



MODEL OF INTERACTION OF CHANGE MANAGEMENT PROCESSES AND QUALITY MANAGEMENT SYSTEM: EXAMINATION OF METAL INDUSTRY COMPANY IN LITHUANIA

Asta Valackienė¹, Angelė Lileikienė¹, Vaida Glaudelė², Jurgita Martinkienė¹

¹Lithuania Business University of Applied Sciences, ²Entrepreneur, personnel and quality manager at Metal Industry Company of Lithuania

Abstract

This paper focuses on the analysis of change management processes and quality management system on the main understanding of interaction platform. And deals with change management issues in a metal manufacturing company that are relevant to dynamic and flexible industry in the changing environment. It is evident, that a large number of enterprises fail to adapt to changes in time, moreover, they have not analysed interaction of change management processes and quality management to control of modern quality systems. In the modern world of business, quality is becoming one of the key drivers of competitiveness and success. Continual changes and progress have forced supervisors to find and implement cost-effective solutions for the change communication and employee support by providing feedback regarding strategic changes in the company.

Main findings and value of the paper: From a theoretical standpoint a holistic discourse of interaction of change management processes and quality management system in the manufacturing company was highlighted and practical contribution was illustrated.

KEY WORDS. Interaction; change management processes; quality management system; industry company.

Introduction

Relevance and novelty of the research. Corresponding to evolving but not yet sufficient theoretical insights focusing on how dynamism in change process affects innovations and strategic changes in companies and how quality management system could be managed for the optimum changes results, it is relevant to analyze how manifests interaction of dynamic change processes taking into account several perspectives which can be named as time, quality, change and change over time. It is evident, that a large number of enterprises fail to adapt to changes in time, moreover, they have not analyzed interaction of change management processes and quality management.

Scientific problem and the extend of its investigation. Increasing competition is forcing companies to implement changes and performance management system (PMS) related to the implementation and control of modern quality systems.

Thus, in order for a company to remain a competitive player in the market, a fundamental transformation-reconceptualization in three dimensions of expression is required: *the first* is to reflect on change management as the process (initiation of changes; implementation, institutionalization and monitoring) by which a company's structure and strategic direction is implemented and updated; *second* - to improve operational processes in the company / Performance Management System (PMS) which includes: production as well as learning and development, training requirement, to enhance communication across the company and its bridge between employee and employer

for change development; *third*, both in the transformation process and in order to improve business processes, companies inevitably face challenges in the field of quality management, in order to improve the process of implementing quality management standards in the production company: better relations with consumers, more profitable orders, product quality, more qualified and loyal employees.

In addition, major importance is devoted to guiding a science policy that the analysis of change management processes reveals *synergies between the two components*, i. y. implementation of change management processes and quality management standards in the manufacturing sector (metal industry company). In order to succeed and hold high positions in the market, multinational companies must meet world-class standards and processes that help them adapt to ever-evolving technologies.

It should be noted that although there is no shortage of both theoretical analysis and empirical research on change management processes, companies pay much attention to the implementation of quality standards, thus adapting to the global market, but some studies lacks a deeper conceptual and applied analysis of change management processes, manage change processes by enabling the components of the performance management system, implementing quality management systems.

To summarize the level of scientific problem exploration it can be stated that although change management and quality management system gained a lot of attention there is still lack of knowledge required to answer the research questions raised in this paper: what are the main elements (and their interrelationships)

constituting change management processes and quality management system and how to apply change strategies that explain how the interaction of change management processes occurs by implementing a quality management system in a metal industry company, and how it could be fostered?

Thus, it is crucial to gain holistic understanding of what, why and how: the conceptually examined interaction of change management processes requires the broader discussion of insights into the application of change management, of the performance management system components and a quality management system the main research result was achieved: the systematical change management model corresponding to the implementation of a quality management system in a metal industry company is constructed. The Model explains the adaptation of change strategies and platform of interaction of change management processes occurs by implementing a quality management system in a metal industry company.

Theoretical background/reasoning:

Change management processes, reflecting on performance management system and business processes in the company implementing a quality management system

There are various discussions in scientific literature (Mruthyanjaya Rao Mangipudi et al., 2020; Ravi Chandra and Saraswathi, 2018; Sjostrand, 2016; Euchner, 2013; Sujova and Rajnoha, 2012; Zakarevičius, 2010; Klimas and Ruževičius, 2009; Hammer and Champy, 2006; Becker, 2000) on performance management processes and business processes which are covered in the change management field.

