### PSYCHOSEMANTICS OF EMPLOYEE'S IMAGES WHEN IDENTIFYING A TYPOLOGY, RESPONSIBILITY AND COMMUNICATION OF ORGANISATIONAL CHANGES

## Jurgita Bersenaite<sup>1</sup>, Gintaras Saparnis<sup>2</sup>, Diana Saparniene<sup>3</sup>

Šiauliai University, Architektu str. 1, LT-78366 Šiauliai, Lithuania Email: <sup>1</sup>jurgitabersenaite@gmail.com; <sup>2</sup>saparnis@cr.su.lt; <sup>3</sup>diana.s@smf.su.lt

**Abstract.** This paper provides a typology of organisational changes, i.e., changes of structure, culture, strategy, human resources, technologies and system. Leaders of organisations, teams of employees and even external consultants participate in organisational change process and take on roles and responsibility for change. It is revealed by analyzing such roles as initiators, agents, facilitators and catalysts of organisational change. The empirical analysis is based on 306 representatives from different organisations who stated that they get change-related information from their executives through traditional and non-traditional means that allow to change organisational culture, to develope human resources, to manage processes and changes competently.

Keywords: psychosemantics, changes, typology, responsibility, roles, communication.

Jel classification: L20, L21, L22, L29, M12

#### 1. Introduction

Organisational changes are fuelled by various global economic, political, social, ecological and technological changes. In the recent years scholarly publications deal with changes in organisational environment (Karlowski, Paslawski 2008), changes related to competition (Snieska, Draksaite 2007) and nature of labour (Jurkstiene et al. 2008; Kumpikaite, Ciarniene 2008); globalisation (Ogrean et al. 2008); internationalisation (Vida, Obadia 2008); integration processes (Melnikas, 2008); economicsocial development (Ginevicius, Podvezko 2009); development of knowledge economy (Chen 2008); circulation of brainpower (Daugeliene, Marcinkeviciene 2009). As changes in various elements of external organisational environment occur, management is increasingly more often seen as improvement of organisation and its people, government of speed-up of processes and development (Weiner, Brown 2006). As processes get faster, rapid multiplication and fusion of methods, products, services, and systems take place, which leads to survival of those that have best adapted themselves. Therefore, according to Drucker (2007), a way to survive the period of rapid structural changes is through becoming a leader of changes: it is necessary to implement policies of change by rejecting the past, organising improvement and development, taking advantage of success, introducing innovations and taking up challenges.

Although in scientific publications a rather substantial attention is paid to issues of implementation of organisational changes (Alas 2008; Jumpponen *et al.* 2008; Rees *et al.* 2008), linkages between managers' communicative competences and organisational changes success are analysed (Pundziene *et al.* 2007), however, organizational change communication is little studied explicitly (Frahm, Brown 2007); researchers do not seem to be paying adequate attention to problems regarding typology of changes in analysis of psychosemantic structures of employees of various organisations, responsibility for changes and communication of changes.

*Scientific problem* of this research is put in problem-based questions requiring empirical research: What is the expressed opinion of employees of organisation on the necessary organisational changes? What is the expressed opinion of respondents on subjects responsible for changes? What is the expressed opinion of respondents on the communication of changes within organisations?

*Research object* is expressed opinion of employees on the typology of changes, responsibility for changes, and communication of changes.

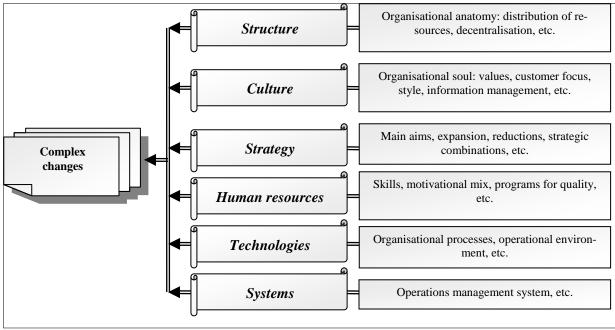
**Research aim** is to analyse psychosemantics of employees' opinion in aspects of manifestation of typology of changes, responsibility for changes, and communication of changes.

**Research objectives** are: to analyse scientific literature on typology of changes, responsibility for changes, and communication of changes; to empirically analyse the attitudes of members of organisation on typology of changes, subjects responsible for changes, subjects communicating changes, and communication channels they use. *Research methods* are scientific literature analysis, qualitative and quantitative content analysis, statistical processing of data.

#### 2. Theoretical background

## **2.1.** Typology of organisational changes (dimensions/areas/features/forms)

It has been proven scientifically that organisations or their elements can be changed. Traditionally the following elements of an organisation are considered to be the most important: human resources, culture, structure, strategy, and technology (Bartol, Martin 1991; Karpavicius *et al.* 2007). If any of these elements changes, the entire organisation changes as well. However, changing structure or strategy does not ensure productive changes in an organisation. According to Waterman *et al.* (2001), an efficient change in an organisation must include the following elements: structure, strategy, systems and procedures, style, skills, personnel, and the so-called "superordinate goals". Therefore it is very important to know the main aim of an organisation and also what has not been done yet.



**Fig.1.** Typology of organisational changes (Source: compiled by the authors of the article with reference to *Bartol*, *Martin (1991), Gelinas, James (1997), Wyman (1998), Waterman et al. (2001), Zakarevicius (2003), Daft (2004), Karpavicius et al. (2007)*).

