ISSN 2228-9860 eISSN 1906-9642 CODEN: ITJEA8

International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies

http://TuEngr.com

Russian Enterprise Management and Business Innovation Development

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Paper ID: 12A13V

Volume 12 Issue 13

Received 07 August 2021
Received in revised form 09 October 2021
Accepted 19 October 2020
Available online25 October 2021

Keywords:
management, Kaizen philosophy, efficiency, lean manufacturing.

Abstract

This article examines the use of lean manufacturing methods and tools following the Kaizen philosophy. This philosophy is about continual improvement but in small, low-cost steps. It is usually contrasted with an innovative development path, as it is aimed at continuous improvement. But at the same time, the Kaizen philosophy contributes to the development and strengthening of innovation in manufacturing. Analysis of the current state of production management in Russia made it possible to identify the main tools for its implementation.

Disciplinary: Modern Management.

Cite This Article:

Erdnieva E., Ubushaeva B., Samaeva E., Proshkin S., Evieva B. (2021). Russian Enterprise Management and Business Innovation Development. *International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies, 12*(13), 12A13V, 1-8. http://TUENGR.COM/V12/12A13V.pdf DOI: 10.14456/ITJEMAST.2021.274

1 Introduction

At the current stage of Russia developing market relations in conditions of fierce competition, the enterprises of the regions, to achieve their goals, need to optimize production processes, hire highly qualified personnel, reduce costs, and improve the quality of products. Moreover, in the economic crisis, requirements for production efficiency and product quality are only increasing. Lean production is a way of rationalizing activities, which, like innovation, contributes to the growth of key indicators, albeit as a result of everyday improvement. Moreover, the philosophy of lean production only contributes to the development and consolidation of innovation in production [1, 5].

Kaizen in business is a constant desire for improvement, from ordinary employees in production to senior management, everyone from the director to the typical worker should be involved in progress. Improving standardized actions and processes, kaizen's goal is lossless production.

European executives usually understand that total efficiency is not achievable in the short term, so small teams of qualified professionals are trained to work. They are made up of employees at the firm because they are aware of all the vulnerabilities of the production process. According to T. Ono, 5S is the most accessible tool without which productivity is difficult to achieve, so they begin to implement the system with this tool. All production data are collected and systematized in non-stop mode and are available in understandable designations to any participant in the production process. When selecting a supplier, the emphasis is on the quality of the raw materials rather than on the cost. This is part of the quality control and the various error prevention systems in the production process. Various projects coming from staff can easily be applied in the work process, and workers receive considerable remuneration for such initiatives, which is a motivating factor. It is also essential to have training centers and research laboratories, even in small enterprises. And production, aimed initially at the consumer's needs, allows you to provide a wide range of additional options for personalizing the product for little money [3, 5, 8].

2 Adopted Innovation for Bussiness

2.1 Kaizen

Kaizen is formed from two words - "kai" - change and "zen" - for the better. This philosophy involves constant improvement, but in small steps, one that does not require high costs. If we compare kaizen with the innovative way of development, then the introduction of innovation due to its nature gives a sharp jump in the area in which it is applied. As a result, a production that uses innovation is at first very efficient and productive. Still, the situation stabilizes over time, and in some cases, productivity and efficiency can return to the initial stage [4].

It is usually contrasted with the innovative development path concerning kaizen philosophy since it aims to improve constantly. For example, improvements are planned and implemented directly in the workplace, so the full involvement of staff in the improvement process is needed. In the kaizen philosophy itself, another distinctive feature is hidden - improvement is constant, they work on it daily since improvement occurs in small steps. Table 1 compares the innovative path of development and kaizen.

2.2 Lean Production

When it comes to innovation in enterprise management, it is necessary to remember that the technology of production of such an organization should consider the possibility of working in the smallest batches and even piece by piece with the preservation of efficiency and competitiveness. In addition, significant changes in production technology or design work with entirely new equipment, a new tool, in other words, innovation should be accessible and

understandable to any position to ensure high quality of products, enterprise productivity, and competitiveness. The lean production technique meets all these requirements [2, 6, 11].

A fairly common mistake among domestic and Western firms is the vision of lean production as an end in itself and not a means of achieving productivity progress. If this is not the case, then a significant advance is often expected after a couple of months of application, which leads to nothing since the process is designed for the future. Therefore, it is also necessary that all staff be involved in the change process without continuous improvement of the moral progress [7, 10].

