthesize and integrate empirical findings on academic engagement capability, knowledge creation capability, academic innovation capability, research collaboration capability, institutional dynamic academic capability, and institutional competitive advantage in higher education. This approach was selected because it enables exploration of conceptual relationships among constructs developed across different research traditions, facilitates the identification of research gaps, and supports the development of a more comprehensive conceptual framework. Moreover, the Narrative Literature Review facilitates the integration of empirical evidence and theoretical perspectives from diverse research domains, making it well-suited to developing an integrative conceptual model (Ferrari, 2015; Green et al., 2006; Snyder, 2019).

The literature search was conducted using the Scopus database because of its broad coverage of international journals, rigorous publication standards, and widespread recognition as a primary source for research in management, higher education, and the social sciences. The search focused on articles published between 2020 and 2026 to capture recent developments in organizational capabilities, higher education transformation, and institutional competitive advantage. A combination of keywords related to “academic engagement,” “knowledge creation capability,” “academic innovation capability,” “research collaboration capability,” “dynamic capability,” “higher education competitiveness,” and “competitive advantage” was used during the search process.

Articles were included if they met the following criteria: (1) they were published in Scopus-indexed journals; (2) they were published between 2020 and 2026; (3) they addressed one or more of the study’s principal constructs; and (4) they were available in full text. Empirical studies served as the primary source of evidence because they provide stronger support for examining relationships among the constructs. Seminal works were retained to establish the theoretical foundation, particularly those related to the Resource-Based View and Dynamic Capability Theory (Barney, 1991; Grant, 1996; Teece et al., 1997; Teece, 2007). Editorials, book reviews, conference abstracts, and publications that did not provide sufficient empirical or conceptual evidence relevant to higher education were excluded from the review.

The screening process identified 25 articles that satisfied all inclusion criteria. These studies were subsequently classified into six thematic categories: higher education competitiveness, dynamic capability in higher education, academic engagement, knowledge creation capability, academic innovation capability, and research collaboration capability. This thematic classification facilitated the synthesis of empirical findings and the identification of conceptual relationships relevant to the framework proposed in this study.

The literature was analyzed using a thematic narrative synthesis approach. Each article was examined to identify its research objectives, theoretical perspective, study context, research method, and principal findings. The findings were subsequently compared and integrated to identify recurring patterns, areas of ongoing debate, and unresolved research gaps.

The synthesis was then used to develop a conceptual framework explaining how academic engagement capability contributes to the development of institutional dynamic academic capability through knowledge creation capability, academic innovation capability, and research collaboration capability, ultimately leading to institutional competitive advantage.

RESULTS AND DISCUSSION

The literature on academic engagement, knowledge creation, innovation, collaboration, dynamic capability, and competitive advantage has evolved across several distinct research domains. Academic engagement is primarily discussed within organizational behavior and higher education research, whereas dynamic capability originates from the strategic management literature. Knowledge creation, innovation, and collaboration, in contrast, are commonly examined within knowledge management and knowledge-based organization studies. Although these streams have developed independently, they share strong conceptual linkages. Accordingly, this section synthesizes empirical and conceptual evidence to explain how academic engagement capability contributes to the development of institutional dynamic academic capability through knowledge creation capability, academic innovation capability, and research collaboration capability, ultimately leading to institutional competitive advantage.

Academic Engagement Capability as a Strategic Resource

Academic engagement represents one of the strategic resources that influence the effectiveness of higher education institutions. Within the academic context, engagement reflects the active involvement of the academic community in teaching, research, community service, and institutional development. Active engagement has been shown to strengthen research productivity, promote research-informed teaching, facilitate knowledge exchange, and enhance collaboration with external stakeholders, thereby contributing to institutional performance and long-term development. Accordingly, academic engagement should be viewed not merely as an individual behavioural characteristic but also as an organizational asset that supports the achievement of institutional strategic objectives (Perkmann et al., 2021; Uaciquete & Valcke, 2022).