According to Hammer and Champy (2006), a process is the scope of activities performed within a company, requiring use and merging of respective resources in order to achieve the best possible result. Chang (2005) maintains that it is a targeted and planned activity carried out, when all actions in the process are transformed into the final result, by providing benefits to the consumers. According to Ruževičius (2006), the concept of a process in a company is considered as actions aimed at the achievement of the objective set and are limited over time, i.e. have a beginning and an end. According to Klimas and Ruževičius (2009), material and financial resources and activities, required in order to achieve the desired result, merge during the process. Most commonly one process causes another process, which follows it, thus creating a certain chain. **Business process management covers five areas:** process development or change; development and modelling; execution; monitoring; and optimisation. Becker (2000) **classifies business processes as follows:** processes within a company; inter-company or inter-competitor processes; managerial business processes, such as customer search, recruitment, etc.; customer service; company performance oriented business processes, such as data protection, etc. The above-mentioned Lithuanian authors

Klimas and Ruževičius (2009) argue that there are **three process groups:** management processes, e.g. management of strategic and management systems; key processes, e.g. development of a new product; supporting processes, i.e. processes involving human resources and company's infrastructure. Another Lithuanian author Zakarevičius (2010) proposes division of processes into **six key (production) processes:** preparatory works; production; sales; economic process; quality assurance; social process, when needs of employees are satisfied. Foreign scientific literature authors, such as Sujova and Rajnoha (2012), propose the following classification of **business processes in accordance with the area of changes:** change of business processes, i.e. major alterations, aimed at the intensive improvement of processes; continuous improvement of processes, i.e. an ongoing process during which production processes are gradually improved. In this way a maximum competitive advantage is aimed to be achieved.

The authors of the article stress the significance of quality management in the business environment by reflecting on the necessity of the implementation of quality systems in the company's business processes. It is noted that an increasing number of companies, especially production companies, face changes in technology and innovation areas. And the implemented changes lead to correction or even complete restructuring of the performance processes. In order to ensure efficient work and stability of the position of the company in the market, implementation of management quality systems is invoked (Daunorienė and Bagdonienė, 2008; Iden, 2012). For a company striving to be in line with global standards quality becomes a prerequisite (Christauskas and Kazlauskienė, 2012).

According to Franceschini (2006), development of internal culture of a company and perception of standard implementation is the most significant method for the improvement of the company's performance in order to attain competitive advantage. Quality system contributes to ensuring efficient company management and enables preparation for strategic changes (Garza et al., 2015).

By implementing quality management systems companies obtain considerably more advantages in the following areas (Dale, Iwaarden, 2007): consumer satisfaction, higher revenue, products of higher quality, efficient performance of a company, procedure control, team work and leadership.

Companies, which strive to maintain competitive in the market, most commonly choose **international standardisation quality system ISO** and introduce it in a company's performance processes.

According to Wolniak (2016) the improvement of quality system within the company or its introduction, when the company apply ISO standards, creates added value to the company itself, as well as to the company's employees, customers or consumers, suppliers and society. Such added value is most often measured by financial, economic and other indicators. According to some authors (Magd, Curry, 2003), the added value of ISO to a company may be measured taking the following aspects into account: *improvement of daily procedures; improvement of structure; quality planning; improvement of leadership/management; availability of suppliers and*

improvement of communication with them; introduction of control processes and their improvement; compliance with environmental requirements and their introduction;

The key reasonings and benefits related to the introduction of the quality management system in a company are defined in scientific literature (Gotzamani et al, 2007; Vyšniauskienė, 2014).

With a view to achieving efficient management of a company management of interacting business processes and quality system is required. By conceptualising the interaction of change management processes the following constituents are highlighted: actions, intended for attaining the objective set and are limited over time, i.e. have a beginning and an end; material and financial resources and performance, required in order to achieve the desired result, merge during the process. All processes operate consecutively thus creating a certain chain. It has been disclosed that introduction of quality management systems has been becoming the norm for business companies ready for changes. It may be maintained that introduction of international standards in companies creates added value for companies in the global market, aids in developing quality products and services, ensures reduction in the number of consumer complaints, improves a company's image and financial and economic performance indicators and reduces risk.

