



**International Symposium on Strategy & Transformation Management
For Tertiary Education
Virtual Symposium
14 – 16 Oct 2024**

Main Organiser: Universiti Teknologi MARA (UiTM)
Co-Organiser: East Kazakhstan Technical University (EKTU)

**Achieving Global Prominence:
The interplay of strategy, structure, and systems for university transformation**

Mohamad Faizul Yahya^{1,4*}, Siti Fatimah Saipuddin^{1,4}, Mahanijah Md Kamal^{2,4}, Alawi Sulaiman³

*Corresponding Author

¹ Faculty of Applied Sciences, Universiti Teknologi MARA, 40450, Shah Alam, Selangor, Malaysia

² School of Electrical Engineering, Universiti Teknologi MARA, 40450 Shah Alam, Selangor, Malaysia

³ Faculty of Plantation and Agrotechnology, Universiti Teknologi MARA Cawangan Melaka

Kampus Jasin, 77300 Merlimau Melaka, Malaysia

⁴ University Transformation Office, Universiti Teknologi MARA, 40450 Shah Alam, Selangor, Malaysia

mfy@uitm.edu.my, sitifatimah7020@uitm.edu.my, mahani724@uitm.edu.my, dr_alawi@uitm.edu.my
Tel: +6010-225 3462

Abstract

The integration of strategy, structure, and systems, combined with effective governance and operational management, is important for a university's progression toward global prominence. This article provides a historical overview of strategic planning developments from 1968 to 2023 and examines the frequency and prioritisation of 16 key transformative elements, which are categorised as high, moderate, low, or very low priority. Analysis reveals that strategy, structure, and systems consistently rank as the most critical elements in established planning frameworks, underscoring their central role in guiding institutional transformation, fostering innovation, and enhancing global recognition.

Keywords: Transformation; Strategy; Structure; System

eISSN: 2398-4287 © 2025. The Authors. Published for AMER by e-International Publishing House, Ltd., UK. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>). Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers) DOI: <https://doi.org/10.21834/e-bpj.v10iSI34.7466>

1.0 Introduction

As universities throughout the world strive to increase awareness of their presence, they face a growing challenge due to the increasing complexity and competitiveness of the global landscape. Schools need to do more than only educate, undertake research, and serve the community in this time of quick change. It is also imperative that they can adapt to the evolving world and the forces that influence higher education. For universities to achieve global recognition, they must develop and implement concepts, frameworks, and procedures that facilitate global participation, flexibility, and innovation. Globalisation has significantly altered the way higher education operates by simplifying the process of transferring ideas, money, technology, and people across borders. Therefore, colleges must

eISSN: 2398-4287 © 2025. The Authors. Published for AMER by e-International Publishing House, Ltd., UK. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>). Peer-review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers) DOI: <https://doi.org/10.21834/e-bpj.v10iSI34.7466>

modify their internal operations to align with global standards and requirements. To be the best in the world, an institution must be good at research, teaching, and coming up with new ideas. They must also address significant global issues such as sustainability, digital transformation, and social equality. It encompasses the recruitment of exceptional individuals, the facilitation of international collaboration, and the receipt of funding from a diverse array of sources. Colleges need to examine the entire system and ensure that strategy, structure, and processes are all working together for this change to be effective. Strategy provides a comprehensive overview of the organisation's long-term objectives and the strategic use of resources, thereby enabling the identification of institutional priorities. The establishment of governance models that provide faculties with control, facilitate cooperation among disciplines, and support shared leadership is how organisational structure translates strategy into action. The institution can be more responsive and generate innovative ideas at all levels by implementing a decentralised, adaptable structure. Both technical and operational institutional frameworks contribute to day-to-day operations and long-term goals. Some examples include digital infrastructures, quality assurance systems, and decision-making tools. As an increasing number of colleges and universities implement data-driven management strategies and digital platforms, systems must facilitate transparency, efficiency, and growth. A university must ensure that its strategy, structure, and processes are coordinated to be globally relevant and exceptional. This synergy has resulted in an environment that is conducive to change, encourages adaptability, facilitates the university's growth, and establishes it as a respected international player. By fostering an academic culture that is inclusive and forward-thinking, universities can navigate new challenges and advance their mission in a globalised society. This study aims to systematically analyse 16 strategic planning models developed between 1968 and 2023 to identify the frequency, prioritisation, and relational patterns of key transformative elements within higher education strategic planning. By mapping these elements across historical and contemporary frameworks, the study seeks to determine how strategy, structure, and systems have been emphasised over time and to evaluate their relative importance in enabling universities to progress toward globally recognised institutional transformation.

