Risk Management in Global Software Development: A Position Paper

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Risk Management in Global Software Development

- Risk Management in GSD involves additional steps
- We lived some experiences with a wholly owned subsidiary that shows us that:
  - GSD involves additional steps and decisions that can impact in the risk management process
  - Having distant teams, using collaboration technologies, and developing specific solutions to distributed projects also adds more risk factors to the projects
  - We need to create a process that consider also decisions taken before the project start
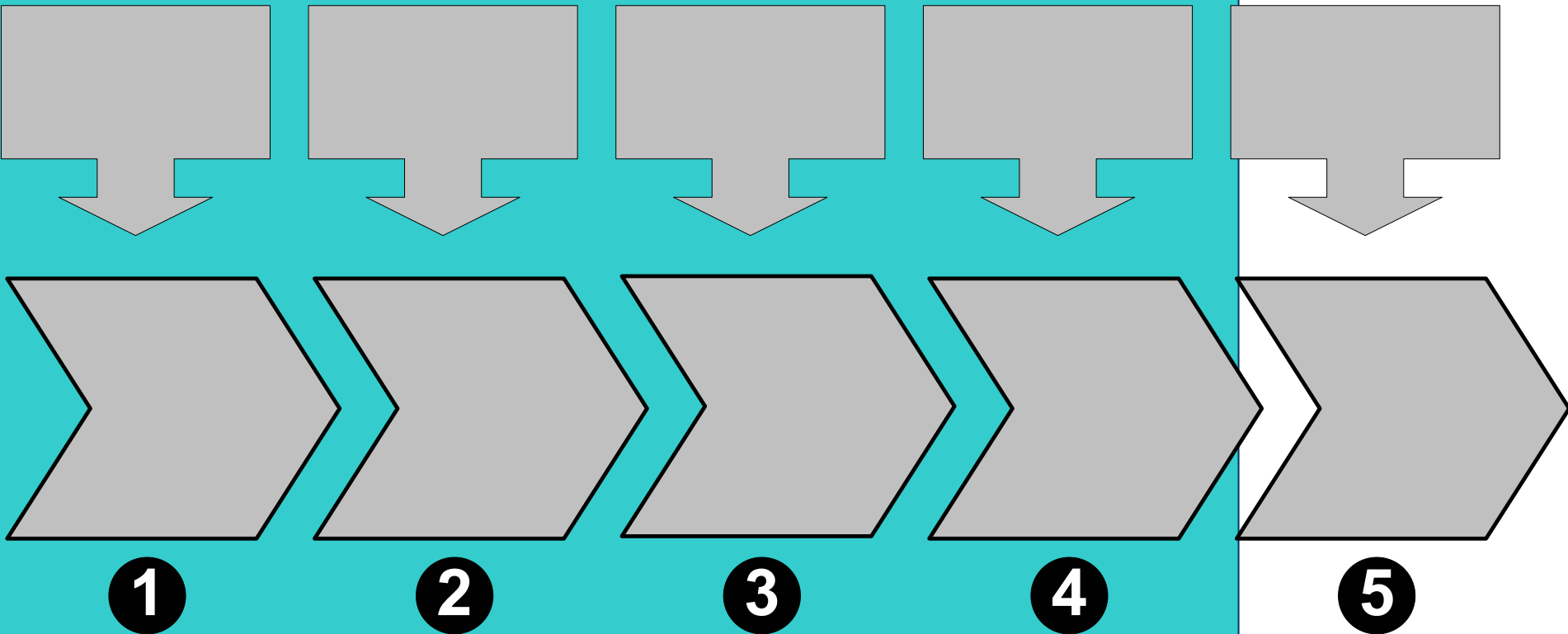
Approach taken
Process Integration

- Offshore Distribution Model
  - Software Development Distribution Model
- Strategic, Tactical and Operational levels
  - the long-term offshore road map
  - "which center" decision
  - project risk management process
- How can we integrate the processes?
- How can we benefit from the risk being managed in the early stages, before the project start its execution?

