

# Impact of change management implementation in a production system – A Croatian experience

KRUNOSLAV SKRLEC  
College of Agriculture in Krizevci  
Milislava Demerca 1, Krizevci  
CROATIA  
[kskrlec@vguk.hr](mailto:kskrlec@vguk.hr)

NIKOLA VLAHOVIC  
University of Zagreb  
Trg J. F. Kennedyja 6, Zagreb  
CROATIA  
[nvlahovic@efzg.hr](mailto:nvlahovic@efzg.hr)

*Abstract:* - The increasing dynamics of business systems generate more frequent changes in external and internal organizational factors and the need for faster adjustment of business systems to these changes. This trend has greatly increased the development of business information systems as more relevant information becomes accessible from the targeted markets. In this paper we analyze the production sector in the Republic of Croatia which is insufficiently adapted to these new conditions. Each change in the business system renders specific overall effects which, at times, may not be as expected. The objective of this study is to point out problems that occur while introducing changes inside a production system and the adjusting mechanisms within the information system. In the conclusion of the paper a few guidelines for top management based on recent survey will be presented.

*Key-Words:* - Change management, Business information systems, Production systems, Manufacturing, Management

## 1 Introduction

Changes are ubiquitous in current dynamics of business systems, and effective and efficient control of changes is critical for successful business performance. There have been many empirical suggestions as to how to manage changes for best outcomes like [10], [3], [7], [11], etc. and exploring the relationship between project characteristics and the implementation of change management best practices [15].

Production systems that are a part of these business organizations are highly dependant on the information that they receive from the targeted markets. Information system should be able to analyze and retrieve relevant data (i.e. using Collaborative Business Infrastructure [6] for example). If the Information system of the firm does not perceive these changes and if the top management does not recognize the need for change, problems occur. Problems can also occur if the top management realizes the need for a change management project implementation but is

overwhelmed and unable to control the implementation successfully. The goal of this paper is to investigate the most important role of top management while implementing change within an organization. This is the role of managing attitudes towards change.

In this paper we will describe the results of a survey conducted in Croatian firms that was used to assess the attitude of different members of these organizations and the effectiveness of the top management to successfully implement change implementations. The results of the research have shown that the majority of employees in Croatian firms attain uncertain attitudes towards change implementations. The goal of the paper is to assess the current state of change management in production organizations in Croatia and supply the best guidelines for top management for the given state of attitudes.

The rest of the paper is structured as follows. In Section 2 change management overview is given, and most important advantages it can supply to the

organization are discussed. Most importantly, classification of attitudes towards change management implementations of two basic interest groups in every organization (employees and managers) is presented. In Section 3 methodology of the conducted research is described followed by the description of the results attained, in Section 4. Discussion of the results is given in Section 5 followed by the Conclusion and final remarks.

## **2 Change management in organizations**

Change management refers to a structured planned process of implementing adjustment of the current organizational system to a new desired organizational system. This may involve transitioning individuals, teams, and organizations from a current state that proves to be inadequate, to a desired future state that can better satisfy goals of the organisation.

The adjustment of the organisation is initiated as a response to changes in external and internal organisational factors. Extensive empirical studies have proven that the most prominent drivers of change are: (1) mergers and acquisitions; (2) innovation; (3) technology; (4) restructuring/re-organizing; (5) declining sales and/or market share; (6) globalization, expansion and growth; (7) sense of urgency; and (8) when 75 percent of the leadership is honestly convinced that business as usual is no longer an acceptable plan [10].

Change may be seen differently by each organizational member depending on their respective perception of that change [8]. No matter if the change is welcomed or resisted a new paradigm shift appears that needs to be managed.

Intended effects of change management in organizations are as follows:

### *Better and easier management*

One of the objectives of a change implementation project is that new processes in the business system are better, more accurate, and are simply performed, while at the same time, those are better and easily managed. It is most probably that this is due to the technology, in the first place, the information technology, but also, the technology tied to automatics, electronics, etc.

### *Better and simpler process control*

It is clear enough that one of the most important objectives in the change implementation project is a

better and simpler control of processes as well as of the whole system.

### *Processes are automated*

A change project tries to automate and digitally sort out processes, procedures or actions. All given information is stored inside a database in a selective and structural manner. Such processed information can later be of great help to the whole business system, so that it can, in the same manner, advance and perfect processes and correct eventual mistakes.

### *Greater personal safety*

The objective of a change implementation project is not just so that it can secure a competitive advantage but also to increase the profit of the business and everything that has been previously listed and described. The objective of the project must be focused towards a higher safety for employees' work because if it was not for this, then the project loses its meaning.

