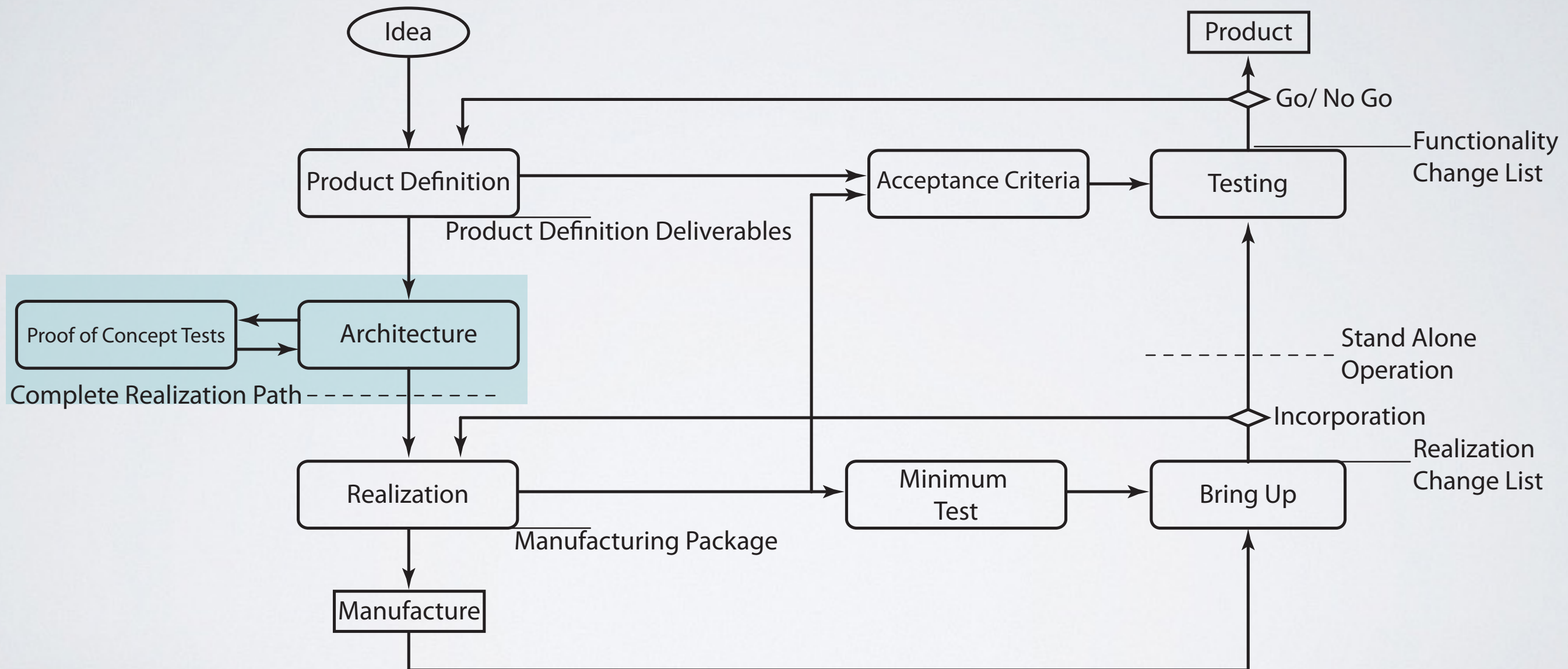


ARCHITECTURE PHASE

The Engineer Accelerator
Malcolm Knapp

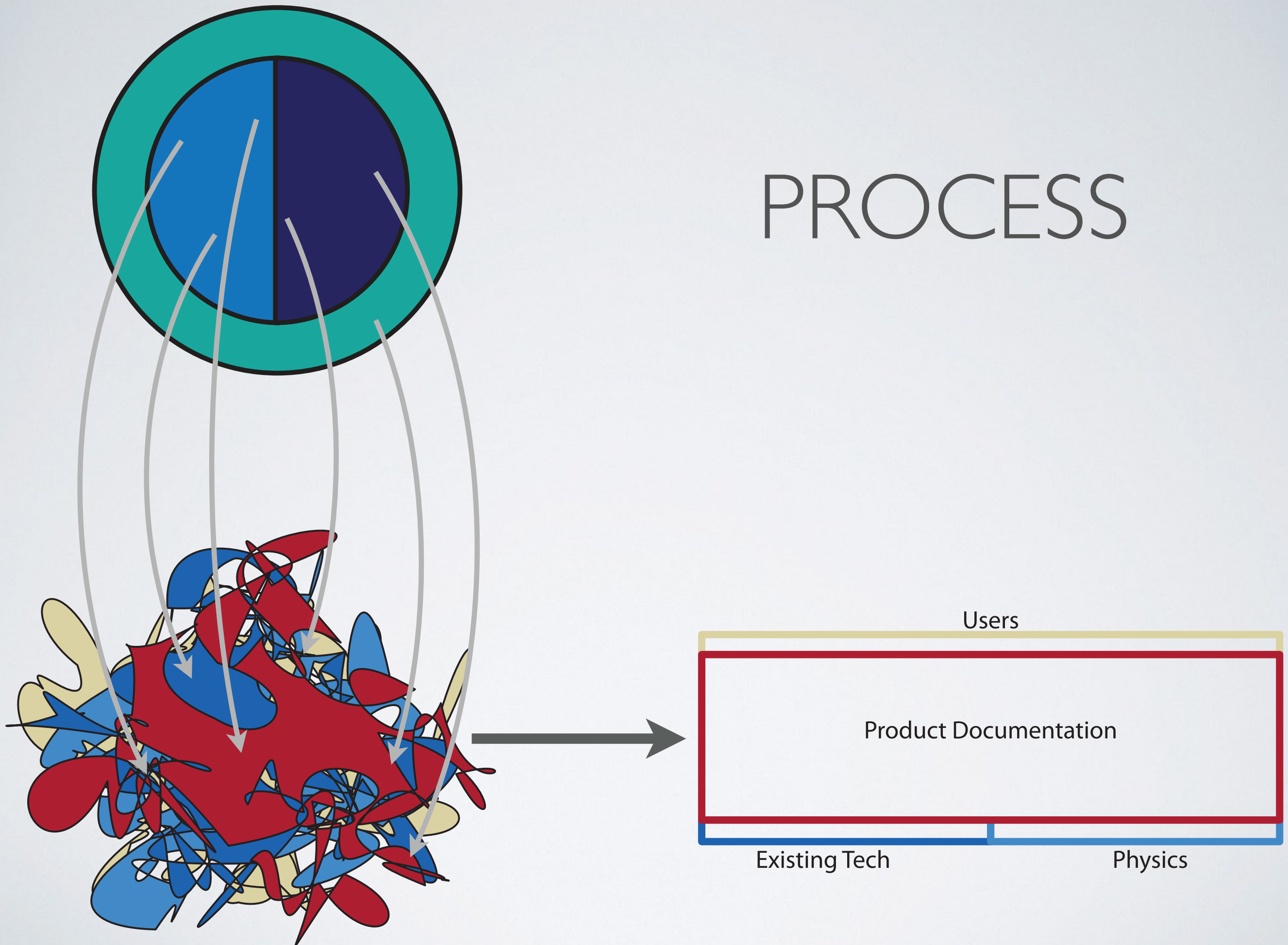
DEVELOPMENT PHASE



