

Role of Knowledge Management in Innovation and Creativity: A Case Study

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Abstract

This article seeks to identify ways of how a leader in an advertising team can use knowledge management principles to drive the team towards an innovative and creative idea in advertising. It details the nature of innovation and creativity as well as their value proposition. It also seeks to clarify the role of knowledge management in innovation and creativity.

Given the rapid change in the contemporary business world, innovation and creativity has become the core of organizations. Competitive advantage today is gained by the appropriate use and application of knowledge that resides in a team or organization as a whole. The complexity of innovation has been increased by growth in the amount of knowledge available to organizations.

Introduction

One way for organizations to become more innovative is to capitalize on their employees' ability to innovate.¹ As Katz² puts it, "an organization that depends solely upon its blueprints of prescribed behavior is a very fragile social system". The centre of any work today is knowledge and the importance and survival of employees is now in terms of how fast they can generate ideas and become innovative. Innovation has, however, become increasingly complex due to changing customer needs, extensive competitive pressure and rapid technological change.³ Du Plessis⁴ believes that the complexity of innovation has also been increased by growth in the amount of knowledge available to

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¹ J. De Jong and D. Den Hartog, "How leaders influence employees innovative behaviour", *European Journal of Innovation Management*, Vol. 10 (1), 2007, pp. 41-64.

² 1964, cited in *Ibid.*, pp. 41-64.

³ S.T.Cavusgil, R. J. Calantone, and Y. Zhao, "Tacit knowledge transfer and firm innovation capability", *Journal of Business & Industrial Marketing*, Vol. 18 (1), 2003, pp. 6-21.

⁴ Marina du Plessis, "The role of Knowledge Management in Innovation", *Journal of Knowledge Management*, Vol. 11 (4), 2007, pp. 20-29.

organizations as a basis for innovation. She further notes that innovation is extremely dependent on the availability of knowledge and therefore the complexity created by the explosion of richness and reach of knowledge has to be identified and managed to ensure successful innovation.⁵ As part of building on what has previously been investigated, this paper will look into the drivers of innovation and creativity in a team of five persons who look forward to come up with a distinct advertising idea by applying the principles of knowledge management.

Definitions

Knowledge Management

It is important at this point to relate the connection between innovation and creativity with knowledge management in order to discover how the two are intertwined and correlated. But before delving into this subject, it is equally important to define knowledge management. Du Plessis⁶ defines knowledge management as a planned, structured approach to manage the creation, sharing, harvesting and leveraging of knowledge as an organizational asset, to enhance a company's ability, speed and effectiveness in delivering products or services for the benefit of clients, in line with its business strategy. The author further notes that knowledge management takes place on three levels, namely the individual level, team level and organizational level.

Innovation

There are many definitions of the term innovation. For the purpose of this paper, only selected definitions will be provided. According to Chen *et al.*,⁷ innovation refers to the introduction of a new combination of the essential factors of production into the production system. Herkema⁸ defines innovation as a knowledge process aimed at creating new knowledge geared towards the development of commercial and viable solutions. Herkema also states that innovation is the adoption of an idea or behavior that is new to the organization. Du Plessis⁹ defines innovation as a process wherein knowledge

⁵ G. L. Adams, and B. T. Lamont, "Knowledge management systems and developing sustainable competitive advantage", *Journal of Knowledge Management*, Vol. 7 (2), 2003, pp. 142-54.

⁶ Marina du Plessis, *Journal of Knowledge Management*, Vol. 11 (4), 2007, pp. 20-29.

⁷ J. Chen, Z. Zhaohui, and H. Y. Xie, "Measuring intellectual capital", *Journal of Intellectual Capital*, Vol. 5 No. 1, 2004, pp. 195-212.

⁸ S. Herkema, "A complex adaptive perspective on learning within innovation projects", *The Learning Organization*, Vol. 10 No. 6, 2003, pp. 340-6.

