Virtual Teams - Role of ICT in managing globally distributed Projects

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Project Scope

- **Research question:** How can a project managers leverage information and communication technologies(ICT)effectively to mitigate a high level of risk that is inherent in remote IT projects ?

- Why virtual or remote teams are becoming popular?
- What benefits can they provide to the organizations?
- What are some of the problems faced by the virtual teams?
- What role ICT Technologies can play in bringing team members together?
- What major factors lead to failure of remote projects?

Outline

- Background/Introduction
- Common problems faced by remote teams
- Establishing a Communication Framework
- Risk Management of remote Projects
- Conclusion

Background

- **Outsourcing:**
  - Intense Competition and tight project budgets
  - Rise of Knowledge based economy
  - Minimize Operational Cost
  - Emergence of Cloud based communication technologies
  - Leverage global talent

Virtual Teams

Definition:

"a group of geographically, organizationally and/or time dispersed workers brought together by information technologies to accomplish one or more organization tasks" (Powell et al. 2004, p. 7).

Virtual Teams

- **Benefits**
  - Cost Reduction
  - Cultural diversity
  - flexibility in building cross-functional teams
  - Business value

Input-process-output model

Figure 1: Issues arising in initial stages of team formation

Figure 2: Processes that enable successful functioning of the team

Figure 3: Task Processes enable collaborative work environment

Figure 4: Output category of issues focuses on the performance of the virtual team

Establishing a Communication Framework

- Our focus in this project was management of remote IT projects
- Global IT projects cannot function without sufficient ICT involvement.
- Due to low product visibility and changing requirements IT projects are perceived as challenging and High risk.
- Meeting deadlines of projects requires a high degree of communication amongst the team members.

Information overload:

- High information overload load can occur due to excessive volume of e-mails or text based communication.

- This leads to
  - overlooking of critical information
  - Delays in decion making
  - Co-ordination Problems

  - Communicaiton framework should allow the ability to prioritize certain type of communications.

Ranking Communication Tools:

Media Richness Theory (MRT), proposed by Daft and Lengel (1986), can be used by organiation to judge communication abilities of different communication media.

Social Media

- Social networks can diminish the cognitive distance between project team members.

- They can allow:
  - Increased Knowledge sharing
  - informal communication between members of the team
  - establish a sense of oneess (To be said: amongst the team mmebers and has a positive influence on team dynamics.)
  - Boast overall team morale

Risk Management of Remote Projects

Lack of Communication- Associated risks

- miscommunication can lead to:
  - Risk of Redundant work
  - Incorrect understanding of project requirements
  - Project Failure

- Mitigation Strategy:
  - ICT technologies
  - Create a Symbiotic Relationship
  - Facilitate Transfer of Knowledge

Heterogeneous culture

- Preferred mode of communication
- Cultural arrangements
- Manager Training
- Infusing Cultural sensitivity

Collaboration Tools - Associated Risks:

- Selection of Tools
- Low usage frequency
- Tool's Training

- TTF Model
- Five trigger Model

Task-oriented communications

- It will influence expertise location and cognition-based trust in virtual teams.

Lack of collaboration – associated risks

- Introvert and extrovert members
- Characteristics of team members
- Size of Project team
- Reduced efficiency of virtual team

Key takeaways

- Sophisticated communication technologies can go in vain if the team is lacks trust or is not willing share knowledge.
- Certain ICT technologies can reduce the communication gaps better than others and richness of the information needed to establish strong social relationships.
- Internal social communication tools that allow informal commination can go a long way in establishing bonds or oneness amongst team members.

Key takeaways (continued)

- Overall even though globally distributed teams face a lot of challenges, they have the capability to provide organizations with great opportunities and benefits in terms of adding business value(Akemi et. al,2013).

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