



NEW MANAGEMENT SYSTEMS AS AN INSTRUMENT OF IMPLEMENTATION SUSTAINABLE DEVELOPMENT CONCEPT AT ORGANIZATIONAL LEVEL

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Abstract. Diversity of contemporary management concepts, short life duration of some of them, fashion of implementing popular solutions, indiscriminate adoption of management systems in companies simultaneously with a long period of waiting for positive effects of implemented changes and decreasing involvement of employees lead to the situation in which many companies still face unresolved dilemma of choosing the right strategy of acting that ensures sustainable development of a unit. Therefore, new solutions should be treated as one of the elements of organization improvement, not as an objective as such, and as the way of solving the existing problems. One of the ways of realizing sustainable development principles at the level of an organizational unit is implementation of normalized systems elaborated by International Organization for Standardization (ISO). The article presents a proposal of the way of implementing sustainable development concept at organizational level using three systems: quality, environmental, occupational health and safety management.

Keywords: sustainable development, environmental management, quality management, safety management.

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1. Introduction

While discussing proper strategies of action, managers ought to follow trends of management that dominate worldwide. Among ten commandments, or rules, which were elaborated

by Naisbitt and Aburdence and which companies of 21st century ought to comply with are, among others:

1. In the transformation process in an information society, an industrial company will more frequently employ human capital, the bases of which are: information, knowledge and creativity.
2. The main premise in upgrading motivation systems will be usage of solutions that take into consideration increased participation of employees in both management and possession.
3. Companies will express noticeable interest in the issues concerning social responsibility: environmental protection issues and health conditions in the working environment.
4. Change of company's organization culture will cause consolidation of new standards regarding organization conduct and ethical norms (Naisbitt, Aburdence 1985).

One of contemporary concepts in economic theory that guarantees adjustment of human activity to the aforementioned guidelines is the concept of sustainable development. Definition of sustainable development (SD), which was promoted mainly by the so-called Brundtland report, is as follows: Sustainable development is the process that meets present requirements, but does not comprise the future generations' ability to meet their own needs.

The original premise of sustainable development concept was an ecological crisis. It posed threat to the prosperity and functioning of community. The other premises comprise:

- crisis of civilization in socio-economic aspect;
- ethical premises;
- changes in the way of perceiving the reality (Dobrzański 2005).

Depending on science discipline, sustainable development is perceived and defined in a different way. In philosophy, SD is considered as an idea, a keynote that earmarks a certain objective and course of deliberations. In ecology it is considered as the principle of shaping anthropogenic and natural structures. In economics, on the other hand, it is considered as a general category indicating the way of perceiving the reality, subject of economic research and its changeability in space and time (Poskrobko 2007).

Each definition of sustainable development quoted in literature points at the triad of aims which at international, regional, local or organizational level may be achieved by using various ways and instruments. These aims are of the following types: ecological, economic and social.

Generally, sustainability is shown as a regulatory idea which initiates and accompanies the social process of learning and searching, whereas sustainable development is presented as the concept of practical actions complying with a regulatory idea (Jahnke, Nutzinger 2003; Diskienė *et al.* 2008). Unchangeably actual question remains: 'In what way and with which instruments is it possible to transfer assumptions of sustainable development concept and to use them at organizational level?'

The issue presented in the article concerns practical aspects of sustainable development concept at the level of company. Sustainable development at the level of organization may be defined in a narrow perspective concerning respect for environmental limitation of activity, or in a wide perspective, taking into consideration economic, environmental and social ef-

fects of company's functioning. Selected definitions of sustainable business were presented in Table 1.

