Exposition of Internal Factors Enhancing Creativity and Knowledge Creation

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Abstract. A creative organization is distinguished among traditional organizations. Creative organizations are trying to strike a balance between business and creativity when creating a proper environment for knowledge management, at the same time, encourages employees to develop creative work and produce new products that meet market needs. Thus, the research purpose is defined as follows: what features of internal factors do influence creativity and knowledge creation in a creative organization? A qualitative research method, based on a scientific analysis and identification of the key factors, allowed reveal the features of a task, group and time influencing creativity and knowledge creation in a creative organization. The research results show that different features of tasks, group and time make an impact on different employee groups, types of creativity and knowledge in a creative organization.

Keywords: Creativity · Knowledge creation · Task · Group · Time · Creative organization

1 Introduction

Creativity is a core factor for each organization seeking to maintain a competitive advantage and successful development. A creative organization is distinguished among traditional organizations. It has unique projects, which leads to high staff turnover, especially among creators. It is characterized by individual artistic creativity, which is transformed into production and products. Therefore, creative organizations are trying to strike a balance between business and creativity when creating a creative environment for knowledge, at the same time, encourages employees to develop creative work and produce new products that meet market needs. The creative duality leads to the natural need of organization's specific business management to ensure the two parallel processes of the organization, consistent with each other - individual creativity and empowerment of the creativity.

During the recent decade creative industry and creative organization as a research topic is relevant. Scientists pay a lot of attention to the genesis of creative industry, identification of performances and various management issues [10–12, 18, 20, 22, 23, 26, 28, 33], concept of creativity and formation of creative environment [2, 3, 5–9, 17, 20, 21].

Creative organization in the context of this topic is fragmented, and touches only the concept of knowledge bases [12, 16], artists and administrative staff training issues

(cultural sociologists), creativity and creative process management techniques and methodologies (educational psychology) and innovation issues [12], but still lacks researches how creative organizations remain creative and innovative [30].

2 Internal Factors, Creativity and Knowledge Creation in a Creative Organization

2.1 The Concept of a Creative Organization

A creative organization reflects the conceptual and individual talent and large production convergence by new media technologies (ICT) in knowledge-based economy. This organization is unique, because it attempts to strike the balance between production and artistic creativity. The project based organizational structure is identified as the most common type in a creative organization [15], which allows to justify creative organization's specificity: to experiment constantly by creating new products and forming new groups.

Two employees' types could be identified in the creative organization-administrators and creators. Administrators mostly belong to permanent employees' group, who are responsible for managerial, administrative and economic issues. Although creators produce artistic products or services, thus adding value to the organization and ensuring a competitive advantage, they often migrate among groups, projects or even external organizations. It could be argued that various experience, rotation and movement from one to other projects extend employees' competence and uphold their creativity.

2.2 Creativity and Knowledge Creation

Creativity is a base for knowledge creation. Usually creativity is defined as the production of novel, useful ideas or problem solutions. Creativity and its resulted knowledge creation keep the key position in a creative organization theory. All components of creative organizations are creative: creative process, products and employees, as well as work environment and work culture, even the first word of the title is directly related to creativity [2, 3, 6–8, 17]. Duality of creativity is expressed through creativity in the creative content of organizations (arts and culture in the traditional sense), and creativity as a competitive economic base.

Competence of creative employees results successful performance of creative organization. It consists of knowledge, abilities, skills, talent and other personal features and can be directly affected by the balance among skills, abilities and complexity of tasks. Amabile [4] determines three main components of creativity: expertise, motivation and creative thinking skills. Other scientists [7, 12, 30], analyze interaction between individual and organization. It is stated that special abilities of creative employees can be developed by learning or by setting proper environmental conditions.

Rahimi et al. [27] state that creativity is a result of the combination of existing knowledge and new knowledge. Scientists [12, 30], define three types of creativity:

- Analyzing;
- Changing;
- Combining.

Very often, during the creative process all types of creativity are assimilated – already known ideas are interconnected in a new context, as well as new context is studied, in which the adaptation of new ideas is applied, or existing system is changed.

