

# Managing Project Knowledge Exchange: Paradigms and Possibilities

A distinct paradigm exists in the management of project knowledge exchange. To deliver a project, a project manager must know how to balance a wide range of activities using codified techniques. The efficient application of these techniques relies on accepted bodies of knowledge, such as the Project Management Body of Knowledge, referred to as the PMBOK® Guide (*Project Management Institute, 2013*). Through the use of a common language, defined by a body of knowledge within the profession, the project manager becomes increasingly sophisticated at interpreting and communicating client expectations – or not. The advantages of consistently adhering to institutionalized frameworks may contribute to a unitary set of beliefs with boundaries, thus limiting possibilities.

Over a decade ago Morris (2000) suggested the way to refocus project management was through building knowledge, learning and competency. To build knowledge in an evolving and dynamic environment Nonaka, Toyama and Konno (2000) developed a ‘Model of Dynamic Knowledge Creation’. This model suggests that by following a prescribed process tacit knowledge can be converted to explicit knowledge through socialization, externalization, combination, and internalization. However, through simplifying the conversion of knowledge “... Nonaka

is blurring the lines between individuals and groups” (*Bratianu, 2014, p. 195*), and does not explicitly consider reusable knowledge in the transformation of knowledge (*Harsh, 2009*).

In practice, project managers have limited access to techniques on how to effectively exchange knowledge between individuals and groups. The PMBOK® Guide (*Project Management Institute, 2013, p. 466*) is limited in this area, including knowledge management as an appendix. The appendix suggests project managers consistently manage project data, work performance information, and work performance reports using a traditional knowledge management model. This model proposed by Ackoff (1989) depicts a hierarchy of ‘Data, Information, Knowledge, Understanding, Wisdom’ (*DIKW*). The model describes the content of the human mind in terms of past experiences of and how they are incorporated into a future vision and design.

Research has begun to create insights on how project managers exchange knowledge in Australia (*Algeo, 2014a*). The outcomes suggest project managers exchange knowledge in a predominantly impersonal manner and in a formal context, and the exchanges are systematic and social. Knowledge

exchange for project managers is deliberate and can be a multi directional and includes reciprocal exchange of knowledge assets. It has been defined as “a social process contingent on histories, professional perspectives and local conditions where interaction results in a systematic mutual approach to identify, capture and share tacit knowledge in order for it to become explicit knowledge (*Algeo, 2014b*). In comparison, related areas of knowledge research include Knowledge Management, which includes “... the application of principles and processes designed to make relevant knowledge available to the project team” (*Reich, 2007, p. 8*). Knowledge transfer has been viewed broadly, and perhaps less consistently, in several contexts including: networks (*Reagans & McEvily, 2003*); inter-firm knowledge transfers within strategic alliances (*Mowery, Oxley, & Silverman, 1996*); knowledge transfer success in new product development (*Cummings & Teng, 2003*); and the transfer of implementation knowledge from consultants for an Enterprise Resource Planning system (*Ko, Kirsch, & King, 2005*).

The knowledge exchange research (*Algeo, 2014b*) noted that there was commonality between what the project manager said they did to exchange knowledge. In addition, capturing their workplace colleagues views of the project manager’s behavior reinforced the conclusion of a consistent course of action (*Algeo, 2014a*). The significance of these views is important given the real possibility of inconsistency. This alignment reinforces, at least for the primary preference, the self-perception of the project managers’ and the observed reality. While it was expected

there may be differences between the observations and the project managers’ self-perceptions, the consistent results from the different colleague’s evaluation of their project manager was aligned, which was unexpected. The consistency may be indicative of not only consistent behavior reinforced by strong operating views, but of a paradigm effect within the world of the project manager.

Using an action research framework, new techniques were developed and tested to manage project knowledge exchange and applied in five government and private organizations in Australia (*Algeo, 2014a*). The project managers were given a single laminated sheet with a diagram to trigger the following questions to influence their communication planning and when exchanging knowledge:

- **Organisation:** what is the industry sector, the nature of the business, and level of maturity you are working with as this will overtly or covertly influence how you exchange knowledge?
- **Individuals:** are the people involved experienced and hold the required qualifications/certifications, and will their personal traits support or hinder how you exchange knowledge?
- **Relationship:** have you planned if knowledge will be exchanged formally or informally, how will you balance the power levels, and if trust is important, how will this be established and maintained?
- **Tools:** do your tools to exchange knowledge need to be formal or informal, what procedures need to be followed or developed, and what are your technological needs?

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- **Project:** is the project strategic to the organisation, driven by time factors and what will be the impact of the expected outcomes?

Project managers were asked to "... think about the sequence of thought processes in which they engage while managing" (*Mumford, 1996, p. 4*). The task cycle moved through four core experiences including: taking action; seeing results; thinking about results; and planning next time. Post use, the project managers reported increased awareness and changes to their approach to exchanging knowledge and a perception of 'usefulness' of the tool.

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- The reflexivity of a micro-view of the management of local knowledge exchange has the potential to inform accepted professional bodies of knowledge and practices through a more complete mapping of managing project knowledge exchange. An over-reliance on structure, reinforced by the paradigm of creating order to deliver expected project outcomes, may limit possibilities. This approach may deliver predictable project outcomes through mechanisms of control, however an over-reliance on a systematic approach will drive mediocrity through conformity.
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