Identify Factors Affecting Organizational Creativity: A literature review

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ABSTRACT: In today’s business environment, one of the essential elements to an organizational success is adaptability, which is introduced as people must be able to accept changes and so takes creativity and innovation. To encourage creativity organizations need to create a climate that supports and enables the creative thinking of employees. In other words, organizations must try to remove barriers that might impede creativity and enhance the factors that enable creativity. For more understanding of creativity, this article attempts to bring into business setting a conceptual framework, which is supported by prior literature. So we review writings in an attempt to clearly identify the factors that influence organizational creativity and hence that need to be taken into consideration when managing creativity in organizational setting.

Keywords: Creativity, Organizational creativity

INTRODUCTION

Creativity is an important issue in management research (Shalley et al., 2004). Increasing global competition, coupled with rapidly changing technology and the through the respondents' shortening of the product life cycle, has made corporations more vulnerable to failure than at any time in the past. People's creativity can be affected by various attributes including individual personality (Amabile, 1988, 1996a), social environment and working environment (Amabile, 1996b, 1997). In this era of globalization and competition, creativity and innovation are considered to be key factors for survival, success and excellence of organizations (Cook, 1998). While creativity is generally of three types, consist of: individual creativity, group/team creativity and organizational creativity, in this study we focus only on organizational creativity. Likewise, innovation is also classified as incremental innovation and radical innovation. Organizational climate, organizational culture, leadership style, resource and skill, and structure and systems are five factors that affect organizational creativity (Andriopoulou, 2001). Innovation friendly strategy, structure, top management style, middle management support and effective modes of managing innovation are five factors that affect organizational innovation (Khandwalla and Mehta 2004). Knowledge and learning play critical roles in quality creation and value innovation. While single loop and double loop learning are useful for incremental innovation, triple loop learning is important for radical innovation (Wang and Ahmed, 2002).

LITERATURE REVIEW

Definition of creativity

Before moving into the body of the literature review it is useful to define the terms creativity and organizational creativity.

The Encyclopedia Britannica defines creativity as:

“The ability to produce something new through imaginative skill, whether anew solution to a problem, a new method or device, or a new artistic object or form”.

The Wikipedia definition of creativity:

“The ability of a person to be creative, participate in creating or be useful in a creative network of other people”.

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Cook (1998) considered creativity as an element of competitive advantage for organizations. The most profitable new products will be those that meet the customer needs more effectively than the competitor's products, and are therefore preferred by more customers (Mc Adam and McClelland, 2000). Innovation and creativity benefit companies beyond direct sales growth or efficiency improvements. A company that establishes an effective creativity and innovation process is also likely to realize social benefits that arise from team working and employee motivation (Cook, 1998). Amabile (1997, 1998) defines creativity as the process involved in developing an idea for a new product. Although the fundamental research on creativity dates back to 1960, by the 90s scholars had started appreciating its value in competitive advantage.

Basadur et al. (1982) divide the creativity literature into three streams: those belonging to the individual, those related to their organization and those intended to identify enhancements gained from training and development. The first stream focuses on identification of characteristics carried by more creative people (Torrance, 1972; Wang et al., 1999; McIntyre et al., 2003; Audia and Goncalo, 2007). A number of researchers have investigated importance of creativity to organizations from different points of view. As a result, a variety of elements have been chosen. Some of these researchers have focused on individual characteristics such as entrepreneurship (Drucker, 1985), and intrinsic motivation (Amabile, 1989). Others have assessed result of the creative process such as novel solutions (Johannessen, Olsen, and Lumpkin, 2001; De Bono, 1970).

