

## METHODS AND TOOLS OF ALTERNATIVE MANAGEMENT IN PROJECT MANAGEMENT

### МЕТОДИ ТА ІНСТРУМЕНТИ АЛЬТЕРНАТИВНОГО МЕНЕДЖМЕНТУ В УПРАВЛІННІ ПРОЕКТАМИ

*In the paper the concept, content and essence of alternative management which is gaining popularity in Ukrainian companies, especially in companies of project type, are reviewed. The components of this concept are structured. Basic definitions that determine the direction of technology of alternative management are systematized. Key principles of alternative management are presented. Methodological approaches, the use of alternative management tools in project management are analyzed. The systematization of technologies of project management is submitted from the point of flexibility. The possibilities of using alternative management in project management in companies considering Ukrainian mentality are determined.*

**Keywords:** *alternative management, Deming's principles, Kaizen, Lean Production, Shuhart-Deming cycle, Total Quality Management, Kanban, BSC, ABC, Agile Manufacturing System, BPR, Synchronous Manufacturing System MRP, ERP, CRM, PMBoK, PRINCE, P2M, SCRUM.*

**Problem statement.** Globalization and the speed of information flow necessitate constant changes in the organization and require timely qualitative management decisions. First of all, changes need special wish of management, but other than that also clearly structured weighed methodological provisions, which it will be able to be guided by in decision-making to implement these changes. One of the most advanced management technologies as a means of change management is project management. Technology of Project Management, is often regarded as a practical toolkit of implementing changes, since the modern world is a world of projects, where almost every unique result of activity is either a project or a part of a complex project.

Fierce rivalry and economic instability encourage managers to seek new ideas of effective management, which take into account the experience of leading world-class companies. Looking into the trends of development of modern project management it should be noted that to ensure efficient operation project managers should be well-informed and skillfully combine efficient management technologies, based on the principles of both traditional and alternative management. Most alternative management methods were introduced in Japan and have been successfully implemented at leading companies, which proves their high efficiency [1, p. 86]. However, their implementation in practice of Ukrainian companies, considering Ukrainian mentality, requires detailed research and analysis.

**Analysis of recent sources, researches and publications.** To the issue of research and implementation of alternative methods of management are devoted the works of domestic and foreign experts: Doroshkevych D. V., Fydelman G. N., Osono E., Mikhailov M. Y., Starchenko A. V., Novikov D. A., Whitehill A., Cotter D. P., Layker D., Masaaki I., Niv G. R., Pande P. and others.

Despite the large number of publications concerning mainly the implementation of quality system, the issue of using alternative management methodology in project management is not highlighted enough. Considering the problems faced by project managers in planning and project implementation at all stages, should be noted the need for using alternative methods of management.

**The goals and objectives of the article.** Analysis of technologies and methods of alternative management concerning their ability of being used in project management.

**Presenting of main material.** Analyzing the etymology of the word «alternative» should be noted that this is, above all, «choosing of variants», namely variants, which, in this case are different from traditional management based on a hierarchy, rigid structure, motivation of «carrot and stick» principle and search for the guilty one, strict regulation of processes and other principles of the school of Taylor and Fayol.

Alternative management is based on the philosophy of Deming, creation of developing systems and philosophy of leadership [2, 28 p]. Among theories of alternative management should be noted: Deming's principles, Kaizen (continuous improvement of processes), Lean Production, Shuhart-Deming cycle, Total Quality Management (general system of quality management), Just-in-Time, Kanban (effective inventory management), Jidoka (removal of defects) and others.

The concept of alternative management, summarizes a large number of such approaches as «Six Sigma», «five C» (system of workplace rationalization), «TPM» (general system of support of production activity) and others that are the components of an integrated system of Japanese management Kaizen (continuous improvement), based on the ideas of Deming, Juran, Feigenbaum and their Japanese colleagues Ishikawa, Taguchi, Singu, what can be generally described as quality management.

Developed by Edwards Deming known concept of 14 principles of building a globally competitive business provides success of companies such as Toyota, Procter&Gamble, General Motors and many other market leaders.

Should be noted the teachings of USA statistician Shuhart about process management. He determined that control is a state of the process, when the variability of output does not exceed the upper and lower limits, separated from each other by 6 Sigma. Sigma is a sign used in the statistics to indicate standard deviation of values in the general summation. If some indicators in the process go beyond the limits, then you need to identify that particular reason that led to such effects and take steps to remove it. The process cannot be interfered arbitrarily and require special system of work for its improvement. To eliminate special reason enough powers of a team that is working over the corresponding process [3, p. 28]. The basis of the concept of «Six Sigma» is to minimize the amount of discrepancies by applying the methodology DMAIC (define, measure, analyze, improve, control): definition, measurement, analysis, improvement of principles and control.