Knowledge creation is considered as the four modes of knowledge conversion of model by Nonaka [24, 25]: socialization, externalization, internalization and combination, where these modes of knowledge converse from explicit to tacit. A broad range of factors that can influence the success of knowledge creation has been mentioned in the scientific literature. Wong [32] proposed summarized key factors: management, leadership and support, culture, IT, strategy and purpose, measurement, organisational infrastructure, processes and activities, motivational aids, resources, training and education, HRM. Organizational components as task, group and time are one of the most effectively affecting creativity [1, 3], so it is important to investigate how do they influence creativity in a creative organization.

2.3   Role of the Task, Group and Time in a Creative Organization

Flexibility of the task has received considerable research attention and empirical support as an important situational factor that could influence human creativity [29]. The task is one of the essential dimensions influencing the potential of organization creativity, because it creates the conditions for employee to satisfy their ambitions and self-realize. Correct identification of task specification and characteristics positively impacts an organization and its performance. As creative organizations are innovative and based on each time a new assessment, and often - difficult tasks, standardization becomes a relative concept. However, some degree of standardization of tasks, however, is possible. In this case, these tasks become routine. They can be monitored, regulated and controlled due to its predictable structure: their goals are specific and experience is embedded in the behaviour of employees. These tasks may be controlled of the mid-level managers. Task execution procedure can be transferred (repeated). In such a way the evaluation of a result becomes possible. Creators who perform standardized - routine tasks are more suitable for centralized control, because in this case it is necessary to evaluate the implementation of the objectives and tasks requiring less expertise through self-knowledge and ideas. In addition, the right of decision making should be controlled, and the application of knowledge and ideas should be limited. The opposite situation is with unique or the new tasks. Control of these tasks must be carried out only by top-level managers, because the process is unfamiliar, goals are abstract, creativity is competence based, and there is no experience of executing that task or, at best, not at the organization.

Thus, the standardization of a task is hardly possible in the creative environment. This causes problems of management and coordination. The task specification can directly affect both positively and negatively the organization of creators. Task novelty and complexity results two-fold result of the administrators and creators aspect –it is more complicated for the leaders and more interesting creators to perform this type of task.

Permanent change of tasks, groups, the nature of the tasks (new and complex) leads to limited resources for accomplishment of those tasks. Both creators and administrators, are forced to perform at the same time for a several tasks or they are given too little time to complete the task. This time limitation especially affects creativity. Time as a factor of making creativity-friendly environment becomes very significant and important in order to create a favourable environment for ideas and knowledge creation. Time can influence (positively or negatively) creativity differently: too less time results stress and decrease creativity, on the other hand it concentrates and may increase creativity. Unsworth et al. [31] detected that time demands were positively related to creativity. Wagner (2003) states that characteristics of the working groups, as group size, the degree of harmony and composition, its members' expertise and skill distribution of suitable conditions for the development of creativity and to create and manage knowledge should be considered as a significant criteria, especially how the principles of teamwork improves the microclimate in the organization. Goncalo and Staw [14] state that groups might be more creative than individuals. George [13] suggests that groups composed of diverse members should be more creative than more homogenous groups because they presumably can call upon a greater diversity of knowledge, skills, expertise, and perspectives to generate new and useful ideas [19].

Analyzing characteristics of task encouraging creativity and creation of new knowledge, new and complex tasks creates a potential breeding ground for new ideas and the emergence of knowledge. They become a challenge for creators. Based on the above analysis, the main features of task, group and time are defined:

– Task characteristics: short/long-lasting, clear/uncertain, routine/new, simple/complex.
– Group characteristics: size, integrated/free, group harmony degree, heterogeneous/ homogeneous, chemistry of a group, knowledge, skills and composition, approval/ objection existing assumptions.
– Time characteristics: the number of different tasks, time properties (a little/a lot of/ fragmented/concentrated), job autonomy (full autonomy/narrowly defined objectives).

Hemlin et al. [17] stated, that generally short product lifecycle projects due to constantly changing nature of the task (short/long-lasting, easy/difficult, routine/new, modulated/integrated), the project group composition (size, integrated/free, group harmony degree, heterogeneous/homogenous participants, persons, group harmony, the knowledge, skills and abilities composition consent/objection to existing assumptions), subculture, leadership (transactional, transformational) and the time allocated to the task characteristics (different number of work tasks, time characteristics (few/many, fragmented/concentrated) and work autonomy (full autonomy/narrowly defined objectives) enhace creativity.

