

Use of Quality Management Principles in the Shaping of Work Environment

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Abstract. Adherence to the systemic approach to improving working conditions is increasingly becoming a central prerequisite for the successful operation of business organizations. By adopting systemic principles to improve the quality of working conditions, organizations gain access to effective tools for eliminating hazards and strenuousness and consequently acquire the ability to grow and improve themselves [8]. Any measures adopted within that framework are undertaken in recognition of the roles and tasks of employees seen as the internal clients of specific processes. In this paper showed important conditions, ensured effectiveness of work conditions improve by the systemic approach. In particular, reference was made to capabilities, which impacted on improving conditions of work. This activities was related to the principles of quality management system.

Keywords: Quality management · Work environment · Management principles

1 Introduction

A key prerequisite for the safe and efficient performance of work in a business organization is to check whether the working environment meets legislative requirements in all of its parameters. Any potential violations should be seen as distortions that warrant modifications. In their self-improvement efforts, enterprises should recognize the commitment to change the working environment as a priority consideration [9].

The working environment can be described by reference to characteristics which enable organizations to keep the space in which humans operate free of hazards and strenuousness [6]. Such characteristics additionally define ways in which occupational activities can be carried out efficiently. The man, with his qualifications as well as it is professional preparation particularly essential conditioning factor and effective management led of economic activity. Its role in the meaning displays across character of human factors, often determining internal and the external possibilities the development of enterprise [5]. Their agreement to be treated as one of essential criteria of effectiveness opinion of laded processes, which are defining from expectations the external customers (the buyers of articles and the services) and internal (the workers of the enterprise).

Additionally, factors characterizing the working environment, indirectly define ways in which occupational activities can be carried out efficiently.

2 Preconditions for the Systemic Improvement of Working Environment

Organizations which discover inconsistencies between parameters of the working environment and the criteria defining the desirable characteristics of the space in which humans operate need to respond by identifying improvement measures and defining their scopes [13]. Such responses are particularly critical where working environment assessments and improvements rely on elements of the process approach. It requires [4]:

- disclosure all conducted in business activities as the processes,
- determine a sequence of processes and its interactions,
- determine the conditions of ensure course effectiveness of the processes, including a guarantee possibility of their control,
- provide the resources needed for the processes operation,
- monitoring and analyzing processes, and in the situations occurring deviations from the desired state, the introduction of improvement activities.

In such an approach, the working environment is seen as an internal process, or a part thereof, carried out to ensure compliance with prescribed working conditions. In shaping the working environment seen as conditions for the completion of an internal process to meet quality engineering guidelines, organizations may adopt quality management principles, methods and tools, which are instrumental in improving processes and their parts. The idea of this approach is shown in Fig. 1.

The implementation of quality management principles required to provide the resources and conditions to enable their practical application. As a particularly important resource can point out the knowledge possessed by the staff responsible for the execution of processes or access to this knowledge, combined with its ability to collect and process. In day-to-day practice, quality improvement principles, methods and tools allow organizations to effectively improve their working environments. The work environment is to be seen as critical for business outcomes (the outcomes of manufacturing or service provision operations). Organizations which fail to recognize work environment needs often end up having to pay the price as they lose market positions and their competitive advantage [4]. Further, a competitiveness analysis calls for consideration of the availability of production factors. The key criteria for competitiveness which constitute means of production include the human factor, described as the productive value of employees, and the social capital defined by the role a business organization plays in its social environment. This is particularly significant for ensuring effective operation in realms which require continuous improvement. It is also helpful in satisfying the growing demands of stakeholders.

