Linkage between Knowledge Sharing, Organizational Culture, Employee Creativity in Manufacturing Organizations

Naima Andleeb¹, Md Fauzi Ahmad², Mohd Fahrul Hassan³, Nor Aida Abdul Rahman⁴, Arman Shah Abdullah⁵, Mohd Nasrun Mohd Nawi⁶

¹²Faculty of Technology Management, University Tun Hussein Onn Malaysia (UTHM), Parit Raja, Batu Pahat, Johor, Malaysia.
³Faculty of Mechanical Engineering, University Tun Hussein Onn Malaysia (UTHM), Parit Raja, Batu Pahat, Johor, Malaysia.
⁴Aviation Management Department, Universiti Kuala Lumpur
⁵Faculty of Technical and Vocational, Universiti Pendidikan Sultan Idris, Tanjong Malim, Perak, 35900, Malaysia
⁶School of Technology Management and Logistic, College of Business,Universiti Utara Malaysia, Malaysia

¹ naima@uthm.edu.my
² mohdfaizi@uthm.edu.my
³ fahrul@uthm.edu.my
⁴ noraida@unikl.edu.my
⁵ armanshah@fvtv.upsi.edu.my
⁶ nasrun@uum.edu.my

Corresponding author: mohdfaizi@uthm.edu.my

Abstract—Creativity relevant literature relevant is diverse in approaches. As a result, there has been a lack of cohesive theoretical understanding of how employee creativity operates and gets affected in organizations. The purpose of this paper is to develop a conceptual framework of employee creativity (EC) along with knowledge sharing (KS), organizational culture (OC), Motivation and towards employee creativity in manufacturing industry. The literature review demonstrates the importance of employee creativity in manufacturing industry. Ever increasing competitive environment requires more competent and creative workforce in manufacturing organizations. Critical issues in designing this framework is to facilitating the factors that contribute in employee creativity in manufacturing industries. The direction of current framework has been found from past literature. Anticipated outcomes from KS and OC in manufacturing industry include application of motivation as a mediator. A further empirical study will be carried out to examine the effect of the proposed framework and hypotheses. This paper provides a comprehensive framework that contributes the empirical evidence to the academicians, act as a platform to the manufacturing industry.

Keywords— Knowledge Sharing, Motivation, organizational culture, employee creativity, Manufacturing organizations

1. Introduction

In the current unpredictable competitive business environment, employee creativity and knowledge management (KM) have more and more been recognized to be critical for organizational success [1]. Scholars in varied fields, including strategic management, organizational studies and information systems, believe that effective capturing and making use of a firm’s collective knowledge and expertise can stimulate and facilitate creativity. Employee creativity is beneficial to both individuals and organizations. That’s why creativity research has been in focus for more than four decades. Extensive research on ‘creativity’ has been carried out for over 60 years [1] and the same in the discipline of management and psychology has exponentially increased for the last few decades [2]. Previous studies that are specific to employee creativity have adopted diverse and varied approaches. However, cohesive conceptual understanding of how employee creativity operates and gets affected in organizations could not be developed. The present study is an attempt in this direction [6]. The purpose of this article is to review prior research studies, based on synthesized review, to present an integrated conceptual framework of employee creativity and to identify the research gaps in this context so as to provide a concrete base for further creativity research. To sustain or remain successful organizations need to build a creative environment so creativity can be nurtured [7], [8]. Researchers like [9], [10], also reported that to maintain continuous growth and success, organizations need to support employee creativity need to manage knowledge in enhancing employee creativity knowledge sharing plays a vital role.

Knowledge Management is a precarious organizational resource that provides a viable competitive advantage in a dynamic and competitive era [8], [11]. To gain a competitive advantage it is required but inadequate for organizations to trust on recruitment and training systems only that focus on choosing the employees having specific knowledge, competencies, skills, and abilities, or helping employees in acquiring [12],[13]. Manufacturing organizations also consider how to transfer expertise and knowledge from the experts to novice’s employees [14].
That is, manufacturing organizations need to stress to more effectively feat knowledgeable resources that already part of the organization [15], [16]. As one knowledge-based activity, knowledge sharing is the fundamental means through which employees can contribute to knowledge application, creativity, and ultimately the competitive advantage of the organization [17]. Knowledge sharing between employees and within and across teams allows organizations to exploit and capitalize on knowledge-based resources [18], [21]. Research has shown that knowledge sharing organizational culture and motivation positively works to nurture employee creativity and resulting reductions in production costs, faster completion of new product development projects, team performance, firm innovative capabilities, and firm performance including sales growth and revenue from new products and services can enhance in manufacturing organizations [18], [23].