⁹ Marina du Plessis, *Journal of Knowledge Management*, Vol. 11 (4), 2007, pp. 20-29.

is acquired, shared and assimilated with the aim to create new knowledge, which embodies products and services. Innovation can broadly be described as the implementation of discoveries and interventions and the process by which new outcomes, whether products, systems or processes, come into being.¹⁰

Creativity

The famous knowledge management guru, Nonaka Ikujiro defines the creative process as the process of making tacit knowledge explicit knowledge.¹¹ Creativity can also be defined as the mental process of the connecting and rearranging of knowledge in order to generate new knowledge.¹² Sometimes creativity is used interchangeably with innovation, which is not a very useful approach to discussing this subject area. While creativity is considered as the art of shifting one's perspective in order to see new possibilities relevant to the problem at hand, innovation on the other hand, means to come up with new ideas and implementing them successfully.¹³ In this sense, innovation is even broader than knowledge creation as it is not just about creating knowledge, but also putting it to use.¹⁴

Gurteen suggests that human beings are naturally creative, and the need to be creative is a fundamental driving force in them.¹⁵ It is possible to argue that Gurteen's proposition may only be true to a certain extent because if it was as absolute as he implies, then we would have seen a world full of creativity and innovation in every sphere of life, which would surpass the present situation. But the fact worth noting is that innovation and creativity do not have much to do with massive information or new ideas; they are a reflection of the different new ways of how we perceive these ideas and information. This is supported by McFadzean's observation that creativity can be encouraged by changing a person's mindset or paradigm.¹⁶

¹⁰ Gloet, M. and Terziovski, M. (2004), "Exploring the relationship between knowledge management practices and innovation performance", *Journal of Manufacturing Technology Management*, Vol. 15 (5), pp. 402-9.

¹¹ Ikujiro Nonaka, "Knowledge Creating Company", *Harvard Business Review*, July/Aug 2007, Vol. 185 (7/8) pp. 162-171.

¹² H. Rollet, *Knowledge Management: Processes and Technologies*, (Massachusetts: Kluwer Academic Publishers, 2003), p. 46.

¹³ Ibid, p. 46.

¹⁴ Ibid, p. 46.

¹⁵ Gurteen, *Journal of Knowledge Management*, p.5-13.

¹⁶ E. McFadzean, "Techniques to enhance creative thinking", *Team Performance Management Journal*, 2000, Vol. 6 (3/4), pp. 62-72.

The Role of Knowledge Management in Innovation and Creativity

The first major role that knowledge management plays in innovation and creativity is to enable the sharing and codification of tacit knowledge. Since tacit knowledge sharing is critical for organizations' innovation capability,¹⁷ firms with high innovation potential employ a learning-by-doing effect that makes it difficult for competitors to buy this know-how in the market and also makes it difficult to replicate. Therefore, the first step which should be undertaken by the advertising team is to be aware of the stocks of tacit knowledge available to them. Knowledge management can then easily make the tacit knowledge accessible e.g. through utilization of a database containing people's expertise. It can also assist in codifying tacit knowledge to make it explicit in order for it to be more readily available for application in future innovations.¹⁸

The second major role that knowledge management plays in the innovation process is related to explicit knowledge. Through knowledge management, the advertising team will make their explicit knowledge available for recombinations into new and innovative ideas. This is basically made possible by providing the tools, processes and platforms to ensure knowledge availability and accessibility, e.g. through structuring the knowledge base.¹⁹ Knowledge management, as noted by the author, can also ensure that explicit knowledge, which can be used as input to the innovation process, is gathered internally and externally.

The third major role that knowledge management plays in innovation and creativity is through the enabling of collaboration. Collaboration plays an especially significant role in the transfer of tacit knowledge and in building collective know-how.²⁰ The stronger the relationship between collaboration partners, the greater the extent of the tacit knowledge transfer.²¹ The best way of fostering collaboration among the advertising team is through informal networks or relationships such as mutual trust and confidence. Through knowledge management, the team members can facilitate collaboration as

¹⁷ S.T.Cavusgil, R. J. Calantone, and Y. Zhao, *Journal of Business & Industrial Marketing*, Vol. 18 (1), 2003, pp. 6-21.

¹⁸ Marina du Plessis, *Journal of Knowledge Management*, Vol. 11 (4), 2007, pp. 20-29.

¹⁹ *Ibid.*, pp. 20-29.

²⁰ S.T.Cavusgil, R. J. Calantone, and Y. Zhao, *Journal of Business & Industrial Marketing*, Vol. 18 (1), 2003, pp. 6-21.

²¹ H. Scarbrough, "Knowledge management, HRM and the innovation process", *International Journal of Manpower*, Vol. 24 (5), 2003, pp. 501-16.

mechanism to foster innovation through provision of technological platforms and tools to enable knowledge sharing within knowledge sharing communities, such as online discussion forums.²² The main objective of knowledge management at this stage is to ensure knowledge creation, sharing, gathering and leverage within these collaborative forums. This is based on the fact that tacit knowledge is the most essential tool for innovation process.