2.0 The Role of Strategy, Structure, and System in Supporting University Transformation

A well-defined institutional strategy provides a comprehensive framework for a university's transformation journey. This strategic plan clearly outlines the institution's long-term ambitions, identifies key focus areas, and delineates the specific steps necessary to achieve its overarching objectives. Effective strategic planning empowers the university to allocate its resources efficiently, foster a culture of innovation, and closely align its activities and initiatives with the evolving demands of the global academic community. (Kotler et al., 2023). By developing and implementing a robust strategic plan, the university can position itself as a leader in higher education, attracting the best talent, driving groundbreaking research, and maximizing its positive impact on students, researchers, and society at large. Through strategic foresight and agile execution, the university can navigate the complex global landscape, capitalize on emerging opportunities, and solidify its reputation as a world-class institution that shapes the future of higher education.

Clearly defining and harmonizing the university's overarching vision, mission, and strategic objectives is essential for driving successful transformation. This ensures that all institutional initiatives and activities are united towards a shared purpose, propelling the university towards its long-term aspirations while upholding its fundamental principles and values. By aligning the university's strategic plan with its core mission and vision, the institution can ensure that its resources, efforts, and decision-making are focused on achieving its primary goals and objectives, ultimately enhancing its ability to elevate its global prominence and impact. (Shirley, 1988) This strategic alignment empowers the university to efficiently allocate its resources, foster a culture of innovation, and closely tailor its activities to the evolving needs of the global academic community. Through this deliberate and cohesive approach, the institution can solidify its reputation as a world-class leader in higher education, attracting the brightest minds, driving groundbreaking research, and maximizing its positive influence on students, scholars, and society at large.

Data-driven insights are essential for effective strategic planning. The institution will, therefore, be able to use data in tracking progress, observing patterns, measuring performance, and projecting needs. Through evidence-based analysis, the institution will be able to justify its decisions and ensure that its curricula are responsive to changing needs in society. It will then be possible for the organization to make strategic decisions leading toward long-term success and international recognition. Thus, the university will be able to achieve strategic goals much faster and with more initiative, reinforcing its position among the best institutions. A university needs an effective organizational structure, which fosters cooperation, resource distribution, and accountability for the successful change of the university. With a properly developed structure, the institution should be able to harness cross-functional synergies, effectively implement its strategic plans, and respond promptly to new opportunities and challenges (Jasti et al., 2019). The section discusses three critical components of a university's transformation at the global level: strong performance management systems, organizational structures for governance and leadership, and efficient resource allocation and management. Ideologies of governance and leadership become particularly pertinent in times of transition at institutions of higher education. Transformation projects are often heavily dependent on an institution's management and structure, most particularly in their power hierarchies, decision-making procedures, and the setting of priorities. One pivotal stage is to constitute a strategic planning committee consisting of top administrators such as department chairmen, deans, and the university president, along with faculty and students. This committee oversees overseeing the strategic planning procedure, making sure that the institution's leadership actively participates in decision-making, and defining precise accountability for carrying out the plan. To foster cooperation, increase resource efficiency, and improve overall agility, the university should also think about reorganizing its academic and administrative divisions (Paris, 2004).