The concept of Lean Production, aimed at maximum savings of resources in the production process, is based on the principle of ranking, detection and elimination of the processes that do not bring added value to customers or reduce it. As a rule, are distinguished about seven kinds of such processes: the processes that lead to overproduction; pending processes; processes of unnecessary transportation; processes of unnecessary machining; processes that lead to stock excess; processes that contain unnecessary movements; processes that create defects.

'Kaizen' – the Japanese concept of quality management system based on the principle of continuous improvement of internal processes of the organization with minimal cost of resources and the involvement of all employees in implementing improvements. [4, p. 18].

The basic principle of «Kanban» is to ensure timely delivery of products to the customer, both to external and domestic, taking into account the presence of the demand of these products on a specific point of the production cycle. Under this approach, «production of the next part of products must be carried out only when it is an order from the internal or external customer» [4, p. 68].

These approaches to determining the quality define the nature and direction of the management technologies of these management systems (Table 1).

Table 1

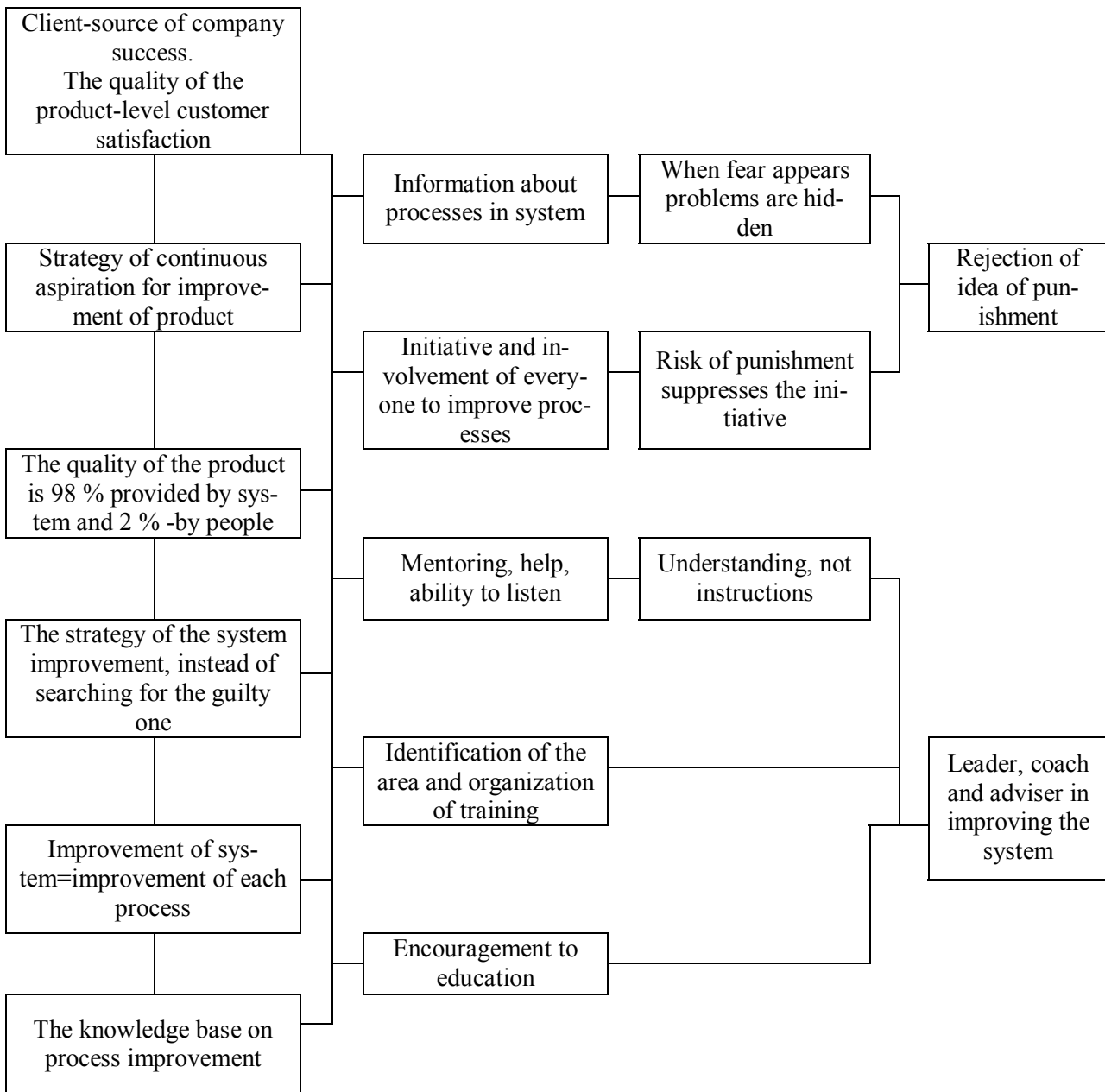
### Concept of Quality

Author	Definition	Direction of Management
Edward Deming	Quality is satisfaction of consumer's needs for not only to meet his expectations, but to predict the direction of future changes.	Focusing on processes. Anticipating of customer needs, reducing costs, continuous improvement.
Joseph Juran	Quality is matching purpose or application.	The focus of staff development. Optimization of quality costs, incremental changes.
Armand Feigenbaum	Quality – total matching characteristics of the products or services, including marketing, development, production and service	The focus on processes. Total control of quality, gradual changes.
Kaoru Ishikawa	Quality – is the activity of the development, design, manufacturing and maintenance of products, which is the most economical and useful and exactly meets consumer needs	The quality is the foundation of the whole company. Continuous learning, (learning organization).
Genichi Taguchi	Quality – losses felt by society and are connected with delayed delivery and inefficient use of products	The staff responsibility for the results. Creating ethic of continuous improvement.

**Reference:** own study based on [5, p. 64]

The concept of alternative management is the logical result of a long development theory and practice of management skills. One of its features is the depth. That is, if it is not one-time periodical innovations but a long and gradual process of improving the system, step by step. Alternative management is a management model which is based and identifies other values of management of people, systems and processes. It is these values that form a commitment to creative collaboration and process improvement to maximize customer's needs satisfaction, which increases the competitiveness of the company and its profitability.

The essence of this concept is displayed on fig. 1.



**Fig. 1. The essence of the concept of alternative management**

**Reference:** own study based on [2]

It should be noted that education and training have a different meaning, namely preparation and training are aimed at the creation and development of skills but the education is aimed at the development of knowledge. Moreover, training takes place in a certain activity, it is concrete, and education has no limits. That is, when an employee brought his work to the level of skills, further training for him is not relevant.

