

USE AND EFFICIENCY OF KNOWLEDGE TRANSFER METHODS WITHIN PROJECT-BASED ENVIRONMENTS

Ionel, NAFTANAILA

Academy of Economic Studies, Bucharest, e-mail: ionel@naftanaila.ro

ABSTRACT: In most organizations, knowledge is deeply embedded in people minds, databases, routines, procedures or simply in the organizational culture. This knowledge is of little value though, unless it is easily accessed and delivered to the right people at the right time. One of the most acute problems in project environments has become the dependence on knowledge that is not in the possession of the team. To overcome the problem of knowledge possession project managers have tried to increase the transfer of knowledge both within and among the teams but with little success. Thus the main purpose of the paper is to present the methods of knowledge transfer that could be applied to project environments in order to resolve the problem of knowledge possession. Research on learning has shown that people learn better and retain knowledge longer when their brains are actively engaged, therefore the managers must focus their attention on those methods that engage the team members and make them realize their importance within the team.

1. INTRODUCTION

21st century is marked by a profound change in every aspect of human and business life. In business environments the focus is on going global and gaining a sustainable competitive advantage. For that reason, managers no longer regard the classical factors of production as being effective. The traditional factors of production, land, labor and capital have become easier to access and their possession no longer guarantees the success of the company. This is why management scholars and business people look towards a fourth factor of production, knowledge, as the one that differentiates one company's success from other company's failure. But, knowledge is very different in many ways from the traditional critical assets, particularly because the way it operates within the company. It is difficult to track and the value it adds is not really quantifiable [1], [13].

One of the main issues with regard to knowledge is that much of it presents limited commercial value, unless it is bundled in some way. Knowledge that is trapped inside the minds of key employees, in filing drawers and databases, is of little value if it is not supplied to the right people at the right time [18]. Hence the importance of knowledge sharing practices within organizations. Knowledge sharing practices and initiatives often form a key component of knowledge management programs, in terms of organizational and individual learning [11]. Therefore, better and purposeful sharing of useful knowledge translates into accelerated individual and organizational learning and innovation, leading to better product development and enhanced market performance [14]. A useful example in this regard is World Bank, which responded quickly to the changes in the market by increasing its ability to access existing know-how in different countries. The nonprofit organization sends leaders from different regions of the world on tour to see best practices in diverse topics, such as transportation, exports, health care etc. The organization has learned very fast that people learn easier and faster from peers whose work situations are similar to their own [15].

Knowledge sharing or transfer implies that during a given exchange, one individual or group will at some point know more than the other [8]. The word transfer is used more often in order to emphasize that the movement of knowledge within the organization is a process that depends of the characteristics

of everyone involved [16], [17] meaning that the message delivered by an individual has to be interpreted by the receiver before it becomes knowledge of the latter.

The project environment is often confronted with the problem of knowledge possession, more and more projects being dependent on knowledge that is not in their possession. The problem of knowledge sharing in project environments is an acute one [6]. Many of the project managers confronting these problems in their environments have tried to solve the problem of knowledge possession by converting tacit knowledge into explicit knowledge available to everyone, but with little success. Therefore, the main purpose of this paper is to present the methods that could solve the problem of knowledge possession and increase the transferring of available knowledge in project environments.

2. METHODS OF KNOWLEDGE TRANSFER

The subjectivity of knowledge has raised multiple problems not only in project environments but among management scholars too [10]; [5]. What may be considered knowledge to one person can represent information or even data for other people. Research on learning has shown that people learn better and retain knowledge longer when their brains are actively engaged [8]. It is proven that lectures, presentations and directives create receptors in the brain, and provide knowledge to the extent that receptors already exist. In other words, the message sent by the emitter can be decoded by the receiver if and only if the receiver has all the prerequisite information in order to decode it. For example, if a person receives the message "333/33", most probably that person will not know what that array of symbols represents. But placing the message in a context, say for example, blood pressure is 333/33, can increase the chances for the receiver to decode the message received. And if the receiver has some prior medical knowledge, that person can interpret the message received and act upon it [10].

Hence, the importance for team members to talk the same language. The more the knowledge content to be conveyed can be captured in explicit form, the more effective the modes of knowledge transfer become. Leonard [8] has exemplified the mode of knowledge transfer according to the implication of the receiver in the decoding of message received (figure 1).