The process of implementing sustainable development concept at organizational level means steering towards perfection. Senge was right to say that *an organization may not be perfect in terms of reaching full perfection, (...) it is only capable of holding disciplines of learning and reaches better or worse results* (Senge 1990). Perfection is reached in the process of constant perfection of those elements that decide about perfection. The process of improvement is inextricably linked with the process of making changes. The necessity of changes as such seems to be indisputable, whereas the way of implementing changes is the matter of choice. There are isolated two types of changes:

- radical – connected with revolutionary change of strategy and constituents of management system; as example serves the strategy of Reengineering (*Business Process Reengineering*) which means introducing radical changes in business processes with the purpose to reach maximum efficiency together with reduction in costs (Hammer 1990; Hammer, Champy 2003);
- constant – connected with evolutionary changes (*Business Process Improvement* or continual improvement) (Malara 2006: 23).

Radical changes are supported mainly by M. Hammer's and J. Champy's theory that is loaded by heritage of Gilbreth and Taylor on the one hand, and Mayo and McGregor, on the other hand. Evolutionary changes are supported by the representatives of Ren school, which applies to European countries and Japan. Representatives of not radical, but gradual adjustments, are: M. Ghertman, M. Albert, S. Shingo, S. Shiba, whereas in Poland by K. Zimniewicz. The comparison of two concepts of introducing changes was presented in Table 2.

Table 1. Definition of sustainable company

Organization	Definition
Environmental Protection Agency (US EPA)	Environmentally sustainable organization functions in the way that preserves elements and functions of environment for future generation, i.e. positive environmental impacts are larger than negative effects
Sustainablebusiness.com	Sustainable business is business that contributes to an equitable and ecologically sustainable economy
World Council for Sustainable Business	For company sustainable development means adoption of such business strategy and such actions that contribute to satisfying present needs of company and interested parties, as well as simultaneous protection, maintenance and strengthening of human and environmental potential which will be needed in the future
Sustainable Development International Corporation	Sustainable company may function in a short period of time without negative influence on the conditions of existence and functioning of other groups and individuals, including organizations

Source: (Sidorczuk-Pietraszko 2007).

Table 2. Radical and evolutionary approach to changes in a company

Analyzed features	Reengineering	Systematic improvement
Type of change	Radical change – fluctuation in terms of quantity	Continuance of changes (mainly in terms of quality)
Subject of changes	Concerns mega processes	Concerns sub-processes and functional processes
Starting point	Process as a starting point, both for processes, and for shaping structures	Prevailing functions or sub-processes
Time	Horizon of changes from short to medium	Horizon of improving – debts
Extent of risk	The purpose of project works is to reach optimum productivity, high risk	Individual and constant learning leads to improvement of prevailing processes and functions, moderate risk
Involvement of employees	Limited participation of employees	All employees involved in the process of creating new knowledge and evolutionary development of a new model of conduct
Initiative of changes	Dependant on management	Dependant on employees of lower and medium level

Source: (Zimniewicz 2009).

Normalized quality (ISO 9001), environmental (ISO 14001) and safety (OHSAS 18001) management systems are instruments of introducing evolutionary, not radical, changes in an organization which ensure implementation of sustainable development concept. Three management systems in particular are the subject of interest:

- ISO 9001:2008 Quality Management Systems;
- ISO 14001: 2004 Environmental Management Systems;
- OHSAS 18001: 2007 Occupational Health and Safety Management Systems.

Numbers of ISO 9001 and ISO 14001 certificates confirm existing interest of Polish and Lithuanian companies in implementation quality and environmental management systems (Table 3). Share of Poland and Lithuania in total number of world certificates is rather insignificant, but the numbers of certificates in relation to GDP indicate significant share.

