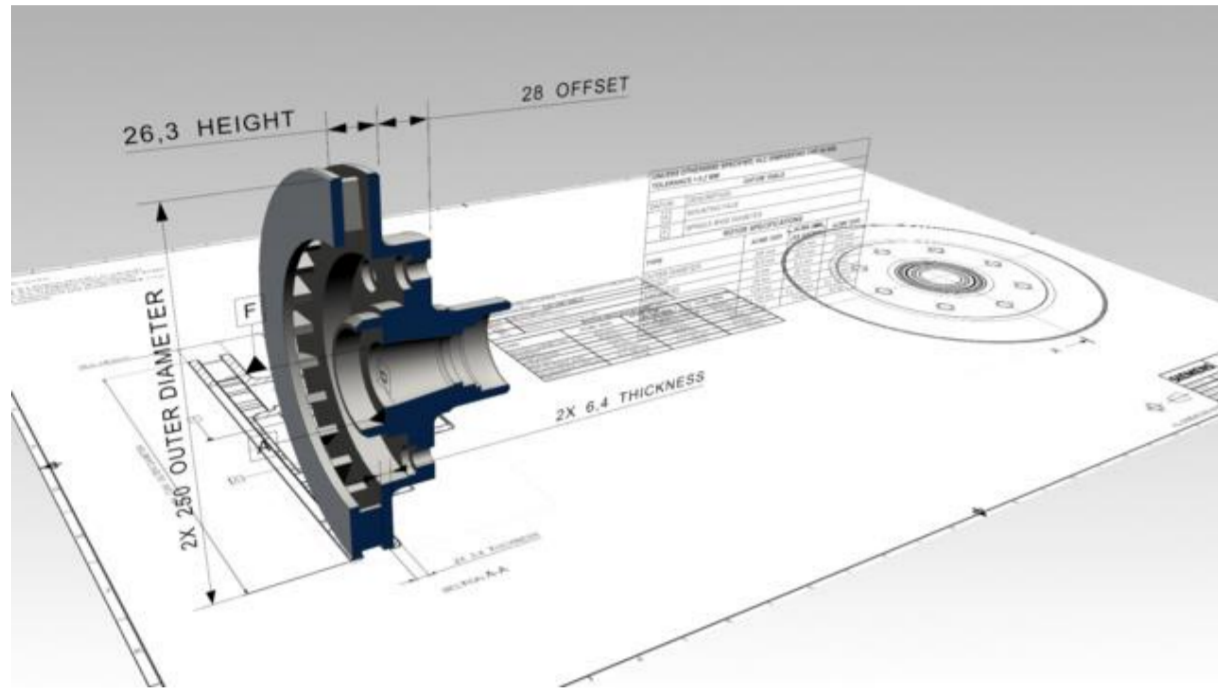




Lean Model-Based Definition Framework for Product Life Cycle

Kamran Goher

1. RESEARCH MOTIVATION



- Manufacturing Industry is replacing 2D drawings with 3D models as the final authoritative source for complete product definition known as “Model Based Definition”.
- A “Model Based Enterprise” aims towards adoption of MBD through out the product life cycle needing the product definition to be more comprehensive and challenging instead of just a geometric model.
- This requires Product Lifecycle data from concept stage to the product’s disposal encompassing the design intent, contextual, behavioral and geometrical information based on the native 3D model.