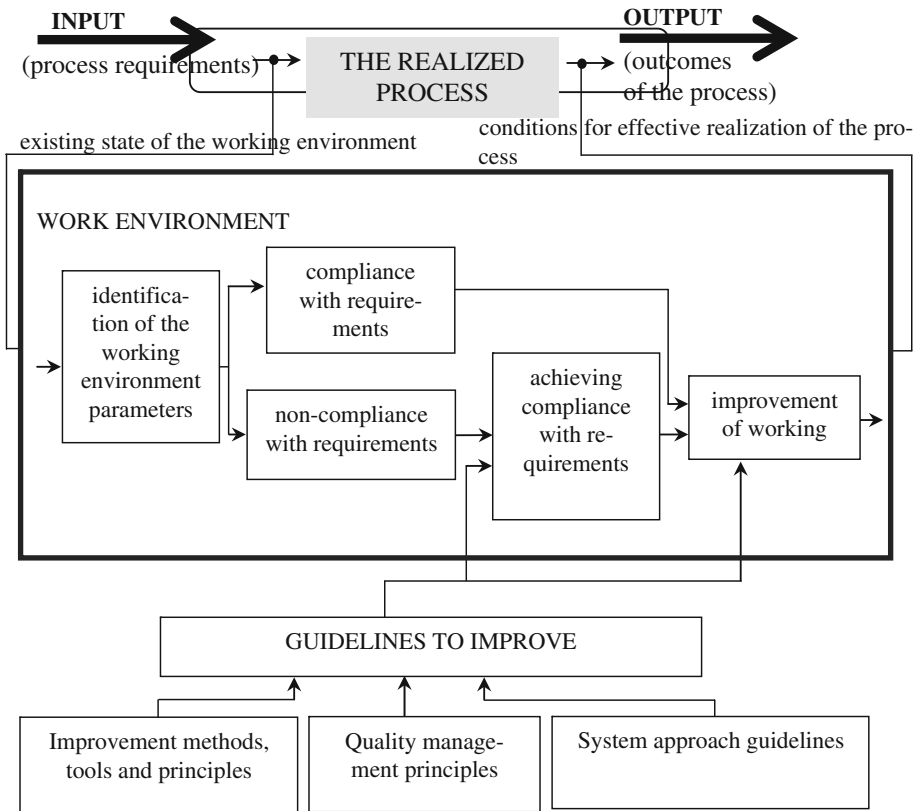


Fig. 1. Essence of inclusion principles, tools and methods supporting the quality management to improve the work environment.

3 Guidelines for Application the System Principles

In formulating the above management guidelines and putting them into practice, it is vital to account for the specific nature of the working environment to which the requirements pertain. The work environment is a central component of a business organization’s management system and plays a pivotal role in enabling it to achieve desired economic benefits [4, 7]. Any measures undertaken by business organizations are designed to mitigate or eliminate hazards and strain affecting the workers.

In shaping the working environment by the principles of systemic management, organizations should rely on quality management guidelines. Such guidelines apply to [2, 11, 14]:

- **customer orientation** – the customer being the internal customer of processes; customer orientation makes it necessary to identify and fulfil customer needs and assess customer satisfaction by undertaking specific measures,

- **leadership** – leadership requires the formulation of a mission statement and a statement of vision for growth; such a mission and vision need to be sold to employees; proper ways and means also need to be found to achieve strategic and operational goals,
- **commitment** – commitment is the central prerequisite for high quality performance; it combines motivation, organization culture, communication and teamwork,
- **process approach** – in the process approach, customer demands are seen as a function of performance in the process chain designed to satisfy customer needs and expectations,
- **systemic approach** – this approach is based on the perception of a company's outcomes produced as a synergy of all benefits derived from carrying out processes in the company,
- **continuous improvement** – continuous improvement contributes to the resolution of any identified issues and involves projects designed to benefit the organization and its customers through e.g. performance improvement,
- **dedication to decision-making** – such a dedication requires the regular gathering of information, its immediate processing, notification of any findings to appropriate parties and their use as a basis for informed decision-making,
- **partner relationships with suppliers** – the relationships are based on information exchange, assessments and checks of supplier qualifications and on the use of additional verification criteria while recognizing the specific nature of each requirement.

Examples of actions, allowing to shape the work environment associated with the principles of quality management system are presented in Table 1. Usage the system of quality management principles on improving requires attention to the recipient of actions, i.e. workers as an important resource of business.