2.3 Innovation Development Path vs Kaizen

Kaizen and, in general, lean production - is a way of rationalizing activities, which, like innovation, contributes to the growth of key performance indicators, although not in jerks, but as a result of everyday improvement. Moreover, the philosophy of lean production only contributes to the development and consolidation of innovation in production [9].

Table 1: Comparison of innovative development path and kaizen

Parameter name	Kaizen	Innovation
Project Scale	Continuous small changes	The significant improvement that seriously improves efficiency
Project team	Involvement of all personnel of the enterprise	A specially selected team with the necessary competencies
Development and Implementation Time	Every day continuously	5-10 years due to complex innovation life cycle
Expenses	Minimum	Considerable
Level of the decision on development and implementation	The decision is made at the workplace by direct employees	Top managers
What improvement is aimed at	Process	Product/Item Service/Process/Sales Method/Work Center
Level of improvement	Minor Improvement	Significant improvement requiring a systematic approach
Visibility of results	Immediately after implementation	During commercialization at the stage of investments in production as a result of sales growth

3 Result and Discussion

3.1 Practical Frugality of Russian Business

Practical frugality should imply continuous improvement of this model. Firstly, this corresponds to the basic philosophy of lean production. Secondly, this suggests that enterprises are in an ongoing search for ordinary and universal, and optimal models.

The next item included in the concept of practical frugality is using various tools and techniques for lean production inappropriate situations that correspond to the goals and objectives of enterprises at this stage of development. The main tools and methods were described in GOST R 56020-2014 "Lean production. Basic Provisions and Dictionary" and GOST R 56407-2015" Lean Production. Basic Methods and Tools "and were discussed in the previous chapter.

A practical frugality should be based on a system of targets and calculation of economic efficiency so that there is no illusion that the enterprise has done much and the threshold of improvement has been achieved. Such a system must constantly evaluate optimization results, highlight critical areas, see the costs of progress and their effect.

The lean production model will be effective if it takes into account several features inherent in Russian enterprises. For example, the management of Russian enterprises is aimed at a quick and visible result, which does not radically change the situation at the enterprise, especially in top management.

Paradoxically, management is willing to spend heavily on innovation, which in the future will lead to a significant increase in profits, efficiency, or cost reduction, even though it is venture capital financing. Yet, at the same time, low-cost continuous improvement seems to them a long process with an unclear result.

Figure 1: Elements of lean production philosophy

The third and most important feature of the Russian reality of lean production is that management uses personal tools of the slim output as a universal tool, while not particularly delving into philosophy and concept, which, in turn, means detailed study, development of employees and partners, constant work on solving fundamental problems, continuous training, profound cultural transformation. Thus, an understanding of the essential elements of the concept (Figure 1) is part of the model of practical frugality.

3.2 Components of Practical Frugality of the Enterprise

We found that the components of practical frugality of enterprises are essential. It includes the following items:

- changing or developing the cultural paradigm of the enterprise within the framework of the philosophy of lean production, its deep study, understanding of the critical values of the concept;
- A well-established system of management of development and further improve processes, which is based on the main and new products in the field of lean production, planning of targets, calculation of economic effect;