**Model of Organizational creativity based on the literature**

**Enhancing Creativity**

Andreopoulos and Lowe (2000) mention ‘perpetual challenging’ as a method to enhance organizational creativity. The process of perpetual challenging in creative organizations occurs through adventuring, overt confronting, portfolioing and opportunising. Through three processes of adventuring, namely, introspecting, scenario making and experimenting, individuals are encouraged to explore uncertainty so that they can generate innovative solutions. Incremental risk taking and mistake making are part of experimenting. Overt confronting (conceptual confronting and contextual confronting) refers to the deliberate set of work related debates used among employees so that their creative thinking is fully utilized. In portfolioing, i.e. simultaneous portfolioing, sequential portfolioing, conceptual portfolioing and contextual portfolioing, creative employees are encouraged to get involved in a diverse range of projects or teams related to projects. Opportunising refers to the process through which creative employees identify and get involved in projects which are considered as commercially or creatively interesting. Creative organizations need to be skilled at creating, acquiring and transferring knowledge and modifying behaviors by using these methods to reflect new knowledge and insights.

**Obstacles to Creativity**

Jalan and Kleiner (1995) claim that there are obstacles to the full development of the creative potential of both organizational and individuals and there are methods to overcome these obstacles. Recent popular developments for developing creativity are brain skill management program, use of fisher association lists, game playing in small groups and establishing a reward for creativity. It is equally important to implement proposed solutions to determine its effectiveness for solving organizational problems. Mortinier (1995) suggests that in order to achieve competitive advantage, a product innovation matrix should be developed to help marketing and technology staff to think in terms of innovation for the customer. Risks need to be managed from the beginning by identifying them, assessing their likelihood and possible impact and preparing an overall action plan to deal with them. Projects which exceed budgets cost and time scales, projects that are overrun the budget by more than 100%, and project which had been major failure need to be dealt with. Sometimes unsuitable projects need to be discouraged so that further damage is minimized.

**Definition of organizational creativity**

Organizational creativity is not the simple aggregate of all members' independent Creativity. It is a function of creativity of individuals as group members within an organizational setting, which is relevant to their collective strategy and goal (Woodman, Sawyer, and Griffin, 1993). They define organizational creativity as “the creation of a valuable, useful new product, service, idea, procedure, or process by individual working together in a complex social system”. Organizational creativity:

“the creation of a valuable, useful new product, service, idea, procedure or process by individuals working within a complex social organization”. (Woodman, 1995)
Determinants of organizational creativity

Five factors, namely organizational climate, leadership style, organizational culture, resources and skills, and structure and systems of an organization affect organizational creativity (Andreopoulos, 2001). While Amabile (1997) has demonstrated the relationship between individual creativity and organizational innovation, Woodman, Sawyer and Griffin (1993) have demonstrated the relationship between individual, team and organizational aspects of creativity. This paper so contends that it may be helpful to explore the concept of organizational creativity by reviewing five major organizational factors that be highlighted in literature, includes:
1. Organizational climate;
2. Leadership style
3. Organizational culture
4. Resources and skills
5. Structure and system of an organization.

**Organizational climate**
- Participation
- Freedom of expression
- Performance standards
- Interaction with small barriers
- Large number of stimuli
- Freedom to experiment
- Building on earlier ideas

**Leadership style**
- Participative
- Leader's vision
- Develop effective groups

**Organizational culture**
- Open flow of communication
- Risk-taking
- Self-initiated activity
- Participative safety
- Trust and respect for the individual

**Resources and skills**
- Sufficient resourcing
- Effective system of communication
- Challenging work

**Structure and systems**
- Long-termism
- Flat structure
- Fair, supportive evaluation of employees
- Rewarding creative performance

Figure 1. shows details of these factors

**Organizational climate**
It is important to distinguish between organizational climate and culture. An organization’s culture concerns the values, beliefs, history and traditions reflecting the foundations of the organization. Culture is long standing, deeply rooted and often slow to change. An organization’s climate, however, refers to the recurring patterns of behaviour exhibited in the day to day environment of the organization, as experienced, understood, and interpreted by the individuals within that organization.
Schein (2000) defines organizational climate as "cultural artifact resulting from espoused values and shared tacit assumption"; to understand it fully, we must explore deeper and study values and assumptions. Schein (2000) advises that, if an organization's new vision and new values are not attuned with its existing assumptions and values, it would be a waste of time. However, "when such assessments are done, it is usually found that there are elements in the culture that can be used positively to create new ways of working that are more effective, and that is far preferable to 'changing' the culture." According to Gilley and Maycunich (2000), work climate is a by-product of the organization's culture and structure; a positive work climate that encourages dialogue between all members within an organization; shared purpose and sense of belonging, is developed upon a foundation of collaboration, togetherness, and teamwork, respect and reciprocity in a work setting.

