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THE IRISH SOFTWARE
ENGINEERING RESEARCH CENTRE



International
Science Centre

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Global Software Development



Research Interests



- Planned and Agile Software Process in Specific Environments
 - Regulated Industry
 - Global Software Development
 - Small to Medium Sized Enterprises
 - Services

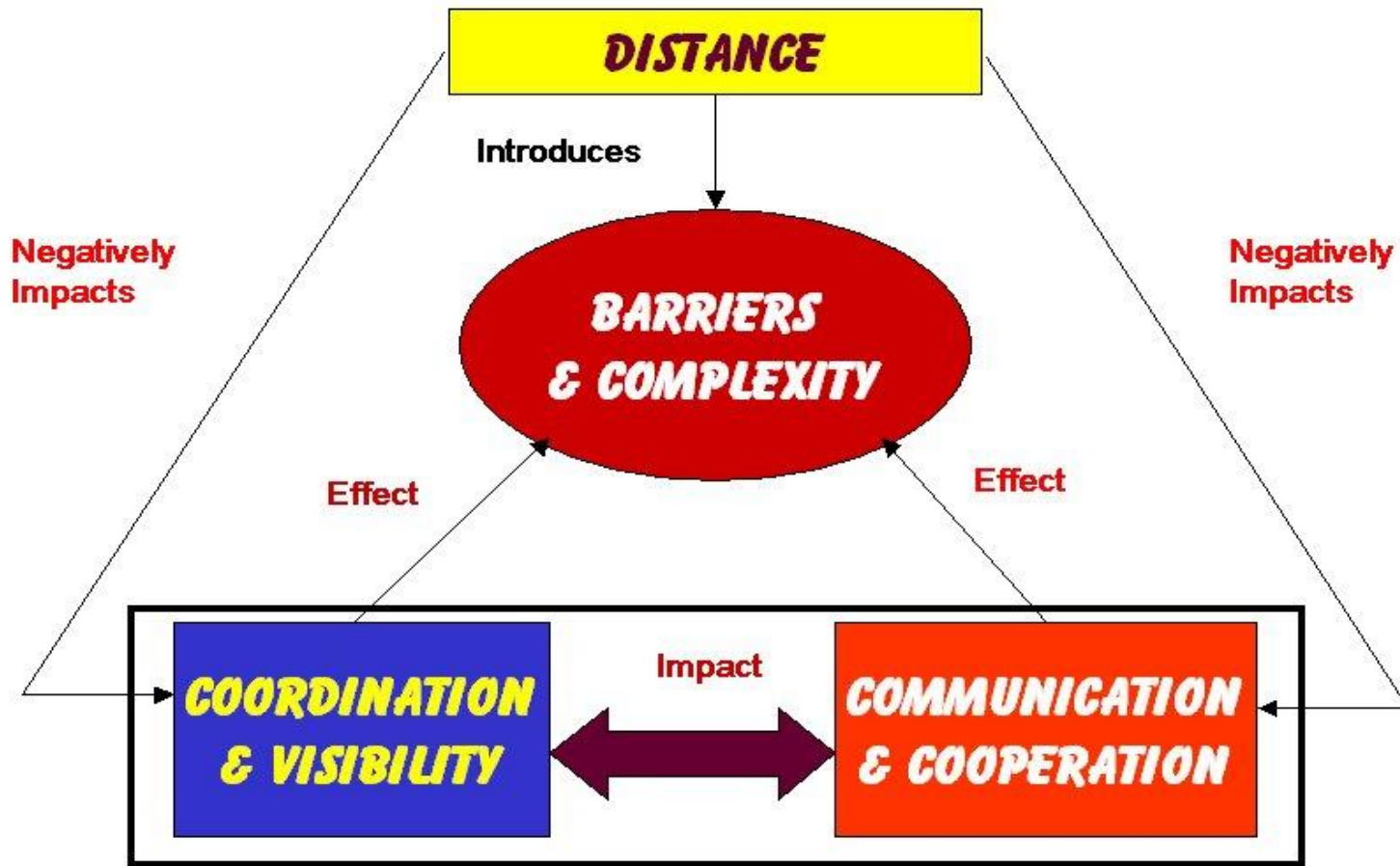


Global Software Development

- Barriers and Complexities in Global Software Development
- Are there solutions?
- How must processes change?
- What about process models?



