

Junshi: A Daily Kaizen activity of Lean Production Management

Kamal S. K.*

Department of Management of Technology, Malaysia-Japan International Institute of Technology, Universiti Teknologi Malaysia
Email: kamalsk76@gmail.com

Nurul Fadly Habidin

Department of Management and Leadership,
Faculty of Management and Economics, Universiti Pendidikan Sultan Idris,
35900 Tanjung Malim, Perak, Malaysia

DOI: 10.6007/IJARBSS/v7-i3/2851 URL: http://dx.doi.org/10.6007/IJARBSS/v7-i3/2851

Abstract

Lean production management is a proven success practice of cutting waste and giving value to the automotive industry for years. However, lean implementation faced various obstacles related to human aspects such as the lack of knowledge of daily kaizen practices for process improvement related to daily production activities especially the Malaysian automotive industries. This study aims to find the significant values or factors for the successful implementation of the lean management, an analysis of the integration between factor of human-related practices of lean philosophical culture such as kaizen, teamwork, and respect for people in Toyota way as moderating effects towards achieving lean management sustainability and success factor towards the success of implementation of lean production management with a proposed theoretical framework and variables under incentives, behaviors, and operations.

Keywords Lean culture, Lean Production Management, Toyota way, Daily kaizen, Creativity

Literature Review

The past 40 years of lean research, literature have evolved from the initial discovery of "Japanese management" techniques (Drucker, 1971) to the current interest in determining performance outcomes (Fullerton, Kennedy, & Widener, 2014) and their impact on lean sustainability. Since the term "lean" introduces (Krafcik, 1988) and "lean thinking" (Womack, J. P., & Jones, 1996), most research literature stems from operations management and industrially applied science fields with very few from social sciences or applied psychology (Barratt, Choi, & Li, 2011).

The methodology for this work includes an analysis of the literature on Toyota Way (Saruta, 2006) and Malaysia National Automotive Policy (NAP) 2014, from where synergies of



the experiential lean principles conceptual methodology being developed. Literature search as per in summary table below indicates that there is a lack of research on Daily kaizen that will help to change the culture and behavior to sustain the lean production management.

Elements/Variable	Author	Author	Author	Author	Author	Author
	1	2	3	4	5	6
Create a lean vision and align goals	/	/	/	/	/	/
Automotive experts; coach and	/	/	/	/	/	/
develop others						
Lean Basic thinking, mindset, and		/	/	/	/	/
assumptions						
Lean Production System: Value-			/	/	/	/
driven purpose						
Leadership skills	/	/	/	/	/	/
Human Capital Development					/	/
Support daily kaizen	/					/
Respect	/	/	/	/	/	/
Teamwork				/	/	/

(Authors: Author 1; (Wong & Morse, 2014) Author 2; (Warcup & Warcup, 2015) Author 3; (Hagg, 2013) Author 4; (Wolf, 2016) Author 5: (Dora & Sandjong, 2014), Author 6 (Kamal S. K.)

Table 1: Comparison table of variables and a previous study on kaizen activity of lean production Management.

A proposed conceptual Model

An application of the Quantitative method studies the Key Performance Index (KPI) of management (Marksberry, 2011), sustainable values in understanding, support and execution towards a lean sustainability management (Piercy & Rich, 2015).

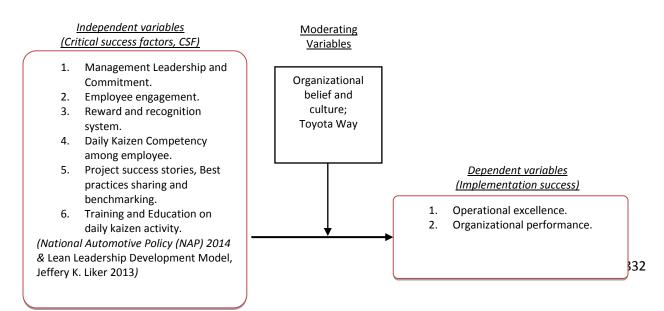




Figure 1: Theoretical framework and variables: Incentives, Behaviors, and Operations

Methodology

The most apparent void within the body of knowledge eluding from lean literature was the lack of theoretical connections often associated with planned organizational change and HRD interventions (Shuck & Rose, 2016). (Seddon & Caulkin, 2007) observed the importance of systems thinking and its applicability to lean, while certain studies connected the sociotechnological aspects (Netland, Schloetzer, & Ferdows, 2015) human performance (Angelis, Conti, Cooper, & Gill, 2011), and motivating job characteristics (Badurdeen, Wijekoon, & Marksberry, 2011) to lean transformations. While these articles with a few others, opened the discussion around aspects important to lean sustainability, from 1985 to 2016 much of the nearly 150 articles focused on "how-to-manage" lean principles and critiques of the effects (Arlbjørn & Freytag, 2013). Therefore, the Exploratory fieldwork of research utilizes diary and field notes with key informants over a period using descriptive, analytic thinking and interpretation through questionnaires, in-depth interviews, meetings, document, and observation (Phellas, Bloch, & Seale, 2011).

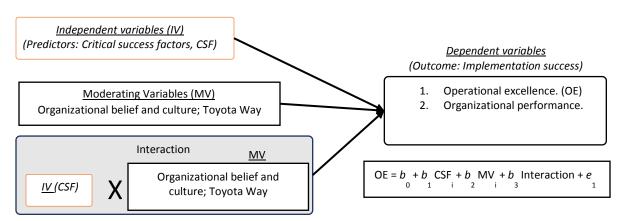


Figure 2: The Statistical Models: Incentives, Behaviors, and Operations

Expected findings/results

The daily kaizen culture develops the shop floor workers to demonstrates their abilities in identifying and solving problems are valued by making those abilities part of their work by establishing factors, it has had on the overall competitive positions of the adopting organization, understand the function of management support in a lean sustainability implementation and examine the lean implementation impact had made within the system. This research shall demonstrate on how Lean understanding, diligence, and the impact has evolved over 50 years from its sources of Japanese auto manufacturing to a holistic value system that is applicable to all business sectors, both private and public (Hvidman & Andersen, 2014).