A number of other management researchers approach the significance of values upon organization from different perspectives. Leonart and Swap (1999) assert that, values can improve as well as impede an organization's creativity. In Drucker's (1993) contention, the value system of an organization is determined by the nature of its task. Senge (1990) recognizes shared values as an assurance to the efficiency of a learning organization.

To define climate, they have adopted the following two approaches: "(I) the cognitive schemata approach, which conceptualizes climate as 'individuals cognitive representation of proximal environment... expressed in terms of psychological meaning and significance to the individual' (James and Sells, 1981); (2) the shared perception approach, which defines organizational climate as 'the shared perception of organizational policies, practices and procedures' (Schneider, 1990). Anderson and West (1998) believe that the appropriate level of analysis at which to examine shared perception of climate is the proximal work group; i.e. "the permanent or semi-permanent team to which individuals are assigned, whom they identify with, and whom they interact with regularly in order to perform work-related tasks." Though individuals may have joined more than one team, attention is specifically given to the group within which they carry out their everyday tasks and activities.

Organizational climate could be determined by measuring the level of participation, freedom of expression, performance standards, interaction with small barriers, large number of stimuli, freedom to experiment and building on earlier ideas. Creativity is a key element to competitive advantage. When the context is right, creativity techniques can play their role in raising the level and type of creativity within organization (Peter Cook, 1998). The corporate research foundation lists six key drivers for future success, namely structural flexibility, innovative power, international orientation, human resources, growth markets and quality of management. Creativity is 80% context and 20% techniques (Peter Cook, 1998). Creative strategy can be explained by a three legged stool analogy taking creative strategy on the top, and culture, leadership and values, structure and systems and skills and resources being the three legs of the stool. Organizational culture should be developed to encourage open flow of communication, risk taking, self initiated activity and teamwork. Moreover, management should trust and respect its employees.

In summary, the literature suggests that the climate required for enhancing creativityin the workplace is that which promotes the generation, consideration and use of new products, services and ways of working. This climate supports the development, assimilation and utilization of new and different approaches and concepts (Isaksen et al, 2000). To enable such a climate consideration must be given to participative safety, support, appropriateness of vision and the establishment of performance standards (West, et al. 1990) and Ekvall's (2002) dimensions of challenge and involvement, freedom, trust/openness, idea time, playfulness, conflict, idea support, debate and risk taking. Although dimensions may vary by name and description there exists a commonality among the researchers of the climate requirements that will support and enable organizational creativity.

**Organizational culture**

To encourage creativity in organizations a key challenge is to create an culture whichnourishes it. Organizational culture, as stated previously, concerns the values, beliefs, history, traditions etc reflecting the foundations of the organization. An organization's culture is long standing, deeply rooted and often slow to change. Organizational culture reflects the things people value, the way people within the organization generally relate to one another, share ideas and work together on a daily basis to get things done. It includes the shared view of directions and values, priorities, commitments and feelings of loyalty and personal worth within an organization. Organizational climate, on the other hand, refers to the recurring patterns of behaviour exhibited in the day to day environment of the organization, as experienced, understood, and interpreted by the individuals within that organization. It is an important differentiation although there is often an overlap between the two. A positive organizational culture is essential for an organization to be successful. It also provides personal work satisfaction, supports emotional and physical well-being and generates high morale as well as positive perceptions by others.
Andriopoulos’ (2001) literature review of organizational creativity categorizes organizational culture and organizational climate into two different determinants that enhance creativity in a work setting. However, Gilley and Maycunich (2000) argue that, work climate is a by-product of the organization's culture and structure. They believe a positive work climate that encourages dialogue between all members within an organization; shared purpose and sense of belonging, is developed upon a foundation of collaboration, togetherness, and teamwork, respect and reciprocity in a work setting. As Williams and Yang (1999) have observed, to compete more successfully in an increasingly dynamic business environment, organizations must invest their economic and spirit resources into open experimentation that allow mistakes and failures and into creativity-relevant project.