Safety of the employees is directed towards the personal safety in the workplace, so to say, the business system and processes that are being carried out in the workplace have to be organized in such a manner that they provide the maximum safety for its employees. On the other hand, the change project gives employees a security of their own workplace. The change implementation project is not carried out so that the employee loses its workplace, on the contrary, with its educational program it has the objective to enable the employee and to provide knowledge and skills that can later be of great help anywhere on the job market.

### *Increased product safety*

By the control of the production system, better and more qualifying management and the implementation of the new quality standards, which we get by the change implementation project, we assure the product safety. In the first place, that security can be noticed in the better controls, for example all the raw materials are controlled systematically, all are computerized and as the structural data enter the system that administers the whole process and in that way it better increases the safety of the product fabrication.

Moreover, the implemented standards enable the monitoring of the product after the fabrication, when the product is on the market or at the consumer, after the sale. This high standards and the care for the product after the sale keep the customers, find new consumers and build the image of the company and its employees.

*Better product quality*

By the automation of the process we get a better quality of the products. The best way to show this is to see the example. Here is one of the best examples that describes and explains the need for automation of the process and achieving of a better product quality [14], [9].

*Higher productivity in the same time unit*

It is important to mention that in order to achieve a qualifying and successful change implementation project, the higher the productivity in the same time unit is not necessarily the condition. However, most projects have the goal for an increased productivity [5].

*Less defective products*

Good system control combined with the information technology as a result has the reduction of the defective products to the minimum, so the production is increased.

The reduction of the defective products is not only a result of the implementation of the new and contemporary equipment. The change implementation project in the production system has as its goal and through the education programs, to elevate the knowledge of the overall business system and of all the employees in that system. Increasing the knowledge and skills differently affects the quality of the product, and the reduction of the defective products in the production process.

One example is the idea of integrating learning management and knowledge management system [1] that allows for better knowledge and the understanding of the production process of the supply section, where the whole quality of the system is increased, which finally results in the less defective products.

In addition, the decrease of the defective products includes sophistication of the equipment and computer software that has access to the current stage of products and production processes [9]. If there is any deviation from the given standards, the software tries to resolve the situation and when the problem cannot be solved, it stops the process thus impeding the equipment to keep producing defective products.

*Possibility of simulation process*

Informative technology is the element of every change implementation project and it enables us with the possibility of prediction of some processes by simulations. The possibility of the simulation and the elaboration of the problem in that manner

saves a lot of time and money, gives new ideas and helps understanding different problems.

Moreover, advanced simulation programs and tools save very expensive time that is lost when research is made experimentally in the same production process and they direct the team to the most sophisticated and complicated stages of the process that need to be changed, replaced or perfected. This facilitates work greatly.

*Adoption of new knowledge and skills*

The implementation of the project changes gives us the opportunity to get some knowledge, skills, and experiences which hardly can be achieved by classical education or specialization. That is the kinds of knowledge and skill that is achieved directly and which are acquired directly from practice.

*Meeting new people and ways of thinking*

The best part of every such project is the meeting of new people, new culture - general or business, their experiences and the ways of solving problems, and that is invaluable for every individual [4].

*Higher wages*

The most important question and the most important theme of every employee is the personal income. That is the most sensitive issue. Why is it like that? Maybe because the people value themselves, maybe people underestimate themselves, maybe both. Maybe the problem is not transparently and fairly determined.

One thing is for sure, the goal of the implementation of the project changes is to increase the profit. And if that is the goal and is successfully achieved, logically the employees' income increases.

**2.1 Employees' attitudes towards changes**

Employees react to changes in working environment and organization in different ways. We can group these in five different groups:

- a) *Positive attitudes.* Positive attitudes of employees are the ideal situation every management looks for as well as each member of a designated team for the implementation of a change project. That is a situation when the whole business gets together with its employees in desire and purpose so that a change implementation project can be realized in a faster and better manner. Such a situation does not occur randomly; moreover, it is mainly the responsibility of the management of the business. When a relationship is positive, it means that the

management has done its job properly, the way that it is expected of a successful management. Management has explained clearly its objective and the effects such a project brings about, whether positive or presently negative. In the case that the objectives were clearly and transparently presented to employees, management has done the majority of work for the realization of the project. Such situations of change implementation projects in which employees positively relate to the project in majority of the cases are characteristic for small and medium enterprises.

