Mechanisms for Capturing and Transferring Tacit Knowledge Between Projects

Ricardo D Correa – Uninove University
Prof. Dr. Luciano Ferreira da Silva - Uninove University
Prof. Dra. Isabel Cristina Scafuto - Uninove University
Agenda

• Objective
• Theoretical Framework
• Methodology
• Presentation of Results
• Conclusions
Objective

A vision about the difficulties and enablers in adopting a process of capturing and transferring tacit knowledge between projects.

Purpose of explaining the causes that prevent the tacit knowledge transfer process from being adopted and offering solutions (Mechanisms) that can be applied for projects and their organizations.
• Theoretical Framework

- Knowledge and Knowledge Management
- Explicit and Tacit Knowledge
- Tacit Knowledge in Projects
- Difficulties in Capturing and Transferring
- Mechanisms for Tacit Knowledge

- Polanyi, 1966
- Nonaka & Takeuchi, 1995
- Szulanski, 1996
- Davenport & Prusak, 1998
• Methodology

- Note in the Literature of the themes:
  - Knowledge management
  - Project Knowledge Management
  - Factors that hinder and Factors that facilitate ....
  - .... the capture and transfer of tacit knowledge

- Understanding these difficulties that apply to projects
- 11 Difficulties categorized according to their characteristics
- Develop mechanisms to facilitate the Tacit Knowledge transferring

“What does the academic literature offer regarding the capture and transfer of tacit knowledge to the Project Management area?”
• Methodology – SLR – Pollock and Berge

Question: “What does the academic literature offer regarding the capture and transfer of tacit knowledge to the Project Management area?”
### Results Presentation

**Difficulties** in capturing and transferring tacit knowledge in Projects

<table>
<thead>
<tr>
<th>Difficulties - Categories</th>
<th>Caracteristics</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>I - Organizational environment</td>
<td>Set of values, beliefs and behavioral norms that guide how members of the organization react in their day-to-day activities in organizations.</td>
<td>Context-specific influence; Disintegration of the project team; Conflict between project and organization objectives; Lack of organizational support for the adoption of a favorable climate between projects.</td>
</tr>
<tr>
<td>ii - Social Aspects</td>
<td>Bonds and connections established by interactions between individuals, indicating frequent communication and reciprocal cooperation, accompanied by mutual trust between project teams.</td>
<td>Social distance between team members. Lack of knowledge exchange events.</td>
</tr>
<tr>
<td>iii - Project Characteristics</td>
<td>Peculiar nature of a unique, temporary undertaking, involving different characteristics among it, varying degrees of risk, uncertainty, urgency and complexity, etc.</td>
<td>Pressure for deadlines and costs, finite timeliness of the project; Focus on short-term deliveries; Discontinuing nature of projects.</td>
</tr>
<tr>
<td>iv – Temporal Aspects</td>
<td>Factors related to the time (duration and moment) in which the project team has to invest in knowledge-related activities.</td>
<td>Long time between cause and effect of the problem; Time taken to codify knowledge; Lack of time to dedicate to sharing knowledge.</td>
</tr>
<tr>
<td>v - Competencies</td>
<td>Knowledge, Skills and Attitudes inherent to the individual, the group and the organization that facilitate or hinder the transferability of knowledge.</td>
<td>Difficulties in externalizing knowledge; Difficulties in perceiving knowledge transfer activities; Recipient ability to decode knowledge; Willingness (willingness) to absorb knowledge.</td>
</tr>
<tr>
<td>vi - Communication</td>
<td>It is characterized by the critical role of the context, the interaction between the sender and the receiver, the means used and the content involved in the knowledge transfer process.</td>
<td>Low priority for communication activities; Lack of Standard in communication; Communication capacity of the issuer.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Difficulties - Categories</th>
<th>Caracteristics</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>vii – Cultural aspects</td>
<td>Basic beliefs commonly held and learned by a group, which govern the perception, thoughts, feelings and actions of an individual member of a group and which are typical of the group as a whole.</td>
<td>Cultural differences between project teams; Syndrome was not created here; Belief that the context is unique (no identification of connection between projects); Culture of self-censorship</td>
</tr>
<tr>
<td>viii – Educational Aspects</td>
<td>Continuous process of formation or development of intellectual, technical and procedural faculties within an organization.</td>
<td>Not allowing or not providing adequate time for training; restricting coaching opportunity or access to new trainees; Lack of formal learning incentives and structures outside the projects; lack or failure of training.</td>
</tr>
<tr>
<td>ix - Infrastructure and Technology</td>
<td>The necessary infrastructure, including technological aspects, such as systems and platforms to conduct the capture and transfer process, considering the tacit nature of knowledge.</td>
<td>Lack of structure for Cross-regional knowledge exchange; Lack of mechanisms to capture project learning; Lack of Integration between IT systems and processes; Cost implications.</td>
</tr>
<tr>
<td>x - Procedural Aspects</td>
<td>Processes, Methods, Tools and Activities inherent to the project and the organization that impact the transferability of tacit knowledge.</td>
<td>Lack of record of experience in project processes</td>
</tr>
<tr>
<td>xi – Motivational Aspects</td>
<td>Drive that makes people act to achieve their goals. It involves emotional, biological and social phenomena and is a process responsible for initiating, directing and maintaining behaviors related to the achievement of goals.</td>
<td>Members see no value in the encoding process; Project team members see no benefit in being involved in post-project reviews</td>
</tr>
</tbody>
</table>
## Appropriate Mechanisms - Tacit Knowledge Capture and Transfer

