

## **Abstract**

**of the dissertation by E.M. Sakharov titled "Long-term Development Planning for a Distribution Company Amidst Business Digitalization and a Turbulent External Environment," submitted for the academic degree of Candidate of Economic Sciences in the specialty 5.2.6 "Management."**

### **Relevance of the research topic**

The current economic landscape of the Russian Federation is characterized by the convergence of multiple crisis phenomena and turbulent trends, creating a fundamentally new and volatile business environment. Under these conditions, the challenge of effective long-term planning—traditionally a cornerstone of strategic management—has become critically important and requires fundamental rethinking.

This dissertation, which focuses on long-term planning for the development of distribution trade through digital transformation, is timely due to the following factors:

First, the relevance of this topic stems from the systemic role played by the distribution sector within the trade industry—itself a component of Russia's economic system. Distribution companies act as the circulatory system of the consumer market, facilitating the link between manufacturers (both domestic and foreign) and retail chains. Any disruptions in this link immediately translate into rising prices, product shortages, and a decline in overall economic activity. Thus, the resilience and competitiveness of the distribution sector are matters of both industry-specific and macroeconomic importance, directly impacting the country's food security and stability.

Secondly, the unprecedented turbulence of the external and internal environments has exposed the inadequacy of classical long-term planning models. Global supply chains, long considered the benchmark for efficiency, have demonstrated their fragility. For Russia, this situation is compounded by the impact of sanctions, which have led to logistical breakdowns, payment restrictions, and technological isolation. Against this backdrop, traditional tools—such as Porter’s Five Forces model, the Ansoff matrix, or SWOT analysis—prove largely ineffective. Their static nature, reactivity, and inability to account for the speed and unpredictability of change mean that strategies based on them become obsolete even before implementation begins. Planning based on the extrapolation of past trends loses all meaning amidst a "permanent storm."

Thirdly, a key factor driving relevance is transformation as an inevitable imperative for survival. Digitalization has ceased to be merely a matter of operational efficiency and has evolved into a driver of strategic competitiveness. Retailers—the primary consumers of distribution services—have already made significant strides in this area, creating demand for fundamentally different standards of interaction: response times of under an hour, seamless API integration, real-time data analysis, and demand forecasting. At the same time, distribution companies—especially those in the regions—risk rapidly becoming obsolete. The digital divide between retail and distribution creates an asymmetry that threatens the very existence of the distribution sector.

Fourthly, the particular significance of this study lies in its regional analysis of the Siberian and Far Eastern federal districts. Although these macro-regions possess significant economic potential, they also face systemic problems that exacerbate planning difficulties.

The resolution to this contradiction lies in synthesis: rather than abandoning traditional approaches, they should be updated by integrating digital metrics and principles for adapting ecosystem interactions. This will lead to the creation of a hybrid planning model capable of addressing current challenges. The aim of this study is to resolve this issue by proposing specific methods for modernizing long-term planning within the context of the digital transformation of the distribution sector.

### **Extent of scientific research on the topic**

Theoretical aspects regarding the capacity of distribution companies to implement long-term planning are addressed in select works by foreign authors in the academic literature. A systemic and holistic approach to researching the updating of strategies and long-term planning by distribution firms within the context of the EU economy is being developed by the Saïd Business School at the University of Oxford and the Vienna Institute for International Economic Studies. In the United States, the University of Virginia has become a hub for research into distribution activities, conducting studies based on data collected by the IFDA—an association of the largest national distributors in the US.

At the same time, the issue of long-term planning for distribution activities has received limited attention in Russian academic literature, which is dominated by descriptive reports from consulting and research firms (such as PwC, KPMG, EY, and McKinsey)—leading industry participants to adopt an exclusively positivist perspective—and by studies focused on the legal framework of distribution. Yet, a lack of attention to regulatory aspects and practical implementation can negatively affect the industry's outlook on future prospects.

### **Research Aim and Objectives**

The aim of the dissertation research is to develop theoretical and methodological foundations and practical tools for the long-term development planning of distribution companies in the transport and logistics services sector—operating amidst a turbulent external environment and the digital transformation of the economy—using the Siberian and Far Eastern Federal Districts as a case study.

