ORGANISATIONAL READINESS FOR LEAN TRANSFORMATION IN MODERN LOGISTICS COMPANIES

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Abstract

Lean transformation has become a strategic priority for logistics companies seeking operational excellence, flexibility and long-term competitiveness. However, empirical evidence indicates that many Lean initiatives fail not because of inappropriate tools, but due to insufficient organisational preparedness. In the logistics sector, characterised by operational interdependence, high service expectations and technological integration, readiness for Lean transformation plays a decisive role. The aim of this study is to identify and systematise the key determinants of organisational readiness for Lean transformation in modern logistics companies. The research is based on a structured analysis and synthesis of contemporary scientific literature on Lean management, organisational change and transformation theory. The findings reveal that leadership commitment, organisational culture, employee engagement, communication systems, resource allocation and technological maturity represent the fundamental readiness dimensions. Based on the analysis, a conceptual framework of organisational readiness for Lean transformation in logistics is proposed. The study contributes to the theoretical development of Lean research by shifting attention from operational tools to strategic organisational capabilities.

Keywords: lean transformation, organisational readiness, logistics management, change management, continuous improvement.

Introduction

Lean management has evolved from its origins in the Toyota Production System into a globally recognised philosophy of continuous improvement and waste elimination. Over the past two decades, Lean principles have increasingly been applied beyond manufacturing and integrated into logistics and supply chain management. Modern logistics companies operate in environments marked by globalisation, digitalisation, demand volatility and increasing customer expectations. In response, organisations pursue Lean transformation as a strategic initiative to enhance efficiency, responsiveness and competitiveness.

Despite the widespread adoption of Lean methodologies, research indicates that a substantial proportion of Lean initiatives fail to achieve sustainable results (Bhasin, 2012; Netland, 2016). The failure is frequently attributed not to the inadequacy of Lean tools but to insufficient organisational readiness. Lean transformation requires cultural alignment, leadership commitment and employee engagement. Without these foundational elements, improvement efforts often remain superficial and temporary.

The concept of organisational readiness for change has been widely discussed in change management literature (Armenakis, Harris, 2002; Weiner, 2009). However, limited attention has been given to readiness specifically in the context of Lean transformation within logistics companies. Given the sector's operational complexity and interdependent processes, readiness becomes particularly critical.

Research aim: to identify and systematise the key determinants of organisational readiness for Lean transformation in modern logistics companies.

The following **objectives** have been set to achieve the aim:

1. To analyse Lean transformation as a strategic organisational change process;
2. To examine theoretical perspectives on organisational readiness;
3. To identify and synthesise key readiness determinants relevant to logistics companies;
4. To propose a conceptual framework for assessing organisational readiness for Lean transformation.

Research object and methods

The research object of this study is organisational readiness for Lean transformation in logistics companies.

The study employs a qualitative research design based on systematic literature analysis. Scientific publications were selected from peer-reviewed journals in the fields of Lean management, operations management, logistics and organisational change. The analysis focused on publications discussing Lean transformation, implementation barriers, cultural factors and readiness frameworks.

The literature was collected from major academic databases such as Scopus, Web of Science and Google Scholar. The selection focused on studies related to Lean management, organisational change and logistics published in internationally recognised academic journals.

The research method applied is analytical synthesis. The selected literature was reviewed to identify recurring themes and determinants associated with successful Lean implementation. Comparative analysis was used to evaluate similarities and differences between readiness constructs proposed by various scholars. The findings were subsequently integrated into a conceptual framework adapted to the logistics sector.

Only sources written in English and published in internationally recognised journals and academic publishers were included. The study does not involve empirical data collection and is limited to theoretical and conceptual analysis.

Research results and discussion

The research results are presented in accordance with the objectives set in the study. Since the research is based on systematic literature analysis, the results reflect the synthesis, comparison and critical evaluation of scientific sources rather than statistical testing.

Lean Transformation as a Strategic Organisational Change Process

The analysis of scientific literature confirms that Lean transformation should be understood as a long-term organisational change rather than a short-term efficiency initiative. Early studies on Lean primarily focused on operational tools and production efficiency (Spear, Bowen, 1999; Womack, Jones, 2003). However, later research emphasised that sustainable Lean implementation requires strategic alignment and cultural transformation (Liker, 2004).

According to J. P. Womack and D. T. Jones (2003), Lean thinking is grounded in value creation and systematic waste elimination. Nevertheless, S. Bhasin (2012) argues that many organisations misinterpret Lean as a technical toolkit, neglecting organisational preconditions. Similarly, T. Netland (2016) identifies weak managerial engagement and insufficient cultural adaptation as dominant causes of Lean failure.

These findings demonstrate that Lean transformation in logistics companies must extend beyond process optimisation and incorporate structural and behavioural adjustments across the organisation.

Theoretical Perspectives on Organisational Readiness

The concept of organisational readiness originates from change management theory. A. A. Armenakis and S. G. Harris (2002) define readiness as the shared belief among organisational members that change is necessary and achievable. B. J. Weiner (2009) further develops this perspective by emphasising collective commitment and efficacy as central components of readiness.

J. P. Kotter (1996) highlights leadership-driven urgency and structured change phases as prerequisites for transformation success. These theoretical perspectives indicate that readiness is multidimensional and includes cognitive, behavioural and structural elements.