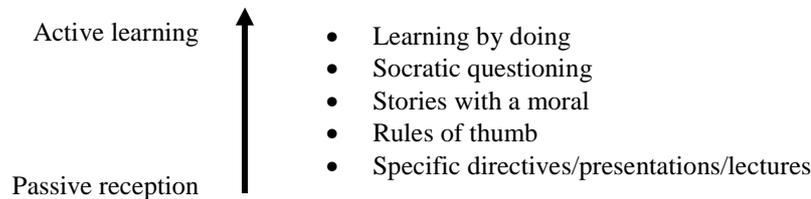


Figure 1. Modes of transfer (Source: Adapted from [8])

Thus, according to the classification made by Leonard [8] the least efficient way of transferring knowledge is through presentations, lectures. In this category can be included the use of intranet within organizations. An intranet is a network that exists exclusively within an organization. The use of intranet can include: access to database, forum for discussion, distribution of electronic documentation, administering payroll and benefits packages, online training, frequently asked questions and so on. The intranet allows for explicit knowledge to be stored and made accessible. Because knowledge has a very dynamic character, constantly changing, both increasing the amount of knowledge, through creation of new knowledge, and decreasing the amount, by loss of knowledge, the management of the intranet systems has to be a very thorough one. Knowledge management systems have to be very robust and flexible at the same time to take frequent updates from all parts of the organization [4].

An intranet thus supports sharing of documents, diagrams and conceptual models that aid thinking and decision making. Therefore, the intranet can be regarded upon as a shared computer work space that becomes the meeting place where project team members generate and share data. One of the evident benefits of intranets is the development of working relationships among team members [6]. On the other hand, the main drawback of intranets resides in the subjective nature of knowledge and its context dependency. It is crucial to realize that the information communicated with the help of intranets will be further on interpreted by other team members. If, as pointed above, the person receiving the information transmitted with the help of intranet does not have the prerequisite knowledge to interpret it can lead to misunderstandings or even worse, can harm the overall objective of the project.

In our opinion, another method highly used in project environments, benchmarking, has also proven to be rather ineffective in terms of knowledge transfer. Benchmarking is a process used in management, in which organizations evaluate various aspects of their processes in relation to best actors, practices, usually within their own sectors. This is a continuous process mostly because practices, customers, demands change and thus a constant adaptation to the changing environment is required. The idea of capturing and transferring knowledge learning from project teams is one that managers find extremely attractive, mostly due to the fact that the lessons learned could improve the quality and or save time and money [2]. But, the transfer of knowledge consists mostly in the replication of practices that are performed in a superior way, which can also lead to the same problem as in the case of use of intranets, where people, without the necessary experience, prior knowledge, can misinterpret or even question the information transmitted which can lead to misunderstandings and so on.

A slightly better method is the one of project briefings. Experienced employees pass on their knowledge and experience from prior projects to team members of the new project team [4]. Within this kind of method the transfer of knowledge takes place in workshops and usually at the

beginning of the project, and thus the team members can easily clarify contingent problems. The method is superior in our opinion to benchmarking due to the face-to-face workshops, where team members can ask as many questions as they feel necessary in order to clarify the problems arose. This method can be combined with storytelling and Socratic Method of knowledge transfer.

The famous Harvard professor [7] has proven that stories are the main mode of communication, and that they are more likely to guide the human behaviour. Stories stimulate the imagination and offer reassurance, providing moral education, explaining certain concepts. Because of the rich contextual details encoded in stories they are the ideal carriers of tacit dimensions of knowledge [8]. The stories are both inscriptions of past performances and scripts and staging instructions for future performances. However, it is important to note that they are highly charged narratives, not merely recounting 'events', but also interpreting them, enriching them, enhancing them and infusing them with meaning [6].

Another method of knowledge sharing which we consider to be also related to storytelling is mentoring. Mentoring is a relationship between two people, the mentor, and the mentee. In this kind of relationship the basis is represented by trust and respect. These two enable problems and difficulties to be discussed in the open, without the feeling of shame, and fear of making mistakes. By sharing experiences, issues and concerns in the open, in a trustful environment, the mentee is able to develop and grow his potential [6]. There are two types of mentoring activities within a working environment, the formal and the informal mentoring. The formal mentoring is when mentoring programs are used in training newcomers or less experienced people. The mentor and the mentee are assigned to work together, and this relationship is characterized by a specific purpose assigned by the organization. On the other hand, informal mentoring is mostly based on relationships that are more personalized and flexible and there is also a high degree of compatibility and cooperation between the mentor and the mentee. In a mentoring relationship the mentor is encouraging the mentee to analyse the performance of the tasks underdone and to identify the strengths and the weaknesses of those tasks. Once the strengths and the weaknesses are identified the mentee is given feedback and guidance in order to improve the tasks and to eliminate the weaknesses. It is a process that involves a high transfer of tacit knowledge, and, thus the mentee is an active participant in the process of knowledge transfer. The knowledge transferred in a mentoring program is mostly knowledge related to problems, how do they arise, what can be done in order to resolve those problems, how and why. It is a method that encourages the active participation of the receiver of the information, because that person is encouraged to reflect on the behaviours and the actions undergone and to identify solutions in order to improve the performance of the tasks.