The basic principles of alternative management are:

- Principle 98:2, which stresses that the results of the company are mostly affected by systemic factors rather than personal ones. 98 % of the problems in the organization, defects of activities or services depend not on people but on the system under which we understand set of procedures, instructions, powers, provisions of corporate culture.

- The principle of punishment absence. Punishment of people makes no sense, because in this way, at best, can be eliminated only 2 % of the causes of defects, which are somehow related to the personality of the employee – with its lack of desire to work or being undisciplined, and the rest of problems will remain unresolved. If the system of punishment works, then employees can provide the management only with favorable information, hiding or decorating disadvantageous information, that corresponds to bottlenecks, where errors and defects are often committed. One of Deming's thesis is: «Wherever the fear appears, there we get wrong numbers». When a person feels the risk of punishment for what he/she can not achieve the best results if he/she takes responsibility for improvements, the involvement of everyone into the process of change becomes impossible.

- Mandatory involvement of all employees into the process of continuous improvement of system. To make people of the firm interested in idea of perfection, to teach them to understand the systems, identify variations, and solve problems. The main mission of management is to inspire and support people who want to take responsibility for improving the system. Leadership – a way to train and support workers [2, p. 97].

- Alternate relation to suppliers – the choice is not based on the best price but based on a partnership for life.

It should be noted that are becoming increasingly popular tools that make the transition from a centralized hard management to the management based on the involvement of employees in process of improvement. In particular, they are: Balanced Scorecard (BSC), accounting, based on the process approach (activity based costing – ABC), quickly reacting production system (Agile Manufacturing System), Business process reengineering (BPR), a system of synchronous production (Synchronous Manufacturing System), MRP (planning the need in material resources), ERP (enterprise resource planning), CRM (customer relationship management) and others.

Balanced Scorecard (BSC), developed by American consultants D. Norton and R. Kaplan and early 90s, is based on assess and control of results of activity through a set of interconnected indicators in four areas: finances, relationships with customers, internal business processes as well as staff training and development. Moreover, the introduction of KPIs (Key Performance Indicators, KPI), which is based on BSC, stimulates and motivates employees to develop and improve systems.

Agile Manufacturing – this term refers to the organization that has the processes, tools and training system, which provide rapid response to customer demands and market change during simultaneous managing of price and quality. Some scientists claim that Agile Manufacturing can be seen as the next, after the lean production, step in the evolution of production systems [6, p. 56].