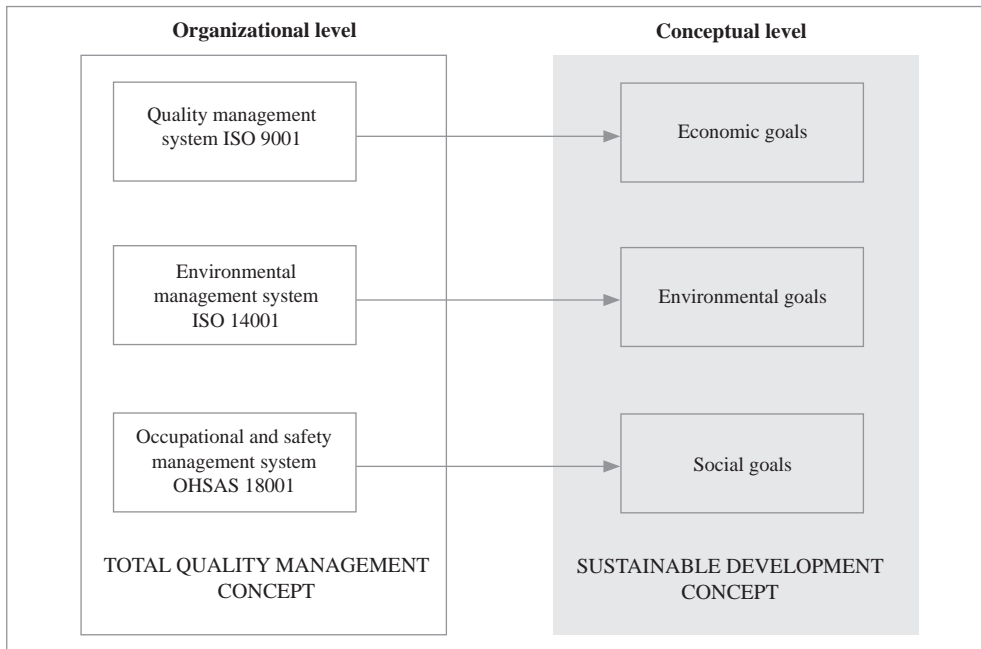
Fig. 1 presents links between the domain of sustainable development concept and management systems implemented at organizational level.

Becoming aware of the fact that ISO management systems do not ensure immediate effects, and also that they are not solutions which in a short period of time will enable radical improvements is a crucial factor of success. Another crucial factor in the process of improving normalized systems is knowledge whose source ought to be systems and the possibility of using it in the processes of further improvements. With time, an organization having ISO

Table 3. Numbers of ISO 9001 and ISO 14001 certificates in Poland and Lithuania in relation to Gross Domestic Product (GDP)

Country	Number of certificates in 2004	Number of certificates in 2005	Number of certificates in 2006	Number of certificates in 2007	Share in total number of certificates in the World [%] in 2007	Share in Total World GDO [%] in 2007	Number of certificates per unit of GDP [number per 1mrd USD in 2007]
ISO 14001							
Poland	709	948	1339	1089	0.70	0.80	2.56
Lithuania	155	208	252	312	0.20	0.10	8.15
World	90569	111162	129199	154572	100.0	100.0	2.83
ISO 9001							
Poland	5753	9718	9115	9184	0.96	0.80	21.63
Lithuania	487	591	697	809	0.90	0.10	21.12
World	670399	773867	897866	951486	100.0	100.0	17.42

Source: own study based on *The ISO Survey 2004–2007*, ISO, Geneva 2005–2008 and *Concise Statistical Yearbook of Poland*, Central Statistical Office of Poland, Warsaw 2008.

**Fig. 1.** Relationship between sustainable development concept and practical implementation at organizational level

systems ought to place more pressure not on ensuring compliance of systems with requirements of ISO standards, but on the possibility of using processes, solutions and procedures within the frameworks of systems in the processes of making decisions. A selection of the systems mentioned above results from the following reasons:

- three mentioned systems coexist in companies more frequently;
- the subject of interest of particular standards (quality, environmental protection, working conditions) is compatible with the holistic concept of sustainable development that concerns equalization of economic, environmental and social objectives;
- the policy of implementing ISO systems in companies indicates quite formalized and procedural approach in the process of their implementation as well as points out the need of improving these systems.