The fourth major role that knowledge management plays in the innovation and creativity is the creation of a culture conducive to knowledge creation and sharing as well as collaboration.²³ This culture is made up of such elements like trust.²⁴ When there is trust, the members of the team will definitely be willing to share their knowledge and expertise and hence be ready to come up with innovations and creativity. It is therefore, the team leader's responsibility to ensure that there is ample trust within their team.

How Can the Team Leader Encourage Innovative and Creative Behaviour in the Team?

In this section, the paper identifies the ways and aspects which when implemented by the team leader will foster the sense of innovation and creativity in his team members, and hence come up with remarkable solution to their problem. A study conducted by De Jong and Den Hartog,²⁵ concludes that the most effective ways of encouraging innovation are the ones discussed below:

Role Modeling

Researchers have come up with evidence to support that role-modelling and innovation are linked to each other. For instance, Jaussi and Dionne²⁶ found a positive and direct influence of role-modelling on creativity. In another study, Shalley and Perry-Smith²⁷ found that "individuals who were provided with a creative work model were able to learn what was considered creative from this model and, in turn, exhibited more creative behaviour". Thierry and Farmer

²² Marina du Plessis, *Journal of Knowledge Management*, Vol. 11 (4), 2007, pp. 20-29.

²³ Marina du Plessis, *Journal of Knowledge Management*, Vol. 11 (4), 2007, pp. 20-29.

²⁴ Rollet, *Knowledge Management*, p. 48.

²⁵ J. De Jong and D. Den Hartog, *European Journal of Innovation Management*, Vol. 10 (1), 2007, pp. 41-64.

²⁶ Jaussi, K.S. and Dionne, S.D. (2003), "Leading for creativity: the role of unconventional leader behavior", *Leadership Quarterly*, Vol. 14 Nos 4/5, pp. 475-98.

²⁷ 2001, cited in De Jong and Den Hartog, *European Journal of Innovation Management*, Vol. 10 (1), 2007, pp. 41-64.

argue that “Role modeling by supervisors is a fundamental contextual factor for creativity and is crucial for efficacy development.”²⁸ Based on these and other findings, the first task of the team leader, from a knowledge management perspective, is to set a model of himself as an innovator and creative thinker. It is not easy to say how he would do that because the notion of innovative behaviour differs from one context to another and from one leader to another.

Intellectual Stimulation

This word was coined by theorists like Bass and Den Hartog²⁹ to refer to “increasing employees’ awareness of problems and stimulating them to rethink old ways of doing things.” It simply means stimulating employees to generate ideas. This is based on Shalley and Gilson’s findings³⁰ that “when individuals know that idea generation is important, they are more likely to show this behaviour.” Drawing on these conclusions, the team leader must play his part in soliciting new ideas which will turn out to be the core of the team’s innovation and creativity. This can be achieved by several methods, the most common of which is the use of metaphor. From a knowledge management perspective, a metaphor is defined by Nonaka as “a way for individuals grounded in different contexts and with different experiences to understand something intuitively through the use of imagination and symbols without the need for analysis or generalization.” From an advertising point of view, a metaphor is a very unique method of perceiving things. According to Nonaka, metaphors not only enable people to put together what they know in new ways, but are also highly effective in fostering direct commitment to the creative process in the early stages of knowledge creation.

Stimulating Overlapping Specific Knowledge

Another task which the team leader should carry out for the purpose for encouraging the team members’ innovation is to stimulate or motivate the team’s shared specific knowledge that is considered overlapping. Worded differently, the team members are expected to share their expertise on

²⁸ P. Thierry and S. Farmer, “Creative self–efficacy: Its potential antecedents and relationship to creative performance”, *The Academy of Management Journal*, Vol. 45, 6, Dec. 2002, pp. 1137-1148.

²⁹ Bass 1985, cited in cited in De Jong and Den Hartog, *European Journal of Innovation Management*, Vol. 10 (1), 2007, pp. 41-64.

³⁰ Shalley, C.E. and Gilson, L.L. (2004), “What leaders need to know: a review of social and contextual factors that can foster or hinder creativity”, *Leadership Quarterly*, Vol. 15 No. 1, pp. 33-54.

advertising techniques, especially those which are regarded as very creative. This knowledge is overlapping in that “only part of each individual’s tacit knowledge about the undertaking is shared- that which is essential to the completion of their interdependent task.”³¹ This objective could be achieved by, for example, shared experiences and observational visits.

