Creativity in Organization: a Literature Review

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Abstract

This paper aims to report the results of a literary review on research in the field of creativity. The study was conducted systematically on 35 articles in the field of creativity using systematic review methods.

The results show that the research area of creativity with the object of general organization has been widely practiced. Most of these studies utilized qualitative methods. In contrast, similar studies within the context of creative study is still limited, both in qualitative research and in quantitative research. Results show the importance of research on creativity, especially in the creative industries. The direction of future research, put forward by researchers is expected to extend understanding on creativity in creative industries.

Keywords: **Creativity, Creative Industry, Systematic Review, Research**

I. INTRODUCTION

In the current open market era, every company, regardless is required to be ready to compete. Many firms must be able to compete by creating innovative products. Researchers also argue that innovation is one of the key variables for an organization to survive and compete in areas of increasingly high competition [2]. Innovation is the process that begins with the emergence of new ideas, and is called creativity [3]–[5].

Discussion of creativity by academics and practitioners has evolved over the last twenty years [4], [6], as evidenced by the increasing number of studies that addressed creativity over that period. Research on creativity has evolved, from the scope of the discussion and research methods. This paper is a literature review that aims to look at the development of research in the field of creativity. This paper is divided into five parts. The first is about rationalization and the level of interest of creativity being discussed in the business environment. Second, is about the method of implementation of a literary review. Third, is the result of a creativity literary review in general, individual creativity, group creativity, and organizational creativity. The last section closes with implications for the direction of further research objectives. The results of this study are expected to lay a foundation for further studies in the field of organization creativity.

II. METHODOLOGY

In the first step, the researcher determines the research question and determines the key words of creativity, organizational creativity and creative industry. This study aims to determine the area of research in the field of creativity in the industry, so the research questions to be answered include:

1. What areas have discussed creativity in the industries today?
2. What research methods are used?
3. How is the research conducting?

Articles were obtained from journals that have been subscribed by UGM and have been indexed SCOPUS through www.ugm.lib.ac.id. All the the articles obtained are then considered according to an inclusion criteria (criteria for articles that can be included for a literature study in this article).

The second step determines the inclusion criteria and exclusion criteria. There are:

1. Scientific articles that discuss about creativity in general and creative industries
2. Articles are written in English
3. Articles published between 1900-2015

Based on these previously determined criteria, 35 articles which are considered relevant to the topic of creativity, are identified. The articles found are then mapped in a tabular form with the names of authors, published year, research objectives, research methods, findings and component categories.

III. RESULTS

III.1. Definition of creativity

Some researchers have expressed their opinions about creativity. References [3] and [7] argue that creativity is the process of producing new and useful ideas by an individual or some individuals working together in a small group. References [5], [8] and [9] have somewhat different opinions about the output of creativity. Those scholars argue that the output of creativity can be either new products, new services, new ideas, or new processes which are useful to an organization. Other scholar view regard the definition from different perspective. References [3] and [7] define creativity at the individual and group level, while [4], [9] and [5] define creativity from an organizational level. Nevertheless that all of the stated researchers use the same keywords, that indicate the output produced by the process should have a level of novelty and usefulness for the organization.

Creativity is an important factor in innovation process of a company. References [10] argues that creativity is the first step in innovation, which is the implementation/realization of new ideas appropriate to, and in accordance with, the needs of the organization. A similar opinion is also expressed by [3], [4] and [5], which generally assert that creativity and innovation are

inseparable because innovation is based on creative ideas being the main element. Some studies have argued that creativity and innovation can often replace each other, except in terms of the discussion of activities and the resulting output as in [7] and [6]. From here it can be concluded that innovation is the implementation of creative process, where the output of innovation can be in the form of product, service and new processes [5]. In an organizational context, creativity and innovation are two concept that are equally important and somewhat inseparable to the organization.

Based on a review of the various studies that have been done, the researchers discuss the creativity on different levels, including: individual, group and organizational creativity. In the next section each level of the discussion of creativity is elaborated.