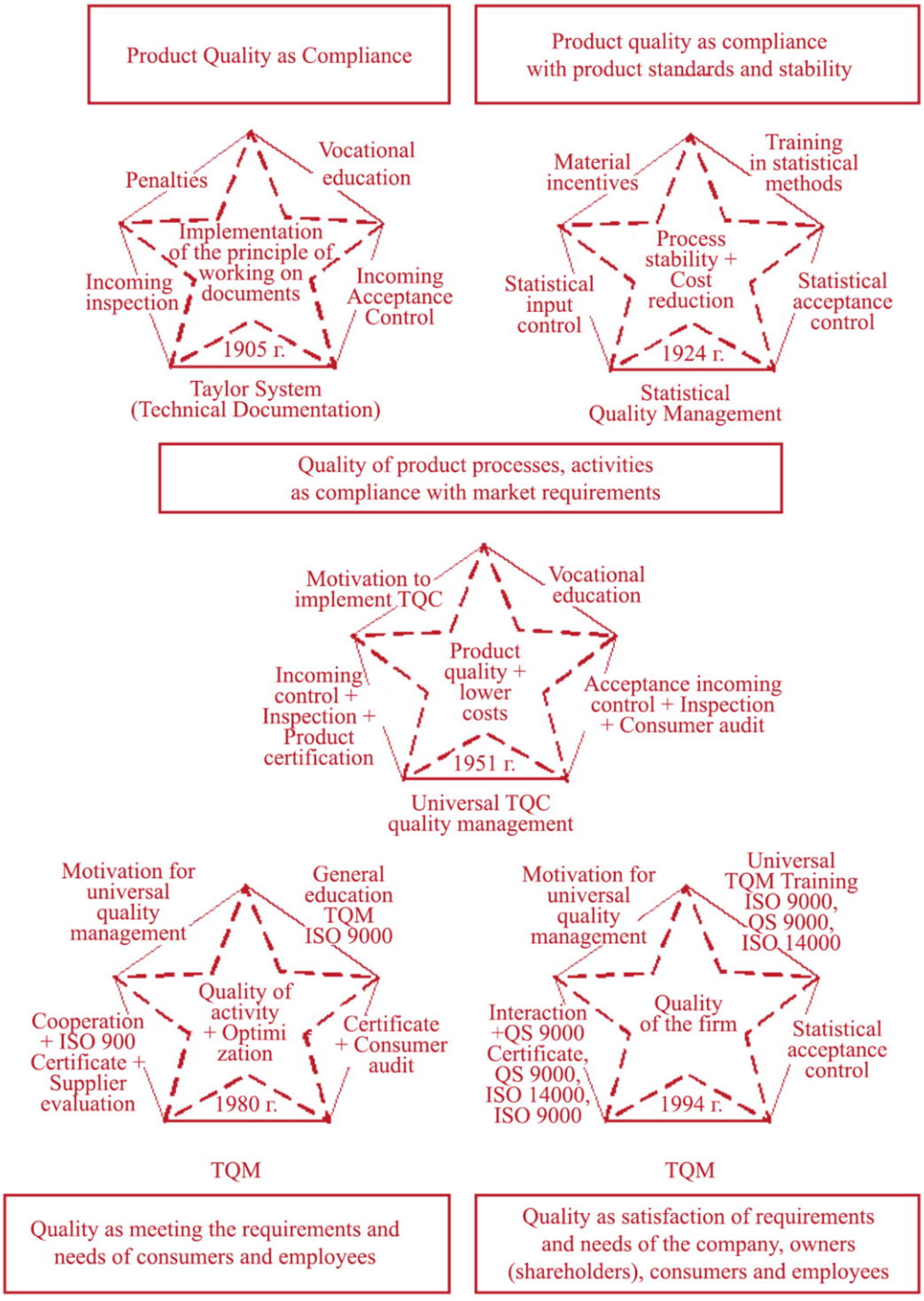

Figure 2: Stages of development of quality management systems.

- personal participation of senior managers;

- creation of a specialized department in the organizational structure of the enterprise, which is engaged in lean production, while the general manager should be entrusted to the general director, and the management of individual areas by the heads of departments;
- involvement of all enterprise personnel in the process of optimization according to lean production methodology, continuous training of personnel, change of their worldview, explanation of the need for improvements. In addition, it also involves suppliers and consumers in the optimization process.
- Lean production is a management concept created at Toyota. The basis for this concept is continuous improvement in the field of elimination of various types of losses. It also involves the involvement of each employee in the process of optimizing production processes and maximizing the orientation of product quality to the consumer.
- At different times, there was a different approach to understanding quality. So, for example, the history of the development of quality management systems has five stages, which, as a rule, are displayed in the form of five stars (Figure 2).

3.3 Adopted Quality Management for Russian Enterprises

The next stage is characterized by a change of key concepts around which quality management is built. Total Quality Management does not only mean quality management to meet the established requirements, but also the direction of the goals and needs themselves. Such a system meets the main tasks of lean production:

- - continuous improvement of quality;
- - minimization of production costs;
- - delivery on time.
- Let's consider what methods and tools are used in lean production to achieve high efficiency.
- The main tools of lean production include the following:
- Standardization of work;
    - organization of the workspace (5S) - or system of effective organization of the workplace;
    - Mapping Value Creation Stream (VSM)
    - visualization;
    - rapid equipment transfer (SMED);

- protection against unintentional errors (poka-yoke) - preventing the occurrence of accidental errors and their prompt elimination until the operation stops so that the inappropriate part does not get to the next one;
- kanban (from the Japanese word "kanban" - billboard) - a structured information system that regulates the processes of supplying products and supplying the necessary volume of products to the consumer;
- total productive maintenance (TPM) - a system of equipment maintenance aimed at improving its use efficiency by preventing and eliminating losses.

Figure 3 shows a simplified way to gain a competitive advantage by following the concept of lean manufacturing.