As seen in Figure 1, the content of organisational changes is very broad. There are changes in structure of management, organisation, staff, and management culture, the strategy is replaced or redefined, there occur changes in human resources management process related to increase in performance and efficiency as well as to development of skills and competences, reform of organisational environment takes place, new technologies are used for products, production or in business processes, there are systematic changes as well. According to Cetkovic, Knezevic (2006), this change is related to reformation of the core organisational agreements, objectives, operations, and results, also to revision of business image and social environment in general.

Lithuanian scientific literature (Zakarevicius 2003) focuses on methods of and ways for management of individual elements of an organisation: adjustment of strategy, reformation of organisational forms and structures, transformation of organisation's operation processes, improvement of staff management, development of motivational mix, and modification of organisational culture.

According to Lipinskiene, Stokaite (2006), changes taking place at an organisation are assessed using such indicators as *introduction of innovations, new principles of organization of production of goods and services, marketing systems, financial relations and the like, increase in amount of information, intensification of conflicts and stresses, structural changes, personnel policy and new value orientations and changed expectations of employees, changes in organisational aims, objectives, and mission.* 

Implementation of changes at an organisation yields the following *outcomes*: strategic combinations – mergers, acquisitions, joint ventures; collapses, separations, sales; reductions; expansion to new locations, markets, technologies, and offerings; new leadership (Wyman 1998); horizontal arrangement, teams, products, mergers, joint ventures, consortiums, networks, new technologies, new business processes (Daft 2004); e-business (Jovarauskiene, Pilinkiene 2009); learning organisation (Sakalas, Venskus 2007); organisational learning (Hernaus *et al.* 2008); introduction of innovations at workplaces (Reinhold *et al.* 2008).

# 2.2. Aspect of responsibility for organisational changes

According to Andrews et al. (2008), contemporary process of organisational changes involves not only top or middle management, but also teams of employees and independent advisers. All these participants have different experience and prospects. External advisers become necessary when big changes are being implemented or when organisation's members (managers and executives) lack objective attitude, need advice and help. However, external advisers do not have sufficient understanding of the organisation's history, culture, work procedures, and personnel (Robbins 2006). Furthermore, they may offer more drastic changes, because they will not have to endure the outcomes of these changes themselves. Meanwhile managers and employees of the organisation are more cautious and attentive when implementing changes.

Organisation's members (or even external advisers) may take different roles in managing organisational changes. The differences here are in responsibility and involvement in the process of change. The *initiator of changes* is considered a person who has proposed to make some change for the organisation that experiences difficulties or is in crisis situation. Major efforts in organising and coordinating changes must be put by the *change* agent that may be an independent adviser, a group of employees, or the manager of the organisation (for example, seeking to ensure smooth process of changes). Struggler for changes has enthusiasm to change, i.e., to remind everyone why the changes take place and what benefit they will bring. The latter two roles (change agent and struggler for changes) may be served by the same person, only at different time. Supporter of changes is formally responsible for coordination of the process of changes. It can be one of the departments of the organisation (such as Human Resources Department or Strategic Planning Department), or a few managers (particularly in smaller organisations) supervising keeping to schedule and timely provision of resources as well as proceeding of training (Major Roles during... 2010).

Changes require management; therefore it is necessary to take responsibility for the change. This responsibility falls on one person (e.g., a team leader) or a group of specialists. Such people become the agents of changes, and external advisers often serve the role of catalysts of changes (Caldwell 2003 cited by Burnes 2004). Leading employees or "leaders of opinion" who think entrepreneurially and have innovative management skills are called agents of changes, and catalysts of changes significantly contribute to employees' reflection on their activities (Dover 2003). This requires to be respected by colleagues, to clearly formulate vision, aims, strategy, continuously update and transfer cultural values to all employees. At the team level a change agent serves the formal or informal role of a leader, guides the team in the right direction.

A change agent can be the organisation's development specialist, division leader, or mid-level manager responsible for changes in own area of activity. According to Tearle (2009) any person becomes a change agent when a team or the entire organisation seeks something new. Complexity and multi-stage character of changes means that they cannot be delegated to a few experts or managers everyone at an organisation must be responsible for changes. However, Perme (1999) distinguishes a change agent from other employees as the one assuming responsibility for self-change and care of co-workers. According to this researcher, a true change agent fully understands the situation as well as how he could influence it. He is a qualified specialist happy with his status, sure about his values, motivated, skilled, and able to build coalitions and ask for help. Such a person is ready to make compromises to open a way for greater aims. Furthermore, he is energetic, reaching consensus, building trust, and seeking dialogue.

Burnes (2004) identifies different models of agents of changes. By model of leadership, agents of changes are top level managers responsible for identification and presentation of strategic/transformational changes. By model of management, agents of changes are mid-level managers / functional specialists responsible for introduction or support of specific elements of strategic change programmes or projects. By model of consulting, agents of changes are external or internal advisers that may be invited to work at any level. By model of teams, agents of changes are teams operating at different levels of organisation and made up of managers, employees, and advisers who are necessary for implementation of a specific project of changes delegated to them.

According to Weick, Quinn (1999), the content of roles of a change agent also depends on whether the changes that take place at the organisation are temporal or permanent. Temporal changes require from a change agent creativity, alternative decisions, new interpretation of factors, good coordination, and commitment. Moreover, as permanent changes take place a change agent must give sense to them, properly guide them, apply current trends, not to interfere with improvising and learning.