Methodological basis/approach. Based on information processing theory and organizational inertia theory, we seek to investigate how the implementation of a quality management system affects the speed and scale of managing strategic change at the firm level and how this interaction is contingent on the strategic flexibility of the firm.

Due to the increasing competition, companies are forced to implement changes related to the introduction and control of modern quality systems. In the modern world of business, quality is becoming one of the key drivers of competitiveness and success.

The object of analysis is interaction of change management processes and quality management system. Supporting accuracy of the study, *the target* of the research is interaction of change management processes in international manufacturing company in Lithuania implementing a quality management system. *The aim* of the study is to construct the Model and validate it to substantiate on the interaction of change management in manufacturing company implementing a quality management system.

Methods, used to achieve the aim and objectives: conceptualization of theoretical insights, Case study, Content analysis of company's strategic documents, semi-structured interview.

Findings. The paper conceptualizes understanding of change management processes and quality management system, highlights interaction of change management processes in a metal manufacturing company implementing a quality management system. Theoretical insights and evaluation of the results of the empirical study conclude in designing Model of "Interaction of Change Management Processes in the Company Implementing a Quality Management System".

Originality/value. *Theoretical implication.* The coherent construct of the model rationalizes interaction

of change management processes and demonstrates cyclicity; it requires developing a change management plan which enables companies to strategically manage change.

Managerial implication. The constructed regular model facilitates preparation of companies to manage change while implementing a quality management system. An adapted model can be applied in business practices, metal industry and other companies. It is expected that the article raised discussion issue and discussed the model construct encourage deeper scientific debate, will contribute to a more effective change management and quality system synergy results.

Research methodology and research organisation

Substantiation of the research relevance

The international equity metal industry company "X" operating in Lithuania has been selected for the research.

Engineering industry and metalworking companies in Lithuania maintain a leading position within Lithuanian economic sector. In terms of GDP (gross domestic product) metalworking companies in Lithuania have attained an exceptionally high position in Europe and operate as equals to such large states as Germany. The metal sector in Lithuania generates 21-23 per cent of GDP in total. Based on the data of the year 2014 this industry in Lithuania generated 511 million euro GDP in total (Statistics Lithuania, 2018). The metal manufacturing industry is experiencing an increase in demand that has not been seen since before the 2008 recession. This demand has resulted in many feels optimistic about it. Growth in metal fabrication should keep a steady pace at the national level for 2019's U.S. GDP — between 2.7 and 3.4 percent. This increase appears across the manufacturing industry (<https://www.meadmetals.com/blog/2019-metal-industry-forecast>).

The analysis of scientific literature (Bevir et al, 2003; Todnem, 2005), responsive to peculiarities of change management in the metal industry company, in implementing quality management system, disclosed that changes and their management is a complex process, not only covering initiation, planning, implementation and institutionalisation phases, but also requiring financial and human resources. Based on these theoretical assumptions and defined criteria of the research, the aim of the research is to empirically verify the interaction of change management processes on the basis of the example of the metal industry company with an introduced quality management system.

Methodology for the Analysis on the Interaction of Change Management Processes and Quality Management System

For substantiation of the interaction of change management processes in the metal industry company a qualitative research strategy has been selected, which, according to the most progressive company management and business line researchers (Hurzenreuter, Voll, Verbeke, 2011; Tharenou, Donohue and Cooper, 2007;

Schalk et al, 2012.), is the most accurate for clarification of a social phenomenon of this type, and qualitative type data collection and data analysis methods, procedures and techniques have been adopted. Jackson (2012) points out that selection of research methods and statistics should have a critical thinking approach. According to Malterud (2001), qualitative analysis methods cover systematic data collection and organisation and interpretation of textual data. As Eriksson and Kovalainen (2008) maintain in their scientific study "Qualitative methods in Business Research" "provides the deepest response to the company change management field.