The main purpose of the article is to present the concept of sustainable development which is implemented at organizational level on the basis of the following formalized systems: of quality management, environmental management and occupational health and safety. The article points at both benefits and barriers related with using integrated management systems and provides guidelines concerning improvement of these systems.

2. Integrated management system model

Both the main idea of continual improvement and the very structure of ISO 9001, ISO 14001 and OHSAS 18001 norms enable formation and implementation of integrated management systems. Integrated management constitutes understanding and effective directing of every aspect of an organization in order to make needs and expectations of all interested parties properly satisfied thanks to using available financial, organizational and technical resources.

The decision concerning integration of management systems should be a strategic choice of its managers. The aims, expectations, results and planned costs of the undertaking ought to be specified prior to making the decision of implementing the system. *In the situation when a company already has one, two or even three certificates, or has problems with meeting the basic requirements or does not sense “added value” prior to their implementation, it does not make sense to try and integrate faulty systems. Rising costs of accidents at work, non-compliance with regulations on environmental protection and more restrictive law are frequently satisfactory reasons of making the decision to implement other systems or to integrate them* (Kleniewski 2004: 8).

The relation between quality, environmental and safety management systems corresponding to international standards is presented in Table 4.

Table 4. The relation between quality, environmental and safety management systems corresponding to international standards

Occupational health and safety management system OHSAS 18001: 2007	Environmental management system ISO 14001: 2004	Quality management system ISO 9001: 2008
4.1. General requirements	4.1. General requirements	4.1. General requirements 5.5. Responsibility, authority and communication 5.5.1. Responsibility and authority
4.2. OH&S Policy	4.2. Environmental policy	5.1. Management commitment 5.3. Quality policy 8.5.1. Continual improvement
4.3.1. Hazard identification, risk assessment and determining controls	4.3.1. Environmental aspects	5.2. Customer focus 7.2.1. Determination of requirements related to the products 7.2.2. Review of requirements related to the product
4.3.2. Legal requirements and others	4.3.2. Legal requirements and others	5.2. Customer focus 7.2.1. Determination of requirements related to the products
4.3.3. Objectives and programme (s)	4.3.3. Aims, targets and programme(s)	5.4.1. Quality objectives 5.4.2. Quality management system planning 8.5.1. Continual improvement
4.4.1. Resources, roles, responsibility, accountability and authority	4.4.1. Resources, roles, responsibility and authority	5.1. Management commitment 5.5.1. Responsibility and authority 5.5.2. Management representative 6.1. Provision of resources 6.3. Infrastructure
4.4.2. Competence, training and awareness	4.4.2. Competence, training and awareness	6.2.2. Competence, awareness and training
4.4.3. Communication, participation and consulting	4.4.3. Communication	5.5.3. Internal communication 7.2.3. Customer communication
4.4.4. Documentation 4.4.5. Control of documents	4.4.4. Documentation 4.4.5. Control of documents	4.2.1. General (documentation requirements) 4.2.3. Control of documents
4.4.6. Operational control	4.4.6. Operational control	7.1. Planning of product realization 7.2. Customer-related processes 7.3. Product design 7.4. Purchase 7.5. Product and service provision

Continuation of Table 4

Occupational health and safety management system OHSAS 18001: 2007	Environmental management system ISO 14001: 2004	Quality management system ISO 9001: 2008
4.4.7. Emergency preparedness and response	4.4.7. Emergency preparedness and response 4.4.6. Operational control	8.3. Control of nonconforming product
–	–	7.4. Purchase
4.5.1. Performance measurement and monitoring 4.5.2. Evaluation of compliance	4.5.1. Monitoring and measurement 4.5.2. Evaluation of compliance	8. Measurement of monitoring and measuring devices
4.5.3. Incident investigation, nonconformity, corrective action and preventive action)		
4.5.3.1. Incident investigation		
4.5.3.2 Non-conformity, corrective action and preventive action	4.5.3. Non-conformity, corrective action and preventive action	8.3. Control of non-conforming product 8.4. Analysis of data 8.5.2. Corrective action 8.5.3. Preventive action
4.5.4. Control of records	4.5.4. Control of records	4.2.4. Control of records
4.5.5. Internal audit	4.5.5. Internal audit	8.2.2. Internal audit
4.6. Management review	4.6. Management review	5.1. Management commitment 5.6. Management review
		8.5.1. Continual improvement