It should be considered that the difficulty of this era’s business environment forced the organizations to enhance their capabilities in response to environmental changes. On the other hand, social changes, rapid and challenging technologies, and the development of new mission in organizations made the necessity of flexibility and the preparedness to face the new situation inevitable. Therefore, novelty and innovation in organizations should be continued in order to survive and thrive them in the present era. This is because of stagnation and destruction prevention and demands suitable culture [24], [25]. Any organization can enhance its performance and productivity and take forward steps in order to achieve predetermined objectives through reforming its culture and enhancing its employee’s and organizational creativity [26],[27].

Motivation is a mediator on the relationship between KS, OC and employee creativity may acts to motivate employees towards creativity. This study draws on Social cognitive theory to explain how OC and KS influence employee creativity via motivation. SCT focuses on the extent to which an employee’s behavior is motivated and determined [28], [29]. Motivation refers to the drive to engage in an activity for its own sake in order to experience the pleasure and satisfaction inherent at work. Although it has been established that motivation has a positive influence on behavior to work in the organizations like manufacturing industries, therefore little attention has been given to the role of organizational behavioral studies including organizational culture, knowledge sharing and creativity in employees in motivation [6], [30]. As motivation is a product of situational conditions and considered as person’s characteristics [30], it is reasonable to assume that Organizational culture and knowledge sharing may shape motivation [6]. Researches on motivation paid more attention to environmental factors than psychological individual differences [28], [31]. To address the gap, Watanabe and Kanazawa examined the role of knowledge sharing and organizational culture in motivation. As predicted, the findings showed that both knowledge sharing and organizational culture significantly predicted motivation. On the basis of past findings that people who are high on knowledge sharing tend to find more meaning fullness and explore unfamiliar things, [22], [32] hypothesized that people who are open to do new and creative things tend to have a mastery-oriented pattern of thoughts, feelings, and behaviors and these patterns are conducive to motivation.

Environmental protection has become increasingly crucial for manufacturing organizations as they are pressured by competitors, communities, and the governmental authorities. To minimize environmental pollution, creativity can plays important starting from purchasing raw materials, manufacturing products, distributing products, selling products to disposing products. Industry plays a key role in the development of economic and social well-being in the Malaysian society. Industrial sector is the largest contributor to the country’s environmental pollution issues that need to be assessed, monitored, and rectified [22], [32]. Given that the industrial sector is significant to Malaysian society, there is a need to adopt different creative ways to deal with ever increasing competitive environment and environmental issues [6]. However, employee creativity and knowledge sharing are rarely adopted by manufacturing firms in Malaysia since many of them are not sure how important these variables are to sustain the business [28], [29]. This study targeted Malaysian industries that have direct effect on human health and environment [28]. Any efforts to minimize the environmental footprints of the industries are likely to strengthen environment protection and sustainable development. The rest of the paper is structured as follows. Section 2 presents the literature review. Section 3 illustrates the proposed conceptual model. Section 4 discusses the hypotheses development. Then, Section 5 outlines sample, data collection and measurements. The last section delineates the discussion and conclusion.

Organizational culture can contribute into the enhancement of employee creativity because it is the process that can break the status quo of traditional banking system and can bring new instrumental measures for manufacturing organizations [33]. Organizational culture also can contribute in a way that people can understand and change new factors regarding manufacturing industry [34]. While the new system also need to upgrade the organizations by implementing and rewarding [35]. Internal marketing should be another factor that can contribute in enhancement of employee creativity, if employees are willing to share knowledge so, keeping in view all these concepts of organizational culture, internal marketing and knowledge sharing we suggested this conceptual model or the study.

Empirical data collected on this model will provide the evidence for this study that will contribute to enhance employee creativity in Islamic banking. There are so many other factors that can considered as a research gap or novelty of this model like the way of selecting sample
and the mix results in different variable connections[36], [37]. So these variables have some inconsistent results, based on this gap supported by the literature different methodologies and techniques will be the part of this study later on.