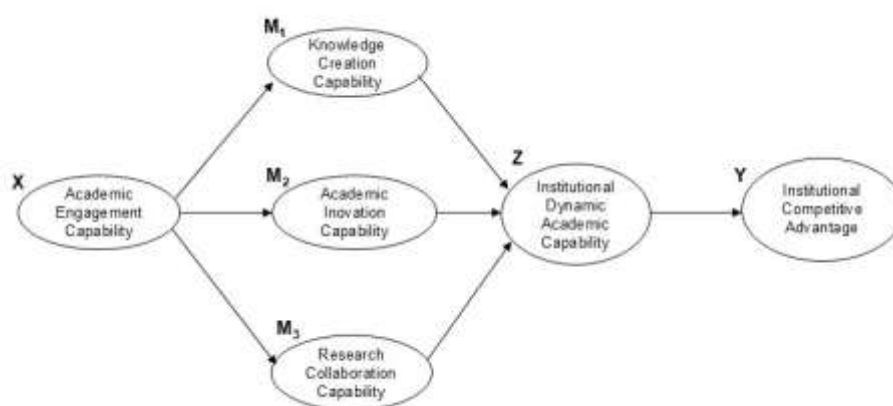
Recent developments have expanded the scope of academic engagement beyond traditional university activities. Academic engagement increasingly encompasses interactions with industry, government, professional communities, and other external stakeholders through collaborative research, consultancy, knowledge exchange, and partnership initiatives. Academics with higher levels of engagement are more likely to establish professional networks, participate in collaborative research, exchange expertise, and contribute to activities that generate broader scientific, social, and economic impacts. These interactions position academic engagement as an important mechanism that links universities' internal knowledge resources to opportunities in the external environment (Marques et al., 2024; Perkmann et al., 2021).

Digital transformation has further strengthened the strategic role of academic engagement. Digital platforms, virtual communities, and global academic networks enable academics to establish collaborations, access knowledge, and foster innovation beyond geographical boundaries. As a result, engagement reflects not only the level of individual participation but also an institution's capacity to mobilize knowledge, expertise, and academic commitment in pursuit of organizational goals. This role has become increasingly important as higher education institutions continue to embrace digitalization and artificial intelligence in teaching, research, and academic administration (Castellanos-Reyes, 2020; Farias-Gaytan et al., 2023; Strielkowski et al., 2024).

From the Resource-Based View perspective, academic engagement constitutes a valuable intangible resource because it enables universities to utilize the knowledge, competencies, and experience of their academic community more effectively. Dynamic Capability Theory further

explains that engagement functions as a mechanism through which organizations identify opportunities, integrate knowledge, and mobilize resources to generate new value. Consequently, higher levels of academic engagement strengthen organizational learning, knowledge sharing, and institutional adaptability in rapidly changing environments (Ali et al., 2024; Barney, 1991; Teece, 2007).

Overall, the literature suggests that the primary contribution of academic engagement extends beyond improving individual performance. More importantly, it creates organizational conditions that facilitate learning, innovation, and collaboration. This perspective broadens the understanding of engagement from an individual behavioural construct to a strategic organizational capability that supports capability development within higher education institutions. Academic engagement capability can therefore be positioned as the foundational capability from which more complex organizational capabilities emerge, ultimately strengthening institutional competitive advantage. To illustrate the relationships among the constructs discussed in this article, the conceptual model developed is presented in Figure 1.



Source: Research Results

Figure 1. Conceptual Model: From Engagement to Competitive Advantage through the Mediating Role of Institutional Dynamic Academic Capability

The conceptual model shows that academic engagement capability serves as a foundational capability that drives the development of knowledge creation, academic innovation, and research collaboration capabilities. Collectively, these three capabilities form institutional dynamic academic capability, which in turn becomes a source of institutional competitive advantage.

Academic Engagement Capability and Knowledge Creation Capability

Knowledge creation capability refers to an organization's ability to generate, integrate, and utilize new knowledge to support the achievement of strategic objectives. In the context of higher education, this capability holds a central position because universities are, by nature, organizations oriented toward the creation, development, and dissemination of knowledge. Therefore, the ability to generate new knowledge is not only an outcome of academic activities but also a foundation for developing higher organizational capabilities (Grant, 1996; Nonaka & Takeuchi, 1995).

The literature indicates that academic engagement capability serves as a key driver of knowledge creation capability. Academic engagement fosters knowledge exchange, collective learning, scholarly discussion, and the development of new ideas, which together form the foundation of the knowledge-creation process. Various studies indicate that knowledge-creation capability develops through the integration of knowledge-sharing mechanisms,

intellectual capital, and collaborative learning processes, enabling organizations to generate, integrate, and disseminate knowledge sustainably (Li et al., 2025; Perkmann et al., 2021).

