

Assessing Employee Creativity and Innovation in Organization: Development of Measuring Item

Nabila Huda Ibrahim¹, Tuan Nooriani Tuan Ismail², Mahadir Ladisma @ Awis³

^{1&2} Faculty of Administrative Science & Policy Studies, Universiti Teknologi MARA (UiTM) Shah Alam, Selangor,
nabillhudd@gmail.com & tnsya800@salam.uitm.edu.my

³ Faculty of Administrative Science & Policy Studies, Universiti Teknologi MARA (UiTM), Kampus Seremban 3, Negeri Sembilan.
mahadir_ladisma@ns.uitm.edu.my

Abstract

Producing novel and useful ideas are demands for every organization to achieve competitive advantages that could guarantee the organizational survival. Creativity and innovation indicates the ability of employees to produce and implement novel ideas in the organization. Creativity and innovation may be nurtured in the organization through engagement, leadership and environment in organization. Creativity and innovation is an intangible skills and irreplaceable talents that needs to be secured in every organization. In order to gain employee creativity and innovation, employee needs to be engaged towards creativity and innovation activities. Assesment towards creativity and innovation is necessary to identity the level of employee creativity and innovation as well as for improving the level. In assessing the employee creativity and innovation in organization, and appropriate measurement is necessary. This paper is intended to build the measuring items for employee to assess their own creativity and innovation. The main focus of this paper is to discuss the development items in measuring employee creativity and innovation. Three factors of personal assessment, role of top management and organization environment are the dimension for assessing employee creativity and innovation. These three factors are significant for engaging employees towards creativity and innovation. This measurement should be employed in every organization as a form to assess employee creativity and innovation.

Keywords: Creativity and innovation; Personal assesment; Top Management; Organizational environment; Item Development

INTRODUCTION

The demands for employee creativity and innovation increase day by day as for every organization to achieve the competitive advantages. Unlike technology, product or services, the organizational talent is irreplaceable and cannot be replicate (Wellins, Bernthal & Phelps, 2005). Changes in economic environmental have made necessity for organization to stay strong in every kind of market competition and the organizational talents is the main cause. Employees with creativity and innovation are able to help the organization gain competitive advantage and organizational survival were emphasized in many studies (Wallace *et al.*, 2013; Mwesigwa & Namiyingo, 2014; Anjum *et al.*, 2016 & Beheshtifar & Zare, 2013). The significance of having employee creativity and innovation in the organization is the production of unique and value products and services lead for organization to win the competitive advantage in the organization. Creativity also helps the organization to become more efficient and responsive towards

opportunities as well as adapting to changes and compete with global market (Bahestifar & Zare, 2013).

Employee creativity is an influential antecedent of organizational performance (Mwesigwa, & Namiyigo, 2014) as it is necessary for every organization to create ideas for better products, services or work processes in improving business performance (Glasberg & Ouerghemi, 2011). The values of employees such as knowledge, experience, creative activity and qualification for continuous learning and research and development also play role for the success of organization (Urbancova, 2013). This has sparks major challenges for managers in the 21st century is how to fully utilize the potential capabilities of employees to enhance and accelerate organizational innovation (Bahestifar & Zare, 2013). Employees should be provided with necessities to engage them in activity for creativity and innovation as well as helping them to expanding their talents.

The employee creativity and innovation should be assessed as creativity is derived fundamentally from the minds of employees who carry out work of the organization rather than overall firm strategy and access of resources (Lee & Tan, 2012). Measuring employee creativity and innovation is necessary for the nurturing process of creativity and innovation in the organization. This needs help the organization to identify the level of creativity and innovation of their talents. This paper is focuses on developing items to measure employee creativity and innovation. Three factors of personal assessment, role of top management and organization environment are three dimensions for these measurement.

DEVELOPMENT OF ITEM

According to Amabile (1988), the employee creativity has been defined based on product (ideas) as the “production of useful novel ideas by an individual or small groups of individuals working together”. Meanwhile, organizational innovation is defined as “the successful implementation of creative ideas within an organization”. The development of the items in this product basically based on the theory of employee creativity and innovation by Amabile (1988) and transformational leadership by Avolio and Bass (1990).

Personal Assessment

The first section of this product is personal assessment. The construct of this items is based on three major components of employee creativity that necessary for individual creativity in any domain (Amabile, 1988). These components are domain-relevant skills, creativity-relevant skills and intrinsic task motivation. The first

component deals with relevant skills that necessary for creativity development. This component may also view as the set of cognitive pathways for a problem or task solving. The related skills are factual knowledge, technical skills and special talent. These skills depend on the individual's skills for creative productivity. Based on domain-relevant skills highlighted by Amabile (1988), the following items were able to measure the component of domain-relevant skills.

