

# Poster summary

Literature



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Poster Summary POSTER SUMMARY The capability to deliver a product ahead of the competition to the market is essential (Nepal, Yadav & Solanki, 2011, p. 65). Lean new product development is a practical approach that hastens the time taken by a company to get its new product into the market. It mainly aims to enhance processes during R&D, such as reducing waste in planning, controlling the design process, improving management of resources, and enhancing communication between functions.

The crucial stages in the process are design and development as well as marketing of the product. The stage gate process involves discrete phases within these stages, including concept design and product design for the first stage, design review, prototype building and pilot production for the development stage, and mass production and sustaining support for the production stage (Nepal et al., 2011, p. 66). A review process is undertaken at the stage gate after every phase and the next course of development is determined. In addition, there are back arrows from each phase that are representative of the learning process informing future development for the previous phase.

In the lean NDP process, the main objectives are to reduce costs and time for R&D, as well as inventory. To do this, the company is required to adhere to various principles, including identification of client needs, identification and mapping of the value stream, and application of continuous improvement processes (Nepal et al., 2011, p. 68). In addition, the company is required to determine customer pulled value and pursue perfection to reduce costs and time required for design and development.

Lean NPD processes have both benefits and limitations. The benefits can be operational with reduction in lead time, space utilisation and inventory and

increased productivity and quality, as well as administrative with reduction in order processing errors, paper work, turnover and service time (Nepal et al., 2011, p. 68). Strategically, lean NPD allows reduction of labour costs, shipping time and lead time, as well as increasing competitive advantage, revenue and sales volume. The limitations include difficulties in adjusting in initial stages, time wastage, work-related stress and low initial financial impact.

#### References

Nepal, B. P., Yadav, O. P. & Solanki, R. (2011). Improving the NPD process by applying lean principles: a case study. *EMJ – Engineering Management Journal*, 23(3), pp. 65–81.