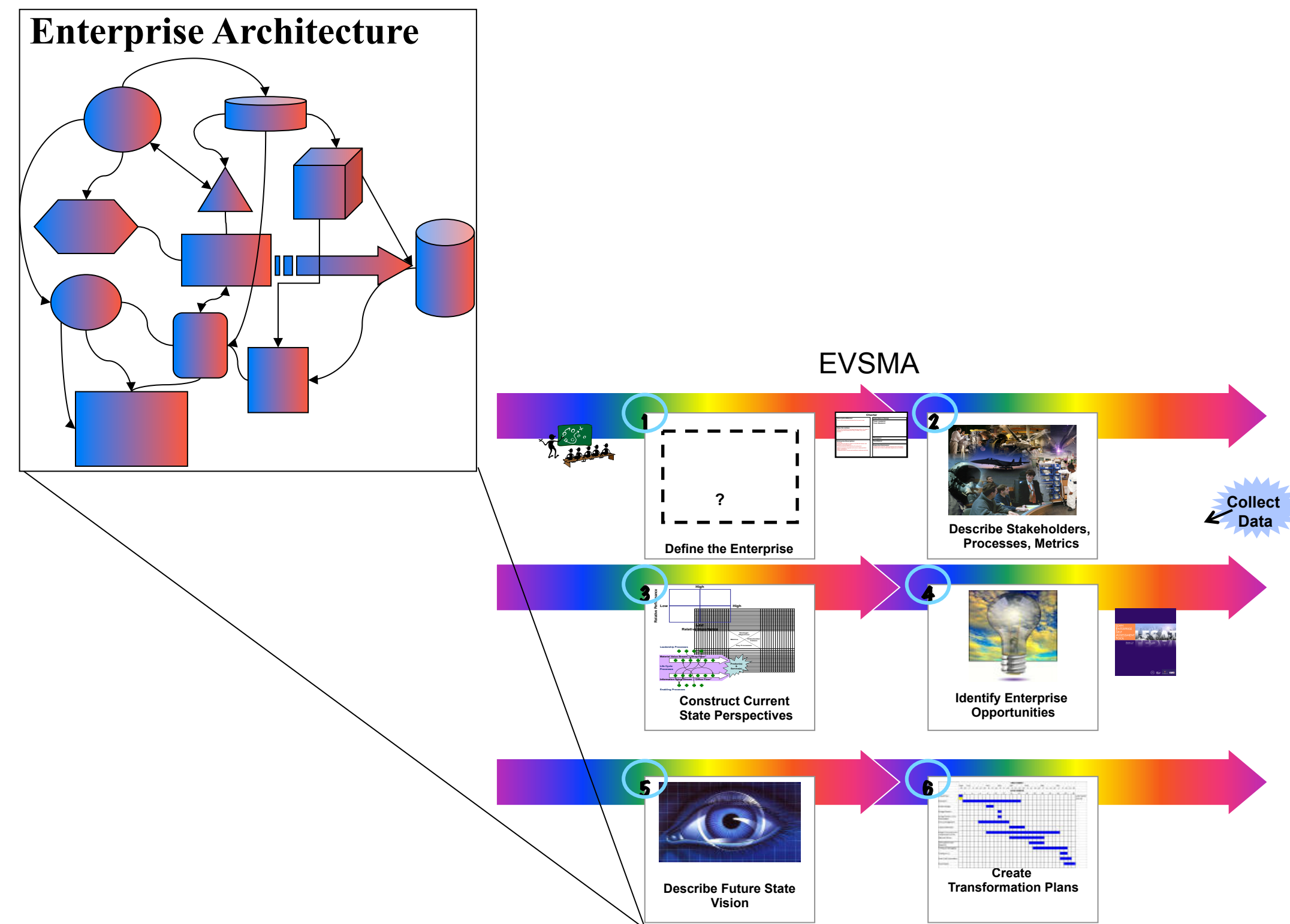