Therefore a change agent can be characterised as reliable, aware, enthusiastic, flexible, possessing good communication skills, able to change attitude, informing others about benefit of changes for people and in resolving problems, including others when talking, and leading by own example (Change Agents: The... 2010); facilitating the process of changes, identifying and analysing factors affecting changes and managing them if possible (Carney 2000). According to Lines (2007), a change agent can be described as an individual especially responsible for planning, implementation, and outcomes of strategic changes. He is distinguished from others by power and motivation. Zubialde (2001) emphasizes striving to understand an individual or a community where he acts during changes, as well as application of knowledge by setting uniting aims, consolidating the most appropriate and accessible resources, technologies, and information for the desired changes to be achieved. According to Brantly (2007), a change agent is responsible for successful start of organisational changes; may (or may not) be empowered to start changes, but is responsible for results; needs ongoing support from management and employees; must be able to communicate at all levels, establish and maintain positive relations with parties being influenced, understand and adapt to ever changing and clashing priorities.

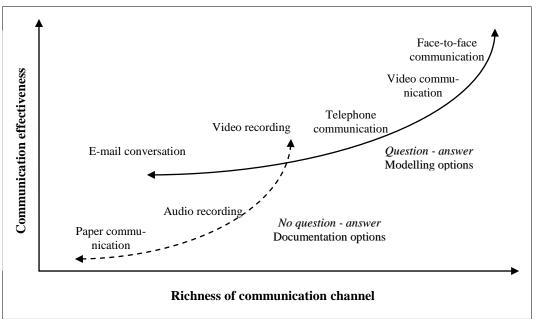
#### **2.3.** Communication of changes

In order to prepare the staff for changes and persuade they are necessary, a change agent must familiarize all the employees with causes, proceeding, and outcomes of changes. In implementing organisational changes it is important to support the organisation's members so that they adapt to innovations, gain missing knowledge, and acquire resources needed. First of all, according to Bartkeviciute (2008), employees must be duly supplied with information helping to comprehend the causes and extent of the planned changes, which should prevent origination of rumours and unreasonable discussions. So, effective communication is one of the key success factors in the change process (Linke, Zerfass 2011).

There are no "bad" means of communication. However, some of the persons responsible for changes use them wrongly or inefficiently. According to Davis (2000), changes can be communicated differently, but it is important to choose an appropriate channel for communication (Fig. 2). For example, email is used to quickly share detailed information. Intranet is used for independent search for employees thus satisfying own interests, bulletins and posters are for notifications and visual reinforcement of an idea. Video recording helps to depict or illustrate an idea, while tele- or videoconferencing is good for reviewing, answering questions, and discussing concepts. Face-toface conversations take place when discussing changes. According to Russ (2008), informal supplements at an organisation are informational meetings of small groups as well as interpersonal verbal communication on changes.

Analysing activity of greatly communicating managers Kotter (2007) notes that they generate various *notices*. At *casual discussions* on business problems they speak of whether the solutions proposed are suitable in broader context. At *regular assessments of activities* they talk about how employee behaviour facilitates or hampers vision. *Quarterly review of departmental activity* includes not only the numbers, but also how managers of departments contribute to transformation.

Answering the questions frequently asked by employees, managers link their answers to the revised aims. Successfully implementing changes, managers use all the available communication channels for dissemination of the vision. Boring and often ignored *organisation's bulletins* are turned into funny articles on vision, quarterly meetings of management are replaced by interesting *discussions* on transformation, and general training at organisation are converted into *courses* on business problems and the new vision.



**Fig.2.** Richness of communication channel (Source: modified by the authors of the article with reference to *Communication on Agile Software Projects*).

Jimmieson *et al.* (2008) say that *persuasive communication, information provision, informa-tional bulletins, face-to-face communication, dis-cussions, observation* are the most effective ways to promote new beliefs or change current attitudes. By providing information to employees on what behaviour is favourable for changes, what the possible results of changes are, by introducing opportunities for participation, having identified employees' expectations, potential support and obstacles to changes, the change agents can help to strengthen readiness to support initiatives of changes.

In addition to traditional means of communication (such as bulletins issued by trade unions) and vertical direct communication (Bernerth 2004), new means (Wiki, blog, RSS-feeds, podcast, Skype, etc.) are used increasingly more often.

## 3. Research methodology

Anonymous semi-open-ended questionnaire intended for employees of both business and public sector organisations was chosen as the primary research method. 306 representatives of organisations investigated participated in the survey. The questions for the questionnaire were selected so that they cover employees' opinions on typology of organisational changes, responsibility for organisational changes, and communication about them. This article presents the third part of our research carried out in October-December of 2008. The first part of the research was published in Issue 5 (65) of the journal "Engineering Economics" in 2009, the second part – in Issue 3 (17) of the journal "Social Research" in 2009 (Saparnis *et al.*  2009 a,b). The first publication is dedicated to analysis of planning of changes, resistance to changes, and overcoming of resistance to changes. The second publication deals the aspects of identification of changes and dimensions of a successful organisation. Moreover, these publications also overview the corresponding aspects of the results of the empirical research.

In order to identify the typology of organisational changes we referred to the results of researches presented by Bartol, Martin (1991), Gelinas, James (1997), Wyman (1998), Waterman et al. (2001), Zakarevicius (2003), Daft (2004), Karpavicius et al. (2007); when analysing responsibility for and communication of organisational changes we referred to Perme (1999); Weick, Quinn (1999); Carney (2000); Zubialde (2001); Dover (2003); Burnes (2004); Robbins (2006); Brantly (2007); Lines (2007); Andrews et al. (2008), and other. The main sources for analysis of the aspect of communication of changes were the publications by Davis (2000); Bernerth (2004); Kotter (2007); Bartkeviciute (2008); Jimmieson et al. (2008); Russ (2008). Meanwhile categorisation of the research results draws on subjective opinion and competences of the authors of the article.