Sources: Own study based on ISO 9001: 2008 Quality management systems, ISO 14001: 2004 Environmental management systems, OHSAS 18001: 2007 Occupational health and safety management system.

The aforementioned guidelines concerning three systems are characterized by full compatibility and coherence. The same idea of continual improvement was used with regards to three areas: quality management of products and services, environmental protection management and occupational health and safety management. Application of normalized management systems by organizations is undoubtedly expression of care for an employee, natural environment and for economic results (quality). However, in practice implementation of systems encounters many barriers.

3. Benefits and barriers for systems' functioning

The analyzed management systems are based on the concept of continual improvement elaborated by Deming (2000). Functioning of each of them ought to provide a company with the source of benefits that should be subjected to quantification and assessment. In

practice, however, it turns out that proving continual improvement is one of the most difficult issues that has to be proved during certification audits or conformity audits. Furthermore, management systems bring not only easily identified benefits, but also constitute a source of problems. These problems include:

- continuous lack of management and involvement of employees;
- functioning of half-dead systems, which manifests itself by work done by people for the benefit of systems, not by systems for the benefit of people;
- usage of too extensive, expanded and complex system of documentation;
- attitude to integrated management systems as if it was a marketing instrument (not an objective itself, i.e. obtaining a certificate), not as an instrument of improving organization's management processes (Ejdys *et al.* 2006).

Research on the efficiency of management systems' functioning is conducted, among others, by International Organization for Standardization. According to data included in the latest report from 2005, which concerns effects of using systems in small and medium-sized companies, the weakest points of systems that respondents most frequently pointed at were: generation of too large input of work connected with holding documentation (*paper work*) as well as high costs connected with improving production processes (Curcovic *et al.* 2005). Apart from these, many companies participating in the survey mentioned lack of adequate knowledge and abilities used for upgrading management systems. It is also problematic for companies that there are not enough resources as well as completely no factors from the outside that would motivate a company to implement systems of this type. Lack of time was shown by 36% of respondents as the main barrier in implementing systems. Into the second place respondents placed inadequate number of staff members (31%) and lack of know-how in the company (21%) (*The Global ...* 2005).

Imperfections in the functioning of formalized management systems were proved also during many-year observations and interviews with employees of Polish companies that have normalized systems¹. A basic question that constitutes a research problem of the author was as follows: To what extent are formalized systems an instrument of improving management processes, improving their efficiency, and to what extent do they constitute an objective as such, i.e. obtaining of certificate? Unfortunately, for most examined persons employed by companies in which ISO systems function, the systems were frequently a purpose for their own sake. Moreover, their practical aspect was perceived only from the perspective of 'obstructing' prevailing manners of conduct and 'obstructing' certain activities. A fundamental cause of status quo may be non-involvement of the management, and as a consequence, the fact that employees do not understand the idea of systems' functioning.

Similar conclusions result from the surveys conducted in Polish companies. In the light of conducted research, Jedynek stated that the most basic weakness of ISO systems lies in too

¹ In the years 2002–2006 the author of this article was one of the contractors of the Project financed from European Commission's sources no. EVG3-CT-2002-80005. The basic objective of this project was to run education and training activity in the form of 1–2 day trainings and two-semester postgraduate studies. These trainings and studies were connected with implementation of the concept of sustainable development. During 3-year activity interviews with approximately 220 participants of postgraduate studies and with 450 participants of trainings were held.

large number of documents, which was shown by 36 analyzed companies (among 147 companies). Vast majority of analyzed units indicate small involvement and too low awareness of employees in the process of implementing and maintaining systems (Jedynak 2006: 5). In the investigation made by M. Urbaniak companies indicated the following most frequent barriers: low awareness of employees (lack of knowledge), high costs of getting prepared for certification, definition of measurable objectives, introduction of processes' meters, as well as preparation of documentation (Urbaniak 2006: 21).