- b) *Negative attitudes*. Unlike positive attitudes, negative attitudes towards a change implementation project are the least desired for management. If such a situation occurs, the management is responsible because it has not presented properly and in a clear and transparent way the effects of the project. Employees are *a priori* against a change implementation project and do not wish to participate in it because they consider that it will not bring anything good and that it simply is not necessary. This is very important information for the analysis of the problem. The importance is that we can see but we cannot neglect this attitude because it can lead to even greater problems such as revolt or absenteeism [2]. These phenomena suggest that the problem is in something else and not specifically in the project, and for which management takes responsibility.
- c) *Neutral attitudes*. Neutral attitude is a situation in which employees do not care how and why is the change project going to be implemented. There is a very small ratio of such employees.
- d) *Uncertain attitudes*. The most frequent type of employee attitude is actually the feeling of uncertainty. This type of relationship towards changes, because of the high percentage, it has to be analyzed additionally. The feeling of incertitude is present because of the following reasons: (1) Insufficient information, (2) Loss of job, moreover its own existence and (3) Other reasons. Reasons for such feeling stem from the fact that (1) employees do not know what the project and the changes bring to them as individuals or as a group, (2) what is expected of them and (3) there is a fear present that they will not be able to respond to the new requirements that will be put in front of them as individuals or in front of the whole group. Therefore, the main

reason is the insufficient information. The second and equally important is the fear of job loss or the fear that personal income will decrease.

- e) *“Shock” – attitude*. The so-called “shock” is a situation when during the process of realization of the project of reengineering an employee abruptly changes his or her stand towards the project whether from a positive attitude towards a negative or inversely due to some external influence [4].

## 2.2 Management attitudes towards changes

Role of the management is to react to introduced changes and make adoptive adjustments [12]. This is why the management defines its final attitude towards changes as a feedback from employees to the measures introduced. This is why there are five corresponding groups of reactions of management as listed below.

- a) *Reaction to a shock situation*. An example of the so-called “shock” situation is when in the middle of the project, an outside investor unexpectedly withdraws from it. A move like this has, of course, caused problems in the change implementation project, but on the other side, it has caused uniqueness, collectiveness, and, a higher additional purpose for the employees for such a project to carry out until the end of its cycle. Here, it is important to point out that a manager with this quality must know how to take advantage of bad moments in projects and how to get the best out of it as much as possible. This is a classic situation which shows that a successful manager cannot succumb to some type of panic nor he has to allow the feeling of panic to generate among employees. Moreover, he needs to know how to appease the situation and manage it in order to turn the situation towards satisfaction of both the employees and the business, and him as a leader.
- b) *Reaction to uncertainty*. By all means, the manager has to carry out an analysis and detect the reasons of uncertainty. If those reasons are stimulated by fear of job loss, insufficient information or by a third reason, he is obliged to find the necessary time to explain to the employees in a clear and easily understood way what the change implementation project needs from the employees and what it gives them in return [13]. A quality way of presentation, information and explanation of objectives and tasks reduces the feeling of uncertainty and it

creates a space for the positive relationship and stand towards such a project.

c) *Reaction to neutral attitude of employees.* Employees that have neutral attitude towards changes do not project any interest in salvaging the situation. Even though such a number of employees is small, a quality manager dedicates time and attention to such employees as well and in that way he creates a correct picture of himself as a leader in which each employee is important. With this, he gets affinity and support from the rest of the employees as well as from those that were completely disinterested before and that were previously disinterested because they considered that they were unimportant and that their thinking cannot change nor can it influence anything.

d) *Reaction to negative attitude of employees.* A negative relationship is usually a characteristic of those employees that have an aversion towards new technologies and changes, creating a picture to themselves and others that they do not need this new technology, that they will ignore it, that it alienates people and that it will take out the position which they have earned in the business by hard work. In other words, they have a hidden fear that, along with their knowledge and skills, they will not be able to follow and adopt changes that need to be carried out. A manager in such situations reacts in a way that he raises the level of knowledge and skills of its employees by education and specialization so that it can bring closer, in an effective way, this new technology and its advantages to its employees. In other words, such employees are actively “thrown” in a change project so that they can gain a feeling of belonging to the project, and so that in this way, they can understand how this new technology, no

matter what it is, cannot and may not function without them in an optimal way.

e) *Reaction to positive attitude of employees.* When employees reach a positive attitude towards changes, it is the best sign that the management is doing their job as it is expected from top managers. But it is also important to note that having a competent manager or management in a company assures that the employees have positive attitude towards changes.

