

Lean Management Practices on Organizational Performance in Malaysian Public Universities

Nur Umilidiya Rapizal and Nursyazwani Mohd Fuzi

Faculty of Management, Universiti Teknologi Malaysia, 81310 Johor Bahru, Johor, Malaysia

Email: umilidiya@graduate.utm.my

Abstract

The objective of this study is to examine the conceptual framework of lean management practices on organizational performance in Malaysian public universities. The methods used in the study are quantitative. Questionnaires are distributed to collect information from lecturer and administrative staff in Malaysian public universities. The use of a conceptual framework in this study as a framework for lean management practices and organizational performance. This study provides important information on lean management practices and organizational performance. It also provides direction for future research in this area.

Keywords: Lean Management Practices, Organizational Performance, Public University, Malaysia

Introduction

Lean is a tool that focuses on increasing quality by eliminating waste and increasing customer value with limited resources (Simonyte, 2022). Lean originated in the manufacturing industry, and numerous companies have already benefited from the effectiveness and efficiency of this tool. Simonyte (2022) claims that lean is still in the early stages of development activities and has not yet become a standard practice in universities. Moreover, lean is not only applicable in business, but also in academia, as it helps to structure faculty operations, promote interdisciplinary teamwork, and improve the programme.

A public university receives most of its funding from the public sector through the national government. Public universities in Malaysia produce graduates who can learn and use their knowledge for the benefit of Malaysian society. Public universities were established to enhance the public interest by providing transformative education to students from backgrounds, conducting groundbreaking research that saves lives, spurs innovation, and improves the quality of life, and by engaging their communities in some of the most challenging issues they face.

Funding for public universities in Malaysia has been drastically reduced over time. In this predicament, higher education institutions (HEIs) must achieve financial success. HEIs need to reform themselves to make their operations more effective while maintaining or expanding their current funding allocations for academic and research activities (Shebli et al., 2022). Implementing the lean methodology in HEIs enables these institutions to achieve process improvements while providing quality education. The lean approach has helped universities improve their services in various areas, such as admissions and financial

management. There is a need to streamline multi-step processes and prioritize the needs of the individuals served.

This paper is organized as follows. In the overview of lean management practices and organizational performance, a literature review is provided, while in the methodology, the proposed conceptual framework is described. Finally, this research forms the basis for the conclusions.

Literature Review

Lean Management Practices (LMP)

The idea of lean management practices (LMP) in higher education is still relatively new compared to those in manufacturing. When applied to public service, lean focuses on managing and optimizing processes, reducing waste, and creating value-added activities. There are several motivations for universities to introduce lean into their practices. Designing lean values into universities currently presents a significant difficulty, as research has shown that management involvement increases the impact of lean values on long-term strategic planning (Balzer et al., 2016). According to Klein (2023), universities have a lot of room to reduce waste while increasing student value, which develops over time. In higher education, lean teaching aims to improve the teaching process, teaching experiences, and teaching outcomes for students, ultimately adding value to employers and society at large. Lean administration aims to improve processes such as approving course content, admitting students, moving students into residence halls, purchasing goods or services, and organizing instruction.

Dimension of LMP

Student Value

Student benefit is a key factor of lean in higher education institutions, as the main goal of the approach is to increase the value of services provided to end users (Simonyte et al., 2021). Addressing student needs, facilitating interaction with administration, staff, and responding to student feedback (positive or negative) are essential elements. This study demonstrates the importance of introducing students to LMP as they have a significant impact on how society will change in the future.

Waste Elimination

In the context of universities, there are many types of waste that administrators must address to eliminate it (Klein et al., 2021a). According to Kang and Manyonge (2014), the main goal of lean is to eliminate steps from procedures that have no value to staff, faculty, or students. System downtime, pointless reports, extra approvals, unnecessary copying, duplication of records, and waste in higher education institutions. Therefore, it is important to identify waste to improve organizational performance.

Employee Involvement

Employee involvement refers to how much employees participate in decisions about their activities and working conditions (Neirotti, 2020). According to Qi and Wang (2018), employee engagement has been linked to improved organizational performance in both the private and government sectors. Employee engagement serves to meet higher-level needs in the long term. Engagement practices allow employees to measure organizational information and participate in decision-making processes, giving them more control over their work

environment. Therefore, universities will only run out of resources if they treat their employees well enough.

Top Management Commitment

A critical success factor for LMP is the active involvement of senior leadership (Antony, 2018). Top management should focus on improving student satisfaction and supporting and recognizing the role of staff. According to Antony (2014), leaders should develop a clear vision to create the desired culture. The purpose of visionary leadership is to pave the way for staff to transition from their current work habits to those that are considered "best in class." Public universities should be aware of the actions and behaviours used by leadership to improve organizational performance.

Research Methodology

Survey research is used to conduct the quantitative study. In this study, questionnaires are used to collect data. The respondents of this study include administrative staff and lecturers of public universities in Malaysia. The three sections of the structured questionnaire are Section A (general information), Section B (lean management practices), and Section C (organizational performance). In data analysis, Cronbach's alpha coefficient is used to evaluate the validity of the study instruments. Finally, a multiple regression analysis is conducted to determine the hypothesis development, namely the relationship between lean management practices (independent variable) and organizational performance (dependent variable).