A rather substantial role in interpreting the data of the research has been played by a branch of psychology called psychosematics. It analyses, inter alia, what subjective meanings the individuals and social groups tend to assign to verbal stimuli. Speech is not incidental; it reflects both personal mental and sociocultural reality (Saparnis 2000). It is known from the history of social research that psychosemantic material (associative response of respondents to verbal stimuli) is a reliable empirical reference. Reference to analysis of psychosemantic structures enabled tangible achievements in differential psychology, psychodiagnostics, and social attitudes research (Osgood, 1959). In our research the role of a word – stimulus has been played by stimulating material compiled on the basis of lexical formations "typology of organisational changes", "responsibility for changes", and "communication of changes" and presented to employees of organisations.

The questionnaires having been returned, it turned out that the answers contain 880 statements reflecting the respondents' opinions about typology of organisational changes (283 indicators), responsibility for organisational changes (302 indicators), and communication of these changes (295 indicators). Respondents replied to the questions in one to three sentences. While processing the research data a decision was made to choose a "strict system of variables" to enable application of quantitative method. Therefore categories were established by grouping empirically obtained answers.

#### 4. Research results and discussion

The research shows that a large part (19.8%) of the respondents thinks that nothing needs to be changed in their organisations, i.e., that status quo must be maintained (Table 1). Managerial wisdom holds that if a change obstructs achieving the aim, such a change must be rejected. It is assumed that the position of respondents willing to maintain status quo may have resulted from thinking that their organisation is doing well and changes are not needed. This is confirmed by statistical calculations showing that respondents willing not to change anything describe market situation of their organisation as positive. Analysis of certain sociodemographic characteristics shows that young employees (younger than 25 years) with little work experience (up to 5 years) but in responsible positions (among them there are 3 directors, 5 deputy directors, 6 branch managers and 7 managers, but not a single owner of a company) are the least open to changes.

Analysis of respondents' answers to the openended question on what needs to be changed at the organisation as well as to other questions shows that a part of respondents were unable to formulate their thoughts on what should be changed at their organisations (perhaps the question proved too difficult for the respondents). If we added respondents who did not answer this question at all to those 6.1% who replied with "I do not know", we would have 17.3% of all respondents.

**Table 1.** Categories of what needs to be changed at the organisation for its aims to be achieved (N = 269)

Organisational changes	Frequency	Percentage	
Management of human resources	63	24.0	
Systems and processes	55	21.0	
Culture	44	16.8	
Strategy	21	8.0	
Structure	6	2.3	
Complex changes	6	2.3	
Technologies	3	1.1	

Comparing the obtained empirical results to the organisational element changes described in scholarly literature on management it is seen that in practice there are more people inclined to change systems, organisational culture, and management of human resources. Only a small part of respondents pointed out the need to change organisational structure. Change in organisational structure is the change most often mentioned by theoreticians. A rather low frequency of the need for changes in technologies as an element of an organisation shows that respondents do not relate these changes to prospective introduction of innovations, abilities to compete in larger market and to increase productivity and efficiency, etc. By the way, a few respondents (2.3%) indicated that accomplishing of aims needs more than changes in separate organisational elements - comprehensive changes must take place.

It has been noticed that, according to the respondents, the biggest number of changes should be initiated in management of human resources. Some respondents are dissatisfied with employee planning, selection, and evaluation system (11.8%). Changes in the process of management of human resources are closely related both to employee motivation system (11.5%) and to managing personnel (10.3%). No significant difference in attitudes to change in management of human resources has been found. The need for changes in this area has been indicated by respondents regardless of their age or size of organisation they represent. However, there are slightly more respondents with long work and managerial experience who see some problems in personnel management. At all organisations (regardless of their age and size) motivational mix should be reviewed or created. Moreover, replacements of people in management might also contribute to positive organisational changes.

Another type of organisational changes also frequently mentioned by the respondents is system(s) changes. These are related to changes in work organisation system (8.0%), modification to marketing mix (6.1%), and changes in activity processes (3.8%) and quality management (3.4%).

16.8% of the respondents indicated organisational culture change as an important organisational change. It can be considered to be among the most complicated areas of change, because cultural changes (and behavioural changes) cannot be seen "with the naked eye" and their assessment is rather troublesome. The major part of the respondents has at least minimum experience in managerial work and must be aware of the bottlenecks of the organisation. This element of an organisation is most desired to be changed by young female employees with higher university education employed at medium organisations, the duration of operation of which does not exceed 20 years. However, people dissatisfied with work culture and conditions (2.3%) are mainly regular employees, they mentioned dissatisfactory work conditions, tools, instruments, clothes, etc.

Considering the attitude of employees to the necessity for organisational changes there emerge differences in respondents by their positions. Managers put greater emphasis on the need for change of the current strategy or devising of a new one. Although devising or change of a strategy are the prerogatives of top managers of the organisation, the importance of changing it has also been indicated by male employees who are still in or already with higher education, younger than 35 years of age, with short work and managerial experience. In seeking the aims of the organisation it is important for managers to properly manage human resources (the problem area most often mentioned by managers), appropriately motivate them, and implement changes in organisational culture. Managers of 3 organisations were dissatisfied with quality management. Serving the function of supervision they noticed that attention should be focused on ensuring the quality of products/services and all the processes. This is particularly relevant to the objective of small and very small organisations to get established on the market, to satisfy and retain customers.

It has been noticed that employees with lower-level education emphasize changes in the mix of technologies, activity processes, work conditions and culture, and motivational system more than other respondents do. This is explained by the fact that when performing their functions the former more often encounter production and technological resources, are more involved in the process of production and service provision in comparison to respondents with higher office. Employees who expressed dissatisfaction with work culture and conditions were mainly from small organisations. As to attitudes of employees, differences in attitudes to systemic and comprehensive changes emerge. Attitudes of employees of medium organisations (that it is necessary to change activity management system and implement comprehensive changes) differ from those of representatives of smaller or larger organisations.