GOAL

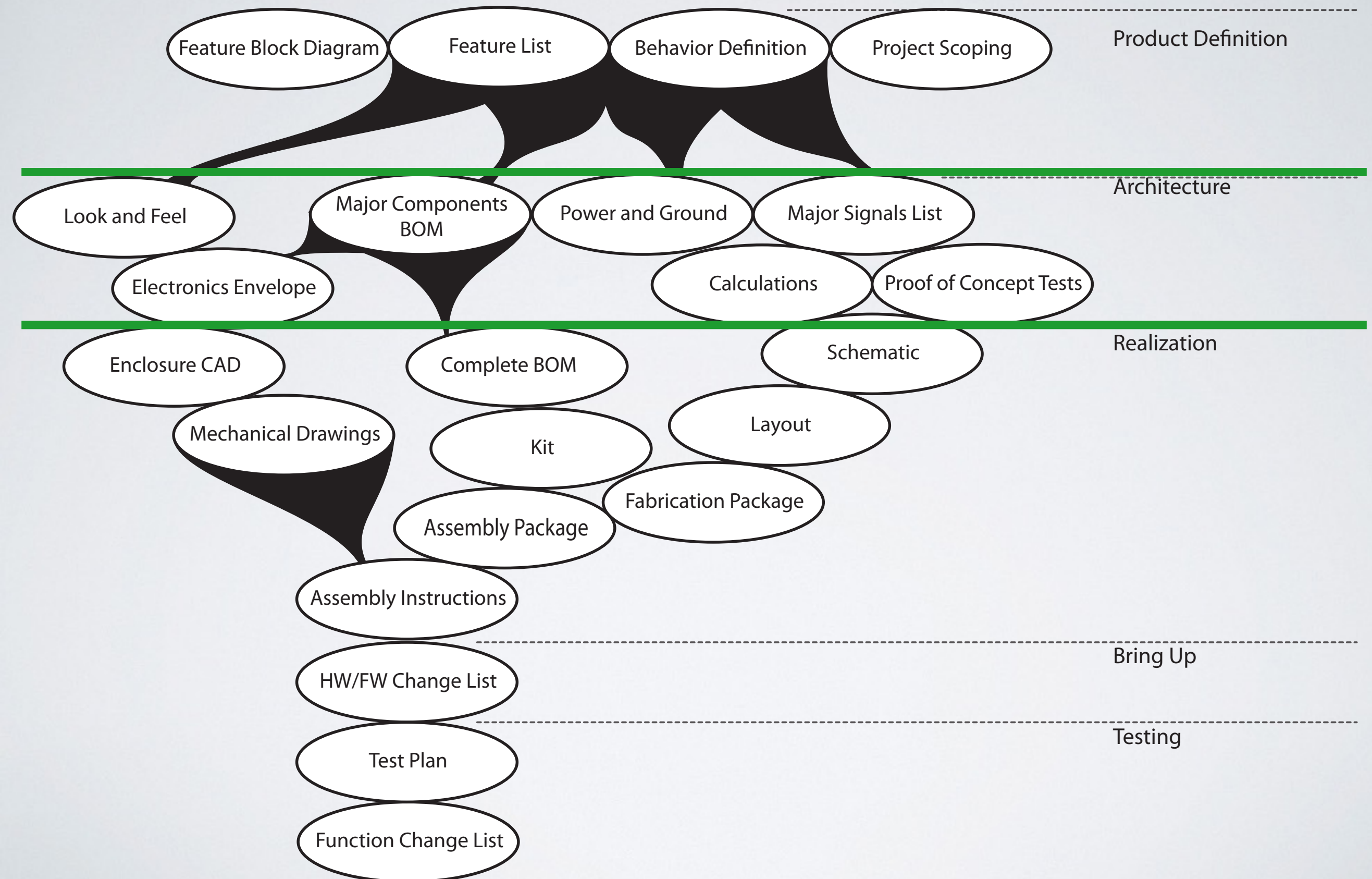
TO DETERMINE THE REALIZATION
PATH FOR ALL FUNCTIONALITY

PROCESS

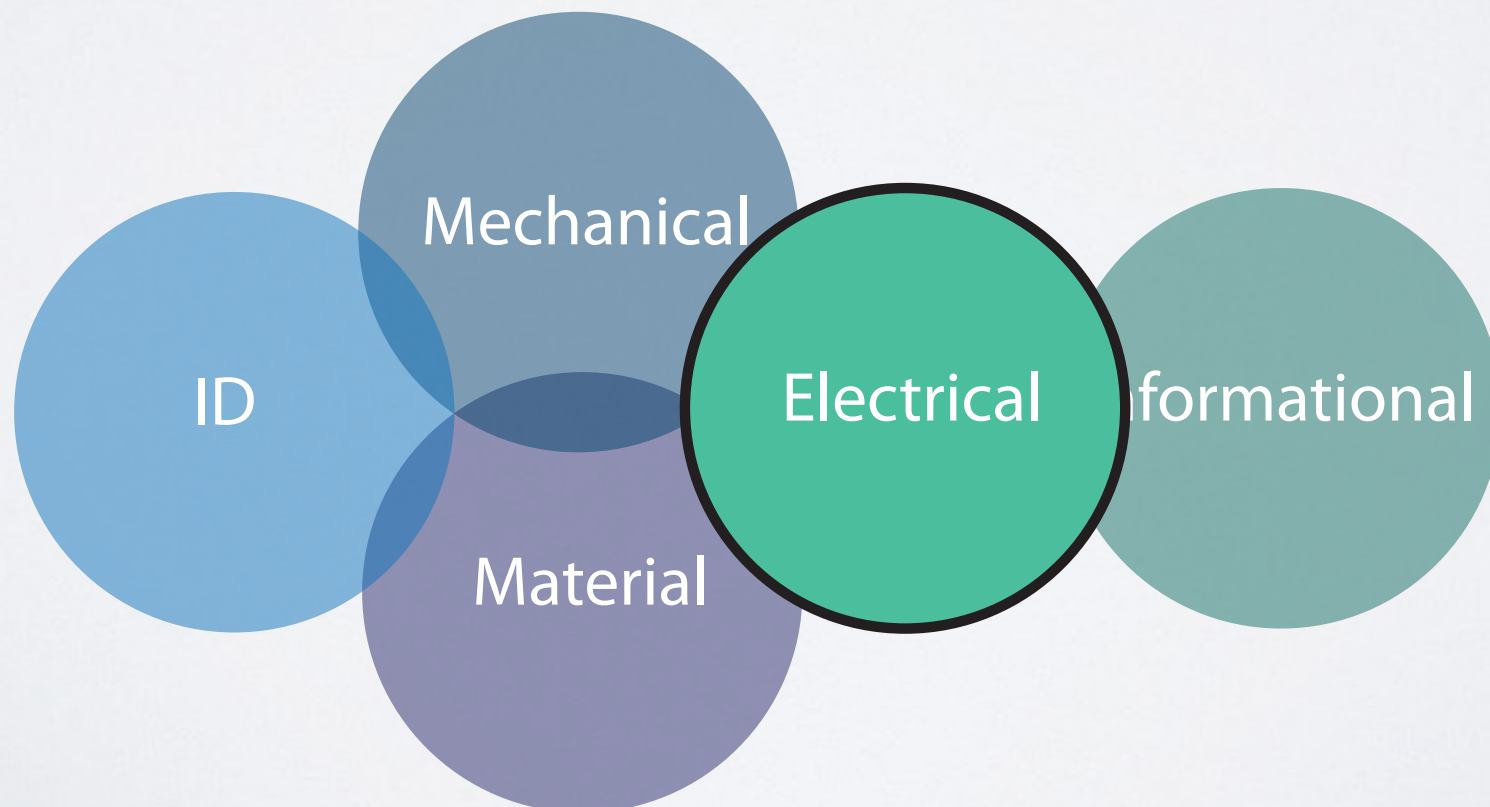
