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QUALITY MANAGEMENT AND CONTINUOUS IMPROVEMENT STRATEGIES IN SMALL BUSINESSES

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Abstract
This article analyzes the issues of effective implementation of quality management and continuous improvement strategies in small businesses. The study highlights how the main principles of the Kaizen philosophy - continuous process improvement, active employee involvement and rational use of resources - can be implemented in small business conditions. It also examines the effectiveness of tools such as the 5S system, the suggestion mechanism and quality circles in small businesses. The results obtained include practical recommendations for small businesses on optimizing costs, improving the quality of products and services, and fully satisfying customer needs.

Keywords: Small business, quality management, continuous improvement, Kaizen, 5S system, suggestion system, quality circles, efficiency.

Introduction

In today's globalized and competitive economic environment, the sustainable development of small businesses and their adaptation to market demands are of great importance. Rapid changes in customer needs, technological innovations and increasing quality requirements encourage small businesses to continuously improve their activities. In this context, quality management and continuous development strategies are an important factor for the success of small businesses.

The Kaizen philosophy is a management approach based on the principle of "continuous improvement" that aims to simplify processes, reduce unnecessary costs, improve quality, and ensure active employee participation. This system, which is widely used in large industrial enterprises, is noteworthy for its effective results in small business activities in recent years.

This article scientifically analyzes the importance, practical mechanisms, and effectiveness of the Kaizen approach in implementing quality management and continuous improvement strategies in small businesses. It also develops appropriate recommendations for small businesses based on national and foreign experience.

Literature Review

Scientific research on quality management and continuous improvement strategies, especially within the framework of the Kaizen philosophy, has become an important resource for the small business sector in recent years.

Imai (1986) in his work "Kaizen: The Key to Japan's Competitive Success" outlines the theoretical foundations of the Kaizen concept, emphasizing that it is an effective management tool not only

for large corporations but also for small businesses. According to him, by continuously improving processes, small businesses can significantly reduce costs while increasing quality.

Deming (1982) in his work "Quality, Productivity, and Competitive Position" developed the basic principles of a quality management system, revealing the importance of actively involving employees in the process and putting customer needs at the center. This approach is also suitable for small businesses, as it helps to use resources rationally.

Among local studies, Karimov (2019) studied the experience of implementing the 5S system (Figure 1) in small and medium-sized businesses, analyzed its role in increasing labor productivity and improving production procedures. He also provided practical recommendations for adapting Kaizen principles in small manufacturing enterprises in the conditions of Uzbekistan.

Figure 1. 5S Methodology

The theoretical framework of the 5S system defines specific stages for effective workplace organization in production and service processes. Each stage — Seiri, Seiton, Seiso, Seiketsu, Shitsuke — increases efficiency by eliminating excess items, maintaining order, cleaning, standardizing and strengthening discipline. This system serves to increase labor productivity, ensure safety and develop a culture of quality.

