

A conceptual model for the implementation of lean product development

Daniel Aikhuele^a, Faiz Turan^b

^a Faculty of Manufacturing Engineering, Universiti Malaysia Pahang, Pekan, Malaysia

^b Universiti Malaysia Pahang, Pekan, Malaysia

ABSTRACT

Companies are faced with the need to address their product development challenges innovatively in order to stay competitive in today's market. One way of doing that is the integration of lean thinking in their product development process. However, due to the lack of clear understanding of the lean thinking performance measurements, the near absent of a holistic and unifying measuring method and the near or non-existence of an evaluating conceptual model to allow for the evaluation of the performance of the lean product development processes, many companies are unable to fully implement the lean thinking principle in their Product development process. In dealing with these issues, this article has therefore proposed a conceptual model which is based on some core critical success factors for the examination of lean performance in the product development process.

KEYWORDS

Conceptual model; Critical success factors; Lean practices; Lean product development

REFERENCES

1. Ahmad, W.
(2012) *Cost Modelling System to Support Lean Product and Process Development*.
2. Aikhuele, D.O.
Systematic model for lean product development implementation in an automotive related company.
(2017) *Management Science Letters*, 7 (7), pp. 337-350.
3. Aikhuele, D.O., Turan, F.M.
A Hybrid Fuzzy Model for Lean Product Development Performance Measurement.
(2016) *IOP Conference Series: Materials Science and Engineering*, 114 (1), art. no. 012048.

4. Aikhuele, D.O., Turan, F.M.

Proposal for a Conceptual Model for Evaluating Lean Product Development Performance:
A Study of LPD Enablers in Manufacturing Companies.

(2016) *IOP Conference Series: Materials Science and Engineering*, 114 (1), art. no. 012047.

5. Aikhuele, D.O., Turan, F.M.

A subjective and objective fuzzy-based analytical hierarchy process model for
prioritization of lean product development practices.

(2017) *Management Science Letters*, 7 (6), pp. 297-310.