### 3 Methodology

In order to investigate current state of change management and attitudes towards change management project implementation in Croatian firms, a survey was conducted. This survey was a part of more extensive research that was conducted in 2009. The survey contained 4 closed-end questions regarding change management (Table 1). The first question was used to assess what is the perceived attitude of employees towards change by the top manager. Top manager had to select one of given categories. Second question was used to assess the attitude of top managers towards changes and in terms of their demands during change implementation. This was the multiple-choice question where managers selected all of the applicable demands in the list. The last two questions deal with observations after the change was implemented in the system. Firstly, top managers were asked to assess the change in organization of the production after the change was introduced in the system, and secondly, they were asked to assess the results of the introduced changes on business parameters of the organization, both using multiple-choice.

<b>Q1</b>	<b>What is the attitude of employees towards implemented changes in the organization?</b> a) <i>positive – they welcome changes</i> b) <i>negative – they resist changes</i> c) <i>uncertain – they are uneasy about their future role in the organization</i> d) <i>neutral – they accept changes without particular feedback</i>
<b>Q2</b>	<b>What is most expected from the employees during change management implementations by managers?</b> a) <i>Knowledge of the new technologies</i> b) <i>Management of the new technology</i> c) <i>Changes in working habits</i> d) <i>Changes in actions and procedures</i> e) <i>Additional engagement and effort of the employees</i> f) <i>Adaptation to new working environment</i>
<b>Q3</b>	<b>What are the results of changes in the production sector?</b> a) <i>Better and easier management</i> b) <i>Better and simpler process control</i> c) <i>Automated processes</i> d) <i>Increased personal safety</i> e) <i>Increased product safety</i> f) <i>Better product quality</i> g) <i>Higher productivity</i> h) <i>Less defective products</i> i) <i>Possibility of process simulation</i> j) <i>Adoption of new knowledge and skills</i> k) <i>Meeting new people and ways of thinking</i> l) <i>Higher wages</i>
<b>Q4</b>	<b>What are the results of implemented changes in business organization?</b> a) <i>New workplaces</i> b) <i>Accident-free workplace</i> c) <i>Culture of the knowledge, skills and experiences</i> d) <i>The increase in production and income volume</i> e) <i>High quality of product and service</i> f) <i>Better client relations</i> g) <i>Realization of the competitive advantage</i> h) <i>Higher profit of the company</i> i) <i>Image of the company-making of the brand</i>

Table 1. Change management section of the questionnaire with results.

The questionnaire was sent to 70 firms from different industries with different market shares. 52 completed questionnaires were received.

In Fig. 1 we can see that the most represented firms that completed the survey are part of the

Construction industry followed by Retail and Wholesale firms and Service industry firms.

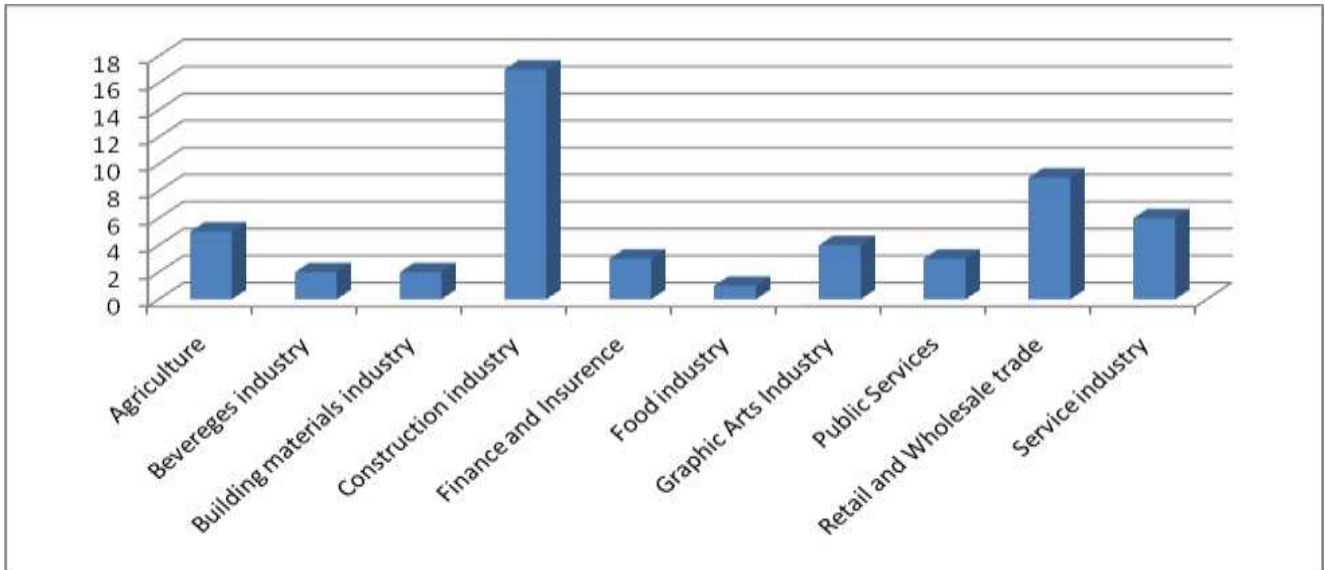


Figure 1. Surveyed companies by industry

In terms of ownership 10 firms are public share holding firms, 3 of them are public institutions and the rest of them are public limited companies. If we exclude public institutions we can see that most of the firms are medium sized firms based on the number of employees and yearly income in the last fiscal year (fig. 2).