It should be done by establishing effective performance management systems that ensure proper integration of individual and departmental objectives into the university's strategic goals. Setting clear key performance indicators (KIPs) indicating the advances toward the global prominence objectives of the institution, regular progress reviews to assess and adjust strategies, and appropriate

incentives and support for driving continuous improvement in the needed areas (Sibel, 2018). Full-scale performance management systems ensure much more accountability throughout the organization in terms of implementing the transformation strategy and enable the university to take measurable steps toward its aspiration of becoming globally renowned. This would help the university to closely monitor and optimize the performance of its different units and personnel, better allocate resources, identify and resolve emerging challenges, and continue its momentum in raising its global standing and impact. An effective organizational structure is what can help in the successful transformation of a university. Organizational structures are the facilitators that enable the development of a globally recognized leader in higher education and provide an enabling environment that addresses changing world needs. The foundational systems that support this transformation include governance policies, operational procedures, and infrastructure, enabling the university to function efficiently, respond to changing circumstances, and produce high-quality research and academic programs (Benavides et al., 2020).

Universities need to ensure data-informed decisions as part of efforts toward improving efficiency and aligning departments with strategic objectives. A robust data system allows each department to collect, analyse, and synthesize the information that will make possible a series of informed decisions and significant improvements. Such data helps colleges identify trends, become better in areas, and make informed decisions about staffing, programs, and resources. In this way, the focus on data-driven procedures would enable the colleges to closely monitor developments, evaluate changes in performance, and adjust their plans accordingly. These procedures place the college in a very strategic position to succeed in a very competitive environment and create a culture of continuous improvement. Therefore, the institution will do a better job monitoring and assessing changes from a data perspective and making positive decisions regarding staffing, programs, and resources. Only a comprehensive approach to digital transformation can make universities continue to be competitive in delivering high-quality education and research. This involves developing the technological infrastructure, integration of new digital means of working, and increasing labor capacity (Hashim et al., 2021). By adopting this technology, universities have improved programs, operational efficiency, and relations with stakeholders (Marks et al., 2021). A good strategy related to digital transformation is needed if universities are to play leadership roles in driving innovation and excellence through technology.

Effective quality control is an important part of university reform. These quality measures are what, in part, hold up the global reputation of the institution. For the university to continue with its international standing, it must have high-quality academic programs, innovative research, and excellent student support services through comprehensive, data-driven quality control processes. These quality assurance procedures should include periodic internal and external evaluations to determine areas needing improvement and to maintain global excellence standards. These assessments will provide an ongoing feedback mechanism using focus groups, town hall meetings, and surveys for the inclusion of findings in strategic planning.

3.0 Methodology

3.1 Design of Experiments

The study examined 16 strategic planning models from 1968 to 2023. Table 1 provides details on the 16 strategic strategies. Following that, Table 2 will map the 16 critical transformative elements that were emphasised in the chosen strategic planning (Noor & Leong, 2013) (Cheah & Merican, 2012). These critical components of the strategic planning blueprint were then analysed to determine their frequency of occurrence and classified into four priority levels: high, moderate, low, and very low-priority elements. The findings were thoroughly examined in the analysis and discussion sections.