Individual Creativity

Individual creativity is a process of creating new ideas by individuals that are useful for organizations [3], [4].Researchers argue that there are several factors that may affect individual creativity, including:

1. Personality
    Personality is a factor which is attributed to special abilities. Personality that supports creativity includes: self-confidence, being interested in a wide range of fields, being open minded, having the ability to provide solutions and being a risk-taking, [3], [4], [11], and [12]. Researchers agree that personality correlates with individual creativity.
2. Cognitive Ability
    Some cognitive abilities associated with creativity include: fluency in communication, fluency in action as said in [4], fluency in interaction, as in [11], [12], and [13], and in generating ideas [4], [11]. Researchers assert that cognitive ability correlates with individual creativity.
3. Motivation
    Motivation is something that encourages someone to do something. Motivation itself consists of two forms: internal motivation arising from self-motivation [3], [11], [12], [14] and external motivation, i.e. encouragement from outside one's self [7], [11], [13]. Researchers have similar opinion that internal motivation correlates with individual creativity, however opinion is divided in terms of external motivation.
4. Knowledge
    Researchers share the opinion that knowledge plays an important role in the creativity of individuals. Knowledge is good, both in terms of knowledge related to the field and specialized knowledge that causes a person to be distinguished [3].

Group Creativity

Group creativity is a process of creating new ideas that are useful to organizations by individuals who are gathered in a group [4]. According to the researchers, group creativity is influenced by many factors, including:

1. Individual creativity
    The group is a collection of multiple individuals who interact together in a group. Creative individuals are important in a group or group, but there are other factors that are important: composition, characteristics, leadership patterns in groups and processes that occur within.
2. Group composition
    Group creativity is influenced by the diversification or diversity of backgrounds and areas of its members. Groups with members with diverse backgrounds as well as diverse fields influence the process of finding solutions to problems [4], [11].
3. Group process
    The types of interactions that exist within the group, the strategy for solving problems, the forms of interpersonal communication, the values applicable within a group are process-related factors that affect the creative process within a group [4], [11], [16]. The processes that occur within the group correlate with the creativity that is formed within the group.
4. Group characteristic
    Degree of cohesiveness and group size also affect group creativity. Groups of a smaller size will be able to produce different levels of creativity if compared to bigger group [4], [11].

Organizational Creativity

Organizational creativity has a wider perspective than individual creativity. Organizational creativity is defined as "the creation of a valuable, useful and new product idea, procedure, service or process by individuals working together in a complex social system" [4]. Similar opinion was also expressed that at the organizational level, creativity is a process to finds a new idea with which innovation can occur [5]. From this can be drawn the distinction between individual creativity and organizational creativity. Individual creativity focuses on the process of generating new ideas [3], while organizational creativity focuses on broader outcomes of creative products (goods and services), new methods and processes [4]. The creativity of the organization to produce its own creative and innovative products is influenced by many variables such as individual creativity [7], [17]; group creativity [4], [18] and [13]; environment [4], [7], [11], [18], [19] and knowledge management system [5], [11], [15], [19].

TABLE 1
RESEARCH MAPPING OF CREATIVITY

	Size	Methods	Level		
			Individual	Team/group	Organization
Creative Industries	Large	Qualitative	Bridgstock (2011); Antonenko & Thompson (2011)		Amabile (1996); Creigh-Tyte (2005); Cunningham (2011); Karpova et al. (2013)
		Quantitative			Amabile et al., (1996)
	Small	Qualitative	Bridgstock (2011); Antonenko & Thompson (2011)		Amabile (1996); Creigh-Tyte (2005); Cunningham (2011); Karpova et al. (2013)
		Quantitative	Yusuf & Nabeshima (2005)		Amabile et al., (1996)
Others	Large	Qualitative	Amabile (1988); Woodman et al., (1993); Amabile (1996); Gurteen & Association (1998); Kaufmann (2003); Borghini (2005); Sternberg (2006);	Amabile (1988); Woodman et al., (1993); Kazanjian et al., (2000); Borghini (2005); Chandra and Neelankavil (2008); Harvey (2013)	Amabile (1988); Woodman et al., (1993); Cook (1998); Gurteen (1998); Koh (2000); Andriopoulos (2001); Martins and Terblanche (2003); Borghini (2005); Sternberg (2006); Amar and Juneja (2008); Chandra and Neelankavil (2008); Klijn and Tomic (2009); DiLiello & Houghton (2009); Andersen & Kragh (2013)
		Quantitative	Griffiths-hemans and Grover (2006); Cheung et al., (2008); Coelho et al., (2011); Gielnik et al., (2012); Cheng et al., (2013)	Choi and Thompson (2005); Dayan et al., (2011)	Amar and Juneja (2008); Azma and Mostafapour (2011); Chae (2015)
	SME	Qualitative			
		Quantitative	Heunks (1998); Gumusluoglu and Ilsev (2009); Shin et al.,(2013)	Shin et al.,(2013)	Amabile et al., (1996); Heunks (1998); Gumusluoglu and Ilsev (2009); Shin et al., (2013)