2. Literature Review

Employee creativity is beneficial to both individuals and organizations. That’s why creativity research has been in focus for more than four decades [1], [38]. Extensive research on ‘creativity’ has been carried out for over 60 years and the same in the discipline of management and psychology has exponentially increased for the last few decades [4]. Previous studies that are specific to employee creativity have adopted diverse and varied approaches [1]. However, cohesive conceptual understanding of how employee creativity operates and gets affected in organizations could not be developed. The present study is an attempt in this direction. The purpose of this article is to review prior research studies, based on synthesized review, to present an integrated conceptual framework of employee creativity and to identify the research gaps in this context so as to provide a concrete base for further creativity research [35].

The studies for organizational behaviour of creative performance employees dominated creativity research for many decades, this research has begun to examine the effects of such KS and OC to EC while motivation is considering as a mediator. Most of this research has been conducted in behavioural laboratories and has followed motivation perspective. According to this perspective, the context in which an individual or employee’s creative task influences their motivation, which in turn affects creative achievement [39]. Individuals are expected to be most creative when they experience a high level of motivation that is, when they are excited about a work activity and interested in engaging in it for the sake of the activity itself [39], [40].

Under these conditions, individuals are free of extraneous concerns and are likely to take risks, to explore new cognitive pathways, and to be playful with ideas. Past studies provide support for the importance of motivation for understanding the creative responses of individuals or employees. Studies showed significant associations between measures of motivation and employee creativity [15], [41]. Motivation has been linked to creativity in work organizations as well. Therefore expected characteristics of an organizational culture that promote or support motivation to enhance creative achievement. In contrast, characteristics of the culture that restrict or constrain an individual's excitement in the work activities should reduce creativity [38], [42]. The study has focused on three antecedents suggested by previous research and theory as important determinants of EC are, OC, KS and motivation in manufacturing organizations in Malaysia.

Organizational culture is part of the organizational behaviour functions to encourage an organization to take up creative initiatives [15], [41]. Organizational culture comes from the philosophy, policy, and practice of human resource management [40]. Organizational culture helps an organization to execute programs to decrease carbon emission, gain carbon credits, and other areas pertaining to manpower, induction, performance, supervision, training and development, compensation, and reward management [39], [40].

Organizational culture is essential for organizations [4]. [40] stated that many firms implement culture and knowledge sharing to benefit their employees and financial performance. Besides the environment, knowledge sharing also increases the retention of talent pool [34]. According to [19], firms can gain substantial achievement of engagement, commitment, morale, work life quality and retention through fair and equitable organizational culture and opportunities to acquire knowledge. Many researchers have discussed what organizations could benefit from knowledge sharing and strengthens cultures of manufacturing organizations. Knowledge sharing can boost employees’ perceptions by cultivating positive knowledge sharing and work surroundings.

Literature demonstrates a model that highlights sufficient knowledge sharing is crucial at different levels as part of OB to incline the level of motivation thereby attaining employee creativity [26], [27]. Few studies have paid attention to the advantages of knowledge sharing and organizational culture. None of them has investigated the effect of OC and KS further on the on employee creativity. The present study investigate the influence of KS, OC to EC and motivation how these elements of organizational behavior behave in manufacturing organizations in Malaysia. This study would like to contribute to in manufacturing industry of Malaysia towards knowledge sharing and organizational culture to create the awareness in triggering employee creativity while improving the culture and knowledge sharing intentions.

3. Methodology

Various approaches of creativity appear as supplementary and complementary to provide better understanding of the employee creativity. However, employee creativity continues to appear as an elusive and complex phenomenon. Therefore, creativity needs to be studied from an integrated perspective. This article, based on the employee creativity, reviews a wide array of theoretical and empirical literature in this field of study.

For the purpose of reviewing the literature on employee creativity, relevant articles published during the period 1981–2013 were identified primarily by the way of search through ‘Business Source Complete’ and ‘Psychology & Behavioral Collection’ in EBSCOhost Database, and also through JSTOR Database, SAGE Database and ‘Google Search’ using a number of keywords including creativity, employee creativity, organizational creativity, creative
behaviour and creativity and innovation knowledge management, knowledge sharing, organizational behavior, organizational culture. Relevant online published papers, working papers, books of all sorts, theses and reports of all sorts were identified through the ‘Google Search’. In total, the abstracts of 445 journal articles were reviewed and based on the relevance of the articles to the main theme of this article, 143 articles were selected for in-depth study. After doing all stages the conceptual framework for this study were arranged that will validated later by following things from manufacturing organizations in Malaysia.