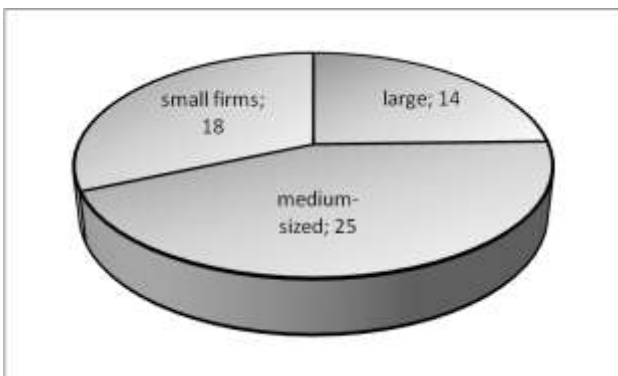


Figure 2. Examined firms by size (in terms of number of employees and income)

The hypothesis of the change management research was that most of the employee attitudes would fall in the negative or uncertain attitudes, due to the structure of the examined sample with majority of medium-sized firms in construction industry.

#### 4 Research results

The results are presented for every question in the questionnaire concerning change management attitudes. First question examines the perceived

attitude of employees towards change by the managers. Results are shown in Fig. 3.

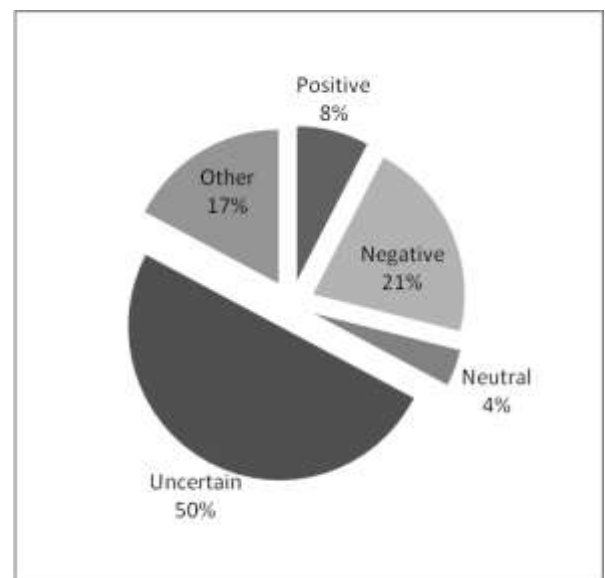


Figure 3. Employee attitudes towards change.

As we can see in Fig. 3. 50% of managers perceive employees' attitude towards change implementation as uncertain, 21% assess the negative attitudes of their employees and only 8% of managers see positive attitudes towards changes in organisations with their employees.

The second question was used to examine the managers' expectations from employees during change implementation. The results are shown in Fig. 4.

