



Case Study

AT A GLANCE INDUSTRY:

Mining Project Based Organisations

COMMODITY:

N/a

CLIENT:

VBKOM (Pty) Ltd

LOCATION:

Centurion, Gauteng

PROBLEM SUMMARY:

Does management of knowledge contribute to project success?

SERVICE:

Management Consulting & Knowledge Management

AUTHOR:

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Mining Engineer



Knowledge Management

Knowledge Management and Mining Consulting – A research summary of good practices

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Abstract:

Various theoretical benefits for knowledge management exists, however putting Knowledge Management into practice in a consulting environment is more challenging. The text examines the recommendations from a research study undertaken in mining consulting and the initial steps implemented to move towards a more mature knowledge management organisation

Keywords:

Knowledge Management, Consulting, Project-based Organisations, Project Success, Case Studies



Problem Statement

Does implementing more formal methods of knowledge management lead to better project outcomes?

Many people are familiar with the saying “Knowledge is Power” and “Knowledge is the key to success”, but what is Knowledge Management and how does it affect project performance? Knowledge Management is a continuous flow of information in which knowledge is refined and categorized into logical processes such as capturing, sharing, transferring, creating and applying knowledge.

Lehlohonolo Lehasa, one of VBKOM’s mining engineers researched the effect of Knowledge Management on project success as part of her Master’s Degree dissertation. Her research problem stated that “Given the vast amount of knowledge and experience available within the mining industry, as well as the maturity and sophistication of project management practices, how can project managers improve project performance (time, budget and deliverable quality) on the basis of implementing Knowledge Management systems with specific reference to Knowledge Transfer?”

This summary paper will distil the core findings of Lehlohonolo’s research, as well as the practices implemented by VBKOM itself to move towards a more mature consultancy.



Research Objectives

To probe which key characteristics and/or aspects of organizational culture inhibit or enable Knowledge Transfer. More specifically:

- To determine to what extent knowledge transfer affects project performance in a project based organization
- To determine what characteristics or factors inhibit or enable knowledge transfer
- To analyse the impact of documenting lessons from projects on knowledge transfer
- To determine if engineers find project based knowledge management frameworks or guidelines applicable in their work environment.

Knowledge management aims to improve organizational performance by controlling and managing the value of past, present and future

knowledge. This can be done through generating knowledge and revising the availability, quality and utilization of knowledge. The main notions of Knowledge Management include transforming information, organizational expertise and experience into usable knowledge that can be re-used by employees who need it. Project closure and project gates are good opportunities to capture and transfer explicit knowledge within a project based organization. Pemsel & Wiewiora (2013) found that when lessons are documented the main focus is on what was achieved by a project team (product knowledge) rather than how this had been achieved or why it worked or did not work (process knowledge).



Research & Literature

Linking Project Success to Knowledge Management, and more specifically Knowledge Transfer

Literature has shown that Organizational Knowledge Management is important for a number of reasons:

- Knowledge Management improves organisational performance (competitive advantage)
- Knowledge Management increases focus on project outcomes (provide fast solutions)
- Knowledge Management assists organisations to sustain their business in a dynamic economic environment (enhances the dynamic capability of employees)
- Knowledge Management protects the organisations knowledge assets (information, data, processes, intellectual property)
- Knowledge Management assists organisations to acclimatise to rapid changes in technology (technology management)
- Knowledge Management improves internal and external engagement and communication (assists to enhance organizations core growth and learnings)
- Knowledge Management improves project management

Furthermore project success is based on the ability of an organization to complete its temporary initiative (i.e. project) on time, within budget and within acceptable quality tolerances. The research conducted indicated that Project Based Organisations (i.e. organisations who deliver their services by means of projects) face specific challenges when implementing Knowledge Management systems due to the following reasons (Refer Lindner & Wald 2011)

- The temporary nature of projects hinders the emergence and development of organizational routines.
- Projects are often made up of discontinuous teams (teams that break up after project completion)
- In contrast to permanent organisations, the unique nature of projects makes the transfer of knowledge from one project to another challenging
- Projects usually have a rather short term orientation with a focus on immediate deliverables while Knowledge Management requires a long term perspective that encompasses a continuous learning approach.

Knowledge Management as a construct and practice, however includes three (3) processes for two (2) knowledge types:

- Knowledge Creation,
- Knowledge Transfer (Sharing) and

- Knowledge Recycling (Re-use).