Man treated is as a resource. It is characterized by the ability to effectively carry out the tasks of the company. Worker form part of a system which combines all aspects of an organization's performance as seen from the viewpoint of an internal customer of its internal processes. Therefore, an organization's operational effectiveness hinges ultimately on the efficiency of its processes which in turn depend on the conditions, working conditions included, in which such processes are performed [1]. In its very essence, the systemic approach brings all of the tasks carried out by an enterprise into a chain of mutually interrelated links (or processes) which, in order to work effectively, must meet the criteria of the process approach. Contemporary management concepts recognize the need to place particular emphasis on the human factor. People in organizations must be perceived as opportunities rather than threats. This is of particular significance in view of the skills and competencies which make some workers irreplaceable. Companies which lose such key personnel may pay a very high price [4]. However, such workers will be unable to perform efficiently in changing environments unless proper conditions are ensured to accommodate them in their company.

Table 1. Examples of taken measures related with the working environment, joined with the principles of quality management system.

Quality management principles	Examples of actions
Customer focus	<ul style="list-style-type: none"> - identification of environmental requirements, ensuring the proper functioning employee in the workplace, - adjustment of working environment to the needs of employees, - assessment of the compliance a work environment with employees expect, - take into account assessment the conditions of work (feasibility tasks)
Leadership	<ul style="list-style-type: none"> - inclusion in mission and vision of enterprise development issues shaping the work environment, - the working environment description contains issues for strategic and operational development of the company, - providing the necessary means to achieve the objectives of enterprise development, containing issues of the working environment
Involvement of people	<ul style="list-style-type: none"> - recognized by all, including the management, motivation to take action to improve conditions of work - shaping corporate culture, addressing the issues of the working environment (safety culture), - shaping the working environment, providing free of hazards and nuisance communications, - the use of teamwork in shaping the work environment
Process approach	<ul style="list-style-type: none"> - the processes implemented issues related to the shaping of the environment work, - method of processes implementation take into account the needs and expectations of employees, - method of process realization takes into account to minimize adverse environmental impacts of work, - evaluation criteria of processes include the environmental for their implementation, - assessment the possibility of process improvement issues concerning the development of the working environment
System approach to management	<ul style="list-style-type: none"> - work environment is treated as an integral part of the management system in firm, - in the assessment of the organization takes into account the requirements associated with the formation of work environment, - shaping environmental effects are important part of the benefits arising from the implementation of the principles of system management

(Continued)

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Quality management principles	Examples of actions
Continual improvement	<ul style="list-style-type: none"> - during the improvement of implemented measures, regard the measures improving of work environment, - non-compliance with the requirements and expectations of the environment are the cause of improving work processes conducted, - improving the work environment is treated as a way to obtain benefits for the organization and its customers and for the internal customers of processes
Factual approach to decision-making	<ul style="list-style-type: none"> - parameters describing the work environment are collected in a systematic way, - collect the information are necessary to make tangible decisions include parameters describing the work environment, - parameters describing the work environment are considered as an important element assessing the merits of actions undertaken improvement
Mutually beneficial Supplier relationship	<ul style="list-style-type: none"> - evaluation and verification of suppliers takes into account that they meet the criteria the work environment describing, - a information describing the work environment are immediately communicated to all interested

4 Conclusions

In improving the environmental performance of the tasks is reasonable to apply the tools, methods and, above all, the principles of quality management. Concurrently, by improving the working environment, enterprises support their employees in performing their work thereby promoting the growth of their organizations. Such efforts may be seen as progress towards strengthening the companies' employee-orientation [3, 10, 12]. The measures make businesses safer and benefit them tangibly.

In order to benefit from the deployment of a management system in any field of an organization's operations, a number of primary as well as secondary factors need to be considered. This guarantees the achievement of the company's desired outcomes. An analysis of preconditions for the effectiveness of a quality management system shows that it is next to impossible to adopt a proper approach to client satisfaction if work environment issues are left out of the equation. In prospect, companies which adopt such management principles gain the ability to rationally select concepts (such as lean management, reengineering, benchmarking, just-in-time deliveries) thereby supporting organization management. As a consequence, they are in a position to improve their operations in keeping with TQM guidelines and are inspired to continually enhance their performance.

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