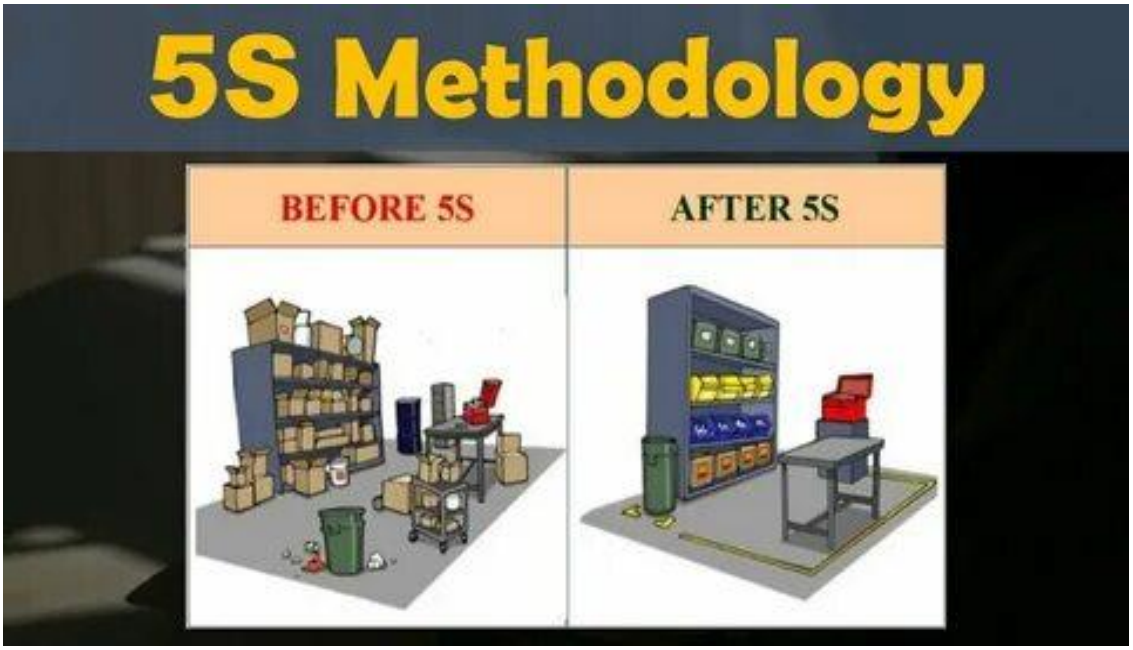

Figure 2."Comparison of the Situation Before and After Applying the 5S Methodology"

Figure 2 compares the situation before and after the implementation of the 5S methodology. In the "Before 5S" case, the workplace is messy, full of unnecessary items and waste, while in the "After 5S" case, the equipment is organized, items are stored in their designated places, and the working environment is clean. This comparison clearly shows how effective the 5S system is in practice in optimizing the workplace and increasing efficiency.

The Toyota Production System model proposed by Liker (2004) is also noteworthy as a foreign experience, in which the principles of waste reduction (Muda), excess load elimination (Muri), and imbalance reduction (Mura) are recommended as effective strategies for small businesses as well.

In general, the literature review shows that the Kaizen philosophy, 5S system, quality circles, and employee suggestion systems are the most important tools for implementing quality management and continuous improvement strategies in small businesses. At the same time, approaches adapted to national conditions will further increase their effectiveness.

Research methodology

This study aims to study, analyze and evaluate quality management and continuous improvement strategies in small businesses based on the Kaizen philosophy. Systematic, comparative and integrated approaches and theoretical principles of quality management were adopted as the methodological basis. In the course of the research, a conceptual framework was formed based on international quality standards (ISO 9001, TQM), the main principles of Kaizen (5S system, PDCA cycle, quality circles) and the developments of leading experts - E. Deming, J. Juran, M. Imai.

The methodology involves considering a small business as a whole system, analyzing its resources, processes, human factors and results in their interrelationships. Through comparative analysis, the indicators of enterprises that have implemented Kaizen principles and those that have not were compared.

Data collection methods:

• Questionnaire - to determine the views of employees and managers on quality management;
• Interview - interviews with quality managers and heads of production departments;
• Observation - on-site study of production processes and elements of the 5S system;
• Document analysis - enterprise reports, production statistics and cost dynamics.

The research indicators selected were the percentage of product defects, production efficiency, cost level, number of employee suggestions and their implementation coefficient. The data were processed using the percentage change, average values and dynamic series method, and the results were presented in tables and diagrams.

Table 1. Stages of the research process

Stage	Implemented Activities	Expected Outcome
Stage 1	Analysis of scientific literature and existing practices	Theoretical foundation and research model
Stage 2	Conducting a survey among small business entities	Collection of practical data
Stage 3	In-depth analysis through interviews and focus groups	Identification of problems and opportunities
Stage 4	Comparing static and dynamic indicators	Measurement of quality management efficiency
Stage 5	Development of recommendations	Practical strategies for small businesses

Research Model

The research model is developed based on the Kaizen approach and covers the key elements that ensure continuous improvement of small business processes, including sequential development stages according to the PDCA cycle (Plan – Do – Check – Act).