Environmental factors that influence organizational creativity can come from internal organizations as well as from external organizations [4]. The external environmental factors of an organization are factors in which the organization has no ability to control them, including turbulence technology, state economic conditions, values and prevailing views of society [4], [11]. Internal environmental factors of tan organization are factors that can be controlled by organizations such as organizational culture [16], [18], [20]; climate [4], [11], [16], [18], organizational structure, resources owned (technology, information, funds, time, creative individuals, knowledge) [5], [15], [21].

III.2. Research Map

Based on Table 1, it appears that research related to creativity has been done, especially regarding the creativity of individuals in various organizations. The method used have also been varied, qualitative, quantitative and combined methods. Qualitative individual creativity research was pioneered by [3]. Research with the same method and scope was also carried out by [3], [4], [7], [11], [12], [15], and [22]. All of these researchers continue to emphasize the variables that affect the creativity of an employee or worker in a large industry, where the variables can be a variable related to the job as well as additional capabilities that make the worker special abilities.

Qualitative individual creativity research has also been conducted specifically on creative industries, as performed by [23] and [24]. Reference [23] specifies skills needed by a person to succeed in the creative industry, while author [24] produced variables that were used to measure creativity in the web design industry.

Individual creativity research with quantitative methods has been conducted by many researchers. Authors [13], [14], [25] have conducted specific research on small and medium industries. Authors [10], [21], [26]–[28] have undertaken quantitative individual creativity research on organizations in general. Quantitative methods, which mostly used survey methods to prove hypotheses by statistical tests.

Research on creativity then, develops at the team or group level. Group-level research has been conducted on various research objects using qualitative and quantitative methods. Research at the group level was qualitatively undertaken by [3], [4], [11], [20], [29], and [30]. Their research was conducted using the object of the organization in general. Reference [13] performed quantitative research specifically on small and medium industries. They examined the influence of small industry ownership style on worker creativity. Quantitative group level research has also been conducted on organizations in general by [31] and [32]. [31] using an experiments to looking at the effect of new member productivity on group creativity. It turned out that the addition of a productive group member had a positive effect on the old group members. While [32] examines the effect of team experience and team members' stress on creative products.

Research on organizational creativity has been largely associated with innovation, and some researchers even consider creativity and innovation inseparable, as in [4], [7], [18], so that creativity and innovation are thought to be influenced by the same variables. Organizational creativity is required by all organizations, both small and large. Research on organizational creativity addresses many major industry issues qualitatively, as in [3]–[5], [9], [11], [12], [15], [16], [18], [20], [33]–[36]. Specific qualitative studies are rarely performed, such as research done by

[37]–[39]. They specifically conducted qualitative research on creative industries in different countries, while [7] made small and medium industries as the object of their research.

References [5], [7], [19], [40], [41] have conducted quantitative research on a wide variety of large industries in general. Research with more specific objects in small and medium industries were done by [7], [14], [25], [42], and [43]. Research on creative industries have been done by several researchers, i.e. :[7], [44], [45]. [7] conducted research on the influence of the organization's environment on creativity and the instruments has been empirically tested on various organizations. [44] and [45] studies were more directed to how creative industries can become more innovative in terms of macro policy, did not discuss the variables that influence it.

From Table 1, it can be seen that a lot of empty space can be filled by researchers in the field of creativity, both with qualitative and quantitative methods. The amount of creative researches in small and medium industries, as well as creative industries at the individual, group and organizational level is still very small. Though research on creativity is far reaching. Creativity can be attributed to other studies, in areas of innovation [4], [9], [13], [15], knowledge management [23] - [25], other fields [8], [46], [47].

IV. CONCLUSION

Based on the findings and the critical review, it can be concluded:

   a. There is need deeper discusses the differences of individual characteristics of workers in general industries, SME's and creative industries to be explored.

   b. There is wider opportunities area for discussing in greater detail variables that affect individual creativity in creative industries.

   c. There is still limited research in subject of how to measure creativity in group and organizational level in creative industries, both in qualitative and quantitative methods.

   d. There is still limited research that discusses relationship between organizational creativity and company performance.

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