While applying qualitative research strategy the following methods are used for the analysis: company's internal documents content analysis and partly-structured interview. The authors of the articles substantiate the validity of the methods applied in the research. According to Walker (2010), when qualitative research paradigmas are applied, the qualitative analysis in particular is found to disclose both internal and external characteristics of the analysed phenomenon, by finally obtaining qualitatively measured indicators (Walker, 2010). An interview is one of the most commonly used methods applied in qualitative researches (Roulston et al, 2003). According to DiCiccio-Bloom, Crabtree (2006), the aim of an interview is to rely on knowledge which is obtained employing the experience of people. Bell (2005) maintains that the main benefit of the interview method is its applicability within the context of in-depth analysis in order to assess the knowledge of informants and analyse their motives, experiences and sentiments (Bell, 2005). In substantiating the *applicability of partly-structured interview method* it may be maintained that such method in the performed research has been selected on purpose in order to provide a more detailed explanation of the interaction of change management processes based on the example of the metal industry company by performing the analysis of changes within a natural context, i.e. by responding to strategic direction of changes in that company where quality management system is being implemented.

The approach of managers and employees to the changes taking place in the company, their significance, frequency and preparation has been disclosed. The opinion on the involvement of all employees in change management processes is substantiated. Another method – *the company's internal documents content analysis* – is valuable in highlighting certain aspects of strategic changes. Application of this method enabled the disclosure of the preparedness of the metal industry company "X" for change management, assessment of the available resources, foreseeing positive and negative factors in the company during the implementation of quality management system; strategic documents (strategic plans, budget documents, employee training plans, constituents of the management competence portfolio, production indicators, etc.) of the company for the period of four years have been analysed. In the analysis of the *aspects of quality management system implementation in the company and discussion of the interaction of change management processes* the official

documents institutionalising issues of quality management (The Victorian Quality Council, 2006; British Standard Institution, 2008; Emergency Preparedness, 2012) have been analysed. Change management field issues are widely discussed in these documents, as well as guidelines for successful implementation of changes are provided therein. In the documents *the change is considered* as a key component, which is required for continuous improvement of quality. The performed analysis of the documents referring to quality management issues helped to methodologically substantiate analytical areas and issues in the research, enabling identification of managerial problems related to changes arising in metal industry companies, which have quality management systems implemented.

The data obtained during the analysis of internal documents have been *triangulated*, i.e. compared with the official quality management documents (by comparison: The Victorian Quality Council, 2006; British Standard Institution, 2008; Emergency Preparedness, 2012), partly-structured interview, staff discussions and analysis of the company's internal strategic documents have been applied. Such application of triangulation (method validity) verification, according to Frechtling and Sharp (2010), requires significant time resources however provides more in-depth data and enrichment.

Defining the Research Gap and Design

Key aspects of the research analysis (4):

- Identifying strategic direction at the metal industry company;
- Disclosing preparedness of the company's management and employees in terms of the projected changes and approach to the changes taking place in the company;
- Substantiating interaction of change management processes (initiation, implementation, institutionalisation and result assessment/control) in implementing quality management system at the metal industry company;
- Disclosing aspects of benefits and projected performance results and discussing reflections of employees within the field of changes taking place at this company.

Research dimensions (3):

- Peculiarities of the change field in the selected company determined by international competitive environment in the metal industry sector.
- Expression of all change management processes apparent within the company (initiation, implementation, institutionalisation and control), positive and negative factors, occurring during implementation of quality management system.
- Model verification (highlighting categories of structural elements and substantiation of the concept), as well as verification of relevance.

Highlighted research criteria (4):

- Preparedness of the company in terms of changes.
- Changes occurring at the production company when change processes are revealed.
- Defined opportunities and challenges for the application of change processes while implementing ISO 9001 quality standard.
- Verification of change management model to support systematic and successful management of changes within the company while implementing quality management system ISO.

Criteria are verified with the aid of the following indicators (4):

- Identification and analysis of the causes for changes taking place at the company.
- Identification of changes taking place at the company.
- Identification of success criteria for implementing changes.
- Involvement of employees in initiation of changes, management, etc.

Research tasks reflect on the following analytical questions: What presupposes necessity and inevitability of changes in the metal industry company? What measures are applied in institutionalising changes at the researched company? What change management and institutionalisation plans are being prepared at the researched company? What problems and risks are highlighted in the change management field?

Research sampling: non-probability targeted sampling has been applied. Targeted selection of the international equity company in Lithuania “X” has been made. This company, which for several years has been nominated for “Verslo gazelle” (*Business Gazelle*) award, represents itself as *the chosen partner*. In realising its *vision (To be the chosen partner)* the company is guided by *the following values*: initiative, integrity, flexibility and respect. By exporting 95 per cent of its production output, the company exceeds performance indicators of the metal industry sector.