Pearson correlation coefficient was applied to determine relationships among categories identified during qualitative analysis. It must be noted that the respondents who put greater emphasis on necessity for changes in marketing mix more often mention that the motivation system needs to be changed as well (r = 0.135).

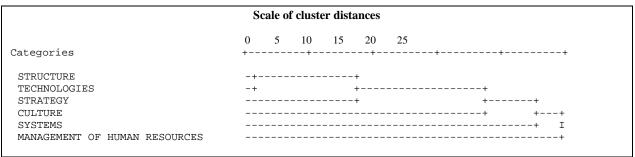


Fig.3. Cluster dendogram including changes in elements of organisation (N=269)

Pursuant to the statistical data processing strategy chosen for this research, cluster analysis of created categories of changes relating to elements of an organisation was carried out, which enabled subsequent development of taxonomy of the categories. Figure 3 presents a dendogram obtained by cluster analysis, wherein distances are measured by Euclidean distance.

The greatest distance among 269 respondents, which puts all the organisational elements into one

cluster, is 25 certain relative units of distance. It is the distance between two clusters of which one contains a single category that exceeds all the others by frequency rating. It is the category reflecting the need for change in management of human resources. The second cluster encompasses the remaining 5 categories. At the distance of 23 the large cluster is made of two clusters with 1 and 4 categories.

Categories	Responsible for changes		Notifies of changes	
	N = 301		N = 280	
	Ν	%	Ν	%
Management personnel	250	83.3	234	83.9
Executive personnel	33	11.0	15	5.4
Founders and owners	26	8.6	10	3.6
Subjects of external environment	16	5.3	3	1.1
Responsible persons	11	3.7	14	5.0
No-one	1	1.3	11	3.9

**Table 2.** Categories reflecting respondents' attitudes to responsibility for changes and who notifies of changes

Table 2 lists the categories reflecting respondents' attitudes to responsibility for changes and who notifies of changes. The data in the table shows that persons whom respondents usually hold responsible for changes are management and administration of organisations. By the way, management personnel are also associated with activity of a change agent when it is necessary to notify of the planned or ongoing changes in the organisation (or changes to the organisation itself). Respondents' attitudes to responsibility for changes vary rather insignificantly. People who tend to assign responsibility for changes to managers are employees of medium organisations who have no or little experience of managerial work. Meanwhile persons with little work experience but more educated see themselves as also responsible for changes. It must be noted that a part of respondents consider various factors of external organisational environment to be not only catalysts of changes, but also responsible for changes. Young employees of small organisations operating in towns or villages think that responsibility for changes must be taken by somebody from outside: governmental institutions (municipalities, ministries, or parliament). It has been noted that the larger an organisation, the more its members emphasize responsibility for changes lying with internal environment subjects (management and employees).

Because managerial personnel of an organisation, according to the respondents, is largely responsible for changes, information about changes usually reaches employees from managers of different levels (director general, chief of production or commander of operations, machine shop manager, team manager) as well. In rather rare cases, specialists (for example, an accountant or a lawyer) or workers must notify of a change. Interestingly, only 3 respondents pointed out they receive information about changes from subjects of external environment. The categories of *Responsible persons* and *Subjects of external environment* remained abstract, unspecified by the respondents. These categories are important as well, but importance assigned to them varies. It follows that at organisations different in size and activities responsibility for changes falls not on people holding specific office, but on various employees. It is interesting, what role in the process of change is played by founders and owners of organisations who, according to the respondents, rather rarely become providers of information.

Respondents who find out about changes in progress from subjects of external environment pointed out that quality management needs to be changed (r = -0.238). Relationship among separate categories has been identified: the category of responsibility for changes falling on founders and owners is related to the category of founders and owners notify of changes (r = 0.491). The category of no-one is responsible for changes is related to the category of *no-one notifies of changes* (r = 0.296). The category of comprehensive changes are needed is linked to the following categories: responsibility for changes falling on founders and owners (r = 0.142); founders and owners notify of changes (r = 0.289); no-one notifies of changes (r= 0.220); no-one is responsible for changes ( $\mathbf{r}$  = 0.404).

Most of the respondents pointed out they were provided with information about changes at meetings, sittings, discussions, directly from manager (or other members of administration) speaking to a group - this is the category of "1 to group". "Verbal" (direct) is a rather abstract category reflecting type of communication about changes. The surveyed employees named this method as "announces orally, informs directly" by usually relating it to the manager (particularly the immediate one). Although this method also includes communication "1 to 1" with a manager communicating to a subordinate in person, it was decided not to merge these separate categories in order not to lose authentic wordings of answers. As seen from Table 3, almost every third respondent who was able to point out the means of communication used during changes mentioned communication in writing, that is, information transferred via various documents, orders, emails, bulletins and announcements on boards, decisions and letters received from ministries, or through a newsletter issued by the organisation. Some respondents mentioned informal ways of communication as alternatives to official information about changes, saying that these contribute to spread of rumours and gossips.