The link between engagement and knowledge creation is growing stronger in digitized academic environments. The use of educational technology enables greater interaction, broader access to information, and interdisciplinary collaboration, thereby accelerating the transformation of individual knowledge into organizational knowledge. At the same time, the active involvement of the academic community increases the likelihood of forming learning communities that foster the development of an institution's intellectual capital (CastellanosReyes, 2020).

Conversely, the literature indicates that an organization's ability to generate knowledge can be constrained by an organizational culture that does not adequately support learning, weak knowledge-sharing mechanisms, insufficient collaboration, and the underutilization of intellectual capital. These conditions reduce the effectiveness of organizational learning processes and limit the institution's capacity to generate, integrate, and apply new knowledge for strategic decision-making (Li et al., 2025).

From the perspective of Dynamic Capability Theory, knowledge creation capability provides the foundation for the sensing process by enabling organizations to recognize environmental changes, identify emerging opportunities, and interpret evolving challenges. The stronger an institution's capability to create, integrate, and apply knowledge, the greater its capacity to formulate strategic responses to environmental dynamics. Recent conceptual work further suggests that organizational adaptability emerges when knowledge resources are continuously transformed into higher-order capabilities through learning and capability development processes, thereby strengthening an institution's ability to respond effectively to environmental change. (Moektiwibowo & Hendayana, 2025).

Knowledge generated through organizational learning processes is the primary driver enabling institutions to adapt and continuously renew their capabilities (Ali et al., 2024; Li et al., 2025; Teece, 2007). Thus, knowledge creation capability can be viewed as the first capability to emerge from academic engagement capability and serves as the initial foundation for the development of institutional dynamic academic capability. High levels of academic engagement strengthen knowledge creation and integration processes, which in turn enhance the institution's ability to respond to environmental changes more quickly and effectively (Ali et al., 2024; Li et al., 2025).

Academic Engagement Capability and Academic Innovation Capability

In addition to fostering knowledge creation, academic engagement capability plays an important role in developing academic innovation capability. In a higher education environment characterized by rapid technological change and rising stakeholder expectations, the ability to generate innovation has become a critical determinant of institutional sustainability. Academic innovation capability refers to a university's ability to develop, adopt, and implement new ideas, processes, technologies, and practices that enhance the effectiveness of both academic and organizational activities.

Academic innovation depends heavily on the active engagement of the academic community. High levels of engagement encourage the exploration of new ideas, academic experimentation, and the development of solutions that address both institutional priorities and external stakeholder needs. Recent studies further suggest that digital transformation, organizational support, and work engagement create conditions that strengthen innovation capability by encouraging academics to adopt new practices, collaborate more effectively, and generate innovative solutions within higher education institutions (Farias-Gaytan et al., 2023; Hassan et al., 2024; Mohamed Hashim et al., 2022).

The continuing development of digital technologies and artificial intelligence has further expanded the scope of academic innovation. Technology integration enables universities to

adopt more adaptive learning approaches, improve research effectiveness, and strengthen institutional governance. Nevertheless, successful innovation depends not only on the availability of technology but also on the willingness and capability of the academic community to adopt, develop, and utilize these technologies effectively in teaching, research, and institutional development (Farias-Gaytan et al., 2023; Hassan et al., 2024; Mohamed Hashim et al., 2022).

The literature also suggests that academic engagement capability provides the organizational energy required to sustain creativity, experimentation, and continuous learning. As engagement increases, universities become better positioned to generate innovations that respond to environmental change and evolving stakeholder needs. Academic innovation capability can therefore be understood as the organizational outcome of transforming knowledge, engagement, and digital resources into new academic practices and value-creating solutions (Farias-Gaytan et al., 2023; Hassan et al., 2024).

From the perspective of Dynamic Capability Theory, academic innovation capability represents the seizing process through which organizations transform knowledge into new products, services, processes, and organizational practices that create value and strengthen competitiveness. By translating knowledge into strategic action, innovation enables higher education institutions to respond more effectively to emerging opportunities and changing environmental conditions. Academic innovation capability therefore constitutes a key component in the development of institutional dynamic academic capability (Ali et al., 2024; Teece, 2007).