Implementing Global Software Development



Casey, 2007

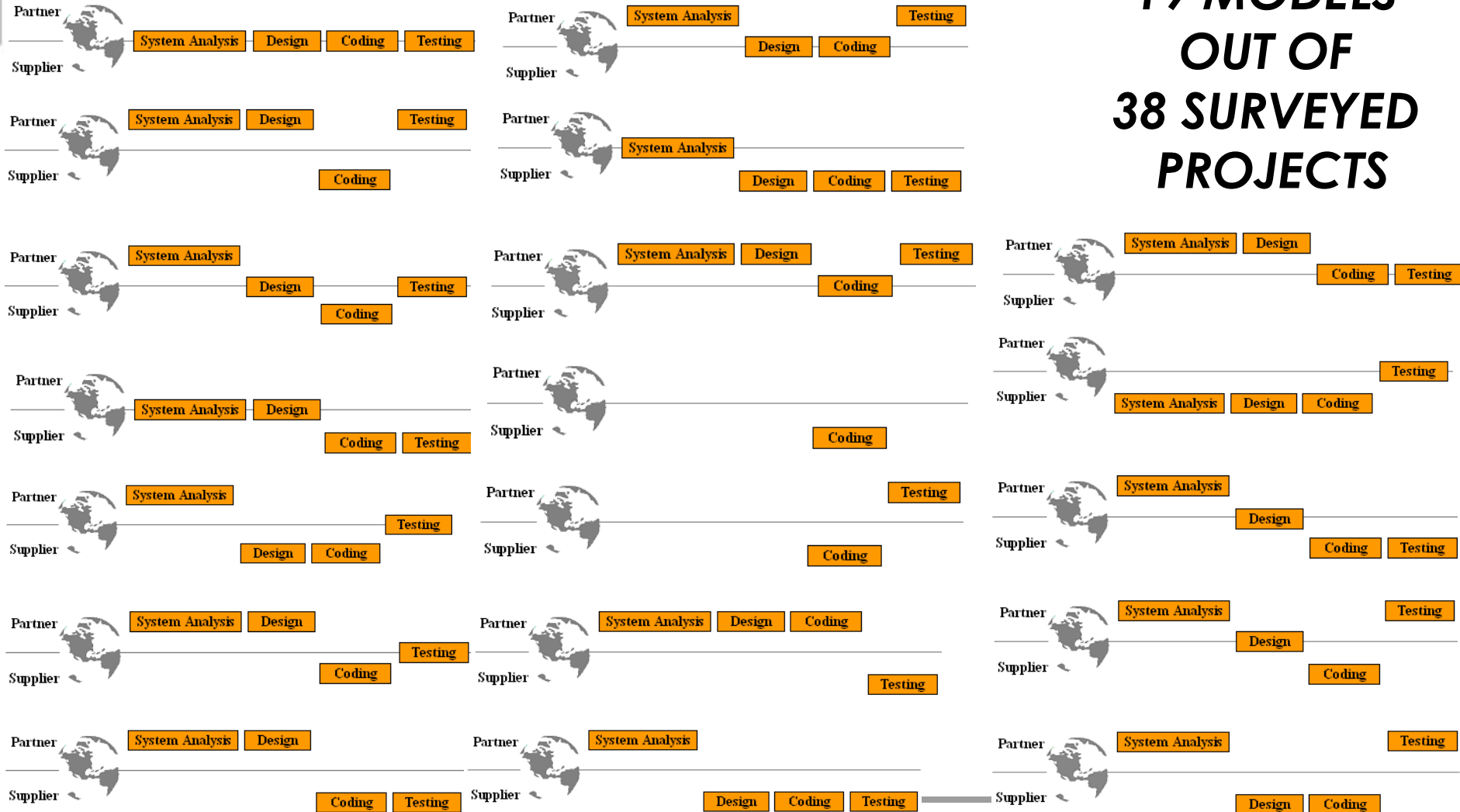
*What are the
BARRIERS AND
COMPLEXITIES?*