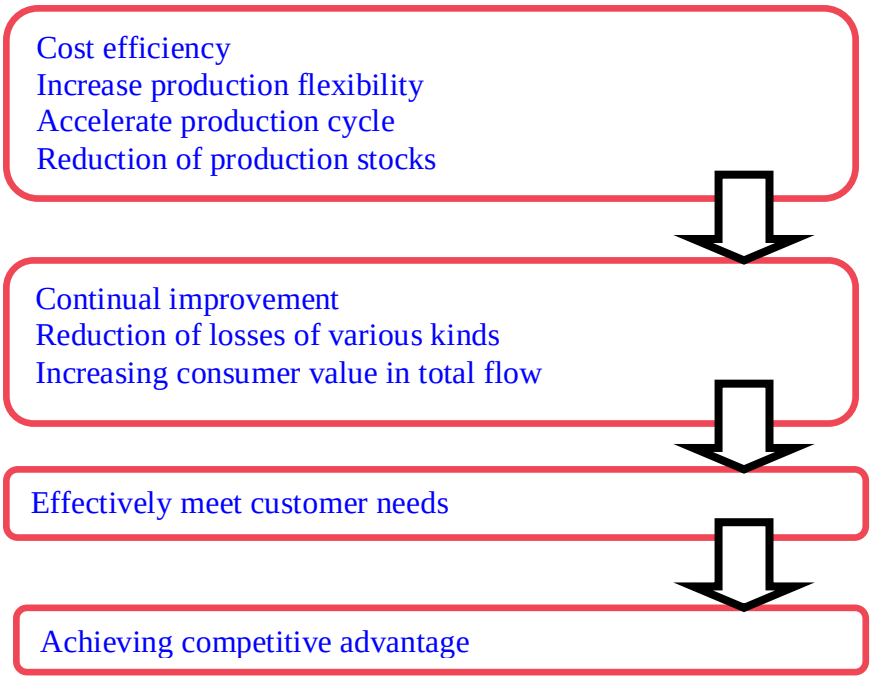

Figure 3: Competitive Advantage Chain.

4 Conclusion

This study considers and applies available innovative management techniques to enterprises. The main advantages of lean production are associated with the accompanying philosophy of kaizen, which implies a continuous desire for perfection. Savings are the most apparent benefit of Lean. Better workflows, resource allocation, production, and storage can benefit businesses no matter the size or volume of production. In addition, saving time can help reduce lead times and improve service while delivering products to customers quickly and help save money through better staffing. Reducing wasted time and resources and removing unnecessary processes can reduce energy and fuel costs. This has clear environmental benefits, as does the use of more energy-efficient equipment that can also provide cost savings. Improving a product or service delivery to a consumer at a reasonable cost increases customer satisfaction. This is essential to business success as satisfied customers are more likely to come back or recommend your product or service to others. Practical frugality of Russian businesses have been extensively discussed.

5 Availability of Data and Material

Data can be made available by contacting the corresponding author.

6 References

Belkina E, Zaitseva M, Tsatkhlanova T, Tsedinov O, Goretskaya E (2019). Grant support of public initiatives as a tool for rural development. Indo American Journal of Pharmaceutical sciences. 6(3), 6249-6255.

Czaczkowski, Wojciech. (2015). The implementation of the KAIZEN philosophy to quality management in construction enterprise. Philosophy and Practice of Subjectivity. 1. 144-158.

Demirbaş, Dilek & Blackburn, Rhys & Bennett, David. (2020). Kaizen Philosophy in a Modern Day Business.

GOST R. (2015). 56407-2015 Lean production. Basic Methods and Tools: www.internetlaw.ru/gosts/gost/59848

LM. (2021). Kanban. http://www.lean-manufacturing-junction.com/kanban.html

Macpherson, Wayne & Lockhart, James & Kavan, Heather & Iaquinto, Antholy. (2015). Kaizen: a Japanese philosophy and system for business excellence. Journal of Business Strategy. 36. 3 - 9.

Silva, Reissa & Alencar, David & Costa, Alexandra & Sanches, Antônio. (2019). Kaizen Philosophy Application as Production Standardization and Process Optimization. International Journal for Innovation Education and Research. 7. 808-816.

Singh, J. & Mehta, M. & Jha, U. (2019). The Kaizen Philosophy in Industry: A Case Study. 1470.

LP. (2022). SMED (Single-Minute exchange of dies). http://www.leanproduction.com/smed.html

Lean. (2021) Standardized work: the foundation for kaizen (1 day class) http://www.lean.org/workshops/workshopdescription.cfm?workshopid

Ueki, H. and Ueki, M. (2010), Enabling knowledge creation and international deployment of best practices in large Japanese firms, Tokyo Keizai University Journal, 266(1), 3-35.

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