Data Analysis

The following results have been demonstrated by the analysis of the internal documents of the company and the responses of the informants from the company management body’s interviews (N=9): 1) it may be maintained that key activities of the company are customer needs oriented. The company has its *business concept* prepared. And it is introduced to the company’s employees. In the market the company represents itself as a competitive supplier of services and sheet metal production for the European market. The *company’s mission (Creating value while being a helpful and trustworthy partner to its customers by continuously improving and creating synergy among the group companies)* is also reflected in its activities and relations with customers. The company positions itself as one creating synergy among industrial production group companies. The analysis of the company’s activities disclosed that strategic changes are based on five key *business pillars*, i.e. efficiency, partnership, quality and profitability.

The analysis of the company’s documents disclosed that the weakest link in the company is its loyal and motivated production employees. High staff turnover is predominant, especially due to the existence of other competitive production companies located within the same region. Therefore the company strives to attract, motivate and maintain its employees. Implementation of quality management system demonstrates high quality of work at the company: better indicators have been achieved, i.e. culture, best management model practice, policy and competences, increase in the effectiveness of production and administration. Consistent profitability in the company demonstrated optimization of profitability by using all skills, improving commercial opportunities, effectiveness and aspiration for the best deals. Solid financial position enables the company to be more focused in the company’s policy on financial indicators during the strategic period, overcome crises and make immediate investments. Although the company’s management has an ultimate responsibility for the company’s performance, responsibility for performance in daily operations has been transferred to employees according to the descriptions of their positions, responding to the structure of the company.

The interview data indicated that the company’s top level management adhere to the guidelines “Good manager guide” approved within the company (9 items): Make a good team choice; Take interest in your employee; Be emphatic; Communicate; Be a role model; Delegate; Be positive and constructive; Rejoice in the success of your employee; Be a teacher; Encourage innovativeness.

The company management body has drawn up a plan of obligations being performed. Such plan served as an aid to the managers, in line with quality management standards, in making changes more effective: by timely organising meetings, organising training and controlling processes over time. Such performance process management serves as an aid in monitoring company’s profitability, efficiency and other indicators.

When analysing the company’s documents the company’s policy based on *Common Platform* has been highlighted. This platform can be described as actions, which are applied by the company, with a view to attaining success, in its everyday activities. The company’s business strategy has been approved wherein criteria of the company’s success are provided:

1. *Orientation towards customers.* In order to successfully satisfy customer needs, the company’s vision is oriented towards customer, i.e. to be a chosen partner. In order to reach the vision it is required:

- **Activeness.** Identification and satisfaction of customer future needs. The aim of the company is to become the first supplier in delivering quality products according to customers’ needs and requirements. To be a part of the solution, not a part of the problem. Alternatives are important.
- **Flexibility.** The customer is always of the greatest importance. Internal problems of the company must not limit or encumber

satisfaction of customers. The most important thing is to be expedient and flexible and keep up with the constantly evolving needs of customers.

- Integrity. The most important thing is to honour your word and deliver promises. If unexpected factors, impeding adherence to the obligations with integrity, it is necessary to immediately inform [customers] thereof and present options and alternatives.
- Respect. It is necessary to know and respect your customer. A positive first impression, diligence and courtesy to customers are fundamental to the success.

2. *Management.* Management of all levels in the company works in the same direction and creates conditions so that all company's employees could contribute to the achievement of the company's key objectives. In order for this to become a norm in everyday activities of the company the following are required:

- Activeness: to plan, do, inspect and take initiative. Employees at all levels must be acquainted with the company's mission, vision and strategic objectives. Employees must understand that the goal for each day leads towards key, strategic objectives. The company has developed a table for the achieved objectives, wherein employees can survey the results.
- Flexibility: to be attainable. Management, which is able to adapt and is flexible, is a prerequisite for a successful business. The successful manager must understand and change in accordance with the situation. Alteration of the conditions and adaptability in the event of the crisis situation is a part of the successfully operating company.
- Integrity: to build the culture of trust and integrity. Employees are more devoted to team work if they believe and see that management works in good faith. It is also for the employees to know that they are valued and that operations will run more smoothly when they work as a team, with members of the team supporting each other.
- Respect: to be an example for the employees working at the company. Everything, what the manager does, is seen and observed. In the successfully operating company the manager must be an example to be followed.

