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## INTERNATIONAL EXPERIENCE IN MARKETING MANAGEMENT AND PRODUCTION EFFICIENCY IMPROVEMENT: LEAN MANAGEMENT AND THE REFA METHOD

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**Abstract:** *This article is devoted to the international experience in marketing management and improving production efficiency through the application of lean management concepts and the REFA method. It demonstrates how the integration of marketing strategies with tools for enhancing production efficiency contributes to cost reduction, improvement of product quality, and strengthening of a company's competitive position in international markets.*

**Keywords:** *Lean manufacturing, REFA method, KPI, productivity, efficiency, optimization of production processes, marketing management, enterprise competitiveness.*

The concept of lean management originated in Japan and was developed and introduced by former Toyota production executive Taiichi Ohno. In the early 1950s, the well-known “Toyota Production System” was implemented, forming the foundation of lean manufacturing philosophy. In the United States, this concept became known as “lean manufacturing,” while in German it is often referred to as “lean” or “lightweight production.”

The essence of lean management lies in using minimal resources to create maximum value for the customer. This system represents a production approach that requires fewer resources compared to traditional mass production. Lean management is not a one-time project or initiative but an integral part of corporate culture, forming a systematic approach to resource management, encouraging employee involvement, and promoting continuous process improvement. From a management perspective, it is a philosophy that integrates strategic planning, organizational culture, human resource management, and production practices to enhance efficiency, product quality, and enterprise competitiveness.

International experience in marketing management demonstrates that a company's competitiveness is directly linked to the efficiency of its production processes. In the context of globalization and increasing competition, relying solely on marketing strategies is insufficient. Systematic production management, continuous performance monitoring, and process optimization are essential.

Key performance indicators (KPIs) are the primary tool for analyzing both production and marketing processes. They enable management to:

1. Assess current productivity and the efficiency of resource utilization.
2. Identify bottlenecks that slow down production or increase costs.
3. Make informed decisions based on data rather than intuition.
4. Determine opportunities for optimization by identifying areas to reduce costs, accelerate processes, or improve quality.

Particular importance in production management is given to the cost per minute of work, as customers typically pay based on actual working time. Profit per minute of production can be expressed by the following formula:

$$\text{Profit} = \frac{\text{Paid minutes}}{\text{Cost per minute}}$$

This approach allows for a clear evaluation of economic efficiency at each stage of production and helps identify areas where costs can be reduced without compromising quality.

Productivity reflects how efficiently available resources are utilized within the production process. It is calculated as the ratio of worked (input) minutes to available minutes:

$$P = \frac{\text{Total worked minutes (te)}}{\text{Output minutes}}$$

Productivity helps to determine how effectively employees are engaged in production activities.

Efficiency evaluates the utilization of all company resources, including administrative staff, and is defined as the ratio of earned minutes to the total working hours of all employees:

$$E = \frac{\text{Total worked minutes (te)}}{\text{Output minutes} / \text{Total working hours of all employees}}$$

The comparison of productivity and efficiency makes it possible to identify the share of “non-productive personnel,” i.e., employees not directly involved in the production process. Managing and reducing this share is an important long-term objective, as increasing the proportion of “productive employees” enhances overall company performance, reduces costs, and increases profitability.

The REFA method, developed in Germany, is a recognized tool for analyzing and optimizing production processes. It is used for:

1. Work process analysis – detailed examination of operations and time spent on each task.
2. Time standardization – establishing benchmarks for task execution.
3. Rational work organization – optimizing workflows and reducing

unnecessary movements and costs.

4. Improving productivity and efficiency – minimizing losses, improving quality, and reducing production costs.

The application of REFA enables a systematic approach to production management, identification of bottlenecks, planning of workforce utilization, and integration of analytical results into marketing strategies, allowing companies to respond more quickly and accurately to market demands.

Modern marketing strategies are closely linked to the efficiency of production processes. Lean management and methods such as REFA enable enterprises to:

- Reduce production costs and product cost price.
- Improve product quality and enhance customer experience.
- Respond quickly to changes in demand, ensuring production flexibility.
- Increase profitability and strengthen competitive positions in international markets.

Thus, marketing in modern industrial enterprises should be viewed not only as a tool for product promotion but also as a value management instrument integrated with production, planning, and control processes.

## CONCLUSION

International experience in marketing and production management shows that the integration of lean management, KPI systems, productivity, and the REFA method ensures a comprehensive improvement in enterprise efficiency. This approach allows companies to reduce costs, improve quality, respond faster to market changes, and enhance competitiveness.

Lean management is not a project but a component of corporate culture that creates a systematic foundation for sustainable development. Combined with process analysis and optimization methods such as REFA, it becomes a strategic management tool that integrates marketing, production, and human resource management, creating sustainable value for both the company and its customers.

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