Table 1. Selected Strategic Planning from 1965 to 2023

Strategic Planning Name	Description
1. The McKinsey 7S Framework	The McKinsey 7S Framework was developed in the late 1970s by management consultants Tom Peters and Robert Waterman at McKinsey & Company. (Putri et al., 2021) This organisational model was first introduced in their 1980 publication and later gained wider recognition through their 1982 work.
2. Leavitt's Diamond Model	Leavitt's Diamond Model, proposed in 1965, depicts the interdependence of an organisation's key elements: Structure, Technology, People, and Tasks.
3. The Burke-Litwin Model	The Burke-Litwin Model, a 1992 framework developed by W. Warner Burke and George H. Litwin, describes how organisational components interact and influence one another, particularly in the context of organisational change.
4. The Nadler-Tushman Congruence Model	The Nadler-Tushman Congruence Model, developed in the early 1980s, emphasises the importance of aligning an organisation's key elements, such as tasks, people, structure, and culture, to optimise performance. This diagnostic framework was first introduced in 1980 and further expanded in 1983.
5. Galbraith's Star 1978 Model	Galbraith's Star 1978 Model outlines five key organisational elements—strategy, Structure, Processes, Rewards, and People—that must be aligned for effective design and successful strategy implementation.
6. The Balanced Scorecard 2001	The Balanced Scorecard 2001 is a strategic management framework developed by Kaplan and Norton that translates an organisation's strategy into measurable objectives across four key areas, helping align the organisation's structure and decision-making with its overall strategy.
7. The Agile Organisation 2008 Model	The Agile Organisation 2008 Model emphasises strategic agility, which is the ability of an organisation to rapidly adjust its strategy, structure, and processes in response to environmental changes, thereby maintaining its competitiveness.
8. The "4 Disciplines of Execution" 2012 model	The 2012 "4 Disciplines of Execution" model emphasises the effective implementation of strategic priorities by aligning an organisation's strategy, systems, and structure through clear objectives, performance monitoring, team coordination, and accountability mechanisms.
9. Digital Transformation Framework 2014	Westerman, Bonnet, and McAfee's Digital Transformation Framework (2014) propose a structured approach for aligning digital initiatives with an organisation's strategic objectives and design.

10. The Digital Capability Framework 2019	The Digital Capability Framework 2019 emphasises the importance of aligning an organisation's digital capabilities with its strategic objectives and developing a cohesive structure and system to facilitate digital transformation, encompassing the cultivation of digital skills, leadership, culture, and governance.
11. The Ecosystem 2019 Model	The Ecosystem 2019 Model for Higher Education proposes that universities collaborate with diverse stakeholders to align their strategy, structure, and systems for effective engagement.
12. The Organisational Agility 2022	The Organisational Agility 2022 Model emphasises the importance of businesses adapting swiftly to changes in their environment by ensuring that their strategy, structure, and systems work together to foster flexibility, responsiveness, and ongoing learning.
13. EDUCAUSE Holistic Digital Transformation 2023 Model	The EDUCAUSE Holistic Digital Transformation 2023 Model promotes a comprehensive approach to digital transformation in higher education. It emphasises integrating strategy, structure, and systems to create a cohesive digital campus and align digital initiatives, governance, culture, and technology infrastructure to support institutional goals.
14. The Sustainable University 2023 Framework	The Sustainable University 2023 Framework from Times Higher Education enables universities to align their strategies, structures, and operations with sustainability objectives by incorporating the UN's Sustainable Development Goals into institutional planning and practices, thereby driving positive social and environmental impact.
15. Gartner AI-Driven Strategic Planning Model 2023	The Gartner AI-Driven Strategic Planning Model 2023 uses AI and data analytics to enhance strategic planning and align an organisation's strategy, structure, and systems.
16. World Economic Forum's Resilience and Adaptability Framework 2022	The World Economic Forum's Resilience and Adaptability Framework 2022 emphasises the importance of higher education institutions developing organisational resilience and adaptability by aligning their strategies, structures, and systems to respond effectively to disruptions, such as pandemics and technological changes.

3.2 Transformative Elements Frequency Analysis

Further in-depth analysis was performed to associate 16 selected strategic planning models with the key transformative elements essential for transforming any university into a recognised, globally established institution. Such in-depth analysis aims to examine the annual priority and frequencies for each type of transformative element. This systematic review thus provided a far greater insight into the complex interplay of relationships and comparative priorities among these transformational elements in the strategic planning of higher education institutions. The critical transformative elements are outlined in Table 2.