Academic Engagement Capability and Research Collaboration Capability

Research collaboration capability refers to an institution's ability to establish, manage, and leverage collaborative relationships to improve research quality, expand access to resources, and accelerate knowledge creation and innovation. In the contemporary higher education environment, collaboration has become one of the primary mechanisms for strengthening research capacity and expanding academic impact at both the national and international levels. Through collaboration, universities gain access to expertise, technology, and resources that are not always available internally, thereby enhancing their capacity to generate knowledge and innovation (Jha & Cottam, 2021; Marques et al., 2024).

Academic engagement capability plays a central role in the development of research collaboration capability. Academics with higher levels of engagement are more likely to establish professional networks, participate in collaborative research projects, and develop partnerships with industry, government, and other external organizations. These activities broaden access to complementary expertise, research infrastructure, funding opportunities, and knowledge resources that strengthen institutional research capacity. As academic engagement increases, universities become better positioned to develop productive and sustainable research collaborations that support institutional development (Jha & Cottam, 2021; O'Dwyer et al., 2023).

Successful research collaboration depends not only on the capabilities of individual researchers but also on institutional support. Effective leadership, collaboration governance, coordination mechanisms, and organizational capacity are essential for sustaining cross-organizational partnerships, whereas organizational fragmentation, excessive bureaucracy, and weak coordination may constrain the development of collaborations with strategic value. These findings suggest that research collaboration capability emerges through the interaction between individual academic engagement and supportive institutional systems (Jha & Cottam, 2021; O'Dwyer et al., 2023).

From an organizational perspective, research collaboration capability enhances an institution's ability to acquire new knowledge, access complementary resources, and accelerate organizational learning. Collaborative research enables universities to integrate diverse

expertise, technologies, and external networks into institutional development processes. As a result, research collaboration not only increases research outputs but also strengthens organizational adaptability, facilitates knowledge exchange, and enhances innovation capacity, thereby contributing to long-term institutional competitiveness (Marques et al., 2024; O'Dwyer et al., 2023).

Within the framework of Dynamic Capability Theory, research collaboration capability supports the reconfiguration process by expanding access to external resources and developing knowledge networks that enable organizations to continuously renew their competency base. Through collaboration, universities combine internal and external resources more effectively, strengthening their ability to adapt and reconfigure organizational capabilities in response to environmental change. Research collaboration capability therefore complements knowledge creation capability and academic innovation capability in shaping institutional dynamic academic capability (Ali et al., 2024; Teece, 2007).

Rather than operating independently, these three capabilities represent complementary organizational processes that collectively strengthen universities' adaptive capacity. Recent conceptual work further suggests that the integration of knowledge creation, innovation, and collaboration capabilities constitutes the core mechanism through which academic engagement is transformed into higher-order dynamic capability, ultimately supporting institutional competitiveness (Moektiwibowo & Ali, 2026).

Taken together, the preceding discussion demonstrates that academic engagement capability drives the development of knowledge creation capability, academic innovation capability, and research collaboration capability. The integration of these three capabilities forms institutional dynamic academic capability, which enables universities to sustain their relevance and competitiveness in an increasingly dynamic higher education environment.

Building Institutional Dynamic Academic Capability

Knowledge creation capability, academic innovation capability, and research collaboration capability not only generate operational benefits individually but also contribute to the development of higher-order organizational capabilities. Dynamic Capability Theory suggests that organizations achieve competitive advantage not simply by possessing valuable resources but by continuously integrating, developing, and reconfiguring those resources in response to environmental change (Ali et al., 2024; Teece, 2007). In higher education, this process is reflected in a university's ability to manage knowledge, foster innovation, and develop collaborative relationships that collectively shape institutional dynamic academic capability.

Knowledge creation capability provides the cognitive foundation that enables institutions to recognize environmental change and identify emerging opportunities. The ability to generate and manage knowledge strengthens the sensing process through trend recognition, strategic interpretation of information, and the development of insights that support decision-making. Universities with strong knowledge creation capability are generally better prepared to respond to change because they continuously develop a relevant knowledge base to support organizational adaptation. Knowledge generated through organizational learning and knowledge-sharing mechanisms therefore becomes the primary source of strategic renewal (Grant, 1996; Li et al., 2025).