<table>
<thead>
<tr>
<th>Mechanisms</th>
<th>Examples</th>
<th>Authors:</th>
</tr>
</thead>
</table>
| i- COP /PMC | COP - Community of Practice  
PMC - Project Management Community / COE - Center of Expertise (Excellence) | Fernie et al, 2003; Bresnen et al, 2003; Garret et al, 2004; Wanberg et al, 2017; Haass & Azizi, 2019; Wenger et al., 2002 |
| ii- Use of Social structures and activities - Socialization. | Meetings; special team events; Face to face interactions; Knowledge sharing connections changing reporting structures - a common tactic for managing knowledge; Practice-based learning approach; Learning Cafes and Expert Group Meeting. | Ren et al, 2019; Fernie et al, 2003; Enkel & Heil, 2018; Garret et al, 2004; Wanberg et al, 2017; Byosiere et al, 2010; Landaeta, 2008; Eltigani et al, 2020; Haass & Azizi, 2019 |
| iii- Provide a Favorable Environment for the Culture of Knowledge | Informal Knowledge Networks; error-tolerant environment; Balance between Rigor and Freedom in learning; Environment for change together with leadership commitment. | Lindner & Wald, 2011; Ren et al, 2019; Eltigani et al, 2020; Bresnen et al, 2003; Fernie et al, 2019; Garret et al, 2004; Foos et al, 2006 |
| iv-Project Reviews | Project Reviews or Audits; Post-Project Review; Review of the Action Plan; etc | Schindler & Eppler, 2003; Goffin & Koners, 2011; Haas & Azizi, 2019; Landaeta, 2008 |
| v- Learning Goals | Knowledge goals at each phase of the project.  
Project-specific tacit knowledge measures to verify progress in integrating tacit knowledge; Rewards for achieved knowledge goals. | Schindler & Eppler, 2003; Ren et al, 2019; Bharadwaj et al, 2005; Foos et al, 2006 |
| vi-Systematization of Lessons Learned | Project Debriefing; Brainstorming; Dialogue Sessions; Storytelling; Expert Debriefing; Interviews; Learning History; Lessons Learned or Best Practices Workshops | Lindner & Wald, 2011; Goffin & Koners, 2011; Haas & Azizi, 2019; Mugellesi Dow & Pallaschke, 2010 |
| vii- Six Sigma Knowledge Creation Mechanism. | Socialization - Brainstorming, Nominal Group Technique, etc. Externalization - Value Stream Map, Fishbone Diagram, Failure Mode Effects – FMEA; etc. Combination – Design of Experiments, Multiple Regression, Quality Function Deployment, etc. Internalization – Error-Proofing, Control Charts, job Rotation, etc. | Anand et al, 2010 |
| viii-New roles | Debriefer; Knowledge Manager; Knowledge Broker Individuals; Brokers | Schindler & Eppler, 2003; Bresnen et al, 2003; Landaeta, 2008; Garret et al, 2004 |
• Conclusion

Organizations that run Projects (internal & external)

Facing challenges to disseminate Knowledge between Projects

To better understand how knowledge occurs, how tacit knowledge is constituted.

Strategically develop knowledge management for their projects

Factors that hinder and Factors that facilitate
• Limitations and Future Work

The difference between Project Based and Project Oriented in terms of Capturing and Transferring Knowledge

The role of Project Support Structure as a broker for in the capture and transfer of knowledge in Projects.

Verify influence of Leadership in Capturing and Transferring Knowledge (Li-Ren Yang et al, 2014)

Horizontality and Verticality in the Transfer of Knowledge Between Projects (Qianwen Zhou et al., 2020)
Thanks!

Mechanisms for Capturing and Transferring Tacit Knowledge Between Projects

Ricardo D Correa – Uninove University
Prof. Dr. Luciano Ferreira da Silva - Uninove University
Prof. Dra. Isabel Cristina Scafuto - Uninove University

ricardocorrea.rdc@gmail.com  lf_silvabr@yahoo.com.br  isabelscafuto@gmail.com