Table 2. Critical Transformative Elements

Structure	Management, Leadership, Practices & Governance	Clear Goals & Objectives
System	Tasks & Cross-Functional	Government & Industries
Strategy	Work & Rewards	Staff & Skills
People, Culture & Teamwork	Financial & Resource Allocation	Customer
Shared Values/ Culture	Internal Process & Continuous Change	SDG
Digital Initiatives & AI	Learning & Growth	Disruptions (pandemics/ technological change)

4.0 Analysis and Discussion

The analysis found four priority levels for the transformative aspects necessary for a university to become a world-class institution: high priority, moderate priority, low priority, and extremely low priority. These levels enable us to better understand the significance of each transformative aspect to the institution as it navigates its transformation journey.

4.1 High-Priority Elements

- Structure (100.0%): Studies show structure is the most significant thing that helps a university change. This shift is based on an open, well-structured, adaptable organisational framework. A robust foundation makes it easier to make decisions, clearly defines job tasks, and helps change projects run smoothly.
- System (94.1%): The value of the organisational structure is strongly related to the importance of a strong system. Integrated and comprehensive systems that support essential tasks, such as managing student data and providing academic resources, enable the university to develop and adapt more easily.
- Strategy (88.2%): A university's efforts to change are heavily influenced by strategy. This highlights the importance of having a clear, forward-looking strategic vision that aligns with the institution's long-term objectives and considers emerging trends in education, research, and societal needs.

4.2 Moderate-Priority Elements

- People, Culture, and Teamwork (47.1%): People and teamwork promote collaboration, employee engagement, and a healthy organisational culture. However, they are not as important as the basic parts of strategy, structure, and processes. However, cooperation between departments is crucial for fostering new ideas and implementing significant institutional changes.
- Culture and values that are shared (23.5%): Culture is important, but not as important as structural and strategic components. This could mean that the university believes culture will change during the transition, even though it is crucial to get the university community to agree on common values.
- Digital Initiatives and AI (23.5%): The fact that digital initiatives and AI are not getting much attention implies that technology is considered a tool, not a driver, of change in universities. However, we need to pay more attention to this area because digitalisation is becoming more important in education (for example, online learning and AI-driven analytics).

4.3 Low-Priority Elements

- Management/Leadership Practices & Governance (17.6%): The data indicates that leadership and governance are not prioritised as much as structural and strategic components in the university's transformation initiatives. This suggests that people trust the current leaders or are more interested in the organisation's structure than in its management methods and governance practices. The institution may consider these aspects less important for driving significant changes than systems and strategy, so they do not focus as much on them.
- 11.8% for Financial and Resource Allocation: The institution's relative lack of focus on financial and resource allocation may indicate that it believes its current financial and resource capabilities are sufficient to implement the desired changes. It could also mean that the institution believes these issues will be resolved naturally, as other key aspects of the transformation, such as strategy, structure, and processes, are improved and integrated more effectively.
- Learning and progress (11.8%): Interestingly, learning and growth are not very high on the list of priorities. These initiatives typically encompass the professional development of academics and staff, as well as students' ongoing learning and skill-building. This suggests that although the institution acknowledges the significance of these factors, it may view them as inherent consequences of its operations. Alternatively, byproducts arise from the effective execution of other critical transformative components rather than necessitating direct, concentrated attention.

4.4 Very Low-Priority Elements

- Staff and Skills (5.9%): It is worrying that staff and skills are so low on the list of priorities. This implies that the institution does not prioritise developing and upgrading personnel competencies as a central aspect of its transformation initiatives. This method can make it more challenging for the university to adapt and respond effectively to new problems and future changes.
- Sustainable Development Goals (SDGs) (5.9%): This could mean that the university needs to put more effort into incorporating projects and ideas that focus on sustainability, a larger part of its main mission, daily work, and long-term goals.
- Disruptions (Pandemics/Technological Change) (5.9%): If an institution does not put much emphasis on being ready for disruptions, it could suggest that it is sure it can handle any crisis. Recent events worldwide, including the COVID-19 pandemic, have underscored the need for organisations to incorporate flexibility and adaptability into their strategic planning and organisational structure.