Providing Vision

In addition to motivating overlapping knowledge, another task of the team leader is to provide the team members with a sense of directions and goals including some guidelines as to how the respective task is to be handled. This aspect of leadership, as noted by De Jong and Den Hartog,³² will not only enhance the generation of ideas but also promote application behavior for two reasons: First, “it provides a frame of reference that indicated what kind of ideas would be appreciated. Second, if a promising idea fits within a vision familiar to and shared by employees, convincing them of its value and guiding its implementation was believed to be much easier.”

Delegating

After deciding with the team members upon the advertising idea to be implemented, which is supposed to be unique and distinctive, the team leader’s mission will then be to delegate the task to the team members. A number of studies conducted support the fact that delegation of duties and innovation are closely linked to each other. For example, in a survey done by Krause, it was found that “granting freedom and autonomy was positively related to various types of innovative behaviour, including the generation, testing, and implementation of ideas.”³³ Another study conducted by early NASA scientists like Andrews and Farris³⁴ concluded that providing subordinates with more freedom to explore, discuss and challenge ideas was associated with higher innovation performance. From the two findings mentioned above, delegation is

³¹ D. Leonard and S. Sensiper, “The role of tacit knowledge in group innovation”, *California Management Review*, Vol. 40 (3), 1998; David E. Smith, *Knowledge, Groupware and the Internet*, (Woburn MA: Heinemann, 2000).

³² J. De Jong and D. Den Hartog, *European Journal of Innovation Management*, Vol. 10 (1), 2007, pp. 41-64

³³ D. E. Krause, “Influence-based leadership as a determinant of the inclination to innovate and of innovation-related behaviors: an empirical investigation”, *Leadership Quarterly*, Vol. 15 (1), 2004, pp. 79-102.

³⁴ 1967, cited in De Jong and Hartog, *European Journal of Innovation Management*, Vol. 10 (1), 2007, pp. 41-64.

used to mean empowering, providing freedom and autonomy to the members, which is believed to create the opportunity for innovation and creativity.

Providing Support

It makes little sense if the team leader will just delegate and empower his team members to come up with innovative and creative ideas, while he provides none or little support to them. A study carried out by Olham and Cummings³⁵ led to the conclusion that “a supportive supervisory style is one of the drivers of excellent creative performance.” One of the best ways of achieving this is by overlooking the members’ mistakes and creating an environment where mistakes are treated as opportunities for learning. As long as the team members understand that there is no penalty for any discrepancy that arises from innovation, then the chances of higher innovative performance are high. Basu and Green³⁶ conclude from their study that “employees are more likely to deviate from the ordinary, engage in unconventional behaviour, and implement innovative ideas if they are sure that they will not be penalized for it.”

Providing Feedback

In order to illustrate how feedback influences innovative and creative ideas, we can consider an example of a new product launched in the market. The producer highly focuses on the customers’ feedback about the use of the product in order to improve and make their product more creative. The same applies to leadership in a knowledge management perspective. Evidence supporting this includes the research conducted by a Swedish telecom company which concludes that “the willingness of employees to strive for innovation depends on personal feedback that is given as soon as an idea is proposed.”³⁷ The team leader can achieve this by providing feedback himself or by asking the team members to take on this role. Another way to accomplish this is by letting the members of the team generate an advertising idea to the client and ask them for feedback for their initial concept.³⁸ This

³⁵ G.R. Olham, A. Cummings “Employee creativity: personal and contextual factors at work”, *Academy of Management Journal*, Vol. 39 (3), 1996, pp. 607-34.

³⁶ R. Basu, S.G. Green, “Leader-member exchange and transformational leadership: an empirical examination of innovative behaviors in leader-member dyads”, *Journal of Applied Social Psychology*, Vol. 27 (6), 1997, pp. 477-99.

³⁷ C. Hellstrom, and T. Hellstrom, “Highways, alleys and by-lanes: charting the pathways for ideas and innovation in organizations”, *Creativity and Innovation Management*, Vol. 11 (2), 2002, pp. 107-14.

³⁸ See Du Plessis, *Journal of Knowledge Management*, Vol. 11 (4), 2007, pp. 20-29.

process may be done more than once until the desired result is achieved, that is, the clients satisfaction.