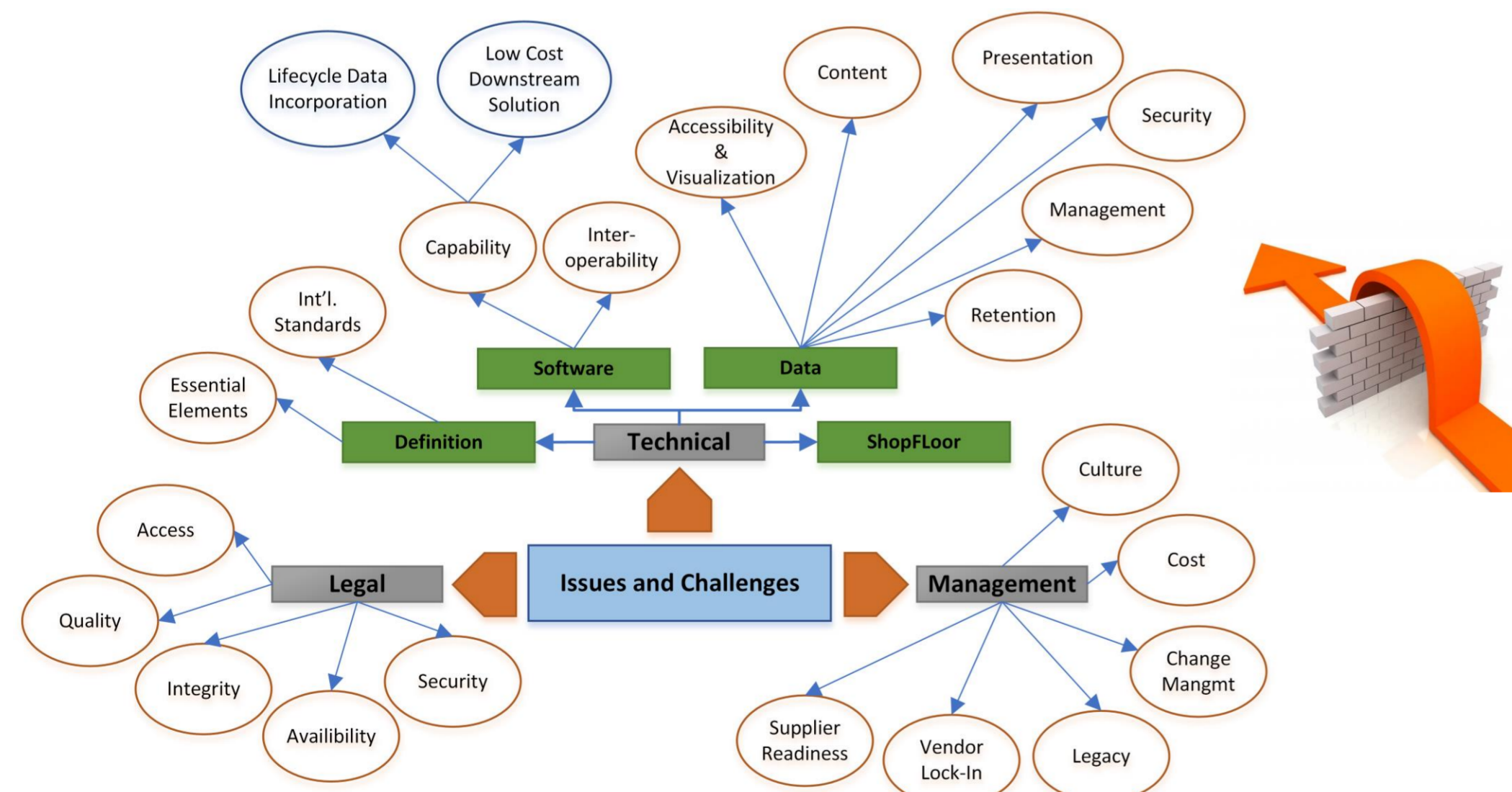
2. AIM & OBJECTIVES

Aim: To develop a framework for minimum information model in MBD environment through product lifecycle in high value manufacturing using lean principles.

Objectives:

- Identify and analyze product definition requirements at each stage of the product lifecycle.
- Determine the lean enablers for defining minimum information.
- Define a process for determining agreed minimum information for MBD through Lifecycle.
- To develop a framework for Lean MBD for product lifecycle.
- Validation of the proposed framework through industrial case studies and expert opinion.