5.0 Conclusion

Achieving global prominence requires universities to pursue coordinated strategic, structural, and systemic transformations. A clearly articulated strategy provides a roadmap for excellence and international recognition, while an effective organisational structure, underpinned by robust governance, resource allocation, and performance management systems, ensures the efficient execution of transformation initiatives. Such alignment fosters innovation, scholarly excellence, and operational efficiency, positioning institutions to attract top talent, conduct pioneering research, and deliver high-quality education. However, this study is limited by its reliance on published strategic planning models and may not fully capture contextual nuances or emergent practices in diverse institutional settings. Future research could explore longitudinal case studies, assess the implementation of strategy-structure-system alignment in different cultural and regulatory environments, and investigate the impact of digital and data-driven innovations on achieving global recognition. These directions would provide deeper insights into how universities can sustainably transform to meet evolving global standards.

References

Benavides, L M C., Arias, J A T., Serna, M A., Branch, J W., & Burgos, D. (2020). Digital Transformation in Higher Education Institutions: A Systematic Literature Review. *Multidisciplinary Digital Publishing Institute*, 20(11), 3291–3291. <https://doi.org/10.3390/s20113291>

Buhler-Miko, M. (1981). Futures planning and the sense of community in universities. *Wiley*, 1981(5), 25–39

Cheah, P.K., & Merican, A M. (2012). Education Policy: A Case Study of Digitizing Education in Malaysia. *Elsevier BV*, 69, 1714-1718. <https://doi.org/10.1016/j.sbspro.2012.12.119>

Hashim, M. A. M., Tlemsani, I., & Matthews, R. (2021). Higher education strategy in digital transformation. *Education and Information Technologies*, 27(3), 3171. <https://doi.org/10.1007/s10639-021-10739-1>

Jasti, B., Livesey, J C., Oppenheimer, P R., & Boyce, E G. (2019). Development, Implementation, and Assessment of a Comprehensive Strategic Plan in a School of Pharmacy. *Elsevier BV*, 83(6), 6899-6899. <https://doi.org/10.5688/ajpe6899>

Kotler, P., Murphy, P E., & Martin, H T. (2023). Strategic Planning for Higher Education. <https://www.jstor.org/stable/1981836?origin=crossref>

Marks, A., AL-Ali, M., Atassi, R., Elkishk, A. A., & Rezgui, Y. (2021). Digital Transformation in Higher Education: Maturity and Challenges Post COVID-19. *Springer Nature*, 53–70. https://doi.org/10.1007/978-3-030-68285-9_6

Noor, N M., & Leong, C. (2013). Multiculturalism in Malaysia and Singapore: Contesting models. *Elsevier BV*, 37(6), 714-726.

Paris, K. A. (2004). Moving the strategic plan off the shelf and into action at the University of Wisconsin-Madison. *Wiley*, 2004(123), 121–127. <https://doi.org/10.1002/ir.126>

Putri, A D., Ghazali, A., & Ahluwalia, L. (2021). Analysis Of Company Capability Using 7s McKinsey Framework To Support Corporate

Succession (Case Study: Pt X Indonesia). Universitas Muhammadiyah Semarang, 11(1), 44-53. <https://doi.org/10.22219/mb.v11i1.17371>

Shirley, R. C. (1988). Strategic planning: An overview. Wiley, 1988(64), 5-14

Sibel, A. (2018). Applying business models to higher education. Academic Journals, 10(9), 111–122. <https://doi.org/10.5897/jeaps2015.0420>

Stensaker, B., Lee, J. J., Rhoades, G., Ghosh, S., Castiello-Gutiérrez, S., Vance, H., Çalıkoğlu, A., Kramer, V., Liu, S., Marei, M. S., O'Toole, L. C., Владимирович, П. И., & Peel, C. (2018). Stratified University Strategies: The Shaping of Institutional Legitimacy in a Global Perspective. The Journal of Higher Education, 90(4), 539.

Tischler, L., Biberman, J., & Alkhafaji, A. F. (1998). A New Strategic Planning Model For Universities Undergoing Transformation. International Journal of Commerce and Management, 8(3), 85.