There is no one model for Global
Software Development

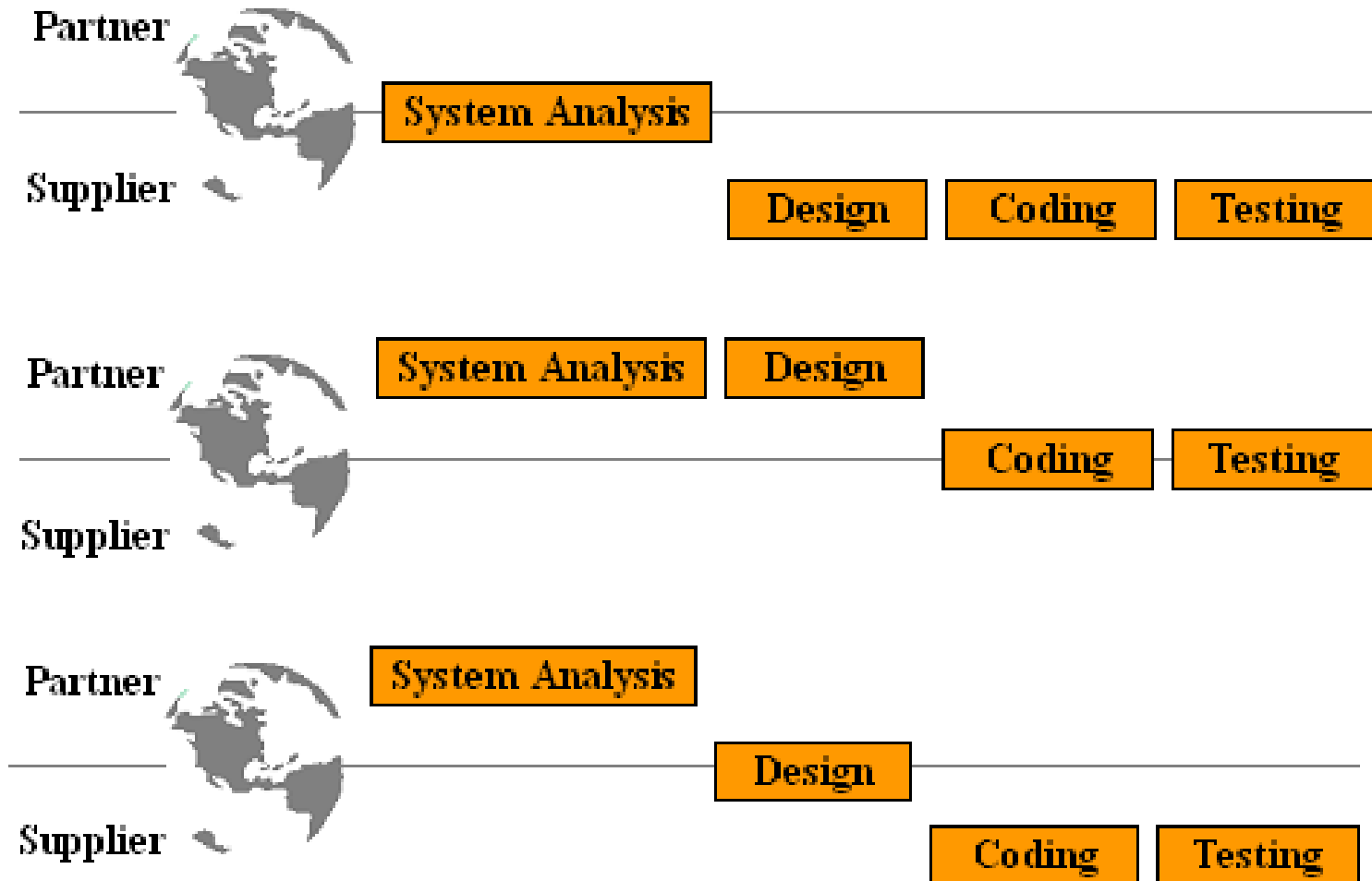


COLLABORATION MODELS (Šmite, 2007)

**19 MODELS
OUT OF
38 SURVEYED
PROJECTS**



COLLABORATION MODELS (Šmite, 2007)