Unlike barriers encountered by companies during systems' implementation and functioning, they also constitute the source of many benefits. The very process of systems integration is the source of additional benefits for an organization. Table 5 presents examples of benefits related with implementation of integrated management system and barriers that may arise in the implementation process.

Table 5. Barriers and benefits related with integration of management systems

Benefits of systems integration	Source	Barriers of systems integration	Source
<ul style="list-style-type: none"> – optimization of obtained results of management system – standardization and unification of documentation, – elimination of repetitions 	Zeng <i>et al.</i> 2008	<ul style="list-style-type: none"> – internal: human resources, understanding and awareness, organization structure and culture – external: certifying units, customers, institutional and, technical environment 	Zeng <i>et al.</i> 2008
<ul style="list-style-type: none"> – reduction in the amount of used documentation, – reduction in costs of maintaining the system, – possibility of parallel certification of systems, – reduction in personnel, 	Hamrol 2008	<ul style="list-style-type: none"> – implementation costs – lack of involvement of the highest management – opposition of employees – unification of documentation – trainings of employees 	Szymczak, Urbaniak 2001
<ul style="list-style-type: none"> – reduction in administration costs ensuing from improvement of internal coordination of actions; – benefits connected with improvement of competitiveness; – organization development towards integrated responsibility – close to three pillars of sustainable development 	Jørgensen <i>et al.</i> 2006	<ul style="list-style-type: none"> – complexity of internal management system – lower efficiency of management – reluctance of employees – increase of management costs – waste of human resources – free exchange of information – increasing amount of paper work 	Zeng <i>et al.</i> 2007

Continuation of **Table 5**

Benefits of systems integration	Source	Barriers of systems integration	Source
<ul style="list-style-type: none"> - improvement of organization image; - using holistic approach to management of business market; - avoiding conflicts between systems; - elimination of repetitions and minimization of bureaucracy; - more effective and efficient external and internal audits 	PAS 99: 2006	<ul style="list-style-type: none"> - lack of knowledge among employees and management, - knowledge of what we have and lack of knowledge what we need it for; - lack of internal and external demand for systems, - bureaucracy, - certifying units. 	Jørgensen 2008a, b
<ul style="list-style-type: none"> - unification of procedures and plans, - responsibility defined in a better way 	Salomone 2008	<ul style="list-style-type: none"> - high implementation costs - reduced personnel resources - lack of communication between departments - opposition of employees 	Wawak 2002
<ul style="list-style-type: none"> - reduction in the amount of documentation and bequests, - reduction in bureaucracy and paper work, - economical approach to costs - as the effect of optimizing usage of time and resources, - simplification of the procedure of conducting internal and external audits. 	Remmen, Thrane, 2005; Salomone 2008	<ul style="list-style-type: none"> - risk of wrong evaluation of importance of system's particular elements - unsatisfactory aid on the part of certifying units - disorientation of employees, - organizational problems, - unsatisfactory integration of standards. 	Salomone 2008
<ul style="list-style-type: none"> - full integration of all processes 	Holdsworth 2003		
<ul style="list-style-type: none"> - cost-time-quality 	Wawak 2002		

Source: own study.

Formalized management systems belong to social systems in which man equipped with strictly defined knowledge is the basic factor deciding about efficiency and effectiveness of their usage. Possessed data and information, which in turn are the source of knowledge,

constitute a key factor deciding about success in implementing mentioned systems and sustainable development concept.