The population for this study is executive employees who are working in Malaysian manufacturing firms. They are those having a good understanding of the variables. The study will invite 130 firms which are members of the Malaysia Industrial Federation representing the most industrial pollutant sectors such as food, pharmaceuticals, and chemicals [43]. The criteria of the participating firms are manufacturers. 110 manufacturing firms were adopted from the state of Johor, Malaka, and Kuala Lumpur. The sample size of 110 is considered adequate for performing data analysis using SEM-Partial Least Squares (PLS) [44]. A survey questionnaire is designed to measure the framework of employee creativity with knowledge sharing, organizational culture and motivation. PLS-SEM will be employed to test H1, H2, H3, H4 and H5. It is a second-generation multivariate analytical tool for identifying a new theory employee creativity in Malaysia. SEM-PLS can determine the hypotheses and statistical properties of a conceptual framework, simultaneously [41]. It is prominently used in various management studies [43].

4. Result

Based on the analysis of the literature, a conceptual framework is developed to investigate the relationship between knowledge sharing and organizational towards employee creativity with motivation as mediator (see Figure 1). Since recent OC and KS literature has primarily focused on the effect on employee creativity [15], [41], this study considers KS and OC as a cohesive set of organizational behaviour studies that has a consequence on manufacturing organization’s creativity by (i) selecting ideal employees who are aware of the importance of knowledge for employee creativity in the organization. This is known as “motivation to creativity” [26],[27]. (ii) providing supportive organizational culture to members of organization who are actively involved in creativity by sharing their ideas. This is known as “knowledge sharing and involvement” [34]. Researchers have suggested that employee creativity, knowledge sharing, organizational culture and motivation are important indicators in in the presence of any manufacturing organization [34], [27].

The below conceptual framework is supported by natural resource-based view by [18]. This theory suggests that an organization can gain competitive advantages from the live resources. The knowledge activities can produce strategic resources that are difficult to imitate [45]; [21]; [42]. A good working organizational culture and proper knowledge sharing that helps employees stay motivated are important antecedent of employee creativity, as stated in the literature review [27]. Cultures that support creativity are open to change, give employees freedom and discretion, motivates employees to challenge the status quo and develop new ideas, and promote diversity in cognitive styles, viewpoints, and approaches to work. In general, it can be deduced that the application of knowledge sharing and favourable organizational culture can fosters employee creativity, which assures the competitive advantage in the manufacturing organizations in Malaysia [46], [47].

![Figure 1. Conceptual Framework](image)

Hypothesis Development

Knowledge sharing is a way to supports employees thinking process and resulting it helps to enhances employee creative abilities [48]. Literature shows that if any employee have access to diverse knowledge and interaction with people they are more likely to others to generate novel ideas. Furthermore, creativity trigger in any individual by sharing knowledge and ideas, when employees of different backgrounds shares whatever they in their head, it makes other person active and the process of manipulating information starts and as a result a creative idea can comes out . In any organization employees can share their knowledge through training, seminars, meetings, website, during orientation and email [47]; [48]; [45]. To show that an employee is creative asset for the company, should let them others know about your unique thought process and experience and knowledge. Finally, integrating diverse proficiencies from different sources can foster creativity in any organization [45].

**H1:** Knowledge sharing and employee creativity have a positive relationship.

Some researchers believe that the creativity of employees can be successfully nurtured in a strong organizational culture. Organizations primarily work to initiate
employees’ creative abilities so that they can find creative solutions for problems [14]. As propagated contemporary organizations have an apparent vision for their organization and also have the ability to develop skills and to encourage employees for creative solutions of problem [34], [27]. In the recent past, organizational culture has gained immense attention from both a practical as well as a theoretical perspective [46], [47]. Organizations tend to encourage their followers to deliver outcomes beyond their expected level, which is possible through invoking employees’ higher level beliefs and values [49], [50]. Organizations possess distinct cultural profiles, there is greater variation across industry through the latest human resource practices like organizational culture, internal marketing and knowledge sharing [48].