Barry (1997) defines the creative organization as an organization that supports the creative process with its motivational environment. In order to create a high level of positive working morale, organization must practice holistic management, which takes care of both the individual and the organizational needs, and move beyond manipulation to a level of nurturing the individuals.

**Structure and system of an organization**

To structure an organization for group creativity, Amabile (1998) advocates for matching people to the right projects and giving freedom around work process. On the other hand, she warns that a common way managers kill creativity is by bringing together homogeneous teams. It may be efficient and helpful to high morale, but "everyone come to the table with a similar mindset. They leave with the same."

Amabile (1998) advises that a mutually supportive group with a diversity of perspectiveand background is a pre-requisite for a team to come up with creative ideas. But, with diversity alone is not enough, a team needs three other common qualities: the members must share exhilaration over their common goal; they must be willing to assist other team partners through difficult periods and obstruction; and, every member must recognize the unique knowledge and perspective other partners bring to the group. Kao (1997) asserts that, the twin imperatives of capital growth and creative freedom in today's business environment have loosened the ties joining people, places and institutions, and have given rise to a culture of the temporary.

A summary of the literature suggests that employees will be most creative when the organizational structure and systems support people to feel motivated primarily by the interest, satisfaction and challenge of the work itself. The structures established can make a big difference in fostering creativity. Setting up work groups so that people will stimulate each other and learn from each other, so that they're not homogenous in terms of their backgrounds and training is important. Assignments to projects can make a big difference, too. To encourage creativity people need work that they're going to find appropriately challenging - not so far out of their skill range that they just can't do anything, but certainly something that's going to get them to operate at the top of their skill level, allowing them to really stretch and grow. That level of challenge is very important for intrinsic motivation.

The overall organization atmosphere needs be open to creativity, from the highest levels. A collaborative atmosphere where people are continually sharing ideas and helping each other with their work, rather than competing with each other is necessary. Whatever reward systems are in place should reward and recognize creative work. Recognizing the value of creativity in that way sends a powerful message of support - and helps people stay passionate about their work, whatever it may be.

**Resources and skills**

Resources and skills are the basic tools an organization has at its disposal to complete its business. These can include the people, capital, machines, equipment, materials, patents, and copyrights that an organization has acquired for use in its operations. The quantity and quality of intellectual assets available to the organization is also a key resource. Resources and technology can impact the feelings and attitudes of people in organizations by either enhancing or inhibiting appropriate creative behaviors. (Issaksen et al, 2000). A lack of key resources can often frustrate and provide barriers to creative thinking and limit initiative. Access to, and effectively using, resources can be a stimulus for creativity and change.

Amabile (1998) states that time and money are the two major resources that can either kill or encourage organizational creativity; managers therefore need to manage these resources with great thoughtfulness. She advises that while it is the duty of managers to determine the funding, people, and other resources that a team legitimately needs to complete a project, they must understand where the threshold of sufficiency is; a balanced point upon which creativity does not improve when more resources are added, but restricted when less resource is put in.

The work of an organization requires people to have an appropriate mix of skills, knowledge and capabilities to perform the work efficiently and effectively. The work undertaken influences the selection of who needs to work on what jobs. The demands made by these jobs influence the behaviours required by the
organization to accomplish its purpose, and in turn, affects the climate. Individuals’ skills and abilities are the capabilities and knowledge held by individuals within the organization. They determine the level of talent available to the organization to meet work requirements. If a workplace is filled with highly qualified people, with sufficient talent to contribute to the purpose of the organization the climate will be positively affected. If creativity is concerned with the generation of ideas while team and organizational creativity is concerned with both the generation of ideas and the implementation of these ideas this would make creative people an essential element of the organizational creativity process.