Many of which are not software development / engineering / process factors

*What are the
**BARRIERS AND
COMPLEXITIES?***

There are many factors at play in Global Software Development –

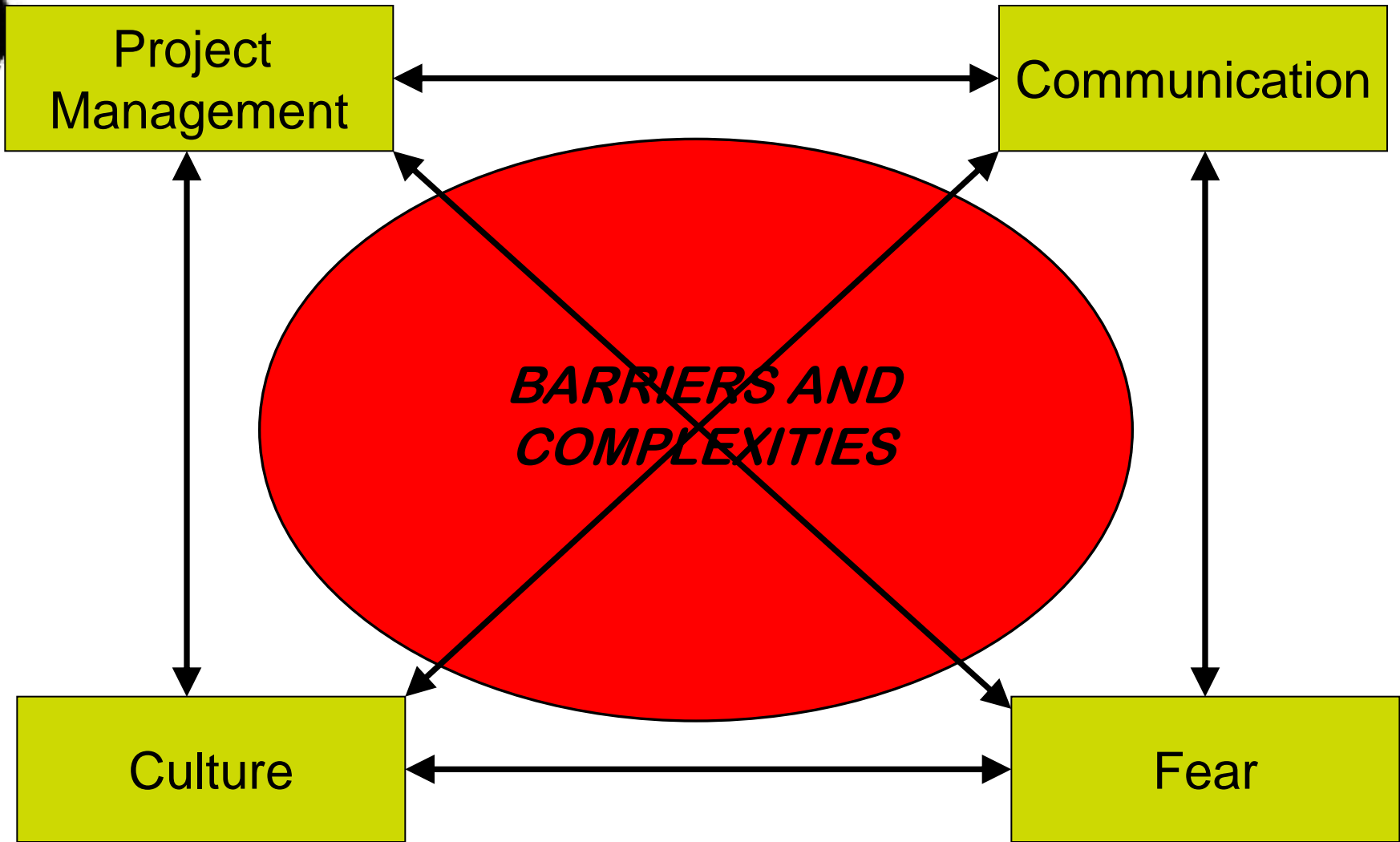
Project
Management

Communication

***BARRIERS AND
COMPLEXITIES***

Culture

Fear



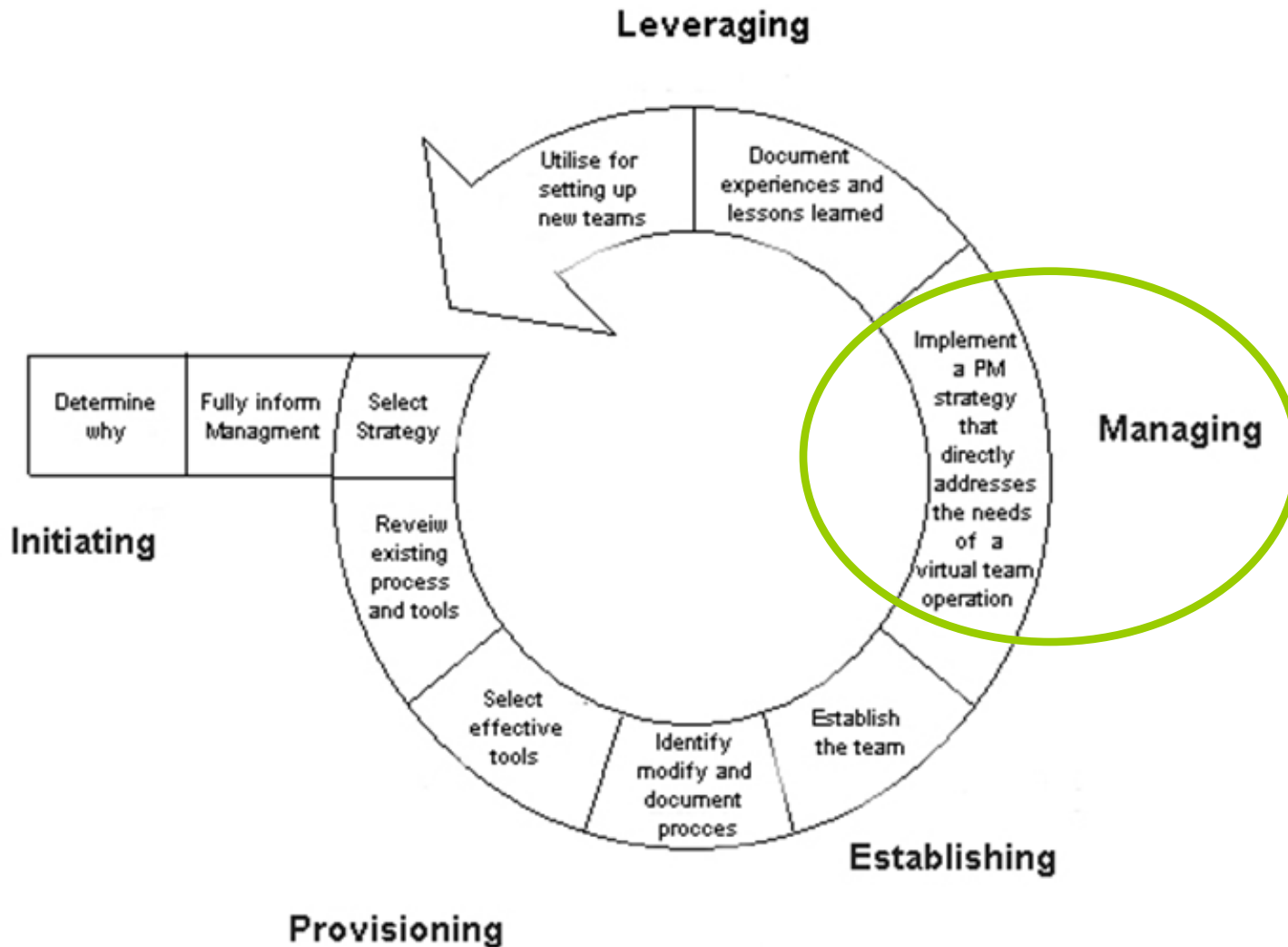


Are there strategies we can use to support effective Global Software Development?



GSD Implementation Model

(Casey & Richardson, 2009)





Global Teaming

(Richardson et al., 2009)

- **SG1: Define Global Project Management**
 - SP1.1 Global Task Management
 - SP 1.2 Knowledge and Skills
 - **SP 1.3 Global Project Management**
- **SG2: Define Management between Locations**
 - SP 2.1 Operating procedures
 - SP 2.2 Collaboration between locations



SP 1.3 Global Project Management

- Identify Global Software Project Management Tasks
 - Plan, facilitate, implement, monitor global communication & coordination related activities
 - Effective policies and procedures
- Assign Tasks to appropriate team members
 - Effective partitioning and allocation of work
- Ensure awareness of cultural profiles by project managers
 - Religion, gender, power distance
 - Corporate vs national cultural norms



SP 1.3 Global Project Management

- Establish cooperation and coordination procedures between locations
 - Tools, processes, technology
 - Motivation to use tools
- Establish reporting procedures between locations
 - Implement formal reporting
 - Requests and instructions
- Establish a risk management strategy
 - Understand staff and their culture
 - Understand the locality in which you are operating



Global Software Development – in summary

- There are problems which exist
 - No one model for GSD
 - Many influencing factors are not technical
- There are solutions
- But
 - Project Managers, Software Engineers and Developers need to become more knowledgeable about problems and potential solutions



Thank you
and.....Questions?

References

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Thank You