


Integration of Knowledge Sharing Into Project Management

Zinga Novais

ISEG, Universidade de Lisboa, Portugal

Jorge Gomes

 <https://orcid.org/0000-0003-0656-9284>

Universidade Lusófona das Humanidades e Tecnologias, Lisboa, Portugal

Mário Romão

 <https://orcid.org/0000-0003-4564-1883>

ISEG, Universidade de Lisboa, Portugal

INTRODUCTION

An increasing number of organizations have implemented their business operations through projects (Todorović, et., 2015). Projects that can be defined as a temporary effort to create a specific product or service (PMI, 2017). Temporary, in the sense that a project has a defined beginning and end, and unique, in the sense that the product/service is different in some way, distinct from other products/services (Owen & Burstein, 2005; PMI, 2017). Projects are collective endeavors with goals based on the development of common understandings, which generate personal and group knowledge that contributes to their own success (Sankarasubramanian, 2009).

For many organizations, knowledge is the most important asset and its survival depends on the organization's ability to effectively use existing knowledge and to effectively create, develop and use new knowledge (Pascoe & More, 2005). Proper knowledge is a basic prerequisite for effective project management (Gasik, 2011) and the knowledge management is vital factor to successfully undertake projects (Sokhanvar, 2014). According to Koskinen and Pihlanto (2008), projects are often dependent on knowledge that is not in their possession. Within this context, the integration of knowledge management in project management is necessary to share information and knowledge to solve problems effectively and efficiently (Yeong & Lim, 2010). Knowledge, defined by Gao et al (2018) as the practical and theoretical understanding of a subject, is considered as an essential organizational resource (Buvik & Tvedt, 2017; Hanisch et al., 2009) and its management is considered as a fundamental tool for the success of the projects (Romani, 2017).

Generically knowledge management represents the set of processes and practices carried out in organizations with the objective of increasing intellectual potential, improving the effectiveness and efficiency of the management of organizational knowledge resources (Heisig, 2009; Andreeva and Kianto, 2012). The basic purpose of knowledge management is to create and share knowledge within organizations (Chen et al., 2018). Knowledge sharing is especially important in a project environment and contributes significantly to the performance of organizations (Buvik & Tvedt, 2017) and to understand the best way to share knowledge between teams and between members of a project (Fernie et., 2003). Further, Al Ahbabi et al. (2019) conclude that the dimensions of knowledge management had a positive impact on

DOI: 10.4018/978-1-7998-9220-5.ch183

innovation, quality and operational performance of employees. Gürlek & Çemberci (2020) shows that firms under the leadership of knowledge-oriented leaders have high knowledge management capacity, innovation performance and firm performance. Also, due to the temporary nature of projects, knowledge management in project-based organizations is not like functional companies (Kasvi, Vartiainen, & Hailikari, 2003). Project team members split up or leave after project completion and this poses several challenges to projects and project-based organizations (Ajmal, Helo, & Kekale, 2010)

Through a case study approach, it is proved that team members use different knowledge sharing practices, in addition to recognizing its importance for the most successful management of their projects.

BACKGROUND

Knowledge

“Knowledge is seen as an intangible asset, which is valuable, distinctive, path-dependent, causally ambiguous and hard to substitute or replicate” (Fang et al., 2013, p. 945). Knowledge is considered an essential strategic resource that allows organizations to maintain competitive advantage in a dynamic market environment (Rashed, 2016).

There is no single definition of knowledge, it has different understandings depending on the context in which it is being defined (Ekambaram et al., 2018). It can be defined as the practical and theoretical understanding of a subject (Gao et al., 2018), the ability to make judgments (Fernie et al., 2003), based on reflection and human experience (De Long & Fahey, 2000), a system of connections between facts and ideas (Romani, 2017) or information combined with experience, context, interpretation and reflection (Davenport, De Long & Beers, 1998).

De Long and Fahey (2000) believe that there are three types of knowledge: human knowledge, social knowledge and structured knowledge. In addition, they believe that there are two dimensions to understanding knowledge in an organizational context: first, that knowledge can exist at the individual, group or organizational level; and second, that knowledge can be tacit or explicit (De Long & Fahey, 2000). This latter dimension, between tacit knowledge and explicit knowledge, is frequently mentioned in the literature (Buvik & Tvedt, 2017; Chen et al., 2018; De Long & Fahey, 2000; Fernie et al., 2003; Hoorn & Whitty, 2019; Nonaka, 1994).

Explicit knowledge consists of words and numbers that are easily accessible (Uğurlu & Kizildağ, 2013), information defined in a tangible way (Gao et al., 2018; Owen & Burstein, 2005), formal and well structured, through documentation, databases and reports (Terzieva, 2014; Mazur et al., 2014). Explicit knowledge refers to knowledge that is transmissible in a formal and systemic language (Nonaka, 1994; Nonaka & Takeuchi, 1995).

Tacit knowledge is defined as what we know, but we cannot explain (De Long & Fahey, 2000), the experience rooted in the individual’s mind (Koskinen et al., 2003; Chen et al., 2018). Tacit knowledge is not in a structured or documented form. It is internalized by the experience, intuition and insight of individuals who are experts within their organizations (Terzieva, 2014; Mazur et al., 2014; Davenport et al., 1998). Tacit knowledge has a personal quality, which makes it difficult to formalize and communicate (Nonaka, 1994; Nonaka & Takeuchi, 1995). According to the same author, tacit knowledge has two types of elements or dimensions. A cognitive dimension based on paradigms, beliefs and points of view that provide individuals with unique perspectives, and a technical dimension supported by informal skills and know-how applied to a specific context (Nonaka, 1994; Nonaka & Konno, 1998). Tacit knowledge

15 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/integration-of-knowledge-sharing-into-project-management/317737

Related Content

Autonomous Navigation Using Deep Reinforcement Learning in ROS

Ganesh Khakare and Shahrukh Sheikh (2021). *International Journal of Artificial Intelligence and Machine Learning* (pp. 63-70).

www.irma-international.org/article/autonomous-navigation-using-deep-reinforcement-learning-in-ros/277434

Three-Layer Stacked Generalization Architecture With Simulated Annealing for Optimum Results in Data Mining

K. T. Sanvitha Kasthuriarachchi and Sidath R. Liyanage (2021). *International Journal of Artificial Intelligence and Machine Learning* (pp. 1-27).

www.irma-international.org/article/three-layer-stacked-generalization-architecture-with-simulated-annealing-for-optimum-results-in-data-mining/279277

A Survey on Arabic Handwritten Script Recognition Systems

Soumia Djaghbello, Abderraouf Bouziane, Abdelouahab Attia and Zahid Akhtar (2021). *International Journal of Artificial Intelligence and Machine Learning* (pp. 1-17).

www.irma-international.org/article/a-survey-on-arabic-handwritten-script-recognition-systems/279276

RFID Security Issues, Defenses, and Security Schemes

Atul Kumar and Ankit Kumar Jain (2021). *Handbook of Research on Machine Learning Techniques for Pattern Recognition and Information Security* (pp. 293-310).

www.irma-international.org/chapter/rfid-security-issues-defenses-and-security-schemes/279917

Early Detection of Alzheimer's Using Artificial Intelligence for Effective Emotional Support Systems

A. Sivasangari, V. J. K. Kishor Sonti, L. Suji Helen, D. Deepa and T. Samraj Lawrence (2024). *Machine Learning Algorithms Using Scikit and TensorFlow Environments* (pp. 192-208).

www.irma-international.org/chapter/early-detection-of-alzheimers-using-artificial-intelligence-for-effective-emotional-support-systems/335189