Leadership style

As per Peter Cook (1998), a fundamental challenge leaders face in the 21st century is how to profit from individual potential and then leverage it so that it produces organizational innovation and excellence. Creative organizations should attract, develop and retain creative talents if they want to remain competitive. Leadership styles conducive to creativity are participative leadership, leader’s vision for creativity and ability to develop effective groups. Cook proposes that leaders must effectively communicate a vision conducive to creativity through any available formal or informal channel of communication and constantly encourage employees. Leaders should also be in a position to balance employee’s freedom and responsibility (Amabile, 1998). Individuals with strong leadership will consider themselves to have more potential for innovation than individuals with weak leadership and individuals with strong potential for innovation and creativity will be more likely to practice them when they perceive strong support from work place than weak support (DiLiello and Houghton, 2006). Their model suggests encouraging self-leadership among organizational members while building organizational environment to support innovation and creativity.

Most discussions on the role of leadership in organizational creativity are inclined to be prescriptive; outlining the ideal leadership traits that can enhance creativity, without considering the development phase an organization is going through at a particular time.

Schein (1995) asserts that, organizations have different needs and problems at different stages in their life cycle; it is therefore critical for a researcher of leadership to study his/her subject within the organizational dynamics at a given time. Any leader who aspires to build a creative organization effectively, will benefit from Schein’s following role functions assigned to leaders who steer their organizations at different stages of their revolution; at the early stage of organizational creation, the leader play the role as animator who supplies the energy needed to get the organization off the ground; once an organization is able to survive, the leader changes his/her role to a creator of culture who transfers his/her beliefs, values, and basic assumptions to the mental models of the employees; at the matured stage of organization when institutionalization is needed, a leader has to act as a sustainer of culture which is critical to the organization’s further growth; at the changing stage, leader must assume the role as a change agent, to enable the organization to acquire new concepts and skills, and at the same time unlearn things that are no longer relevant to the organization’s new development. In advocating for a development organization which emphasizes more on employee growth for greater organizational renewal than a learning organization, Gilley and Mayciniuch (2000) encourage organizations to free their employees from the fear of failure or punishment, so that they can benefit from the employees’ creativity for cost saving, new product development, improvement of existing products, streamlined processes, elimination of redundant procedures. A synergistic relationship between leader and employees is needed to foster a favorable work environment dedicated to continuous improvement.

SUMMERY AND CONCLUSION

This review has attempted to find common patterns and themes in the literature regarding the factors that enhance organizational creativity. Although the dimensions – organizational climate, organizational culture, organizational structure and systems, leadership and resources and skills - were explored individually it is important to acknowledge that the dimensions are somewhat overlapping and the boundaries between them are blurred. In fact, it is the sum of the whole rather than the individual parts that enhance creativity in organizations. Each dimension on its own cannot support creativity. Organizations are complex social, political and technical systems and no simplistic formula for becoming more creative can be applied.

Organizational creativity is linked to a risky balance of complexity, compromise and choice. The creative organization needs to be flexible while controlling risk, but at the same time provide the freedom to search for the ‘new’ through learning and experimentation. I have shown that there is evidence that supports the view that an environment that is conducive to creativity is critical and is linked both to the culture, the climate, and the physical aspects of the environment. There is a systems view of creativity which suggests that creative outcomes are produced in a creative environment, where creativity as a culture is encouraged and rewarded. In this context,
Creativity is not confined to a few individuals, but all employees are encouraged to be creative for the benefit of the whole. In organizations, creativity is facilitated when individuals are given maximum discretion in how they organize their work, when self-efficacy is strong, and when information is of high quality. Individual and organizational creative development is supported by structures and processes that ensure permeable boundaries, value increasing complexity, and provide safe psychological spaces.

REFERENCES