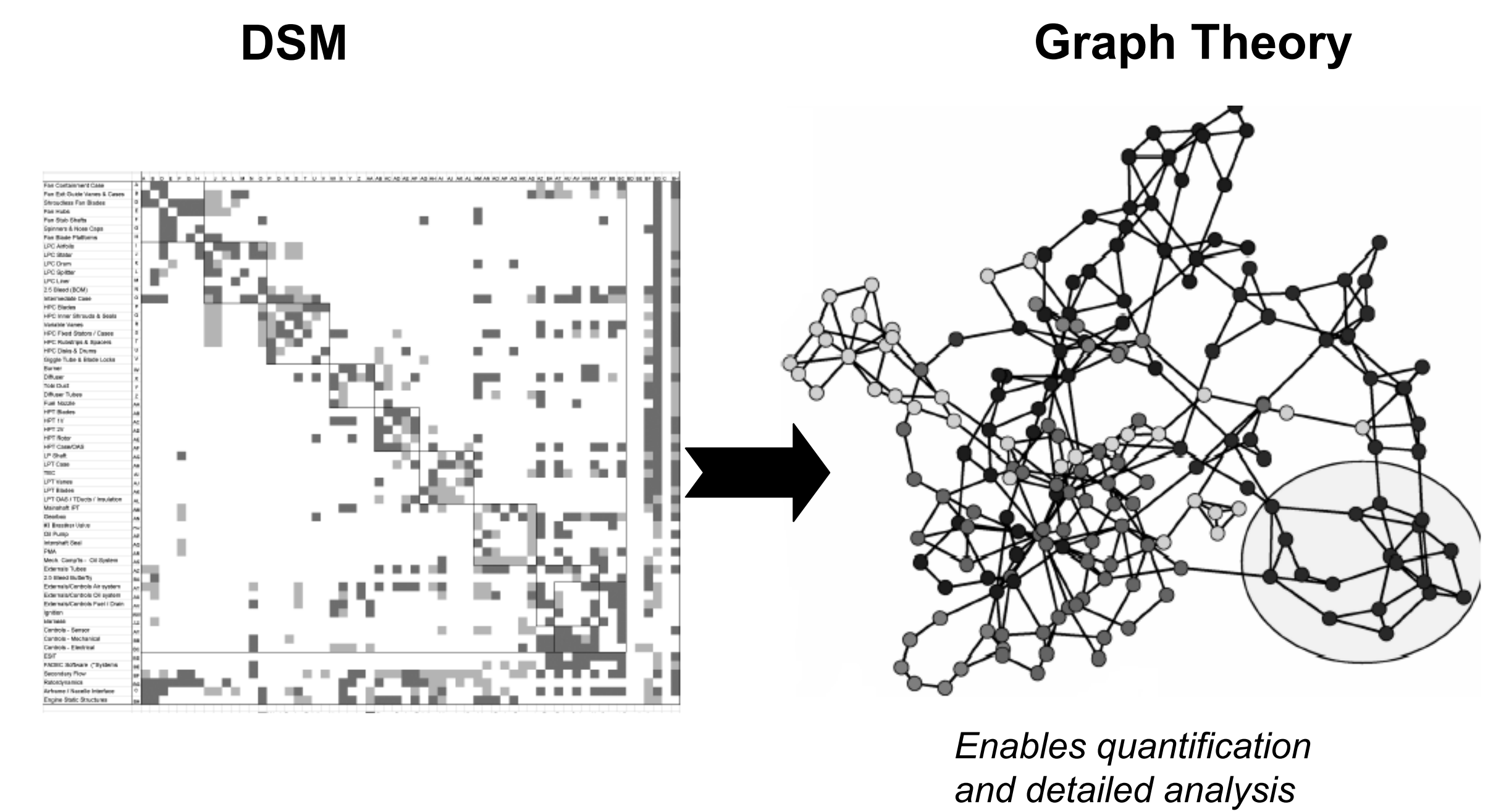# Pedzi Makumbe