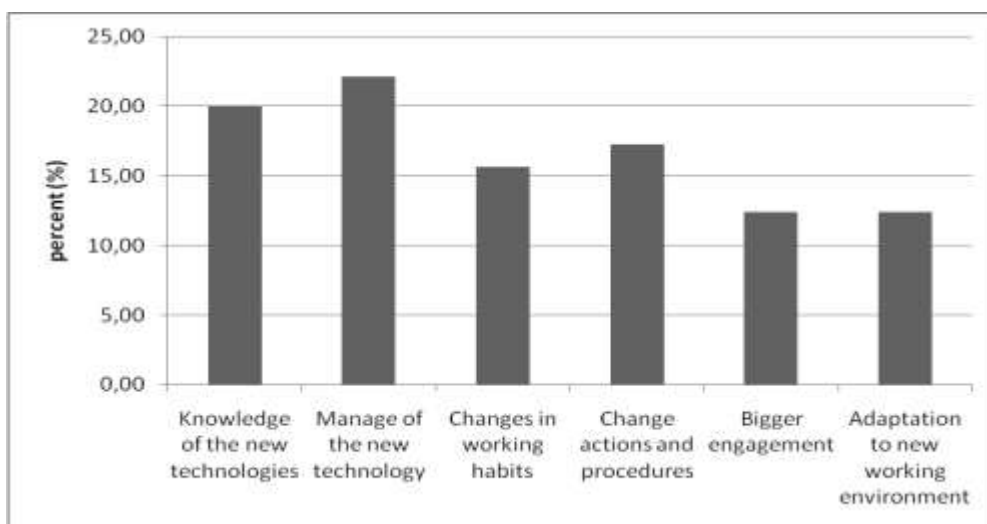


Figure 4. Managers' expectations from employees during change implementation

We can see that most of the managers expected that the task of managing of the new technology was delegated to the employees (20 percent) and also that the employees gain additional knowledge about the introduced technologies in order to successfully manage it. Other significant expectations from the employees include change in actions and procedures (17 percent) and changes in working habits (16

percent). We can see that new technologies are the main concern of the management as expected in the production sector.

The third question was used to examine the changes in organisation of production after the implementation of the change within the organisation. Results are shown in Fig. 5.

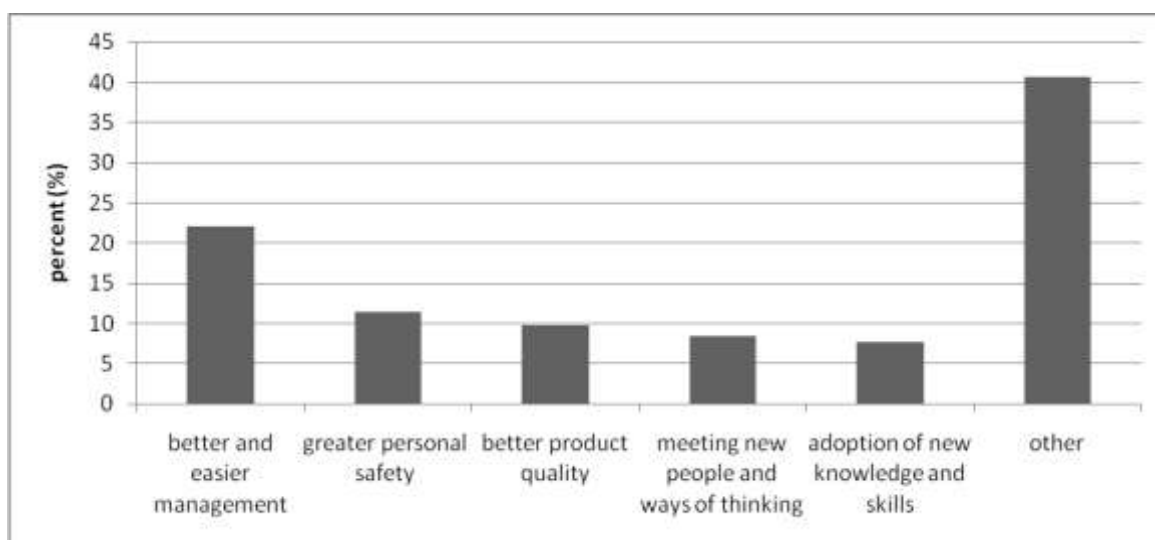


Figure 5. Change in the production system after change implementation

As we can see in Fig. 5. the introduces changes enabled better and easier management of the production (22 percent of surveyed companies), but also better personal safety (11 percent) and better product quality (10 percent). The innovation and introduction of new knowledge seems to be somewhat less but still important consequence of changes in the organisation of production.

The final question was used to examine the perceived results of the implemented changes in the organisation form the managers' point of view. Results are shown in Fig. 6.