When applied to Lean transformation, readiness involves not only technical competence but also psychological acceptance and organisational capability. Studies on Lean implementation barriers confirm that lack of training, insufficient communication and limited managerial support reduce transformation effectiveness (Achanga et al., 2006; Jadhav et al., 2014).

Thus, organisational readiness can be interpreted as the foundation upon which Lean transformation is built.

Identification of Key Readiness Determinants

The literature synthesis allowed the identification of six interrelated determinants that influence readiness for Lean transformation in logistics companies. These determinants are summarised in Table 1.

Table 1. Key Determinants of Organisational Readiness for Lean Transformation

Determinant	Description	References
Leadership commitment	Active managerial involvement and strategic guidance	Kotter (1996); Netland (2016)
Organisational culture	Support for continuous improvement and openness	Bhasin (2012); Liker (2004)
Employee competence	Training and problem-solving skills	Jadhav et al. (2014)
Communication systems	Clear vision and feedback mechanisms	Armenakis, Harris (2002)
Resource allocation	Availability of time and financial investment	Achanga et al. (2006)
Technological maturity	Digital infrastructure supporting transparency	Shah, Ward (2007)

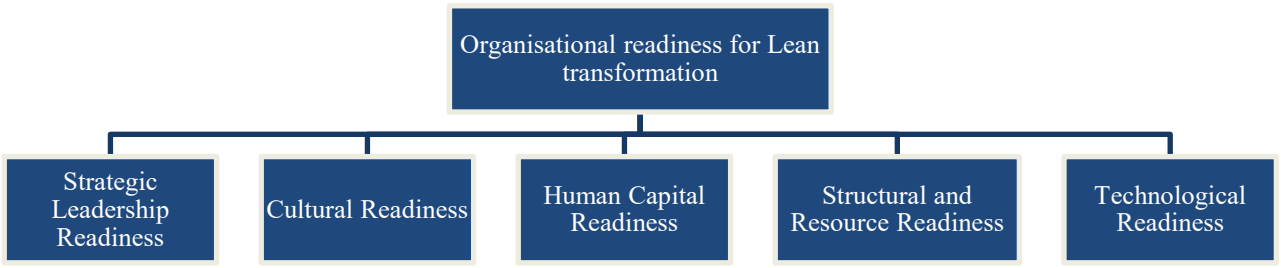
The analysis reveals that leadership commitment is the central integrating factor. Without visible and consistent managerial support, Lean transformation is unlikely to become embedded in organisational routines.

Organisational culture is equally critical. Lean requires transparency, teamwork and continuous learning. Hierarchical resistance and rigid communication patterns frequently observed in logistics companies may hinder transformation progress.

Technological maturity is particularly relevant in modern logistics environments, where digital tools enable process visibility and performance monitoring. Digital readiness strengthens the practical application of Lean principles.

Conceptual Framework of Organisational Readiness

Based on the literature synthesis, a conceptual framework is proposed to systematise the identified determinants (Fig. 1).



Source: developed by the author based on Armenakis, Harris (2002); Kotter (1996); Weiner (2009); Netland (2016)

Fig.1. Lean Transformation Readiness Framework

The results demonstrate that these dimensions interact dynamically. For instance, leadership commitment influences organisational culture, while resource allocation determines the scope of employee training and digital development. Weakness in any dimension may reduce overall transformation effectiveness.

The proposed framework may serve as a practical assessment tool for logistics companies preparing for Lean transformation. Organisations could evaluate their readiness by analysing leadership commitment, cultural support, employee competencies and technological capabilities before initiating Lean initiatives. Future empirical studies may test the framework by applying survey-based assessments in logistics companies.

The research confirms that Lean transformation in logistics companies cannot succeed without prior organisational preparation. The dominant pattern emerging from the literature is that technical tool implementation without cultural and strategic alignment leads to superficial improvement.

Moreover, the logistics sector presents additional complexity due to time pressure, multi-actor coordination and technological dependence. Therefore, readiness assessment becomes particularly important in this context.

The analysis also reveals a research gap: although Lean barriers are widely studied, fewer studies integrate these barriers into structured readiness assessment frameworks tailored specifically to logistics organisations.

Future research could operationalise the proposed conceptual framework and empirically test the relative weight of each determinant in different logistics contexts.

While Bhasin (2012) emphasises organisational culture as the primary barrier to Lean implementation, Netland (2016) highlights leadership commitment as the dominant success factor. This indicates that Lean transformation success depends on the interaction of both structural and behavioural organisational elements.

Conclusions

1. The study confirms that Lean transformation in modern logistics companies represents a comprehensive strategic change process rather than a purely operational initiative. Therefore, the first objective has been achieved.
2. The analysis of organisational readiness theory demonstrates that readiness is a multidimensional construct encompassing leadership, culture, employee engagement, communication, resources and technological maturity. The second objective has been fulfilled.
3. Through systematic literature synthesis, six key determinants of organisational readiness relevant to logistics companies were identified and systematised, achieving the third objective.
4. The proposed conceptual framework integrates the identified determinants into a coherent structure that can serve as a basis for future empirical validation. Thus, the fourth objective has been accomplished.

Overall, the research aim has been achieved. The study highlights that the success of Lean transformation depends primarily on organisational preparedness rather than the isolated application of Lean tools. Assessing readiness dimensions prior to implementation enhances the probability of sustainable performance improvement and long-term competitiveness in the logistics sector.

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