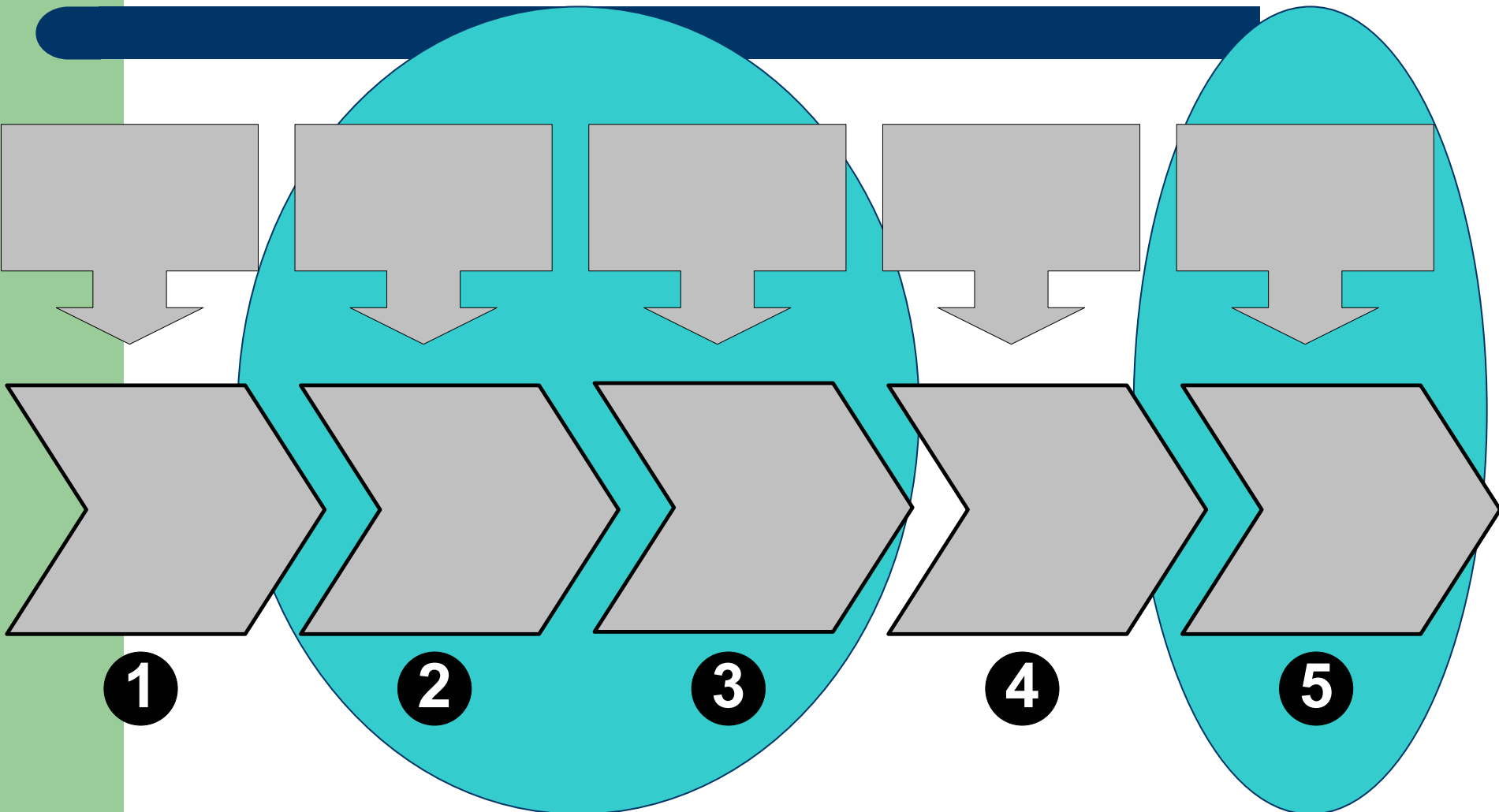# Approach taken
Process Integration
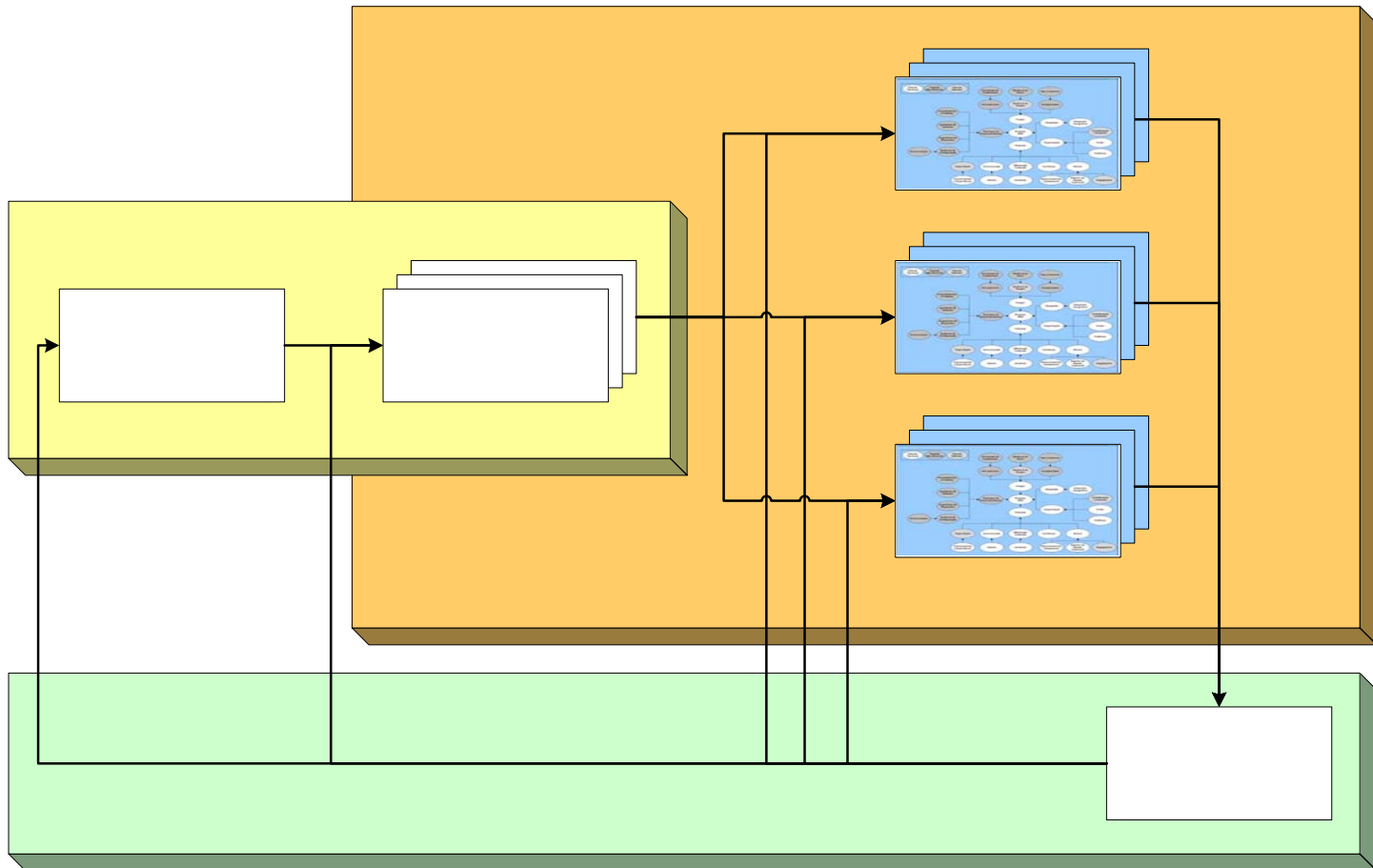
Approach taken Process Integration

Offshore Distribution Model

1 **2** **3** **4** **5**

Approach taken
Process Integration

Approach taken
Process Integration

- Process integration using formal modeling
  - UML Use Case diagrams to identify the main activities
  - UML Activity diagrams to detail each activity
- Standard artifact to identify and document risks in the earlier stages
- Lessons learned to be used when starting the Offshore Distribution Model for new projects to be developed by globally dispersed teams

Future Goals

- To evaluate the effectiveness of the risk management process in multinational organizations with global software development activities, considering all decision levels
- To validate this process integration
- To improve the process based on the feedback and results found