In this research, it examines the primary and secondary data of The Toyota Way on sustainability management, philosophical values as few types of research have been done over



the years. It also presents such of interest in the field of operations management and knowledge contribution in understanding the factors of lean sustainability management.

Conclusion

In general, this research shall be beneficial as an empirical evidence present adds further support, suggesting the factors of significant value that are the dominant characteristics of any successful lean sustainability implementation process. While lean thinking focuses on cutting costs, innovations create new business value by transforming original ideas for merchandise or services that satisfy customers' certain needs, and thus expand the market size and strengthen a company's overall competitiveness. Celebrating the success and standardize the activity plus recognition from the management has brought daily kaizen to a significant level in Lean innovation and sustainability. An organization that effectively accommodates both lean and innovation will benefit the most and be competitive in the long term.

Acknowledgement

The author would like to acknowledge the Ministry of Higher Education Malaysia for the knowledge and support for this study through the awards of My Ph.D., My Brain 15.

Corresponding Author

Kamal S. K.

Department of Management of Technology,

Malaysia-Japan International Institute of Technology, Universiti Teknologi Malaysia,

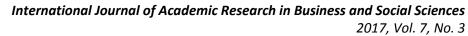
Email: kamalsk76@gmail.com

References

- Angelis, J., Conti, R., Cooper, C., & Gill, C. (2011). Building a high-commitment lean culture. Journal of Manufacturing Technology Management, 22(5), 569–586. http://doi.org/10.1108/17410381111134446
- Arlbjørn, J. S., & Freytag, P. V. (2013). Evidence of lean: a review of international peer-reviewed journal articles. *European Business Review*, *25*(2), 174–205. http://doi.org/10.1108/09555341311302675
- Badurdeen, F., Wijekoon, K., & Marksberry, P. (2011). An analytical hierarchy process-based tool to evaluate value systems for lean transformations. *Journal of Manufacturing Technology Management*, 22(1), 46–65. http://doi.org/10.1108/17410381111099806
- Barratt, M., Choi, T. Y., & Li, M. (2011). Qualitative case studies in operations management: Trends, research outcomes, and future research implications. *Journal of Operations*



- Management, 29(4), 329-342. http://doi.org/10.1016/j.jom.2010.06.002
- Dora, A., & Sandjong, N. (2014). Arielle Dora Nganya Sandjong.
- Drucker, P. F. (1971). What we can learn from Japanese management. *Harvard Business Review*, 49(2), 110–122. http://doi.org/10.1016/j.ccep.2015.08.019
- Fullerton, R. R., Kennedy, F. A., & Widener, S. K. (2014). Lean manufacturing and firm performance: The incremental contribution of lean management accounting practices. *Journal of Operations Management*, 32(7–8), 414–428. http://doi.org/10.1016/j.jom.2014.09.002
- Hagg, H. K. (2013). Large System Transformation within Healthcare Organizations utilizing Lean Deployment Strategies by.
- Hvidman, U., & Andersen, S. C. (2014). Impact of performance management in public and private organizations. *Journal of Public Administration Research and Theory*, *24*(1), 35–58. http://doi.org/10.1093/jopart/mut019
- Krafcik, J. F. (1988). Triumph of the lean production system. *Sloan Management Review*. http://doi.org/10.1108/01443570911005992
- Marksberry, P. (2011). The Toyota Way a quantitative approach. *International Journal of Lean Six Sigma*, 2(2), 132–150. http://doi.org/10.1108/20401461111135028
- Netland, T. H., Schloetzer, J. D., & Ferdows, K. (2015). Implementing corporate lean programs: The effect of management control practices. *Journal of Operations Management*, *36*, 90–102. http://doi.org/10.1016/j.jom.2015.03.005
- Phellas, C. N., Bloch, A., & Seale, C. (2011). Structured Methods: Interviews, Questionnaires and Observation. *Researching Society and Culture*, 181–205. http://doi.org/10.1108/13673270710832190
- Piercy, N., & Rich, N. (2015). The relationship between lean operations and sustainable operations. International Journal of Operations & Production Management (Vol. 35). http://doi.org/10.1108/IJOPM-03-2014-0143
- Saruta, M. (2006). Toyota Production Systems: The "Toyota Way" and Labour–Management Relations. *Asian Business & Management*, *5*, 487–506. http://doi.org/10.1057/palgrave.abm.9200198
- Seddon, J., & Caulkin, S. (2007). Systems thinking, lean production and action learning. *Action Learning: Research and Practice*, 4(1), 9–24. http://doi.org/10.1080/14767330701231438
- Shuck, B., & Rose, K. (2016). Reframing Employee Engagement Within the Context of Meaning and Purpose: Implications for HRD Conceptual Framework and Related Literature. *Advances in Developing Human Resources*, *15*(154), 341–355. http://doi.org/10.1177/1523422313503235
- Warcup, R. D., & Warcup, R. (2015). Successful Paths to Becoming a Lean Organization in the Construction Industry.
- Wolf, L. (2016). Balancing the Complexity of Patient Falls: by, (May).
- Womack, J. P., & Jones, D. T. (1996). Lean Thinking by Womack and Jones. *Review Literature And Arts Of The Americas*, (November), 5.
- Wong, M. A., & Morse, E. A. (2014). Entrepreneurial Culture: Developing a Theoretical Construct and its Measurement, (July).





ISSN: 2222-6990