A Proposed Conceptual Framework

Figure 1 shows the conceptual framework for this study. Organizational performance is dependent variable in this study, and independent variables are lean management practices (student value, waste elimination, employee involvement, and top management commitment).

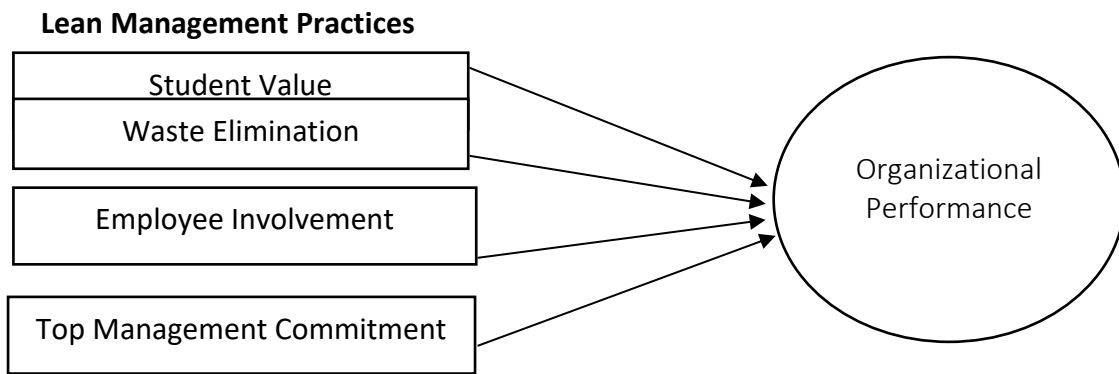


Figure 1. The Proposed Conceptual Framework

According to Klein (2023), LMP has a direct impact on organizational performance. Since these practices include the “soft” elements of Lean, it can be easily implemented in Malaysian public universities. In other words, it focuses more on issues related to people and their interactions, including leadership, people, and teamwork.

Conclusion

The basic lean concepts of value, customer, efficiency, and effectiveness are universal and can be applied in higher education institutions. Lean has not yet become common practise in higher education institutions, and universities are still in the early stages of lean development activities. However, current indicators suggest that lean is on the rise in higher education worldwide. Therefore, this study focuses on LMP in Malaysian public universities. LMP correspond to the goals of improving customer value (students were considered customers from a lean perspective), minimising waste (costs), and promoting efficiency and productivity. An improved education system with LMP approach promotes academic management, improves student satisfaction, and leads to academic success. Academics and professionals can use this study to enhance their understanding of how to apply LMP to improve organizational performance. This study is limited by the fact that it was only conducted in Malaysian public universities. The second limitation of the study is that certain characteristics of lean management practices and organizational performance could not be found in the management accounting literature. It is recommended that this study be conducted in all Malaysian universities in the future. Future researchers can add studies in Malaysian private universities to expand the scope of this study.

References

- Antony, J. (2014). Readiness factors for the Lean Six Sigma journey in the higher education sector. *International Journal of Productivity and Performance Management*, 63(2), 257-264.
- Antony, J. (2018). A conceptual Lean Six Sigma framework for quality excellence in higher education institutions. *International Journal of Quality & Reliability Management*, 35(4), 857-874.
- Balzer, W. K., Francis, D. E., Krehbiel, T. C., & Shea, N. (2016). A review and perspective on lean in higher education. *Quality Assurance in Education*, 24(4), 442-462.
- Kang, P., & Manyonge, L. (2014). Exploration of lean principals in higher educational institutes–based on degree of implementation and indigence. *International Journal of Scientific and Engineering Research*, 35(2), 831-838.

- Klein, L. L., De Guimaraes, J. C. F., Severo, E. A., Dorion, E. C. H., & Feltrin, T. S. (2023). Lean practices toward a balanced sustainability in higher education institutions: A Brazilian experience. *International Journal of Sustainability in Higher Education*, 24(2), 259-278.
- Klein, L. L., Tonetto, M. S., Avila, L. V., & Moreira, R. (2021a). Management of lean waste in a public higher education institution. *Journal of Cleaner Production*, 286, 125386,
- Neirotti, P. (2020). Work intensification and employee involvement in lean production: New light on a classic dilemma. *The International Journal of Human Resource Management*, 31(15), 1958-1983.
- Qi, F., & Wang, W. (2018). Employee involvement, public service motivation, and perceived organizational performance: testing a new model. *International Review of Administrative Sciences*, 84(4), 746-764.
- Shebli, M. A., Turki, S. F., & Muttar, A. K. (2022). Developing a conceptual framework for the implementation of the lean system and its impact on quality of learning and organizational performance. *ASU International Conference in Emerging Technologies for Sustainability and Intelligent Systems (ICETISIS)*, 385-391.
- Simonyte, S., Adomaitiene, R., & Ruzele, D. (2021). Experience of lean application in higher education institutions. *International Journal of Lean Six Sigma*, 13(2), 408-427.