Domain-relevant skill

- I understand the organizational goals very well.
- I understand and committed with my work role and organization.
- I am able to recognize any arising issue or problem.
- I do evaluate progress of my work, organizational process as well as performance.

The second component is creativity-relevant skills. Based on Amabile (1988), this skill is dealing with a cognitive style which is favorable to take new perspectives on a problem, application of heuristic for exploration of new cognitive solution and working style that is conducive for persistent and energetic. A heuristic is defined as principle or device that helps to reduce the search for a solution such as reduction over any blind or random process. Creative-relevant skills also depend on the personal characteristic such as independence, self-discipline, ability to delay gratification and more. The last component is intrinsic task motivation. Based on creative-relevant skills highlighted by Amabile (1988), the following items were able to measure the component of creative-relevant skills.

Creative-relevant skill

- I am never hesitated to offer any ideas or possible solution in organizational process.
- I am motivated to find solution when problem arise.
- I am having a good rapport with colleagues, leader and members in the organization.

According to Amabile (1988), intrinsic task motivation helps to determine to what extent domain-relevant and creativity skills will be appropriately engaged in the service creative performance. There are two elements that constituted task motivation. The first is individual's baseline attitude which is the person inclination toward or away from activities of that sort. The second is the individuals' perceptions of their undertaking task in a given instance. The individual attitudes may result in positive impacts of the employees such as being self-driven, excited to work, enthusiastic attracted by challenges, having a sense of working on something important and a belief

in or commitment to the idea. Environmental and social factor influences these perceptions. Based on intrinsic task motivation highlighted by Amabile (1988), the following items were able to measure the component of intrinsic task motivation.

Intrinsic task motivation

- I know priority of my task and always finish my assignment according to the stipulated time.
- I am always enthusiastic with my work.
- I am involved in the organizational process and activities.

Role of Top Management

The second section of this product is role of top management. The role of managers is undeniable for creativity and innovation. Based on study done by Amabile (1988), 65% agreed good project management contributes to quality of environment that promote creativity. Leadership indeed is a situational factor which could exert the influence in generating creative ideas. Leaders provide support to the follower including job resources in solving the task and also social support which could increase better emotion of the employees (Cheung & Wong, 2011). Studies have indicated that transformational leadership is necessary for employee creativity and innovation (Nusair, 2012; Paulsen, Callan, Ayoko & Saunders, 2013). The past decades have shown that transformational leadership is the most popular topics in research. Transformational leadership was shown to add effectiveness of transactional leadership (Zhu *et al.*, 2012). Transformational leaders refer who elevate the desires of followers for achievement and self-development, while also promoting the development of groups and organizations (Avolio & Bass, 1990). Transformational leaders help their followers to achieve extraordinary by the organization (Sarros, Copper & Santora, 2011). Bass and Avolio (1990) presented a formal theory and conceptual model of transformational leadership which consists of four dimensions: idealized influence, individualized consideration, inspirational motivation, and intellectual stimulation.

The first component of transformational leadership is an individualized consideration. Bass and Avolio (1990) stated that individualized consideration refers to the personal consideration that given by the leader to their followers. It is a unique way of treating employees based on individual needs and supporting it (Jackson, Meyer & Wang, 2012). Individualized consideration refers the transformational leaders which exhibit support behaviour and ability to focus on the individual needs. The transformational leaders act as coach or advisor in assisting the followers to become fully actualized. Following are the items to measure the component of individualized consideration.

Individualized Consideration

- My leaders always provide support to the followers.
- My leaders consider the follower in decision making.
- My leaders able to recognize the needs and abilities of the followers.

The second dimension of transformational leadership is intellectual stimulation. Intellectual stimulation refers to the leaders who are inspiring the followers by a questioning of assumptions, reframing problems, and stimulate them which purposely to increase the intellectual curiosity (Wang, Tsai & Tsai, 2014). According to Bass and Avolio (1990), intellectual stimulation was applied and foster innovation by the transformational leaders through abstaining new problems and approaching old situations in new and novel slipway. These make the leader encourage the imagery and rethinking the solution for the old problems. Leaders with this behaviour also an articulate vision of the future by communicating it with a high expectation (Wang et al., 2013). Following are the items to measure the components of intellectual stimulation.