ESD SM

Lean Enterprise Architecture for System Technological Innovation
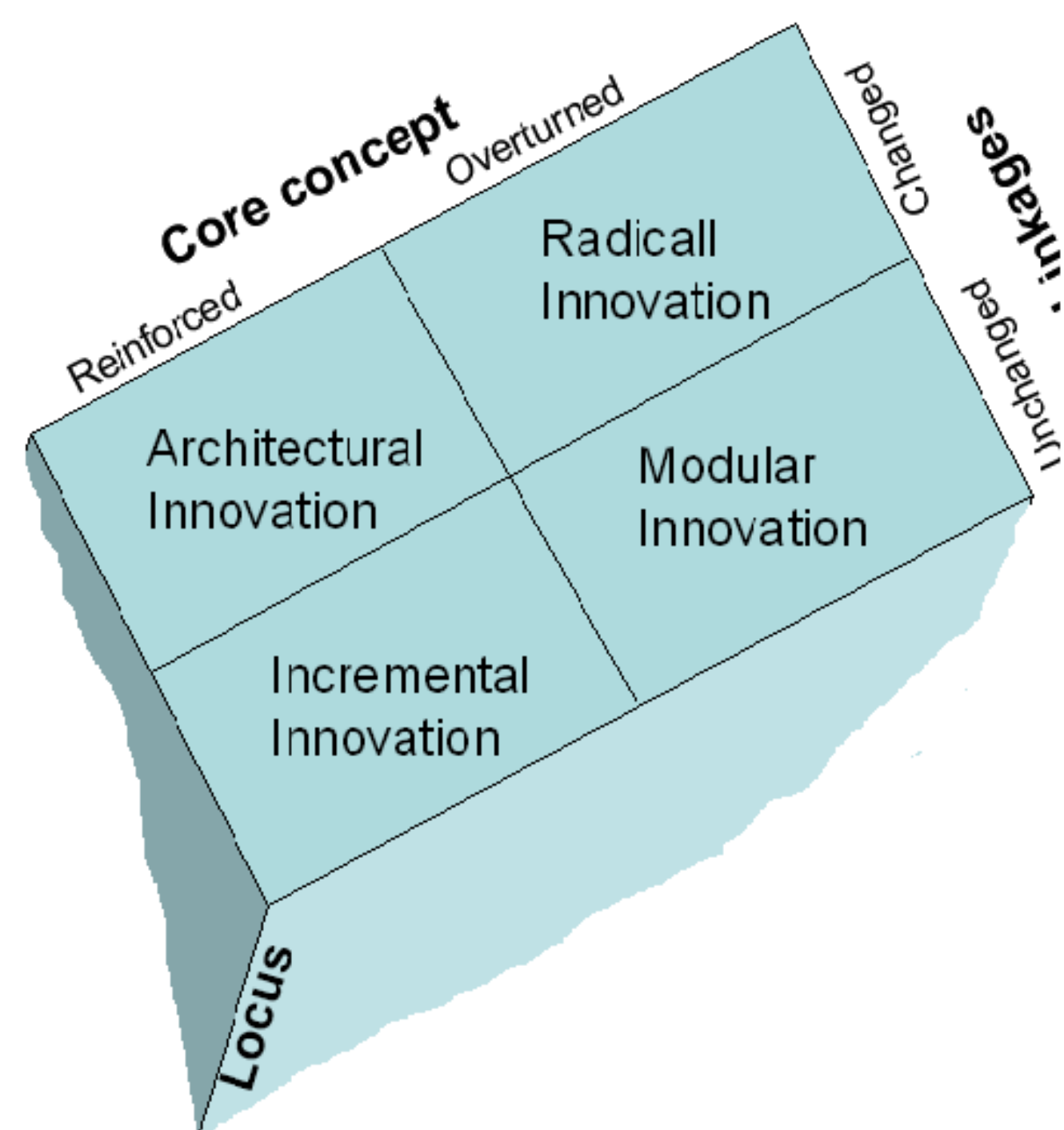
Key Research Questions