3. *Employee involvement.* Competitive, motivated and occupied employees of all levels create a significantly higher value to the company. In order to have such employees working at the company, the following are applied:

- Activeness: money cannot by employee involvement. In order for the company to be efficient in its operations it is very important to involve employees of all levels in the company's activities and initiated or carried out changes. The following are of importance:

respecting employees, appreciation of ideas and eliminating risks which arise.

- Flexibility: encouraging flexible cooperation at all levels of the company. Employee skill cultivation and creation of teams are applied and aid in dealing with the obstacles which are encountered.
- Integrity: particular focus on problem solving. In carrying out changes or initiating them employees at all levels assume responsibility for the work they perform. Interaction and communication with employees is required so that they understand and are responsible for the work they perform.
- Respect: conscious and pleasant communication with employees. Employees are provided with an opportunity to assume responsibility themselves without any fear.

4. *Process management.* The company is oriented towards quality and efficiency. It has been highlighted that greater efficiency is achieved when the changes carried out or other activities and resources related to them are management as an overall process. In order to achieve this, the company strives to ensure:

- Activeness. Systematic definition of performance is applied at the company in order to achieve maximum efficiency. The highest quality of everything, what is done, is what is applied at the company.
- Flexibility. Not complicating situation. Process management by continuously repeating them aid the company's employees in maintaining flexibility and efficiency. Added value is created by letting the customer see everything and keep him or her satisfied.
- Integrity. Effective process management reduces all encountered barriers and obstacles. Ensuring access to required information is one of the most significant factors influencing efficiency. The company also strives to ensure that required information for process management, monitoring and improvement is available to employees at all levels.
- Respect. A project implementer is a part of the whole process. Business management system is a dynamic process and its efficient performance is based on communication with interested parties.

5. *Process improvement.* Profitability and expenditure control are continuously improved. Continuous improvement of all processes should be the common objective of all employees.

- Activeness. Continuously improved commercial approach (sales, purchase, planning, production, storage and delivery/logistics processes).
- The company has a product disposal key process plan prepared, which is clearly set out in internal documents of the company.
- Supporting processes plan has also been prepared.
- Both process plans enable the company to ensure quality management, IT management,

training management, technical sales, technical and application procedures and production processes.

6. *In order for everything to go according to the plan, the company, when developing a product, uses a database and its records* (meeting plan, comprised of external and internal meetings; external customers satisfaction indicators; internal customers satisfaction indicators; customer complaints; key indicators consisting of weekly and monthly indicators; action records; internal non-compliances; supplier non-compliances; audits and analyses; environmental performance; safety at work indicators; overview of actions.

Upon the completion of the company's *process analysis* it has been disclosed that in order for work to run efficiently and smoothly, each product disposal phase has a logical description. These processes are an inseparable part of the company's policy. Therefore sales, purchase and planning processes with all control tools are described.

Model Construction

During verification of the data obtained in the research a model of interaction of change management processes has been constructed. In order to substantiate the concept of the model theoretical constructs have been analysed and the results of the carried out research analysis have been interpreted. The aim of the developed model is to substantiate interaction of change management processes by highlighting cyclical nature of processes in order to achieve efficient management of changes in the company while implementing quality management system.

The model efficiency is explained by the following interlinked structural parts (Figure 1):

1. Change management field.
2. Expression of interaction of change management processes in the company.
3. Stages and measures of quality management system.
4. Change communication field.

Structural parts of the developed model enable assessment of peculiarities of change management at the metal industry company and indicate interaction and cyclical nature of change management processes which enable the company to prepare the plan for implementation of quality management system at the company, which in turn enables strategic management of changes within the company.