Intellectual Stimulation

- My leaders attract the followers to invest their energy towards the organizational goals.
- My leaders promote to take new approach for solving problem.
- My leaders always encourage me to challenge the status quo.

The third dimension which is idealized influenced happens when the leaders portraying themselves as a notable example by strengthening the components of adoration, profound respect and duplicating of followers. Idealized influenced indicates the leaders to gain the trust of the followers to achieve the organizational goals by aligning the follower's goals (Nusair, Ababneh & Bae, 2012). Transformational leaders are said to have idealized influenced when they are trusted, respected by employees and become a significant role model to their followers as they assemble their trust and pride to the organization (Ashikali & Groeneveld, 2013). Following are the items to measure the components of idealized influenced.

Idealized Influenced

- I trust my leaders.
- My leader is my role model.

The last dimension which is inspirational motivation indicates how leaders articulate a vision and make a follower to increase and enthusiasm for meeting and

achieving organizational challenge. The leaders in this dimension will likely to align the employee's goals with the organizational goal and coaching them to achieve it. Thus, organizational objective once the individual's objective is achieved. Furthermore, problems and issues were managed as chances to learn (Nusair, Ababneh & Bae, 2012). Moreover, Bass et al. (2003) show that transformational leaders with inspirational motivation encourage followers to have attractive future for them to be envisioned by themselves. Thus, it portrays inspirational motivation as leaders who are supporting their workers by making individual and participation to accomplish objectives (Birasnav, Rangnekar & Dalpati, 2010). Following are the items to measure measure of components of intellectual stimulation

Intellectual Stimulation

- My leaders attract the followers to invest their energy towards the organizational goals.
- My leaders promote to take new approach for solving problem.
- My leaders always encourage me to challenge the status quo.

Organizational Environment

The third component is organizational environment. Organizational environment is a factor that influence individual creativity and innovation in the organization. Three components of organizational innovation have also outlined Amabile (1988). These components are motivation to innovate, resources in the task domain and skills in innovation management. This component provides supportive environment for innovation.

The first component organizational innovation is motivation to innovation. According to Amabile (1988), the basic orientation of the organization toward innovation and this orientation should originate from the highest level i.e., the president. The role of middle managers is also important for innovation as they are responsible for communicating and interpreting the orientation from the highest level. Corporate vision is a way to lead the motivation to innovate. As highlighted by Amabile (1988), following were able to measure the components of motivation to innovate.

Motivation to innovate

- The organization has clear goals, objective, mission or vision.
- The organization provides freedom to employees to accomplish task.

Secondly, according to Amabile (1988) resources in task domain includes everything the organization has available to aid in task domain. The resources in task domain include people with knowledge of feasibility of particular innovation, people with a familiarity of relevant markets, experience people or fund allocations are necessary for task domain. Task domain refers to the general area that has been targeted for innovation. As highlighted by Amabile (1988), following were able to measure the components of resources in task domain

Resources in task domain

- The role of stakeholders is recognized for organizational directions.
- The organization is free from any undesired political or social issues.
- The organization provides resources for my work.
- The organization provides training and development for employees.
- The organization provides ergonomics and interesting working spaces for idea generation.

The last component is the skills in the innovation management. According to Amabile (1988), this component consists of both level of management at organization as a whole and the level of individual departments and projects. Component of this level combined management skill and style that is conducive to individual creativity. Other facets of organizational innovation process such as the appropriate balance between freedom and constraint, open communication system and the reward system also constituted this component. As highlighted by Amabile (1988), following were able to measure the components of skills in innovation.

Skills in innovation management

- The organization provides benefits and incentives for my performances.
- The organization has open culture towards any changes and implementation of new ideas.
- The organization provides a good career development.
- The organization provides a good career development.

SUMMARY OF MEASURING ITEMS FOR EMPLOYEE CREATIVITY AND INNOVATION

In measuring employee creativity and innovation, there factors were emphasized which are personal assessment, role of top management and organizational environment. The personal assement were based on three major components of creativity by Amabile (1988). These components are domain-relevant skill, creative-relevant skill and intrinsic task motivation. The second factor is the role of top management. This assessment is based on the components of transformational leadership by Bass & Avolio (1990) individualized consideration, intellectual stimulation, idealized influenced and intellectual stimulation. The last factor of organizational environment. This assessment is the components of organization innovation by Amabile (1988). These components are motivation to innovate, resources in task domain and skills in innovation management. Table 1 is the summary of measuring items for employee creativity and innovation.