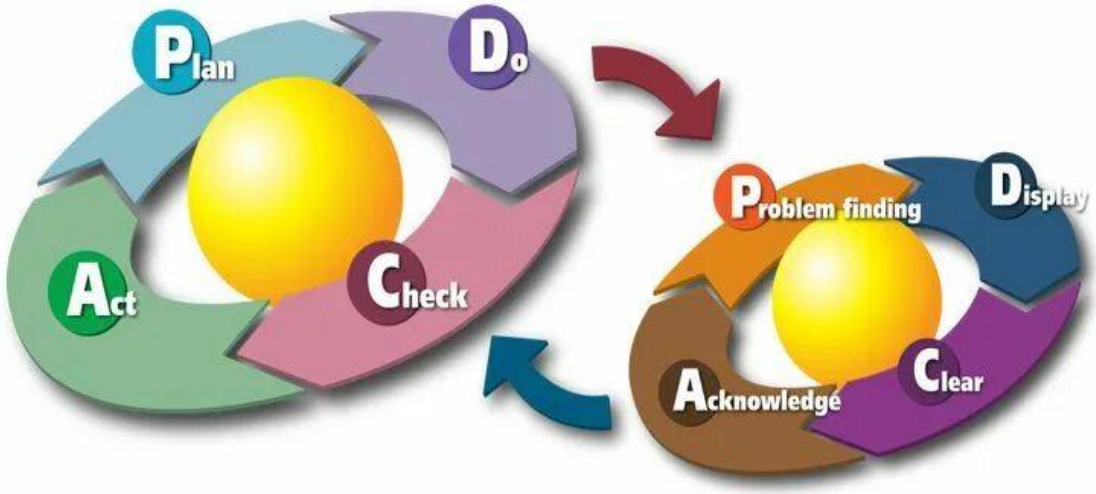

Figure 3. Kaizen model: PDCA cycle

"The PDCA cycle (Plan–Do–Check–Act) helps to continuously improve processes. It includes the stages of planning, doing, checking, and correcting. This approach is an important tool for improving quality, reducing errors, and ensuring efficiency."

Table 2. Application of the PDCA cycle in research

Element	Description	Significance in the Research
Plan	Developing an improvement plan	Defining the strategic direction
Do	Testing the plan in practice	Checking process efficiency
Check	Evaluating results	Identifying weaknesses and strengths
Act	Implementing improvement measures	Ensuring continuous development

The PDCA cycle provides a systematic approach to the research process. It covers all stages, from planning to evaluating results and continuous improvement, which allows for increased efficiency and improved quality.

Conclusions and recommendations

The above research results show that the Kaizen approach, in particular the PDCA cycle, is an important tool for improving efficiency in quality management and continuous improvement processes in small businesses. As found during the research, setting clear strategic directions in the planning stage (Plan), conducting small-scale testing processes in the implementation stage (Do), analyzing real results in the evaluation stage (Check), and implementing continuous improvement measures in the implementation stage (Act) increase quality and competitiveness. This approach allows small businesses to adapt to market changes, quickly meet customer requirements, and optimize costs.

Recommendations:

1. Phased implementation of Kaizen and PDCA systems in small businesses – starting with small processes, then expanding to general production and service activities.
2. Continuous training and involvement of employees – developing a culture of providing quality improvement suggestions.
3. Regular monitoring of results – making quick adjustments through digital analysis of process indicators.
4. Development of quality management methods adapted to local conditions – taking into account the resource capabilities of small businesses.
5. Introduction of innovative technologies – increasing automation and digitalization in the production and service process.

References

1. Deming, W. E. Out of the Crisis. MIT Press, 1986.
2. Imai, M. Kaizen: The Key to Japan's Competitive Success. McGraw-Hill, 1986.
3. Juran, J. M., & Godfrey, A. B. Juran's Quality Handbook. 6th ed., McGraw-Hill, 2010.
4. Oakland, J. S. Total Quality Management and Operational Excellence. 4th ed., Routledge, 2014.
5. Liker, J. K. The Toyota Way: 14 Management Principles from the World's Greatest Manufacturer. McGraw-Hill, 2004.
6. Crosby, P. B. Quality Is Free: The Art of Making Quality Certain. McGraw-Hill, 1979.
7. Gharakhani, D., et al. "Total Quality Management and Organizational Performance." American Journal of Industrial Engineering, vol. 1, no. 3, 2013, pp. 46–50.
8. Antony, J., & Bhattacharyya, S. Six Sigma in Small- and Medium-Sized Organizations. Routledge, 2010.
9. Poksinska, B., Eklund, J. A. E., & Dahlgaard, J. J. "Implementing ISO 9001 in Small and Medium-Sized Organizations: A Longitudinal Study." International Small Business Journal, vol. 24, no. 4, 2006, pp. 341–366.
10. Jaca, C., et al. "Sustainability and Kaizen: Continuous Improvement beyond Lean." Sustainability, vol. 4, no. 3, 2012, pp. 312–327.

11. Glover, W. J., Farris, J. A., & Van Aken, E. M. "Kaizen Events: Assessing the Existing Literature and Convergence of Practices." Engineering Management Journal, vol. 26, no. 1, 2014, pp. 39–61.
12. Sroufe, R., & Curkovic, S. ISO 9000: An International Guide to Quality Management. Springer, 2008.