It has been empirically substantiated that changes within the company are the response to internal and external environments, their changes, therefore in order to achieve efficient change management processes it is necessary to initiate changes. First it is necessary to complete preparatory works, which encompass both internal and external environments of the company. This stage involves determination and elimination of resistance and selection of change strategy. When changes are taking place selection of the strategy depends on the company's level of liability in respect of consequences of changes taking place within the company. *Type of planned changes* (structural, functional, etc.) must be taken into account during the change initiation process stage. An appropriately selected change management strategy enables the following stage, i.e. *preparation of change management plan*. Required information must be prepared and appropriate training must be selected for employees during this stage. Smooth functioning of the stage is ensured by appropriate selection of communication measures. *Appropriate communication measures* are as follows: verbal, digital, notifications, messages, conferences, meetings, etc. These measures will enable the company to commence and manage change implementation process. Appropriate selection of information measures and training will enable smooth transfer to the third stage. *Communication and dissemination of information* will permit adopting relevant decisions, ensure feedback and at the same time will contribute to efficient management of change process at the institutionalization stage. *Training carried out and feedback* at this change management stage indicate whether *innovations are properly implemented in the company's everyday activities*. Required information must be continuously updated and revised, it is also necessary to assess and take into account values of the company and its strategy. While carrying out training and having feedback and submitting received data and information the last stage of change management processes – *assessment of changes (implementation processes)*. *Information dissemination* is reviewed at this stage, as well as *control and verification* are carried out. Change review and result process stage is being carried out. During this stage preparation for changes is investigated, it is evaluated whether changes have become ordinary activities, what is the impact of change management processes previously used at the company. Companies are continuously affected by external and internal environments, therefore if strategic changes take place, the company's strategy may also change.

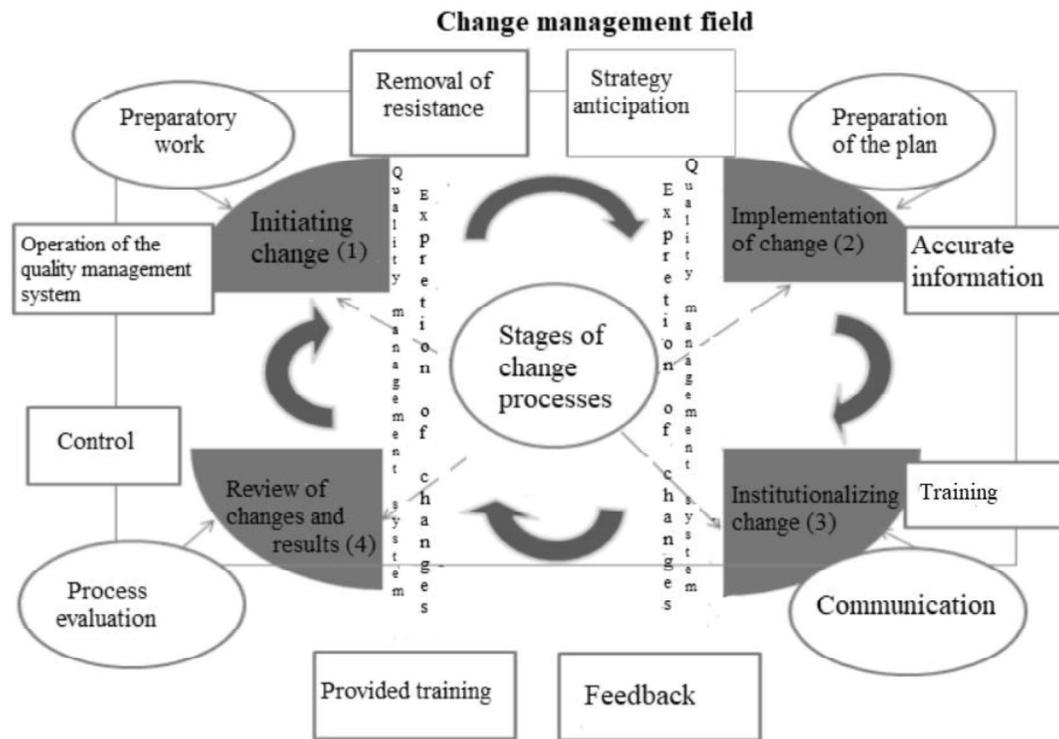


Fig. 1. Model of Interaction of Change Management Processes at the Company Implementing Quality Management System

The model demonstrates interaction of change management processes based on the example of the company implementing quality management system. While quality system is being introduced other changes are also taking place at the company, which aid in implementation of the targeted strategic direction of changes. It must be noted during change management at the company interacting change management processes are being improved, staff skills are enhanced and competences are extended. Each time, as is provided in the change management plan, change results are periodically assessed and presented to employees during the meeting. Peculiarities of implementation of quality management system at the company when changes are taking place are illustrated in the model and specific actions are presented which aid in efficient management of change process at the company. It is necessary to foresee and identify possible nature of changes and then start training and dissemination of knowledge about future changes.