Table 1: Summary of Measuring Items for Employee Creativity and Innovation

Factor	Items
Personal Assesment	<ul style="list-style-type: none"> ▪ I understand the organizational goals very well. ▪ I understand and committed with my work role and organization. ▪ I know priority of my task and always finish my assignment according to the stipulated time. ▪ I am involved in the organizational process and activities. ▪ I am always enthusiastic with my work. ▪ I am having a good rapport with colleagues, leader and members in the organization. ▪ I am able to recognize any arising issue or problem. ▪ I am motivated to find solution when problem arise. ▪ I am never hesitated to offer any ideas or possible solution in organizational process. ▪ I do evaluate progress of my work, organizational process as well as performance.
Role of Top Management	<ul style="list-style-type: none"> ▪ My leaders explain organization goal clearly. ▪ My leaders always provides support to the followers. ▪ I trust my leaders. ▪ My leader is my role model. ▪ My leaders inspire the followers to achieve the organizational vision and mission. ▪ My leaders consider the follower in decision making. ▪ My leaders able to recognize the needs and abilities of the followers. ▪ My leaders promote to take new approach for solving problem. ▪ My leaders always encourage me to challenge the status quo. ▪ My leaders attract the followers to invest their energy towards the organizational goals.
Organizational Environment	<ul style="list-style-type: none"> ▪ The organization has clear goals, objective, mission or vision. ▪ The organization provides freedom to employees to accomplish task. ▪ The organization provides ergonomics and interesting working spaces for idea generation. ▪ The organization provides resources for my work. ▪ The organization provides training and development for employees.

-
- The organization provides benefits and incentives for my performances.
 - The organization provides a good career development.
 - The organization has open culture towards any changes and implementation of new ideas.
 - The organization is free from any undesired political or social issues.
 - The role of stakeholders are recognized for organizational directions.
-

CONCLUSION

The needs of employee creativity and innovation is undeniable necessary in gaining competitive advantage and organizational survival. Employees are encourage to produce novel and useful ideas, product and service. The assessment of employee creativity and innovation is necessary for engagement on creativity and innovation. This paper is focuses on development of measuring employee creativity and innovation. Three factors of personal assessment, role of top management and organizational environment create the underlying foundation of this measurement. This measurement should be applied in every organization regardless of its type to engage employees towards creativity and innovation.

REFERENCES

- Amabile, T. M. (1988). A model of creativity and innovation in organizations. *Research in organizational behavior*, 10(1), 123-167.
- Anjum, A., Sabir, H. M., Makhdoom, H.R., & Hussain, M. S. (2016). Effort-Enhancing HR Practices and Innovative Work Behavior: Role of Employee Empowerment. *International Journal of Academic Research in Business and Social Sciences*, 6(10), 356-368.
- Beheshtifar, M., & Zare, E. (2013). Employee Creativity: A compulsory Factor in Organizations. *Interdisciplinary journal of contemporary research in business*, 5(2), 242-247.
- Bass, B. M., & Avolio, B. J. (1990). Developing transformational leadership: 1992 and beyond. *Journal of European industrial training*, 14(5).
- Glasberg, R., & Ouerghemi, K. (2011). *Innovation in Human Resources. A Theoretical Advancement on Employee Motivation and Organizational Innovation*. 2nd International Conference on Economics, Business and Management. Singapore: Ipedr Iacsit Press.
- Lee, L. Y., & Tan, E. (2012). The influence of antecedents on employee creativity and employee performance: a meta-analytic review. *Interdisciplinary Journal of Contemporary Research in Business*, 4(2), 984-996.
- Mwesigwa, R., & Namiyingo, S. (2014) Job resources, employees' creativity and firm performance of commercial banks in Uganda. *International Journal of Economics, Commerce and Management*, 2 (9), 1-14.

- Urbancova, H. (2013). Competitive advantage achievement through innovation and knowledge. *Journal of Competitiveness*, 5(1).
- Wellins, R. S., Bernthal, P., & Phelps, M. (2005). Employee engagement: The key to realizing competitive advantage. *Development Dimensions International*, 1-30.
- Wallace, J. C., Butts, M. M., Johnson, P. D., Stevens, F. G., & Smith, M. B. (2013) A multilevel model of employee innovation: understanding the effects of regulatory focus, thriving, and employee involvement climate. *Journal of Management* published online 10 October 2013 pp 1-24