Type of communica- tion		Titles of categories	Frequency	Percentage
Formal Direct Indirect		"1 to group" (meetings)	45	48.9
	Verbal	15	16.3	
		"1 to 1" (in-person)	9	9.8
	Indirect -	Written	35	38.0
		Interactive	3	3.3
Inf	formal	Informal	3	3.3
		Various means	2	2.2

**Table 3.** Means of communication of changes (N = 92)

Analysing the respondents' attitude to communication during changes, it has been noticed that types of internal communication (channels used for transfer of information about changes) differ in small, medium, and large organisations. As it could be expected, employees of small and medium organisations reported that changes are usually communicated directly: a manager informs a subordinate verbally (in person). The larger the organisation, the more often are meetings or discussions during which the administration representatives announce the planned or ongoing organisational changes to a larger group of employees or even the whole staff. Written information on changes reaches employees most often at medium and large organisations where communicating in person is complicated and takes much time. Moreover, information presented in writing (particularly via e-mail) reaches employees of different divisions faster and is less distorted by participants in the communication process. It was noticed that larger organisations use interactive tools (such as telephone or Skype) for communication of changes more often than smaller ones. Installation of modern information technologies at organisations opens wider possibilities not only to enrich the process of communication by new tools, but also to change the culture of information management (together with the entire organisational culture), develop and improve human resources, competently manage processes and changes in general. At large, older organisations various internal communication channels are used more often, because such organisations have more financial resources to introduce various tools of communication. This is also necessitated by the need to inform the divisions (which sometimes are geographically remote).

Two inverse relationships among different categories have been found: the category *communicates 1 to group (direct communication)* is in-

versely related to the category *verbal communication* (r = -0.432), while the category *written communication* has inverse relationship to the category *communicates 1 to group* (r = -0.453).

Furthermore, a direct relationship between different categories of questions has been found: the category work conditions need to be changed is related to the category changes are communicated through various means (r = 0.570); the category status quo should be maintained is related to the category changes are communicated in writing (r = 0.299); the category marketing mix should be changed is related to the category changes are learnt about informally (r = 0.390).

#### 5. Conclusions

It is universally known that the content of organisational changes is rather broad. Analysis of scientific literature shows that typology of organisational changes involves the following aspects: changes in management structure, organisational, employee, and management culture changes, strategic changes, changes in human resources management process, which are related to increase in labour productivity and efficiency, development of skills and competences, operational environment reformation changes related to introduction of new technologies to business processes, and systemic changes.

Analysis of theoretical sources has led to conclusion that responsibility for organisational changes may be assumed not only by top or middle managers, but also by employee teams and independent advisers. Contributing to management of organisational changes, the latter may serve different roles in different contexts of changes. Scientists distinguish the following different models of responsibility of participants in changes: a) by model of leadership – top managers responsible for identification and introduction of strategic changes, b) by model of management – middle managers responsible for introduction or support of specific components of programmes or projects of strategic changes, c) by model of consulting – external or internal advisers who may be invited to work at any level; d) by model of teams – teams working on different levels of an organisation and assembled of necessary managers, employees, or advisers necessary to implement a specific change project delegated to them.

Theoretical sources on communication of changes emphasize that the most efficient ways to stimulate and motivate or modify the current attitudes within organisational changes is persuasive communication, information provision through various channels, face-to-face conversations, discussions, and observation. Purposefully using these means of communication the people initiating and implementing changes thus permanently provide information to employees on what behaviour is favourable to changes, what the possible outcomes of changes are, what the possibilities for participation are. Having identified employees' expectations, likely support and resistance to changes they can successfully contribute to strengthening of readiness to support new initiatives of organisational changes.

The research has revealed that organisation members' attitudes towards typology of changes encompass all the elements of typology of changes, which are mentioned in theories of management. Comparing the obtained empirical results with changes in organisational elements which are described in theories of management, it can be seen that practice knows more people willing to change human resources management (named by respondents as the dimension in the greatest need for changes), systems, and organisational culture. Only a small part of the respondents replied that it is necessary to change the organisational structure. Incidentally, change in organisational structure is the change most frequently mentioned in theoretical sources. A rather low frequency of need for technological changes indicates that respondents do not relate these changes to prospective introduction of innovations, opportunities to compete on a larger market, increase productivity and efficiency. It is important that a few respondents pointed out that to achieve the aims of an organisation, changes in separate organisational elements are not enough: comprehensive changes must take place.

Expressed opinion of the respondents is dominated by the attitude that people responsible for changes at an organisation are managers and those in administration. By the way, management personnel are also associated with activity of a change agent when it is necessary to notify of the planned or ongoing changes in the organisation. Respondents' attitudes to responsibility for changes vary rather insignificantly. People who tend to assign responsibility for changes to managers are employees of medium organisations who have no or little experience of managerial work. Meanwhile persons with little work experience but more educated see themselves as also responsible for changes.

Analysing empirical references of the respondents regarding subjects communicating changes and communication channels they use, most respondents pointed out that they are supplied with information about changes at meetings, sittings, discussions, directly by manager or other members of administration. Nearly every third respondent who was able to point out the means of communication used during changes mentioned communication in writing, that is, information transferred via various documents, orders, emails, bulletins and announcements on boards, decisions and letters received from ministries, or through a newsletter issued by the organisation. Some respondents mentioned informal ways of communication as alternatives to official information about changes, usually saying that these are the sources of rumours and gossips.