The different composition of dimension changes the nature of the task and thus requires different provisions establishing the knowledge creation. The most appropriate strategy for knowledge creation could be implemented through the empowerment and training in routine and non-specific, unrelated tasks aspect. Tasks of administrators often are related, but remain routine and non-specific, so the periodic procedures are proposed. The most appropriate strategy for knowledge creation of creators who work

with routine, specific tasks, not connected with each other, would be the balance design of expertise and creativity, when tasks are interrelated - the main provision of the implementation of knowledge creation techniques - through cooperation, informal meetings, practice communities. Then the staff having extensive networking relationships and contacts, use the whole network of knowledge, can faster solve organizational problems and create new knowledge [7, 25].

2.4 Methodology

The qualitative research enabling to reveal the key factors for creativity implementation and knowledge creation was conducted in January of 2012. As a proper source of information for the research TV production organization was selected. 6 respondents, satisfying settled criteria, were tested. The characteristics of respondents are presented in Table 1 below.

Table 1. Characteristics of respondents.

Code	Work position	Work experience	Group
1.	Project manager	20	Administrator
2.	Project manager	9	Administrator
3.	Journalist	17	Creator
4.	Post production director	10	Creator
5.	Director	30	Creator
6.	CEO	22	Administrator

The depth interview as a method of a qualitative research was selected due to organizational issues, uncertainty of the research object and respondents which subject is their responsibility (Table 2).

Table 2. Characteristics of in depth interview.

Code	Interview date	Time	
		Explanatory time, min	Interview time, min
1.	2012 01 09	27	60
2.	2012 01 09	29	120
3.	2012 01 10	24	50
4.	2012 01 10	25	70
5.	2012 01 11	25	100
6.	2012 01 11	20	60

Analyzing the influence of different factors (task, group and time) two questions were raised:

- What types of factor do make an impact on creativity and knowledge creation?
- How do these factors affect creativity and knowledge creation?

Evaluating the impact of the factors on creativity and knowledge creation 3 types of affect were detected: zero (0)- neither negative, nor positive affect; minus (−)- negative affect and positive (+) affect.

3   Results

3.1   Influence of a Task on Creativity and Knowledge Creation

The results of empirical research show the distribution of factors in two groups of employee– administrators and creators. The results were grouped by the criteria of different knowledge types – explicit and tacit, are presented below. It could be stated that tasks are quite similar in two different employee groups – they are routine, simple, clear and additionally complex for creators. The main difference is between creation of tacit and explicit knowledge – tasks usually are new, complex, uncertain and indefinite in a creative organization. It confirms the theoretical insights that tacit knowledge is created executing new uncertain tasks and using their creativity (Table 3).

Table 3. The key types of task for a knowledge creation.

Knowledge type	Administrator	Creator
	Task	
Explicit	Routine, simple, clear	Routine, simple, complex, clear
Tacit	New, complex, uncertain, indefinite	

Table 4 presents the interaction of task and creativity type in a creative organization. When the task is simple, routine, clear and certain, employees usually have to be even more creative and have to find new solutions for the same products or services. But on the other hand it is very convenient for administrators and new explicit knowledge creation. A little bit easier from creativity position is the situation when the task is new, complex, uncertain and indefinite – it is a positive area for creativity and creators. Here tacit knowledge is as usual created. Of course, uncertainty and unclearness results more stress and tension, it can reduces the creativity or require more time for the same result.

Table 4. Task influence on creativity.

Task type	Creativity type		
	Analyzing	Combining	Changing
New, complex, unclear, indefinite	+	+	+
Routine, simple, clear, certain	+	+	+

Summarizing it could be stated that influence of different types of a task on creativity and knowledge creation is dual – it affects differently two employee groups and their knowledge and creativity in two different ways.

3.2   Group Influence on Creativity and Knowledge Creation

Characteristics of a group are significantly important as to creativity, knowledge creation as to microclimate, teamwork and all results of organization performance. Table 5 presents the key features of a group what influence creativity and knowledge creation. It can be stated that the two groups of employees did not formulate different requirements for tacit and explicit knowledge creation. While creators and administrators expressed the same preference level of the group (small), other characteristics of the group disagreed: administrators wanted to work in homogeneous, with the consent and knowledge, skills and composition, and administrators in heterogeneous conflicts with existing provisions of the existing groups.