Academic innovation capability complements this process by transforming knowledge into new solutions, practices, and operational models that create institutional value. Innovation enables universities to capitalize on emerging opportunities through the development of new learning approaches, digital transformation initiatives, innovations in academic services, and improvements in institutional governance. Within this perspective, innovation represents the seizing process through which knowledge is translated into strategic action that generates tangible value for both the institution and its stakeholders. In an increasingly digital higher

education environment, innovation capability has become a critical determinant of institutional adaptability and long-term competitiveness (Castellanos-Reyes, 2020; Farias-Gaytan et al., 2023; Ramírez-Montoya et al., 2021).

Research collaboration capability further strengthens an institution's ability to acquire, integrate, and utilize knowledge and resources from the external environment. Through collaborative research, universities gain access to complementary expertise, advanced technologies, research infrastructure, and professional networks that enhance institutional capacity. This capability enables universities to continuously renew and reconfigure their resource base while improving their responsiveness to environmental change. Collaborative research also accelerates organizational learning, facilitates knowledge exchange, and creates innovation opportunities that are difficult to achieve through internal resources alone. The ability to establish and sustain strategic research partnerships therefore represents a key organizational capability for strengthening knowledge-based institutions and enhancing long-term competitiveness (Jha & Cottam, 2021; Marques et al., 2024; O'Dwyer et al., 2023).

Together, these three capabilities form a mutually reinforcing mechanism. Knowledge creation capability provides the insights required to understand environmental change, academic innovation capability transforms those insights into strategic action, and research collaboration capability expands access to complementary resources and competencies that support organizational renewal. Their interaction enables universities to continuously learn, adapt, and renew their competencies, thereby forming institutional dynamic academic capability (Teece, 2007).

This perspective is consistent with Dynamic Capability Theory, which views dynamic capabilities as evolving through continuous organizational learning rather than emerging instantaneously. Institutions progressively build these capabilities by accumulating knowledge, innovation, and collaborative experience that collectively strengthen adaptive capacity. Within higher education, institutional leadership, digital transformation, and effective knowledge management further reinforce this process by promoting organizational learning and continuous capability renewal (Ali et al., 2024; Farias-Gaytan et al., 2023; Li et al., 2025; Teece, 2007).

Based on this synthesis, institutional dynamic academic capability can be defined as a university's ability to integrate, develop, and continuously reconfigure knowledge, innovation, and collaboration in response to environmental change. In the proposed conceptual model, this higher-order capability emerges from the interaction of knowledge creation capability, academic innovation capability, and research collaboration capability, all of which are initiated by academic engagement capability. Institutional dynamic academic capability therefore represents the central mechanism through which academic resources are transformed into sustainable organizational adaptability and institutional competitiveness (Ali et al., 2024; Li et al., 2025; Teece, 2007).

Institutional Dynamic Academic Capability and Institutional Competitive Advantage

In an increasingly competitive higher education environment, competitive advantage is no longer determined solely by the possession of strategic resources but also by a university's ability to continuously renew and deploy those resources more effectively than its competitors. Institutions that successfully respond to technological advances, changing stakeholder expectations, evolving labour market demands, and shifts in higher education policy are better positioned to sustain their relevance and strengthen their competitive position. From the Resource-Based View, sustainable competitive advantage arises from resources that are valuable, rare, difficult to imitate, and difficult to substitute (Barney, 1991; Peteraf, 1993). Within knowledge-based organizations such as universities, these resources increasingly take the form of intellectual capital, organizational knowledge, and capabilities that support continuous learning (Grant, 1996; Li et al., 2025).

Institutional dynamic academic capability provides the mechanism through which these strategic resources are translated into competitive advantage. By sensing environmental change, seizing emerging opportunities, and continuously reconfiguring organizational resources and competencies, universities become more adaptive and resilient under conditions of uncertainty. Continuous renewal of knowledge, innovation, and collaborative capabilities enables institutions to remain competitive despite rapid technological change and evolving stakeholder expectations (Ali et al., 2024; Li et al., 2025; Teece, 2007).

Competitive advantage is reflected in multiple dimensions, including academic reputation, research quality, internationalization, innovation capacity, educational quality, and the ability to create value for diverse stakeholders. Universities that differentiate themselves through knowledge generation, innovation, and collaboration generally achieve stronger and more sustainable competitive positions than those relying primarily on traditional resources. Across the global higher education sector, the capacity to generate new knowledge while managing digital transformation has become an increasingly important source of institutional competitiveness (de Wit & Altbach, 2021; Hart & Rodgers, 2024; Wilbers & Brankovic, 2023).