Rewards and Motivation

Research findings show that when employees are rewarded, they are most likely to be motivated to come up with new ideas and contribute to the company immensely.³⁹ Whether to use intrinsic or extrinsic reward is at the discretion of the leader, since there is no one cut-off rule on this, although previous researchers like Amabile suggest that one should avoid using money to “bribe” people to come up with innovative ideas.⁴⁰ The benefit of these rewards is that the team members will not only be motivated to use their full expertise and capabilities, but also increase their focus on the problem area or complexity.

Providing Resources

It is not enough to be enthusiastic about a promising idea, the team members need to be awarded resources to develop a particular idea. Ekvall and Ryhammer⁴¹ (1999) examined a variety of organizational variables that might influence innovation among scholars working at a Swedish university, and found that the availability of resources was most strongly related to their innovative results. Drawing on these conclusions, it is vital for the team leader to spur the members’ capabilities to innovate by offering the necessary resources for the achievement of the team’s objective. This could be attained by providing the team members with such facilities like unlimited access to the internet, and groupware technologies.

Significance of Knowledge Management in the Qur’an

The Qur’an lays adequate emphasis on man’s application of reason in every walk of life whatsoever. The human reason is a means of obtaining knowledge. Its non-application will certainly lead to knowledge being outdated. Innovation and creativity in an organization are keys to success of both the organization and the members associated with it. It is human reason the extensive use of which will enable people concerned to innovate and create and thus to

³⁹ R. Eisenberger, and J. Cameron, “Detrimental effects of reward: reality or myth?”, *American Psychologist*, Vol. 51, 1996, pp. 1153-66.

⁴⁰ T. M. Amabile, “A model of creativity and innovation in organizations”, *Research in Organizational Behavior*, Vol. 10, 1998, pp. 123-67.

⁴¹ G. Ekvall, and L. Ryhammer, “The creative climate: its determinants and effects at a Swedish university”, *Creativity Research Journal*, Vol. 12, 1999, pp. 303-10.

contribute to continuous progress of the organization. Human reason does not refer to any particular organ in human body; it is rather a process involving three main faculties, hearing, sight, and thinking. Thus the ears, eyes, and mind when engaged in performing their respective tasks constitute reason. Around six times in the Qur'an it has been mentioned that Allah, the Creator of man has granted man three powers, hearing, seeing and thinking: "*And He granted you power of hearing (al-sam'), that of sight (al-basar), and that of pondering (al-fu'ad); but hardly you are grateful to Him.*"⁴²

As it appears, the power of hearing refers to obtaining the existing form and amount of knowledge and information; the sight signifies making observation of the available knowledge and deep insight into it in order to identify the nature of each and every component of knowledge; pondering denotes developing new form of knowledge, enriching the available compendia of knowledge. If an organization makes full use of its members in terms their reason, encouraging them to acquire knowledge which is available, to analyze critically that knowledge, and to enrich it with more and more new knowledge developed on the basis of acquisition and analysis of knowledge, it will most certainly achieve its targeted goal. Innovation and creativity are the natural outcome of continuous use of reason. Members of an organization who remain complacent with whatever they have already obtained and hardly analyze and criticize the existing form of knowledge may sooner or later become bane for the organization. Such persons, as the Qur'an puts it, can be likened to deaf and dumb: "*The worst of creatures are the deaf and dumb who do not use their reason.*"⁴³

The Qur'an differentiates between human and animal by referring to man's intellectual power: "*They have hearts wherewith they understand not, they have eyes wherewith they see not, and they have ears wherewith they hear not.*"⁴⁴

What is clear from these Qur'anic statements is that man can progress individually and organizationally only as long as he remains innovative and creative. Continuous use of reason in the proper direction is the only method to be innovative and creative. Knowledge management requires that those who deal with it must be innovative and creative.

⁴² The Qur'an 32:9

⁴³ The Qur'an 8:22

⁴⁴ The Qur'an 7:179

Conclusion

Based on this article, it is clear that knowledge management plays a significant role in innovation and creativity. These are the two pillars on which the success of the team rests. The Qur'an invites man to use his reason in order to be innovative and creative. Further research is required, however, on the potential role of knowledge management in innovation and how the value of knowledge management can be maximized to ensure a more efficient and effective innovation process. It is important for both innovation and knowledge management professionals to understand the systemic relationship between these concepts and the value that it can generate in respect of creating and maintaining sustainable competitive advantage for organizations. The preceding study has defined innovation and creativity and has provided an overview of the aspects and ways how the team leader can encourage innovation and creativity.

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