### **Object of Research**

The object of research is the business activity of distributor companies in the TPS sector operating amidst structural turbulence and the digital transformation of the economy, with a focus on organizations in the Siberian and Far Eastern Federal Districts.

### **Subject of Research**

The subject of research comprises the organizational-economic relations, patterns, and mechanisms emerging during the long-term strategic planning of distributor company development, as well as the methods and tools for modernizing this process through digital transformation.

### **Research Area**

The topic of this dissertation and its content correspond to specialty 5.2.6. "Management." Research areas (according to the specialty datasheet): Section 6. "Methods and criteria for assessing the effectiveness of management systems. Results-based management"; Section 9. "The organization as an object of management. Organizational theory. Organizational management structures. Organizational change and organizational development"; Section 14. "Strategic management, methods and forms of its implementation. Organizational business models. Corporate strategies. Strategic resources and organizational capabilities of the firm"; Section 19. "Innovation management. Innovative capabilities of the firm. Management of organizational and technological innovations. Interorganizational

forms of innovation management"; Section 26. "Organization management in the context of digital transformation. Strategies and methods for digital business transformation"; Section 34. "Theory and practice of anti-crisis management of the organization. Development of anti-crisis management models."

### **Methodology and Research Methods**

The methodological basis of this dissertation is a dialectical approach to understanding economic phenomena and processes, which allowed us to examine the object of study—the long-term planning system of a distribution organization—in its constant development, dynamics, and inconsistencies caused by the interaction of internal and external factors. A systems approach was used as a general scientific foundation, within which a distribution organization is viewed as a complex, open, adaptive system operating in a macroeconomic environment and interacting with retail, suppliers, logistics, and digital platforms. This necessitated the use of a set of complementary methods adequate to the stated goals and objectives.

Research methods were grouped according to the levels of scientific knowledge and stages of work:

1. Theoretical and methodological block:

\* theoretical research methods: ascent from the abstract to the concrete, hermeneutic analysis of scientific texts, the method of scientific abstraction, comparative and critical analysis of planning models with a systematization of their advantages and limitations;

\* Conceptualization and modeling methods: synthesis, structural-functional modeling, formalization.

2. Empirical-analytical block:

\* Empirical data collection methods: secondary data analysis (Rosstat, Bank of Russia, industry statistics, international reports, scientific publications and conference proceedings), structured quantitative document analysis, questionnaires with elements of expert survey;

\* Empirical data processing and analysis methods: descriptive statistics, index method, comparative analysis, factor analysis.

3. Design-construction block: normative method, scenario planning method, case study method.

Thus, the research methodology is based on the mutual verification of the results obtained by various methods.

### **Theoretical Framework of the Study**

The theoretical framework of the study is based on a synthesis of several key scientific schools and concepts:

\* classical and modern strategic management theory: competitive analysis and industry models (M. Porter, the Five Forces Model, the Value Chain, and the National Diamond); strategic growth and diversification models (I. Ansoff, the Products-Markets Matrix); the resource-based approach and the concept of core competencies (J. Barney, VRIO analysis, G. Hamel, K.K. Prahalad); the concept of dynamic capabilities for adapting to change;

\* performance management systems theory: the balanced scorecard (BSC) and strategy maps (R. Kaplan, D. Norton);

\* industrial economics and the theory of the firm: studies of structure and competition in distribution markets for consumer goods; transaction cost theory;

\* Concepts of digital transformation and the knowledge economy: theories describing the impact of information technology, platform business models,

network effects, and data on competition and firm boundaries; concepts of digital maturity and digital ecosystems;

\* Regional economics and economic geography: works devoted to the specifics of the socio-economic development of the Siberian and Far Eastern Federal Districts, including issues of logistics, human resources, and the investment climate.