Today, more organizations realize the advantages and benefits of using alternative management, especially flexible approach to project management. [7, p. 322]. But when it comes to the use of a clearly defined set of indicators that should be used in organization project management, they are not always ready and do not always realize what indicators should be used and how to apply the so-called flexible technology. Considering the advantages and disadvantages of flexible methodologies, it should be noted that companies that focus on the production of finished products for the market predominantly use traditional approaches based on institutionalization and documentation of processes, and companies whose projects are focused on specific customers, for whom customer's quality satisfaction and rapid responsiveness to changes are more important than full documentation, are practicing alternative management methodology, that focuses on the interaction between employees. Figure 2 shows the systematization of technologies and approaches to project management.

Analyzing the standards and technologies in project management it should be noted that the most common standard in project management is PMBoK, (Project Management Body of Knowledge), PRINCE (Projects IN Controlled Environments) and P2M. However, become increasingly popular SCRUM technologies which confirms the relevance of implementing the principles of alternative management. PMBoK and PRINCE provide centralized implementation of plans and their control. As to P2M and SCRUM, it should be noted that these technologies aimed at establishing responsibility of the performers for the overall result and

monitoring the activity according to the position of how much is left to do, but not of how much is done already.

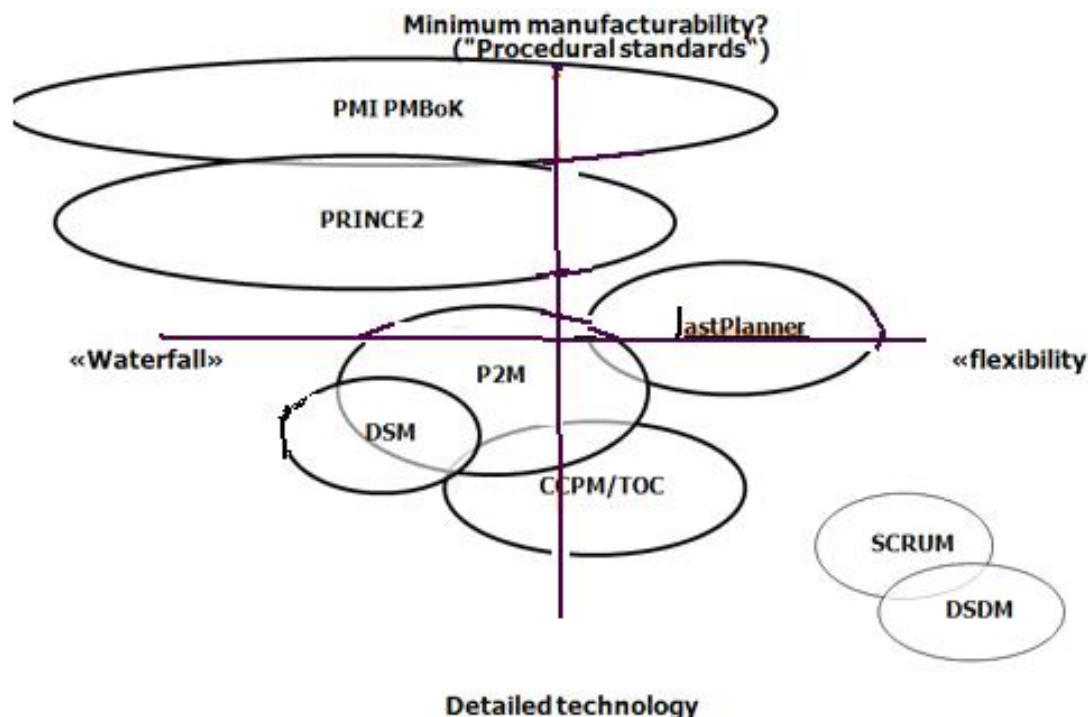


Fig. 2. Systematics technologies and approaches to project management

Reference: own study based on [8, p. 15]

**Conclusion.** Despite the fact that the basic ideas of alternative management concept first appeared and developed on Japanese enterprises, it would not be right to treat it just as Japanese or Swedish model. Analysis of its tools it proves that it is a synthesis and generalization of advanced management practices of successful companies around the world. However, the use of alternative management practices in Ukrainian companies should take into account the Ukrainian mentality [9, p. 165], especially in the implementation of the principle of collective responsibility, which may be associated with the lack of personal responsibility, as well as some other principles, which require long-term cultivation of values that are contrary to the values of traditional management.

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*The use of alternative management practices in Ukrainian companies should take into account Ukrainian mentality, especially in the implementation of the principle of collective responsibility, which may be associated with the lack of personal responsibility, as well as some other principles, which require long-term cultivation of values that are contrary to the values of traditional management.*

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