Dynamic academic capability contributes to competitive advantage by connecting strategic resources with organizational value creation. Universities strengthen their competitive position by leveraging intellectual capital, accelerating innovation, expanding collaborative networks, and continuously renewing organizational competencies. Competitive advantage therefore emerges through continuous learning, knowledge integration, and capability development rather than through resource ownership alone (Ali et al., 2024; Li et al., 2025; Teece, 2007).

Collectively, the evidence suggests that the relationship between academic engagement capability and institutional competitive advantage is indirect rather than immediate. Academic engagement first stimulates knowledge creation, academic innovation, and research collaboration, which subsequently interact to form institutional dynamic academic capability. This higher-order capability functions as the central mechanism through which universities strengthen their adaptive capacity and sustain competitive advantage in an increasingly dynamic higher education environment (Ali et al., 2024; Li et al., 2025; Teece, 2007).

Research Gaps and Future Research Agenda

Although the literature on academic engagement, knowledge creation, academic innovation, research collaboration, dynamic capability, and competitive advantage has expanded considerably in recent years, several important research gaps remain. First, academic engagement and dynamic capability have largely evolved as separate streams of research, leaving the conceptual relationship between these constructs insufficiently explained. Second, existing studies primarily emphasize the performance outcomes of individual capabilities, while relatively little attention has been devoted to understanding how these capabilities are developed and integrated within higher education institutions. Third, no comprehensive conceptual framework has yet integrated academic engagement capability, knowledge creation capability, academic innovation capability, research collaboration capability, institutional dynamic academic capability, and institutional competitive advantage into a unified model for explaining capability development in higher education (Ali et al., 2024; Li et al., 2025).

These gaps point to the need for research that examines capability-building as an integrated and dynamic organizational process. Future studies could empirically test the proposed conceptual model using Structural Equation Modeling (SEM), multilevel modelling, or longitudinal research designs to capture the dynamic relationships among the proposed capabilities. Future research may also examine the influence of contextual factors including academic leadership, organizational culture, digital transformation, and institutional governance on the development of institutional dynamic academic capability and its

contribution to competitive advantage in higher education (Farias-Gaytan et al., 2023; Li et al., 2025).

CONCLUSION

This article synthesizes the literature on the role of academic engagement capability in the formation of institutional competitive advantage through institutional dynamic academic capability in the context of higher education. The results of the synthesis indicate that academic engagement capability not only contributes to individual outcomes such as academic productivity and job satisfaction but also serves as a strategic resource that drives the formation of knowledge creation capability, academic innovation capability, and research collaboration capability. Collectively, these three capabilities form the institution's dynamic capability, enabling higher education institutions to respond to environmental changes in a more adaptive and sustainable manner (Ali et al., 2024; Li et al., 2025).

A literature review indicates that knowledge creation capability provides a knowledge base that supports the sensing process; academic innovation capability enables institutions to engage in seizing through the development of new solutions and practices; and research collaboration capability strengthens the reconfiguring process by expanding access to external resources and networks. The interaction of these three capabilities generates organizational adaptive capacity, which serves as the primary mechanism for transforming academic resources into institutional competitive advantage (Ali et al., 2024; Li et al., 2025; Teece, 2007).

The main theoretical contribution of this article lies in the integration of the literature on academic engagement, knowledge creation, academic innovation, research collaboration, dynamic capability, and competitive advantage into a single coherent conceptual framework. Unlike previous studies that tend to examine these constructs separately, this article demonstrates that the formation of a university's competitive advantage can be understood as a capability-building process that begins with academic engagement capability and evolves through a series of organizational capabilities to produce the institution's dynamic capabilities. These findings also expand the application of Dynamic Capability Theory in the context of higher education by explaining the capability formation mechanism that links academic resources with organizational value creation (Ali et al., 2024; Teece, 2007).

From a practical perspective, the study's findings indicate that enhancing the competitiveness of higher education institutions cannot be achieved solely through investment in infrastructure or physical resources. Higher education institutions need to encourage the active engagement of the academic community, strengthen knowledge creation mechanisms, foster a culture of innovation, and expand research collaboration as part of their organizational capability development strategy. This approach enables institutions to build stronger adaptive capacity in the face of an increasingly dynamic and competitive higher education environment (Ali et al., 2024; Li et al., 2025).

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