#### References

- Alas, R. 2008. Implementation of Organizational Changes in Estonian Companies, *Journal of Busi*ness Economics and Management 9 (4): 289-297. http://dx.doi.org/10.3846/1611-1699.2008.9.289-297
- Andrews, J.; Cameron, H.; Harris, M. 2008. All change? Managers' experience of organizational change in theory and practice, *Journal of Organizational Change Management* 21(3): 300-314. http://dx.doi.org/10.1108/09534810810874796
- Bartkevičiūtė, I. 2008. Žmogiškieji ištekliai kultūros įstaigų veikloje [online] [accessed 2 October 2009]. Available from Internet: http://www.lkdtc.lt/mokomedz/files/01\_Bartkeviciut e.pdf
- Bartol, K. M.; Martin D. C. 1991. *Management*. New York: McGraw-Hill. 813 p.
- Bernerth, J. 2004. Expanding our Understanding of the Change Message. Human Resource Development Review 3: 36-52. http://dx.doi.org/10.1177/1534484303261230
- Brantly, D. 2007. *Smart @ Model, Dumb @ Change* [online] [accessed 30 December 2011]. Available from Internet: http://www.sei.cmu.edu/library/assets/brantly\_07.pd f
- Burnes, B. 2004. *Managing Change: a Strategic Approach to Organisational Dynamics*. New York: Prentice Hall. 535 p.

Carney, M. 2000. The development of a model to manage change: refection on a critical incident in a focus group setting. An innovative approach, *Journal* of Nursing Management 8: 265-272. http://dx.doi.org/10.1046/j.1365-2834.2000.00190.x

Cetkovic, J., Kneževic, M. 2006. Uvodjenje organizacionih i programskih promjena sa osvrtom

- naiskustva naših preduzeca. *Preduzetnicka ekonomija*, Volume XII.
- Change Agents: The Key to Successful Change [online] [accessed 30 December 2011]. Available from Internet: http://www.inspired-partners.com/changeagents.pdf
- Chen, C. K. 2008. Construct Model of the Knowledge-Based Economy Indicators, *Transformations in Business & Economics* 7 (2:14): 21-31.
- Communication on Agile Software Projects [online] [accessed 30 December 2011]. Available from Internet: http://www.agilemodeling.com/essays/communicati on.htm
- Daft, R. L. 2004. *Organization theory and design*. Australia: South-Western. 624 p.
- Daugeliene, R.; Marcinkeviciene, R. 2009. Brain Circulation: Theoretical Considerations, *Inzinerine Ekonomika – Engineering Economics* 3: 49-57.
- Davis, A. 2000. Communicating Change in a Brave New Way, *Tactics* July: 12, 13, 19.
- Dover, P. A. 2003. Change agents at work: Lessons from Siemens Nixdorf, *Journal of Change Man*agement 3 (3): 243–257. http://dx.doi.org/10.1080/714042535
- Drucker, P. F. 2007. *Management challenges for the* 21st century. Amsterdam: Elsevier. 181 p.
- Frahm, J.; Brown, K. 2007. First Steps: Linking Change Communication to Change Receptivity, Journal of Organizational Change Management 20 (3): 370-387. http://dx.doi.org/10.1108/09534810710740191
- Gelinas, M.; James, R. 1997. *Creating Real and Lasting Change through Collaborative Organization Design* [online] [accessed 30 December 2011]. Available from Internet:

http://www.gelinasjames.com/article10.html

- Ginevičius R.; Podvezko V. 2009. Evaluating the Changes in Economic and Social Development of Lithuanian Counties by Multiple Criteria Methods, *Technological and Economic Development of Economy* 15 (3): 418-436. http://dx.doi.org/10.3846/1392-8619.2009.15.418-436
- Hernaus, T.; Škerlavaj, M.; Dimovski V. 2008. Relationship between Organisational Learning and Organisational Performance: The Case of Croatia, *Transformations in Business & Economics* 7 (2:14): 32-48.
- Jimmieson, N. L.; Peach, M.; White, K. M. 2008. Utilizing the Theory of Planned Behavior to Inform Change Management: An Investigation of Employee Intentions to Support, *The Journal of Applied*

*Behavioral Science* 44: 237-262. http://dx.doi.org/10.1177/0021886307312773

- Jovarauskienė, D.; Pilinkienė, V. 2009. E-Business or E-Technology? Inzinerine Ekonomika – Engineering Economics 1 (61): 83-89.
- Jumpponen, J.; Ikävalko, M.; Pihkala, T. 2008. Management And Change In Turbulent Times: How Do Russian Small Business Managers Perceive The Development Of Their Business Environment? *Journal of Business Economics and Management* 2 (9): 115–122. http://dx.doi.org/10.3846/1611-1699.2008.9.115-122
- Jurkštienė, A.; Darškuvienė, V.; Dūda, A. 2008. Management Control Systems and Stakeholders' Interests in Lithuanian Multinational Companies: Cases from the Telecommunications Industry, *Journal of Business Economics and Management* 9(2): 97-106. http://dx.doi.org/10.3846/1611-1699.2008.9.97-106
- Karlowski, A.; Paslawski, J. 2008. Monitoring of Construction Processes in the Variable Environment, *Technological and Economic Development of Economy* 14 (4): 503-517. http://dx.doi.org/10.3846/1392-8619.2008.14.503-517
- Karpavičius, T.; Cvilikas, A.; Gatautis, R. 2007. Application of Systemic Management Conception to Organization's Management Decisions Structuring, *Inzinerine Ekonomika – Engineering Economics* 4 (54): 44-52.
- Kotter, J. P. 2007. Leading Change. Why Transformation Efforts Fail, *Harvard Business Review* [online] [accessed 30 December 2011]. Available from Internet:

http://www.mcgill.ca/files/hr/Leading\_Change\_John \_Kotter.pdf

- Kumpikaitė, V.; Čiarnienė, R. 2008. New Training Technologies and their Use in Training and Development Activities: Survey Evidence from Lithuania, Journal of Business Economics and Management 9 (2): 155-159. http://dx.doi.org/10.3846/1611-1699.2008.9.155-159
- Lines, R. 2007. Using Power to Install Strategy: The Relationships between Expert Power, Position Power, Influence Tactics and Implementation Success, *Journal of Change Management* 7 (2): 143– 170. http://dx.doi.org/10.1080/14697010701531657
- Linke, A.; Zerfass, A. 2011. Internal Communication and Innovation Culture: Developing a Change Framework, *Journal of Communication Management* 15 (4): 332-348. http://dx.doi.org/10.1108/13632541111183361
- Lipinskienė, D.; Stokaitė, I. 2006. Komandinio darbo ypatumai pokyčių sąlygomis. *Ekonomika ir vadyba: aktualijos ir perspektyvos* 5: 208-212.
- Major Roles during Change and Capacity Building. Free Management Library [online] [accessed 30 December 2011]. Available from Internet: http://managementhelp.org/misc/roles-duringchange.pdf