### **Empirical basis of the study**

The empirical basis consists of the applied methods and analytical tools used to collect and process data for the stated objectives:

\* Author's modeling method: development and testing of the Integral Distribution Sustainability Index (RDPI);

\* Method for modernizing existing management models: adapting the balanced scorecard (BSC) to the challenges of digital transformation in distribution;

\* Comparative and contrastive analysis: comparison of companies, regions (Siberian and Far Eastern Federal Districts), and classical and digital business models;

\* Factor and index analysis: identifying and grouping turbulence factors, constructing complex indices (e.g., a region's distribution attractiveness index);

\* Scenario modeling and forecast calculations: assessing the potential impact of implementing proposed measures.

### **Research Information and Empirical Base**

The information and empirical base are the specific data sources upon which the analysis and calculations are based:

\* statistical and reporting information: official statistics are provided by Rosstat, regulatory authorities, and international statistics;

\* industry analytical research and data: research by consulting and analytical agencies, industry media and portals, specialized reports, and industry reviews;

- \* scientific publications and journals: monographs and textbooks by cited authors, articles in Russian and international scientific journals on strategic management, logistics, and the digital economy, and conference proceedings;
- \* primary empirical data (collected by the author): the results of the author's own research, expert assessments, and calculations based on the analysis of public reports and industry information;
- \* regulatory documents: references to regional development strategies and regulations governing trade.

### **Scientific Novelty**

The novelty manifests itself at the theoretical, methodological, and applied levels and is revealed in the following points submitted for defense:

1. A modernized balanced scorecard (BSC) architecture has been substantiated and developed as the core of an adaptive management model. The novelty lies in the transformation of traditional perspectives through the introduction of a digital KPI system (ROI of digital assets, response speed, depth of API integration, and a digital competence index) and the introduction of a new, fifth strategic perspective – "Digital Ecosystem," which is an extension of Kaplan and Norton's theory.
2. A proprietary method for quantitatively assessing the sustainability of a distribution company – the RDPI index – has been developed, theoretically substantiated, and tested. The novelty lies in the synthesis in a single mathematical model of the factors of internal readiness (G), innovative activity (I), and external risks (R) with a methodological constraint, ensuring the dominance of controlled internal parameters in the assessment and its suitability for strategic control. The RDPI index is considered not only an important theoretical and methodological basis, but also a relevant practical tool for the implementation of long-term planning for the development of a distribution company in a turbulent external

environment. In essence, this is a single formula - a "sensor" that simultaneously takes readings from three key business systems: internal "health" (G), the ability to renew (I), and external pressure (R).

3. A mechanism for integrating the RDPI index and a modernized BSC into the strategic management framework has been designed. The novelty lies in the development of a formalized adaptive management cycle of "KPI monitoring - RDPI calculation - factor analysis - BSC adjustment" and the corresponding implementation regulations, which ensures the practical implementation of the double-loop learning principle in a distribution company.

4. A systemic crisis of digital transformation of the distribution sector of the Siberian and Far Eastern Federal Districts has been identified and quantified. This crisis manifests itself in a triad of interconnected problems: a critical lag in technological capabilities (87.5% of companies do not use AI), a structural deficit of digital competencies, and a dysfunctional IT investment model (50% - situational investments). Methodologically, this is a systemic analysis and quantitative diagnostics, characterized by: empirical research (collection and analysis of data from companies); structuring disparate symptoms into a single systemic crisis model (triad); Quantitative assessment of each problem through specific metrics (percentages, indices), which translates subjective perceptions into objective data.

Based on the data, a key systemic problem of the sector has been identified: digital transformation is stalled not due to a lack of funds, but due to a vicious cycle where ad hoc investments prevent the implementation of advanced technologies, and a lack of competencies prevents strategic investment.

5. Based on the developed models, a set of practical solutions was developed and substantiated—a digital transformation roadmap: a model for transitioning to

strategic IT investments (8-12% of monthly turnover per year) and a program for improving the digital competence index. These solutions present a taxonomy of possible adaptive digital transformation strategies for distribution companies, with criteria for selecting one of four transition models depending on their current level of digitalization and established market positions: gradual modernization, selective leadership, operational flexibility, and digital leadership.