4. Knowledge as basis of improving management systems

Needs of continual improvement of management systems by particular areas (quality, environmental protection and health and safety) result mainly from lack of knowledge of organization managers in terms of managing these areas. Management systems of quality, environmental protection and occupational health and safety constitute for an organization the source of data, information and knowledge used for making decisions which take into consideration assumptions of sustainable development.

Type of selected environmental, quality, and OHSAS decisions made at the level of an organizational unit was presented in Tables 6–8.

Table 6. Examples of decision processes using acquired environmental knowledge within environmental management system

Knowledge of:	Examples of decision processes
extent to which an organization uses environment for economic purposes (amount of used materials, raw materials, energy, amount of pollutions discarded into environment)	necessity of reducing usage of materials, raw materials and energy sources owing to e.g. rising absorbcency of energy, materials and raw materials in production
environmental protection costs (investment outlays and current costs) connected with held activity and knowledge of their influence on organization’s financial results	necessity of reducing environmental costs connected e.g. with made for use of environment resource for production process
indispensable adjustment actions in connection with changing legal requirements on environmental protection (the ISO standard requirements include: identification, updating and periodical assessment of organization’s compliance with legal requirements on environment protection)	need of adjusting technology to changing legal regulations of environmental protection
ways of minimizing organization’s negative impact on environment (investment and non-investment activities included in environmental management program)	necessity of searching for ways of reducing negative impact of certain organization’s activity on the environment
existing relations of organization with the surrounding in terms of its operation’s impact on environment (the standard requires implementation of external communication with all interested parties)	necessity of improving company’s image by improving the relation with the environment
indispensable extent of actions, activities initiated by particular employees that minimize negative impact on the environment; knowledge of how activity of individual employee has influence on the environment	necessity of increasing employees’ ecological awareness
types of potential breakdown situations, ways of acting in case of breakdown and ways of counteracting the situations which are the source of negative impact on the environment	necessity of making immediate actions in case of emergency situations; the actions minimize damage in the environment and negative effects for an organization

Source: own study.

Table 7. Examples of decision-making processes using obtained knowledge within the frameworks of quality management system

Knowledge of:	Examples of decision-making processes
current and future needs defined by customers	urgent need for fulfilling new requirements of customers beginning the stage of projecting new product which will satisfy clients' expectations
quality of satisfying quality needs of offered products and services for clients	necessity of undertaking immediate actions, e.g. those connected with improving qualifications of personnel owing to dissatisfactory extent of satisfying clients' expectations (e.g. in relation with providing consulting services)
indispensable competences of employees connected with ensuring proper quality	decision about employing an employee who has indispensable competences connected with ensuring appropriate quality
production materials fulfilling certain expectations	necessity of changing production materials that do not fulfill certain criteria
machines, facilities, instruments and other production means that ensure reaching required parameters	necessity of purchasing a new machine (device) that will guarantee ensuring required quality parameters
results of monitoring production processes and existing shortages	necessity of making changes in technological processes connected with inappropriate level of quality and registered number of shortages
quality costs in an organization	necessity of reducing quality costs generally and of particular costs of the account of quality costs

Source: own study.

Table 8. Examples of decision-making processes using acquired OHSAS knowledge

Knowledge of:	Examples of decision-making processes
existing and potential danger occurring on working positions	in case of emergence of entirely new hazards there is necessity of undertaking actions reducing or eliminating danger
applicable means minimizing professional risk on working position in connection with performed work	necessity of undertaking adjustment actions on certain working position
results of inside and outside communication within the frameworks of occupational health and safety management system	necessity of taking into consideration comments of the parties concerned in the processes of maintaining occupational health and safety management system necessity of consultation with employees on the state of safety in terms of occupational health and safety
costs of occupational health and safety within an organization	necessity of reducing costs of work safety
extent of satisfying workers' needs concerning occupational health and safety conditions	necessity of taking into consideration needs of employees in management processes

Continuation of **Table 8**

Knowledge of:	Examples of decision-making processes
binding legal regulations concerning safety and work hygiene (one of norm's requirements is to identify, update and make periodical assessment of organization's compliance with legal regulations concerning occupational health and safety)	necessity of adjusting conditions on working position to new legal regulations
effects of accidents that took place during work	decisions preventing accidents in the future decisions about ceasing work on certain position owing to potential effects of danger

Source: own study.