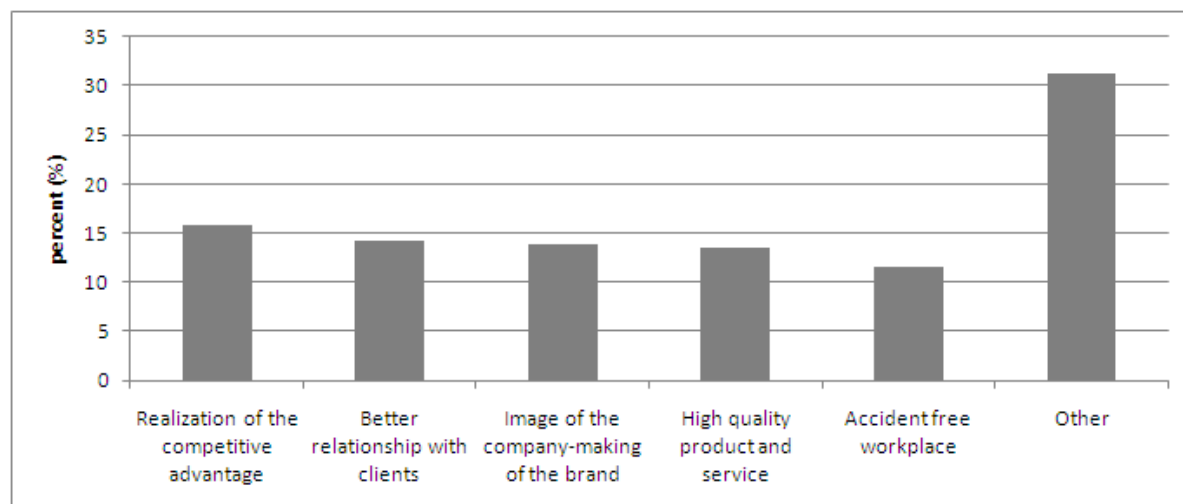


Figure 6. Results of introduced change within the business organisation

Most important consequences of implemented changes on business organisation and its management goals are the realisation of the competitive advantage (16 percent), improved customer relations (14 percent), improvements of company image through creation of a brand (14 percent), improved quality of products and services (13 percent) and realisation of accident-free workplace (11 percent).

## 5 Discussion

In the presented results we can see that the companies are achieving following advantages from conducting change management projects:

### *New workplaces*

The objective of the change implementation project in the production system is not the reduction of workplaces; on the contrary, the goal is to increase the number of workplaces and to increase the personal income. In the case analysis described in this work, it is described and showed that the change implementation project increased the number of workplaces. Specifically, there is the case of the change implementation project in the beverage company called Badel 1862 which took advantage of the changes in order to expand their business activity and to elevate it to the global level of business activity.

### *Accident free workplace*

The change implementation project in the production system described in this work is the open process that is ready to implement any new idea, change and quality standard. It is the

implementation of new standards that enables a safer and more qualified work of all employees.

### *Culture of the knowledge, skills and experiences*

By the change implementation project and technologies that it adopts and implements has no room for employees who do not want to adopt new knowledge and skills, it gives the opportunity to those employees that are willing by the quality and desire for new knowledge and skills to progress in their carriers. So it is confirmed that that the company cherishes the culture of knowledge, skills and experiences.

### *The increase in business production and personal income*

As in most of the analysis, the goal of the change implementation project is the increase in business production in time unit. The main reason for the increase of the production is the modern technology and its implementation in the production systems. The increase of the production and business activity has to make conditions, in a certain time period, to increase the personal income of all employees, especially those who wish to embrace new knowledge, skills and precious experiences.

### *More qualified and safe product*

The implementation of the new technologies and new quality standards result in more qualified and safer product. That exact technology reduces errors, and standards describe the procedures and actions that guarantee the validity and quality of the product, which is analyzed and explained early in

the work, and will be mentioned and analyzed at the end of the work.

#### *Better relationship with the clients*

The importance of the possible client is immense, and can be noticed from everyday competition of businesses, especially through the marketing through which a business tries to attract the attention of the client with its new ideas and with additional offerings to clients, so the business could recruit more clients.

There are more ways to describe the relationship with clients:

##### a) Optional relationship

Is characterized by those businesses that have monopoly for their products and services and they don't dedicate their attention to their clients.

##### Introductory relationship

It is the overall present way of the communication with the users of services or products. Businesses present their services and products to a special group of consumers and in the effective way it approaches the product or service to its potential customers. The characteristic of that relationship is not only to approach the product or service but to show the quality of the product and to clarify the relationship between the cost and results.

##### Marketing relationship

It is an everyday relationship between customers and businesses through different marketing campaigns and sales using all the Media to its disposition so to approach product or services to its customers.

All of these findings are confirmed within the presented results for Croatian production sector. Even though the overall attitude of the employees is not positive but uncertain, it seems that the final outcome is of change management project implementation is rarely negative and unfavourable for the employees. On the contrary, the implemented changes have resulted in improvements for the employees in terms of personal safety, increased personal incomes and learning opportunities. Management also successfully achieves its primary goal which is the facilitation of management functions through less complicated procedures and better control of processes that promote more efficient and more competitive business. As we can see change management projects have positive impact on the

organization which is not recognized by the majority of employees in the beginning of the project implementation. This can be avoided through better communication of the management towards employees. Only with adequate information and solid communication can uncertain attitude of the employees be transformed in to a positive attitude that can improve the quality of introduced changes even further.

## 6 Conclusion

Change management is a crucial management function that is gaining on importance as the dynamics of the business environment is increasing. There is a wide interest both in business and scientific community about the practical guidelines on best managerial practices during change management project implementation.