**H2**: Organizational culture and employee creativity have a positive relationship.

Motivation is the tendency for people to engage in tasks which they find interesting, challenging, and satisfying [46], [47]. Motivational study identified three forms of motivation: a need for achievement, a need for power, and a need for affiliation [28]. The need for achievement is a commitment to strive for success and a desire to show standards of excellence, as well as a need to achieve esteem, status, and feelings of personal accomplishment [14]. They prefer either to work alone or with others who are like themselves, and they express preferences for such organizational cultures that emphasize creativity, problem solving, and accomplishment. The need for power refers to the desire to control and to use vigorous action to influence the behavior of others [51]. In the workplace, power seekers try to acquire status and reputation to gain satisfaction from exercising their influence [14], [52], and they have a tendency to pursue their own individualistic aspirations, such as attaining management and political positions [47]; [48]; [45]. Finally, the need for affiliation refers to the desire to establish warm and cooperative relationships with others. Individuals with strong affiliation motives tend to be supportive and helpful in their relationships [14]. Research has found that employee with high affiliation motives work well in teams that are composed of cooperative employees and tends to be more creative. This study finds that there is a positive relationship between motivation and employee creativity.

**H3**: Motivation has a positive influence on employee creativity.

Motivation refers to the drive to engage in an activity for its own sake in order to experience the pleasure and satisfaction inherent in the activity [53]. Although it has been established that motivation has a positive influence on behavior, little attention has been given to the role of employee’s knowledge sharing in motivation. As motivation is a product of situational conditions and the person’s characteristics [54], it is reasonable to assume that employee’s behavior to share knowledge may shape motivation and the leads to creativity. Researchers has argued on motivation research need more attention to environmental factors like organizational culture than psychological individual differences. To address the gap, Watanabe and Kanazawa examined the role of knowledge sharing and employee creativity in motivation [46]. As predicted, the findings showed that both knowledge sharing and employee creativity significantly predicted motivation. On the basis of past findings that people who are high on sharing knowledge tend to find more meaningfulness and explore unfamiliar creative things, It is hypothesized in past researches that people who are willing to new experiences that tend to have a mastery-oriented pattern of thoughts, feelings, and behaviors and these patterns are conducive to motivation [55], [56]. This study finds there is positive relation between knowledge sharing and employee creativity in this relation motivation found a significant role as mediator.

**H4**: Motivation works as a significant mediator between knowledge sharing and employee creativity.

Extensive body of literature showing that motivation is generally conducive to employee creativity across diverse settings [57];[58];[53]. In the componential framework of employee creativity, [39] indicated three components that are necessary and sufficient to employee creativity, namely, knowledge sharing, organizational culture, and motivation [59]. According to Amabile, individuals who have factual knowledge and relevant technical skills of cognitive styles that are conducive to creativity (e.g., breaking conceptual set, open for other options) are likely to generate creative responses [41]. However, whether or not an individual can produce novel products depends greatly on that person’s motivation toward the task. Amabile emphasized that motivation is “the most determinant of the difference between what a person can do and what any employee will do” [45]. In other words, employees who have favourable organizational culture it is possible for them may have the potential to produce creative outputs [33]. However, these people may not have creative achievements if they are not motivated and where they are working not have favourable culture. In exploring the impact of organizational culture and leadership’ creativity, [60] administered a web-based survey to professional employees (e.g., software engineers and product developers) form IT and manufacturing industries in Malaysia. Analyses showed that motivation significantly predicted employee creativity [61], [62]. The role of motivation in the relationship between organizational culture and creativity and employee creativity is examined is a positive relationship and having influence [57],[63][64]. The researcher hypothesized that explicit marking of ownership is constructive to creativity through motivation.

**H5**: Motivation works as a significant mediator between organizational culture and employee creativity.
5. Discussion and Conclusion

According to the literature review, knowledge sharing, organizational culture employee creativity and motivation are associated with HRM and OB. Although the majority of the studies [65] [59], have reported a significant relationship between these two variables, the implementation of knowledge sharing in organizational culture towards employee creativity in manufacturing organizations has not received much interest in Malaysia [64]. None of the studies have looked into the influence of knowledge sharing on manufacturing organizations' employee creativity. In response to this issue, this study shed some light on the importance of organizational culture and knowledge sharing among manufacturing firms in Malaysia and the impact they bring to the employees creativity in the organization. The model requires modifications to be aptly adopted by manufacturing firms in Malaysia. Last but not least, knowledge sharing and organizational culture has a significant value to the employee creativity with motivation as a mediator. It is considered an essential tool to engage employees of an organization in knowledge sharing, thereby enhancing the employee creativity.

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