3. CHALLENGES

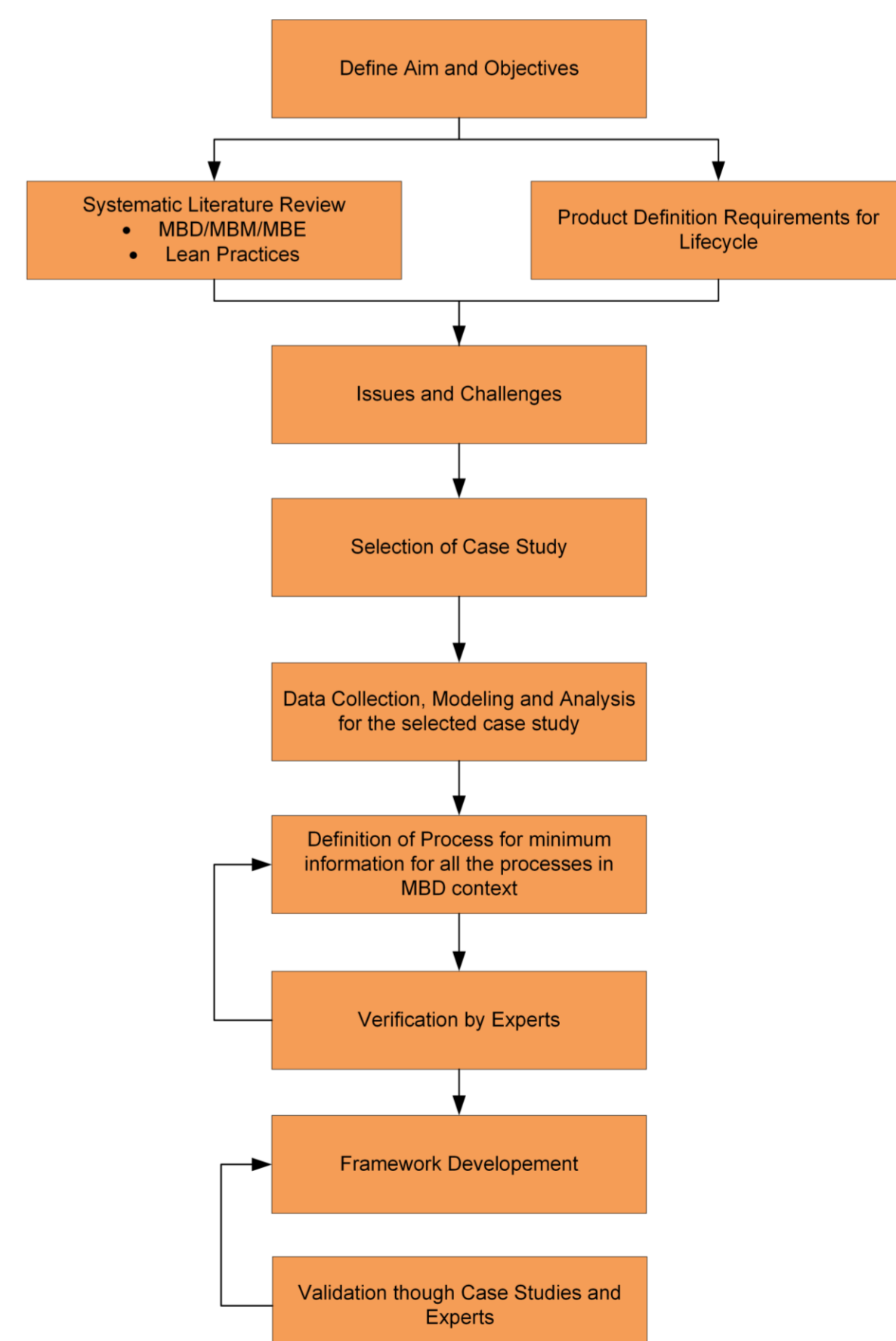


MBD Adoption



(NIST MBE Summit 2017, MBE-360)

4. METHODOLOGY



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