In this paper we have presented the main conclusions of recent literature about these guidelines, but we have also presented the results of the independent research of these practices in production sector of Croatian economy.

The research was conducted using a survey among a set of 52 Croatian companies belonging to different industries of the production sector in Croatia. All of the companies are connected with the production sector of Croatian economy either as institutions or as members of the manufacturing industries. The research was based on determining the attitudes towards change management projects and implemented changes in organization.

The results have shown that the majority of 50 percent of employees have uncertain attitudes towards change management project implementations. In spite of this the results of the implemented changes present favourable changes for the employees in terms of personal safety, increased income and improvement of skills and knowledge of the employees. In order to change uncertain attitude of employees towards changes to positive, managers should improve their communication since the results of changes present positive effects.

Taking these results into account main guidelines for managers in Croatian but also managers in similar transitional economies were stressed. These included improving communication between management and employees in order to reduce the uncertainty such as fear about job loss, insufficient information about the improvements and other reasons. Only in this way positive attitude can be achieved, allowing for positive improvements of the change project implementation such as increased

productivity and personal income, better product and customer relationship.

#### References:

- [1] Beleviciute, I., Sileikiene, I., Integrating learning management and knowledge management systems, *Proceedings of the 3<sup>rd</sup> WSEAS/IASME International Conference on Engineering Education, Vouliagmeni, Greece, July 11-13, 2006*, WSEAS Press, 2008, pp. 108-113.
- [2] Bernik, M. Florjancic, J., Crnigoj, D., Bernik, I., Using Information Technology for Human Resource Management Decisions, *Proceedings of the 8<sup>th</sup> WSEAS International Conference on Mathematics and Computers in Business and Economics, Vancouver, Canada, June 19-21, 2007*, WSEAS Press, 2007, pp. 130-133.
- [3] Doolin, B., Narratives of change: discourse, technology and organization, *Organization*, Vol. 10 No. 4, 2003, pp. 751-70.
- [4] Fronda, Y., Moriceau, J.-L., I am not your hero: change management and culture shocks in a public sector corporation, *Journal of Organizational Change Management*, Vol.21, No.5, 2008, pp. 589-609.
- [5] Georgoulas, K., Papakostas, N., Chryssolouris, G., Stanev S., Krappe, H., Ovtcharova, J., Evaluation of flexibility for the effective change management of manufacturing organizations, *Robotics and Computer-Integrated Manufacturing*, Vol. 25, Elsevier, 2009, pp. 888–893
- [6] Muntean, M., Mircea, G., Business Intelligence Solutions for Gaining Competitive Advantage, *Proceedings of the 7<sup>th</sup> WSEAS International Conference on Artificial Intelligence, Knowledge Engineering and Databases, University of Cambridge, UK, February 20-22, 2008*, WSEAS Press, 2008, pp. 549-552.
- [7] Pettigrew, A.M., Woodman, R.W. and Cameron, K.S., Studying organizational change and development: challenges for future research, *Academy of Management Journal*, Vol. 44 No. 4, 2001, p. 697.
- [8] Ragsdale, G., Engineering a paradigm shift? A holistic approach to organizational change management, *Journal of Organizational Change Management*, Vol.13, No.2, 2000, pp. 104-120.
- [9] Shin H., Benton W. C., Jun M., Quantifying suppliers' product quality and delivery performance: a sourcing policy decision model, *Computers & Operations Research*, Vol. 36, No. 8, 2009, pp. 2462–2471.
- [10] Stanleigh, M., Effecting successful change management initiatives, *Industrial and Commercial Training*, Vol. 40, No. 1, Business Improvement Architect, 2008, pp. 34-37.
- [11] Sturdy, A. and Grey, C., Beneath and beyond organizational change management: exploring alternatives, *Organization*, Vol. 10 No. 4, 2003, p. 651.
- [12] Tatli, A., Ozbilgin, M. F., Understanding Diversity Managers' Role in Organizational Change: Towards a Conceptual Framework, *Canadian Journal of Administrative Science*, Vol. 26, No. 3, pp.244-258
- [13] Thurlow, A., Mills, J.H., Change, talk and sense making, *Journal of Organizational Change Management*, Vol.22, No.5, 2009, pp. 459-479.
- [14] Weber C. A., Current J. R., Benton W. C., Vendor selection criteria and methods, *European Journal of Operational Research*, Vol. 50., No. 1, 1991, pp.2–18.
- [15] Zou, Y., Lee, S.H., Implementation of project change management best practice in different project environments, *Canadian Journal of Civil Engineering*, Vol. 36, No. 3, pp. 439-448