

# Application of Lean Concept in Retail: Literature Review



## Ramunė Čiarnienė, Mindaugas Mančas

Kaunas University of Technology, K. Donelaičio St. 73, 44249 Kaunas, Lithuania

#### Introduction

Retail sector comprises an important portion of the economy. Aspiration to work more sustainably, globalization and changing market demands are increasing competitiveness, and as a result retail companies are adopting different improvement methods and techniques to survive and prosper in the market. Lean concept is one of the wide-ranging ways to promote efficiency, while emphasizing a high level of awareness on customer.

The research aims to reveal the possibilities and barriers of Lean application in retail. Based on the scientific literature analysis, authors of the research present the theoretical conceptual model which illustrates Lean implementation in retail.

The origins of Lean can be found on the shop floors of Japanese manufacturers, in particular at the Toyota Motor Corporation (Marques et al., 2022). Lean philosophy is based on defining value from the customer's viewpoint, and continually improving the way in which value is delivered, by eliminating every use of resources that is wasteful, or that does not contribute to the value goal. Lean thinking increased in popularity in the end of the 1980s and since then has disseminated to different countries and industries across the globe.

Various definitions exist within scientific literature, yet upon reviewing the analysed research works, it is evident that the Lean concept has a multifaceted nature, manifesting at different levels of abstraction. At the strategic level, it presents itself as a philosophy or a mindset; at the tactical level, it encompasses a collection of principles; and at an operational level, it materializes through an extensive array of practices and tools, that are adoptable across diverse organizations to eliminate anything that does not create value (Čiarnienė & Vienažindienė, 2015; Leksic et al., 2020, Marques et al., 2022).

Lean tools are used to deliver products and services better, to improve quality, increase productivity, speed and reliability, while reducing inventories and costs (Madhani, 2020; Silva et al., 2021).

Currently, retail is crucial in the context of gross domestic product and labour creation, and its role in the economy is growing. Retail success can be defined as achieving high gross margins and customer service levels in the context of stock availability at stores.

### Methodology

The research methodology is based on systematic and comparative analysis of scientific literature.

#### Results

Managers in retail every day have to make a whole series of decisions that affect retail store performance. The most important of them are presented in table.

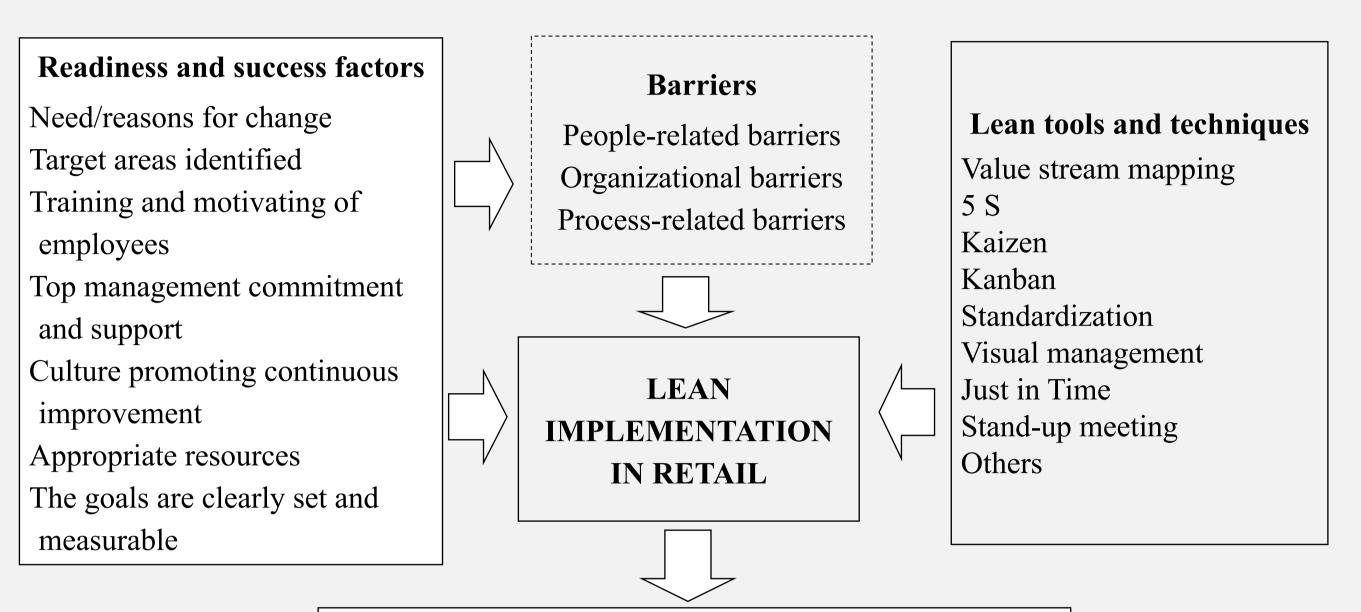
Table. The main retail store operations decisions

Decision area	Explanation
<b>Demand forecasting</b>	Integral to retail store operations, stands as a crucial component in managing inventory and labour effectively.
In-store logistics: backroom storage and shelf replenishment	Products sourced either from internal distribution centres or external suppliers are transported to the store's backroom. Shelf replenishment involves the actions carried out by store employees.
Inventory management	Ensuring product availability is critical in the retail sector. Inventory management significantly influence store sales and profitability.
Assortment and display	Providing an adequate range of products within the constraints of limited shelf space stands as a key concern for attracting and retaining customers
Product promotion	There exists a multitude of strategies for this, encompassing price discounts, coupons, complimentary items, gifts, and other promotional tactics.
Checkout operations	The checkout process is an indispensable aspect of the customer's shopping journey, where speed and friendliness are pivotal contributors to the overall shopping experience.
Employee management	Frontline employees play an important role in driving store sales. Aligning store associates with both customers' demands and store requirements stands as a critical factor in enhancing

retail store performance.

#### Results

Base on the literature analysis, authors of the paper present theoretical conceptual model for Lean implementation in retail.



#### Benefits and progress dimensions

- Improved on-shelf availability
- Increased customer satisfaction
- Enhanced inventory management and space efficiency
- Better utilization of employee potential
- Enhanced transportation and logistics
- Reduced waste and cost
- Increased sales margins and profitability

#### Main conclusions

Lean is a fundamental concept, not limited to a specific type or size of business. Research works conducted by scientists illustrate various improvement initiatives in the retail sector applying Lean principles, tools and techniques. Adopting Lean concept leads to the improved on-shelf availability, minimized wastes, optimized inventory management and better space utilization, increased customer service and satisfaction, increased productivity, sales and profitability This research contributes by elaboration of the theoretical conceptual model for Lean implementation in retail. The model consists of the following elements: readiness and success factors, barriers to Lean implementation, Lean tools and techniques, and benefits, and progress dimensions.

Implementation of Lean concept within the retail company entails a systematic approach that involves identifying need for change and areas for improvement, awareness of possible barriers and responding to them, developing a clear plan, training, motivating and supporting employees, establishing a culture for continuous improvement, allocating suitable resources, as well as consistently monitoring, and evaluating the progress.