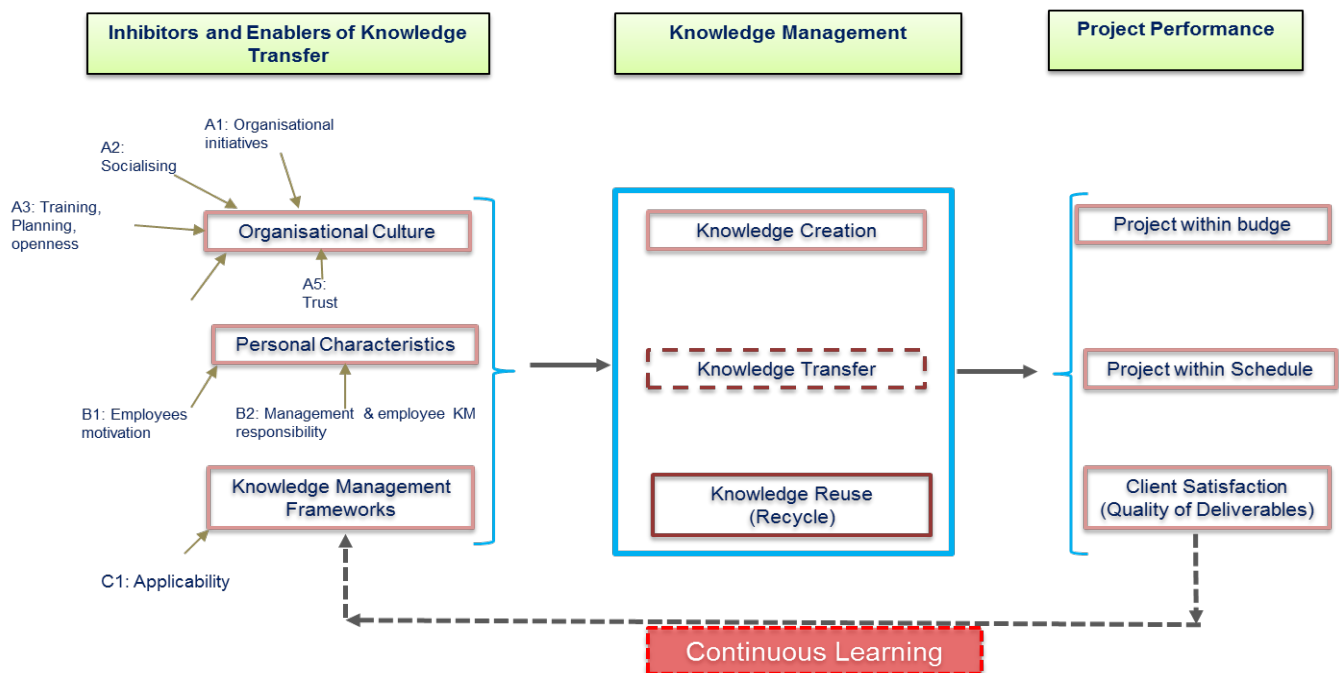
Of which all must/can encompass the two knowledge types of:

- Explicit Knowledge (external, tangible knowledge, this is knowledge that is documented in a formal, systematic manner)
- Tacit Knowledge (internal, intangible knowledge, rooted in an individual's subconscious, experiences, intuition, insight, and judgment)



Theoretical Model

The major inputs, as derived from literature were used to investigate the relationship between the Knowledge Management and project performance. The following constructs formed the theoretical model:



An empirical case study approach was used to carry out the research and data was collected in accordance with the above model by means of Questionnaires and Purposive sampling.



Project Results

The following results were confirmed by the research and data sampling:

- (1) It was affirmed that Knowledge Transfer contributes to effective project performance. Participants agreed that often they complete work faster or avoid mistakes due to colleagues sharing their own previous work experiences e.g. (skills, lessons learnt, and documented standards or templates).
- (2) Initiatives, Socialising & Training, Formal Communication, Interpersonal Trust and Individual Motivation were cited as organisational cultural characteristics which either inhibit or enable Knowledge Transfer
- (3) In terms of a ranking of findings, “Documenting and Sharing lessons learnt from projects” and “Active Leadership Support” came out as the top two cultural characteristics which either inhibit or enable Knowledge Transfer
- (4) The more systematic, formalised, frequent and proficient the Knowledge Transfer process in an organization, the more likely that the project will perform well. The findings indicated that project members have worked faster (project schedule), and avoided technical mistakes (project deliverable quality) where active Knowledge Transfer took place.



Customer Value

In the case of VBKOM, customers stand to benefit from the following

- VBKOM began writing up project standards for the services represented on our value chain.
- VBKOM began writing short project case studies at the end of each project. The case studies give an overview of the project problem and how the company offered a solution.
- Customer feedback is solicited in less onerous and formal manners, thereby increasing the learning and knowledge transfer by means of higher feedback rates
- Going forward Lessons Learnt will not only include the WHAT, but also the HOW (process)

References:

Pemsel, S. & Wiewiora, A., 2013. Project management office a knowledge broker in project-based organizations. *International Journal of Project Management*, 31(1), pp.31–42.

Lindner, F. & Wald, A., 2011. Success factors of knowledge management in temporary organizations. *JPMA*, 29(7), pp.877–888.