- How does one design an enterprise architecture that fosters technological innovation?
  - How does one capture and quantitatively/ analytically analyze complex enterprise interactions?
  - How does one architecturally assess innovation?
  - What are the correlations between enterprise interactions and technological innovation?
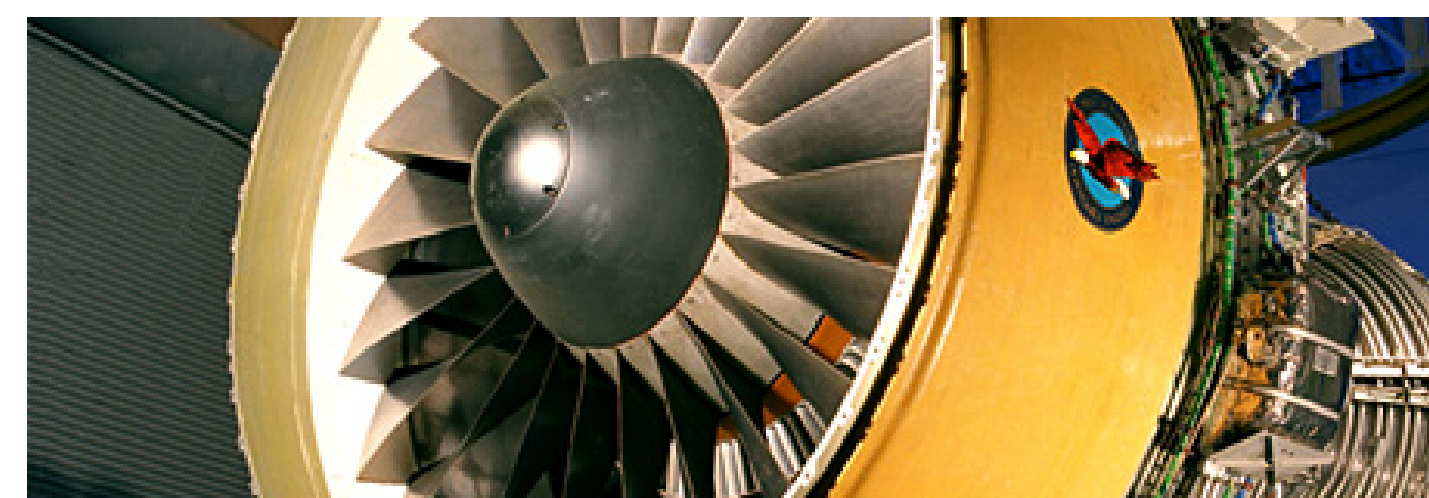
Step 1: Capturing Interactions

DSM   **Graph Theory**

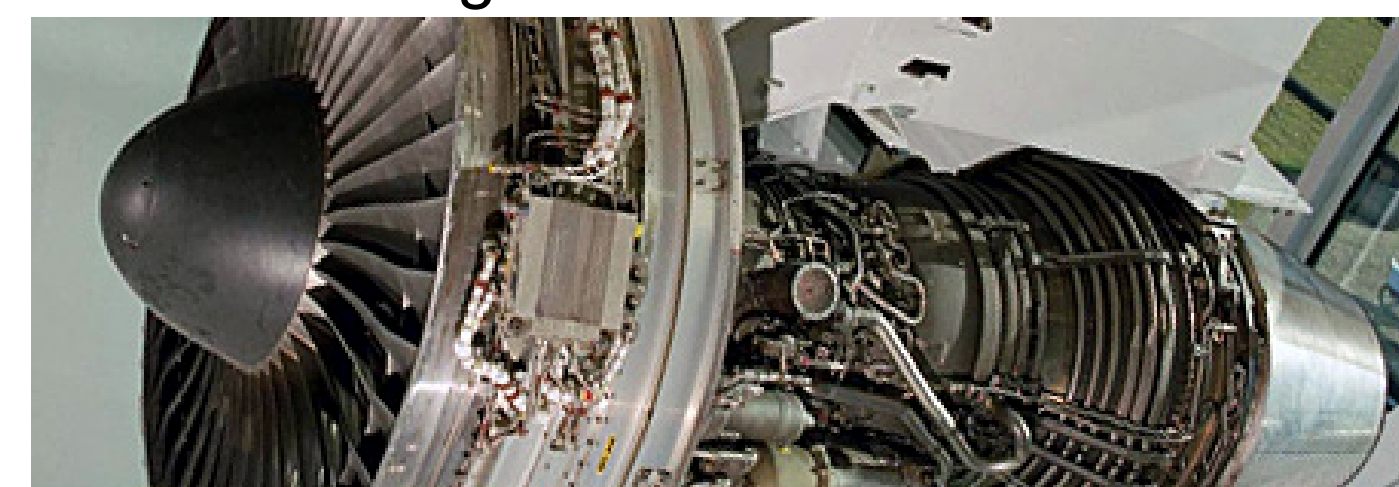*Enables quantification and detailed analysis*

Step 2: Architectural Assessment of Innovation

Project 1 @ P&W

Two similar aircraft engines but one more modular than the other:
1. Capture the enterprise interactions for each engine
2. Architecturally assess innovation associated with each engine
3. Compare and contrast the two findings

Project 2 for NASA

- Designing the enterprise architecture for NASA's Moon, Mars and Beyond mission
- Ensuring that the value delivery architecture interacts with the technical architecture so as to maximize stakeholder value

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