Table 5. The key features of group for a knowledge creation.

Knowledge type	Administrator	Creator
	Group	
Explicit Tacit	Small, big, homogeneous, approval, chemistry, composition of knowledge and skills	Small, homogeneous, heterogeneous, approval, conflicts, chemistry

Table 6 presents the affect of different type of a group on creativity and knowledge creation.

Table 6. Group influence on creativity.

Group type	Creativity type		
	Analyzing	Combining	Changing
Small	+	+	+
Big	+	+	+
	−	−	−
Homogenous	−	−	−
	+	+	+
Heterogeneous	+	+	+
Chemistry	+	+	+
Approval	+	+	+
	−	−	−
Conflicts	−	−	−
Composition of knowledge, skill, experience	+	+	+

Big groups and approval of existing ideas or opinions affect creativity and knowledge creation in two ways – it can increase creativity when there are more ideas, experience, skills and knowledge and everybody approve presented items, but on the other hand it can be very difficult to communicate, cooperate and work together. Also, if everybody accept all ideas, there will be no balance of "a true view".

Conflicts affect creativity and knowledge creation negatively, because usually it is destroying process and does not result fruits. Summarizing it could be stated that influence of different types of a group on creativity and knowledge creation is dual – it affects differently two employee groups and their knowledge and creativity in two different ways.

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3.3   Time Influence on Creativity and Knowledge Creation

Project based activity results new tasks, which differ in their different durations, level of complexity, clarity and content of tasks simultaneously. The task is one of the strongest catalyst of knowledge creation and creativity. Exciting and challenging tasks leads opportunities to self-realization, the creation of new ideas and results, innovative products or services (Table 7).

Table 7. The key factors of time for a knowledge creation.

Knowledge type	Administrator	Creator
	Time	
Explicit/tacit	Limited, enough, one task at the same moment, special time for a task	

Time is one of the factors that can affect negatively creativity and knowledge creation. If it is enough time the creativity will be increased. But the lack of a time, too many tasks at the same time will decrease analyzing creativity and knowledge creation.

On the other hand enough time is useful for a analyzing creativity, because a lot of researches can be implemented, but it is negatively connected with combining and changing creativity. Too less as well as not limited time make a negative impact.

Summarizing it could be stated that influence of different types of a time on creativity and knowledge creation is dual – it affects differently knowledge and creativity in two different ways (Table 8).

Table 8. Time influence on the creativity.

Time type	Creativity type		
	Analyzing	Combining	Changing
Limited	+	+	+
Non limited	−	−	−
Too less	−	−	−
Enough	+	−	−
One task at the same time	+	+	+
Several tasks at the same time	−	+	+
		−	−

4   Conclusions

Internal factors are essential for a creativity and knowledge creation in a creative organization. The research results show that the task, group and time are the core dimensions what enhance creativity and knowledge creation. They influence these processes accordingly different type of employees, knowledge and creativity. Administrators and creators willing to create tacit knowledge should be given the same tasks, while creators should be provided with routine, simple, complex and clear task in order to create explicit knowledge. Groups' characteristic is the same to for creation explicit and tacit knowledge in two different employee groups. And the time characteristics are the same for both employee groups and knowledge types. Finally assessing the impact of internal factors on a creativity it was detected that the task makes an positive impact on a all types of a creativity while the conflicts in a group usually make negative impact. The time limitation and abundance, several tasks at the same time negatively affects creativity as well.

Also some limitations of the survey could be defined:

- Just the main types of factors (task, group and time) were assessed. No detailed characteristics of each factors were investigated.
- It was a qualitative research. A quantitative research could present deeper insights, relations, connections among different types of factors, employees and creativity.
- The research was conducted in a specific industry – creative industry and in a limited geographical area – Lithuania. The repetition of the survey in different industries and countries could to validate results of this survey as well to reveal new insights.

Future research can be implemented evaluating the impact of the internal factors and the other stages of knowledge processes, assessing individual and organizational creativity and the impact of internal factors on them.

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