Also, encouraging the reflection on the behaviour is the Socratic Method. The Socratic questioning forces people to think through and articulate why they are taking a particular

decision or undergo a particular action. It is a method highly used in teaching environments such as Harvard Business School to stimulate the active participation of the students. The method consists of asking five consecutive questions starting with why. After such probes, the examiner often reaches past symptoms to identify the roots cause of the problem. The research [8] has proven that this method results in more knowledge being retained in long-term memory than would be the case if answers to the questions were provided, or even hinted at.

Nonaka and Takeuchi [12] have proven that if new product development teams are able to create “dense” knowledge networks within the team and build bridges between different organizational and outside stakeholders their success would increase. The density of the networks shows the closeness of relations between people [2]. The relationships between friends are considered to be dense, or “close knit networks” whereas the relationships between colleagues are frequently weak or loose knit networks”. Of course, dense teams networks foster shared understandings more easily, which in turn leads to the development of new knowledge. But, in order to create dense networks among the project members the project managers must understand the factors affecting the process of knowledge transfer within the organization and try to integrate those factors in the overall culture of the project.

3. CONCLUSION

How often does one hear at a management meeting “we must have a coherent communication strategy!”, and after that a person is put in charge to spend months of laborious work in order to develop the new communication strategy of the company or of the project. How many times the recommendations and plans proposed in the communication strategy are implemented in real actions, instead of laying untended in reports. We are living in a period in which knowledge is expanding more rapidly than never, yet one of the main limitations of humans is their inability to share and disseminate the knowledge created in ways that people can use it effectively. The main value of knowledge is in its re-use. This and the increasing dependency of a project’s success on knowledge that is not in its possession have raised the attention of project managers towards knowledge transfer methods both within and between teams.

The main purpose of the paper was to present some of the methods of knowledge transfer that could apply to projects environments in order to resolve the problem of knowledge possession. The methods presented in the paper will be of no use if the managers do not learn to manage also the factors that affect the transfer of knowledge within their team. Thus, of interest in the future is to study the factors that hinder the transfer of knowledge within the team in order for the methods of transfer to be successful and to contribute to the overall achievement of the goal.

4. REFERENCES

1. Andriessen, D., Van den Boom, M., East is East and West is West and (n)ever its intellectual capital shall meet, *Journal of Intellectual Capital*, 8(4), pp.641-652 (2007)
2. Buchel, B. Knowledge creation and transfer. From team to the whole organization in Ichijo, K., Nonaka, I. (eds.) *Knowledge creation and management: New challenges for managers*, Oxford University Press, pp. 44-56 (2007)
3. Davenport, T.H., Prusak, L. *Working knowledge*, Harvard Business School Press (2000)
4. Hoegl, M., Schulze, A., How to support knowledge creation in new product development: an investigation of knowledge management methods, *European Management Journal*, 23(3), pp. 263-273 (2005)
5. Kluge, J., Stein, W., Licht, T. *Knowledge unplugged*, UK: Palgrave Macmillan (2001)
6. Koskinen, K.U., Pihlanto, P. *Knowledge management in project-based companies*, London: Palgrave Macmillan (2008)
7. Kotter, J. *Leading change*, Boston: Harvard Business School Press (1996)
8. Leonard, D. Knowledge transfer within organizations in in Ichijo, K., Nonaka, I. (eds.) *Knowledge creation and management: New challenges for managers*, Oxford University Press, pp. 57-68 (2007)
9. Liao, S., Fei, W.C., Liu, C.T. Relationships between knowledge inertia, organizational learning and organization innovation, *Technovation*, 28, pp. 183–195 (2008)
10. Nissen, M.E., *Harnessing knowledge dynamics: principled organizational knowing & learning*, IRM Press, London (2006)
11. Nonaka, I. A dynamic theory of organizational knowledge creation, *Organization Science*, 5(1), pp. 14-37 (1994)
12. Nonaka, I., Takeuchi, H. *The knowledge-creating company: How Japanese companies create the dynamics of innovation*, Oxford University Press (1995)
13. Orzea, I., Agoston, S., Sharing and integrating tacit knowledge, in: Brătianu, C., Lixândriou, D., Pop, Al. N. (eds.), *Business Excellence*, Editura Infomarket, vol. 2, pp. 73-77 (2009)
14. Riege, A. Three-dozen knowledge sharing barriers managers must consider, *Journal of Knowledge Management*, 9(3), pp. 18-35 (2005)
15. Stein, H. *Beyond the World Bank agenda: an institutional approach to development*, Chicago: The University of Chicago Press (2008)
16. Szulanski, G. Unpacking stickiness: An empirical investigation of the barriers to transfer best practices inside the firm, *Academy of Management Journal*, pp. 437-441 (1995)
17. Szulansky, G., Exploring internal stickiness: impediments to the transfer of best practice within the firm, *Strategic Management Journal*, 17 (winter special issue), pp.27-43 (1996)
18. Teece, D.J., Strategies for managing knowledge assets: the role of firm structure and industrial context, *Long Range Planning*, 33(1), pp. 34–54 (2000).