- Melnikas, B. 2008. Integration Processes in the Baltic Region: the New Form of Regional Transformations in the European Union, *Inzinerine Ekonomika Engineering Economics* 5 (60): 54-64.
- Ogrean, C.; Herciu, M.; Belaşcu, L. 2008. Searching for New Paradigms in a Globalized World: Business Ethics as a Management Strategy, *Journal of Business Economics and Management* 2: 161-165. http://dx.doi.org/10.3846/1611-1699.2008.9.161-165
- Osgood, C. E. 1959. The Representational Model and Relevant Research Methods, in De Sola Pool, I. (Ed.) Trends in Content Analysis, Urbana: University of Illinois Press. 33-88.
- Perme, C. 1999. *Agents of Change*. Newsletter 8 (1) [online] [accessed 30 December 2011]. Available from Internet:
  - http://www.cmperme.com/pdf/cmp9906.pdf
- Pundzienė, A.; Alonderienė, R.; Buožiūtė, S. 2007. Managers' Change Communication Competence Links with the Success of the Organisational Change, *Inzinerine Ekonomika – Engineering Economics* 4 (54): 61-69.
- Rees, C. J. 2008. Organisational Change and Development: Perspectives on Theory and Practice, *Journal of Business Economics and Management* 9(2): 87–89. http://dx.doi.org/10.3846/611-1699.2008.9.87-89
- Reinhold, K.; Tint, P.; Tuulik, V.; Saarik, S. 2008. Innovations at Workplace: Improvement of Ergonomics, *Inzinerine Ekonomika – Engineering Economics* 5 (60): 85-94.
- Robbins, S. 2006. *Organizacinės elgsenos pagrindai*. Kaunas: Poligrafija ir informatika. 374 p.
- Russ, T. L. 2008. Communicating Change: A Review and Critical Analysis of Programmatic and Participatory Implementation Approaches, *Journal of Change Management* 8 (3–4): 199–211. http://dx.doi.org/10.1080/14697010802594604
- Sakalas, A.; Venskus, R. 2007. Interaction of Learning Organization and Organizational Structure, *Inzinerine Ekonomika – Engineering Economics* 3 (53): 65-70.
- Šaparnis, G. 2000. Kokybinių ir kiekybinių metodų derinimas, diagnozuojant mokyklos vadybą nestan-

*dartizuotu atviro tipo klausimynu*: Doctoral Dissertation. Šiauliai: Šiaulių universitetas. 187 p.

- Šaparnis, G.; Bersėnaitė J.; Šaparnienė D. 2009a. Psychosemantics of Employees' Images when Identifying the Dimensions of Change Management, Socialiniai tyrimai – Social Research 3 (17): 71-83.
- Šaparnis, G.; Bersėnaitė J.; Šaparnienė D. 2009b. Psychosemantics of Employees' Images when Identifying the Dimensions of Changes and Successful Organisation, *Inzinerine Ekonomika – Engineering Economics* 5 (65): 67-78.
- Snieška, V.; Drakšaitė, D. 2007. The Role of Knowledge Process Outsourcing in Creating National Competitiveness in Global Economy, *Inzinerine Ekonomika – Engineering Economics* 3 (53): 35-41.
- Tearle, R. *The Role of a Change Master. From Change Agent to 'Change Master'* [online] [accessed 22 October 2009]. Available from Internet: http://www.changedesigns.co.za/The\_role\_of\_a\_cha nge%20master.htm
- Vida, I.; Obadia, C. 2008. The Dark Side of Internationalisation: Dysfunctional Behaviours in Foreign Subsidiaries, *Transformations in Business & Economics* 7 (2:14): 130-143.
- Waterman Jr., R. H.; Peters, T. J.; Phillips, J. R. 2001. Structure is not Organization, *Business Horizons* 23 (3): 14-26. http://dx.doi.org/10.1016/0007-6813(80)90027-0
- Weick, K. E.; Quinn, R. E. (1999). Organizational Change and Development, *Annual Review Psychology* 50: 361- 386. http://dx.doi.org/10.1146/annurev.psych.50.1.361
- Weiner, E.; Brown, A. 2006. *Futurethink: How to Think Clearly in a Time of Change*. New Jersey: Prentice Hall. 304 p.
- Zakarevičius, P. 2003. *Pokyčiai organizacijose:* priežastys, valdymas, pasekmės. Monografija. Kaunas: Vytauto Didžiojo universiteto leidykla. 174 p.
- Zubialde, J. P. 2001. Leading Change versus Managing Care: The Role of Change Agent in Family Medicine, Family Medicine 33 (2): 133-136.
- Wyman, O. 1998. Managing the Dynamics of Change: the Keys to Leading a Successful Transition [online] [accessed 17 October 2009]. Available from Internet: http://www.oliverwyman.com/fr/pdf\_files/Managin g\_Dynamics\_of\_Change\_INS.pdf