Change management stages during implementation of quality management system at the company (preparation works, preparation of the plan, communication and dissemination of information, and assessment of implementation processes), which are necessary in striving for efficient changes process management by stages, i.e. change initiation, change implementation, change institutionalization, review of changes and results, are integrated in the model.

Discussion and Conclusions

In conclusion of the research results it may be maintained that the company is advancing and continuously carries out changes. These changes are related both to internal and external developments. It is identified that change management processes (initiation, implementation, institutionalisation and control) described and empirically verified in the theoretical section of this paper unfold in the interaction, evolve into one another, supplement and are improved with the company striving to implement quality management system. According to informants preparedness of employees for changes, related to implementation of ISO 9001:2015 standards is achieved by involving all employees of the company (from the top management to production employee level).

Administrative staff is acquainted with changes following the decision to implement quality standards, and production employees are informed thereof when the implementation process is commenced. In order to successfully implement changes and ensure continuous process training is being organised. Consistent communication activities with employees are carried out by involving consultants, and training is provided. Adaptation plan for introductory training is being prepared for new employees. Dissemination of information on changes is also carried out by involving

communication with department line managers. Informants pointed out that resistance to changes is also observed at the company, since changes often increase workload. However, resistance at the company is also insignificant.

The research has shown that the greatest impact on changes in the metal industry company was made by external environment, which enabled identification of strategic direction of changes, i.e. increase in the product diversity and volume and ensuring quality, which is inseparable from observing principles of safety and quality in meeting requirements of international standards ISO 9001:2015.

The research disclosed that certification system creates high added value to the company by optimising performance processes, improving image, improving work efficiency and financial indicators, reinforcing its position and competitiveness in the local and international market. It may be maintained that changes taking place are successfully implemented and managed in terms of processes. It must be noted that development of the model is based on a systematic approach, categorisation of elements and structural analysis.

Peculiarities of implementation of quality management system are illustrated and specific actions, which aid in efficient management of change process in the company, are submitted in the presented model.

The authors note that potential nature of new changes must be identified in the future and then training and dissemination of knowledge about future changes to employees must be commenced. Opportunities for the application of the model in other production companies may also be identified. Other production companies implementing quality management systems could make use of this success case and experience in managing changes thus allowing managing changes both within internal and external environments and enabling identification of change management processes in striving for competitive advantage in the market.

Ethical Precautions

This research was conducted in an ethical manner. The name of the company is coded. The personalities of the informants are also coded. The participants freely consented to participating in the research; the research objective was introduced to interviewees and they were made acquainted with preliminary questions.

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Asta Valackienė is professor at Lithuania Business University of Applied Sciences of Vilnius Branch. Research interests: Methodology of Science and Research; Change Management; Responsible Research and Innovation. A Member of Management Committee of COST ACTION 17127 Programme. National representative from Lithuania. A Member of UNESCO Unitwin Network Baltic and Black Seas Circle Consortium in Education Research (BBCC) Association. Author of Research studies, Books, Handbooks. Has published over 80 scientific papers indexed in the international data bases with co-authors and single-authored. Address: Žirmūnų Str. 70, LT-09124, Vilnius. Phone: +37068694121. E-mail: asta.valackiene@gmail.com

Angelė Lileikienė is professor, doctor of social sciences. Research field – "Financial system sustainability problems". The author has written and published more than 80 articles on the subject, made presentations at national and international conferences. The author is a member of the editorial boards of research journals or the editor-in-chief of the journal "European Science". Address: Turgaus Street, 21. Klaipėda, LT-91249. E-mail: angele.lileikiene@ltvk.lt

Vaida Gliaudelė is entrepreneur, personnel and quality manager, the certified consultant of the quality management in Metal Industry Company of Lithuania. She holds a master's degree in management. Research interests: Quality Management, Change Management. Address: J. Basanavičiaus g. 8-5, Ukmergė, LT-20194, Phone: +37061495431. E-mail: vaidagliaudele@gmail.com

Jurgita Martinkienė. Director of Lithuania Business University of Applied Sciences, Doctoral degree in Social sciences. Research interests: application of managerial competencies in business companies. Turgaus Street 21, Klaipėda, tel. 8-46 311099, jurgita.martinkiene@ltvk.lt