Thus, the scientific novelty of this study lies not in individual improvements, but in the development of a holistic and methodologically consistent system of perspectives and tools that enable commercial enterprises to conduct long-term planning even in conditions where traditional approaches are losing their effectiveness.

### **Theoretical and Practical Significance**

The theoretical significance of this study lies in its deepening and developing scientific knowledge in the field of strategic management and industrial market economics in the context of digital transformation and structural turbulence. The results of this study contribute to the development of economic theory in the following areas:

1. Developing the theory of strategic management and planning. This study bridges the methodological gap between classical, static paradigms of strategic analysis (the resource-based approach, industrial competition models) and the requirements of a dynamic, networked economy.
2. Deepening the concept of digital transformation in industrial market economics. This study shifts the concept of "digitalization" from a technological and operational perspective to a strategic one. Digital transformation is viewed not as a cost-reduction tool, but as a factor fundamentally changing the nature of

competition, the structure of value chains, and the very boundaries of an organization.

3. Developing a methodology for economic and managerial measurement. The proposed RDPI (Distribution Company Sustainability Index) method represents a new class of integrated indicators for assessing the sustainability of business models. Its theoretical value lies in the comprehensive integration of endogenous (internal capabilities, innovative diffusion) and exogenous (competition, macrorisks) factors into a single metric with methodologically justified weighting constraints. This opens up new possibilities for cross-industry comparative studies and the construction of dynamic models of organizational sustainability in unstable environments.

4. Contribution to Regional Economics. This work makes a significant contribution to the theory of spatial economics and regional development by thoroughly examining the mechanisms by which specific factors of the Siberian and Far Eastern Federal Districts influence the competitive strategies and growth models of companies in the industry.

The practical significance of this work is determined by its focus on solving specific problems in the real sector of the economy and public administration. The results of the study can be directly applied:

1. For distribution companies in the retail sector, particularly in the Siberian and Far Eastern Federal Districts:

- \* the developed, modernized Balanced Scorecard serves as a ready-made framework for restructuring strategic management and long-term planning;
- \* the RDPI method is an effective tool for self-diagnosis and strategic monitoring;
- \* the formulated priority areas for change provide a clear action plan for bridging the digital divide with retail.

2. For state and regional government bodies:

\* the study results, in terms of analyzing turbulence factors and investment barriers, provide a structured analytical framework for developing and adjusting industry and regional development programs;

\* the identified systemic problems point to priority areas for public investment in infrastructure, education, and personnel retraining programs;

\* the RDPI tool can be adapted for use by regional ministries of economics as one of the criteria for assessing the effectiveness of state support measures and selecting recipients.

3. For retailers and manufacturers of distribution systems:

\* the study provides distributor partners with an understanding of the actual state and limitations of their key counterparties;

\* manufacturers receive a tool for assessing the reliability and potential of their distribution networks.

4. For the educational process:

\* the dissertation materials and conclusions can be used in the development of training courses and professional development programs in the areas of "Strategic Management," "Logistics," and "Digital Business Transformation" at universities and business schools.

Thus, the dissertation research possesses the property of scientific and practical synergy: its theoretical conclusions serve as the basis for the development of specific management tools, while the empirical findings, in turn, verify and deepen the theoretical constructs, ensuring the integrity and validity of the obtained results.

### **Validation and Validation of Results**

Some of the research results are used by Zolotaya Liniya LLC and TK Vostochnoe Partnerstvo LLC, as confirmed by validation certificates.

**The author's research results were tested at the following forums and conferences:**

1. The XI Moscow International Financial and Economic Forum "Building Bridges: Partnership Without Borders" (Moscow, RSPP, November 27, 2025)
2. The International Scientific and Practical Conference "Current Issues in Economic Sciences and Modern Management" (Novosibirsk, March 4, 2026).

**Scope and Structure of the Work**

The dissertation consists of an introduction, three chapters, a conclusion, and a bibliography containing 183 titles. The work is presented on 215 typewritten pages and contains 8 formulas, 19 tables, and 24 figures.

July 8, 2026  Sakharov E.M.