Generally, applied systems of knowledge managing do not include the so-called negative knowledge which may be more important than positive knowledge. Knowledge resulting from mistakes, errors and failures is defined as negative knowledge. Such negative experiences usually imply more positive conclusions than success does. However, nobody wants to present their failures in a systematic way because they would be subjected to sneer, criticism and symptoms of malicious satisfaction. Everyone tries to keep negative knowledge for themselves. Normalized ISO management systems offer important instrument that enables collection of this 'negative' knowledge in an organization. These systems include internal audits and external audits (certifications and audits of compliance) as well as management reviews.

5. Conclusion

Completion of the process of implementing ISO systems by certificate is for many employees the final expected result of undertaken actions. After momentary enthusiasm that ensues from apparent improvement of organization's functioning, there comes a period of stagnation, of expecting new audits of compliance or there follows recertification process. Passive expectation may squander initiated perfection process whose aim should be to create an intelligent organization. With this purpose it is necessary to undertake the following actions:

- developing processes of continual learning of employees with simultaneous verification of the extent of using obtained knowledge in the processes of improvement actions concerning quality, environment and health and safety;
- stimulating innovation processes, whose source are problem situations that are identified within the frameworks of formalized systems;
- shaping strong positive relations of an organization with the surrounding, which are source of essential knowledge in the aspect of improving management processes, technological processes and improving products;
- making employees aware of their role in the process of continual improvement of formalized quality, environmental and occupational health and safety management systems towards learning organizations;

- departing from codification of knowledge for the benefit of knowledge personalization.

Improvement of quality, environmental and occupational health and safety management systems is one of the examples of equalizing organization's objectives from the point of view of all the interested parties such as: owners, employers, employees and outside interested parties. Proper quality management is the source of economic benefits for the company. Rational administration of environment resources, on the one hand, reduces costs of companies' functioning, on the other hand, it is an instrument used for improvement of organization's image, whereas management of working safety guarantees proper conditions for employees. All these actions are compatible with the assumptions of sustainable development concept.

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NAUJOS VALDYMO SISTEMOS KAIP INSTRUMENTAI ĮGYVENDINANT DARNIOS PLĖTROS KONCEPCIJĄ ORGANIZACINIŲ LYGMENIU

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Santrauka

Šiuolaikinių valdymo koncepcijų įvairovė ir jų trumpalaikiškumas (kai kurių), polinkis įgyvendinti populiarius sprendimus, beatodairiškas valdymo sistemų diegimas ilgai laukiamų pokyčių, taip pat darbuotojų dalyvavimo, priimant sprendimus, mažinimas sukuria situaciją, kai daugelis bendrovių vis dar susiduria su neišspręsta dilema pasirinkti tinkamą strategiją darniam organizacijos vystymuisi užtikrinti. Todėl nauji sprendimai turėtų būti traktuojami kaip organizacijos tobulinimo elementai, o ne kaip panacėja esamoms problemoms išspręsti. Vienas darnaus vystymosi principų įgyvendinimo būdų – diegti standartizuotas sistemas, parengtas Tarptautinės standartizacijos organizacijos (ISO) įmonėse. Straipsnyje siūloma darnaus vystymosi koncepciją organizacijos lygmeniu įgyvendinti naudojant tris valdymo sistemas: kokybės, aplinkos apsaugos, darbuotojų saugos ir sveikatos valdymo.

Reikšminiai žodžiai: darnus vystymasis, aplinkos valdymas, kokybės valdymas, saugos valdymas.

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