

**EVOLUTION OF LOGISTICS MANAGEMENT IN INDUSTRY:
A THEORETICAL AND METHODOLOGICAL PERSPECTIVE
ON THE TRANSFORMATION OF CONTEMPORARY
MANAGEMENT PARADIGMS**

Zhyvtsov Valentyn

*Postgraduate Student at the Department of Management and Finance,
Ukrainian State University of Science and Technology*

In the current context of rapid transformation of the economic environment, where industrial enterprises operate under conditions of permanent external volatility, logistics management is increasingly viewed as a key managerial domain that determines the economic resilience, adaptability, and competitiveness of production systems. Traditional perceptions of logistics as a set of technical procedures or tools for streamlining flows no longer correspond to the realities of the industrial sector. They have given way to broader theoretical constructs in which logistics emerges as an integrated managerial paradigm incorporating economic rationality, organizational and behavioural mechanisms, cultural determinants, and cognitive components of decision-making.

The evolution of logistics management in industry demonstrates a clear shift from a functional approach – focused predominantly on cost minimisation and operational efficiency – towards an understanding of logistics as a complex socio-economic system. The focus now extends far beyond flow parameters to include the mechanisms of decision formation, interdepartmental interaction, trust, human competences, organizational culture, and digital infrastructures that ensure process integration. This correlates with contemporary trends in behavioural economics, institutional theory, and organizational management, which emphasise the role of the human factor, social capital, and cognitive decision-making models in improving managerial effectiveness.

Rethinking logistics as a managerial paradigm enables a conceptualisation of its development not as a linear process of method improvement, but as a gradual transformation of managerial thinking. Industrial enterprises are transitioning from logistics oriented solely to material flows toward logistics as a value-creation system, where managerial decisions are grounded in a balance between economic rationality and behavioural-organizational factors. In this context, the notion of cognitive decision-making models – now widely explored in global economic science – is increasingly integrated. Logistics management begins to account for how managers interpret information, which biases may influence judgments, how organizational memory is formed, and how collective decisions reflect the culture and experience of the enterprise.

Particular attention is given to the role of cross-functional coordination, which is increasingly recognised as the core of logistics management. In contemporary industrial enterprises, logistics is no longer an isolated subsystem of production – it becomes interwoven with strategic management, demand planning, innovation development, and digital transformation. The study therefore highlights that logistics decisions emerge within an environment where diverse groups of actors – managers, technical specialists, analysts, and change leaders – interact, and that the quality of this interaction directly shapes the enterprise's ability to adapt to market challenges.

An important theoretical shift is the growing recognition of logistics as an environment in which the social capital of an enterprise is formed and accumulated. This encompasses not only communications and relationships but also trust, shared norms, a sense of belonging, and the productivity of teamwork. Social capital becomes one of the catalysts for effective logistics decisions and a factor capable of compensating for technological limitations when an enterprise faces instability or resource constraints.

The study further reveals that the evolution of logistics management in industry is inseparable from digital transformations. The transition to digital platforms, automated control systems, data analytics, and digital twins is accompanied not only by changes in tools but also by deep shifts in managerial thinking. Digitalisation enhances process transparency, accelerates communication, and creates prerequisites for integrated logistics decisions, while simultaneously imposing new requirements on workforce competencies and organizational culture.

The institutional dimension of logistics management also warrants special attention. Modern industrial enterprises operate in an environment where institutional rules, regulatory mechanisms, standards, incentives, and constraints significantly influence the trajectories of logistics development. The study substantiates that logistics management evolves in close connection with institutional dynamics and the requirements of the digital economy, which determine organizational priorities and conditions for integrating logistics practices into the broader enterprise management system.

Thus, logistics management is positioned not merely as an element of production technology or a collection of operational procedures but as an evolutionary managerial concept shaped by changes in human behaviour, social structures, cognitive decision-making models, and institutional transformations within the industrial sector. Logistics becomes a domain where economic interests, organizational mechanisms, and human motivations converge, enabling it to be interpreted as a fundamental component of an enterprise's economic development.

The expanded theoretical interpretation of logistics management proposed in this study provides a foundation for developing new methodological approaches to assessing logistics systems and creating socio-economic

mechanisms to enhance the efficiency of industrial enterprises. This opens pathways for further research in digital logistics, cognitive decision modelling, organizational change management, and the advancement of adaptive logistics management models that align with the challenges of the contemporary economic environment.

Moreover, the evolutionary trajectory of logistics management demonstrates that the effectiveness of contemporary industrial systems increasingly depends on the organisation's ability to cultivate a learning-oriented environment. As enterprises confront uncertainty, market fragmentation and geopolitical shocks, logistics becomes a platform for continuous organisational learning, where errors, experiments and feedback loops contribute to the refinement of decision-making models. This highlights the emerging role of reflexive management practices, in which managers systematically evaluate the consequences of their decisions, reconsider established assumptions and adjust strategies in response to evolving internal and external stimuli. Such practices reinforce the adaptive capacity of logistics systems and strengthen their resilience, ultimately enabling industrial enterprises to navigate complexity with greater confidence and strategic foresight.