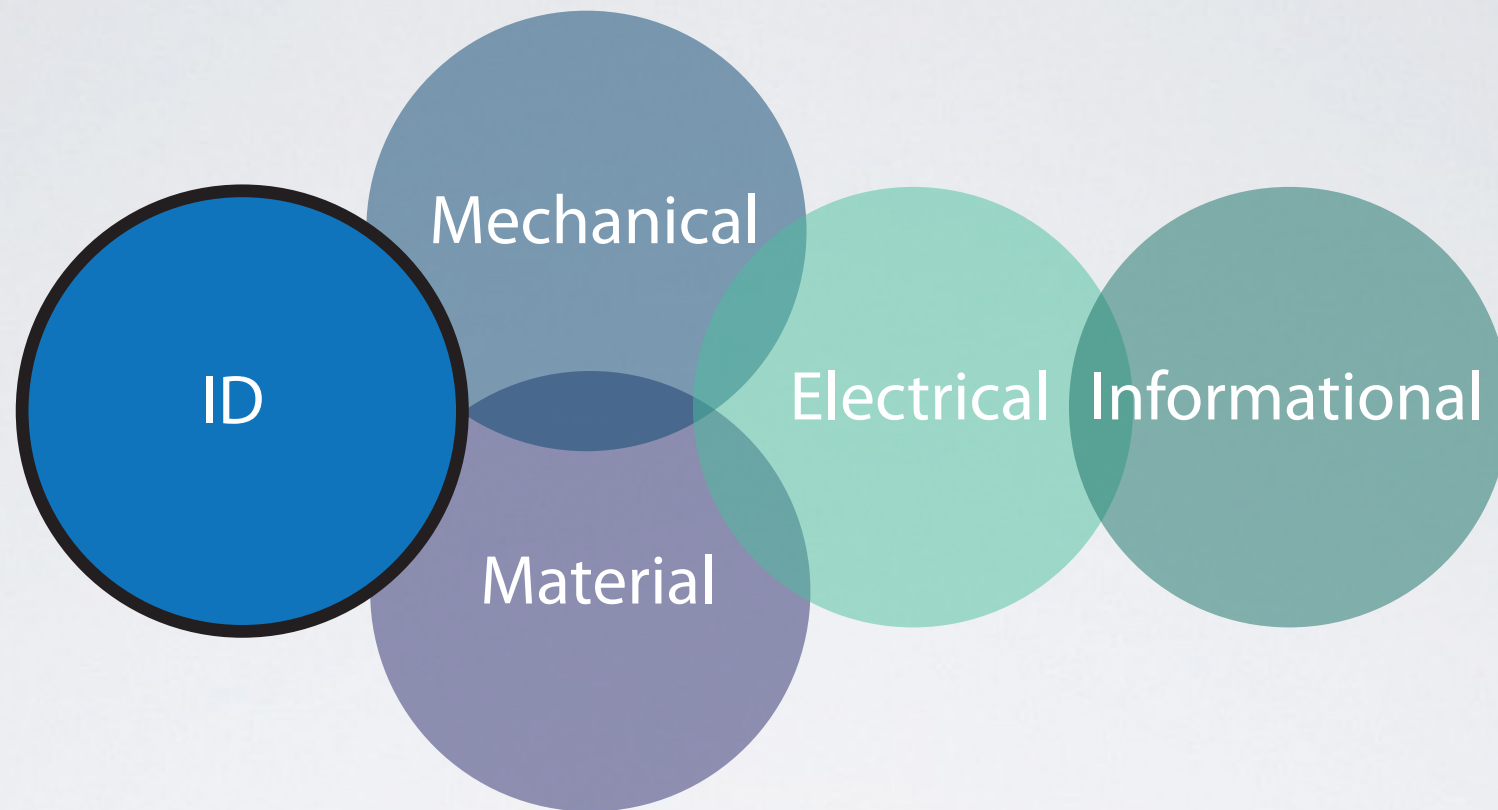


SOME ONE HAS SOLVED THE
PROBLEM BEFORE

DESIGN DEPENDENCY



DESIGN DRIVER



ARCHITECTURAL INFORMATION

- Power and Ground Distribution
- Major Components
- Major Signals
- Pinouts
- Design Calculations
- Board Outline Drawing

ENGINEERING OVERLAP

Mechanical

Component Size
Connector Pinouts
Connector Locations
Board Outline

Electrical

Microcontroller Pinout
Current Draw

Information

Manufacturing Process

Material

PROOF OF CONCEPT TESTS

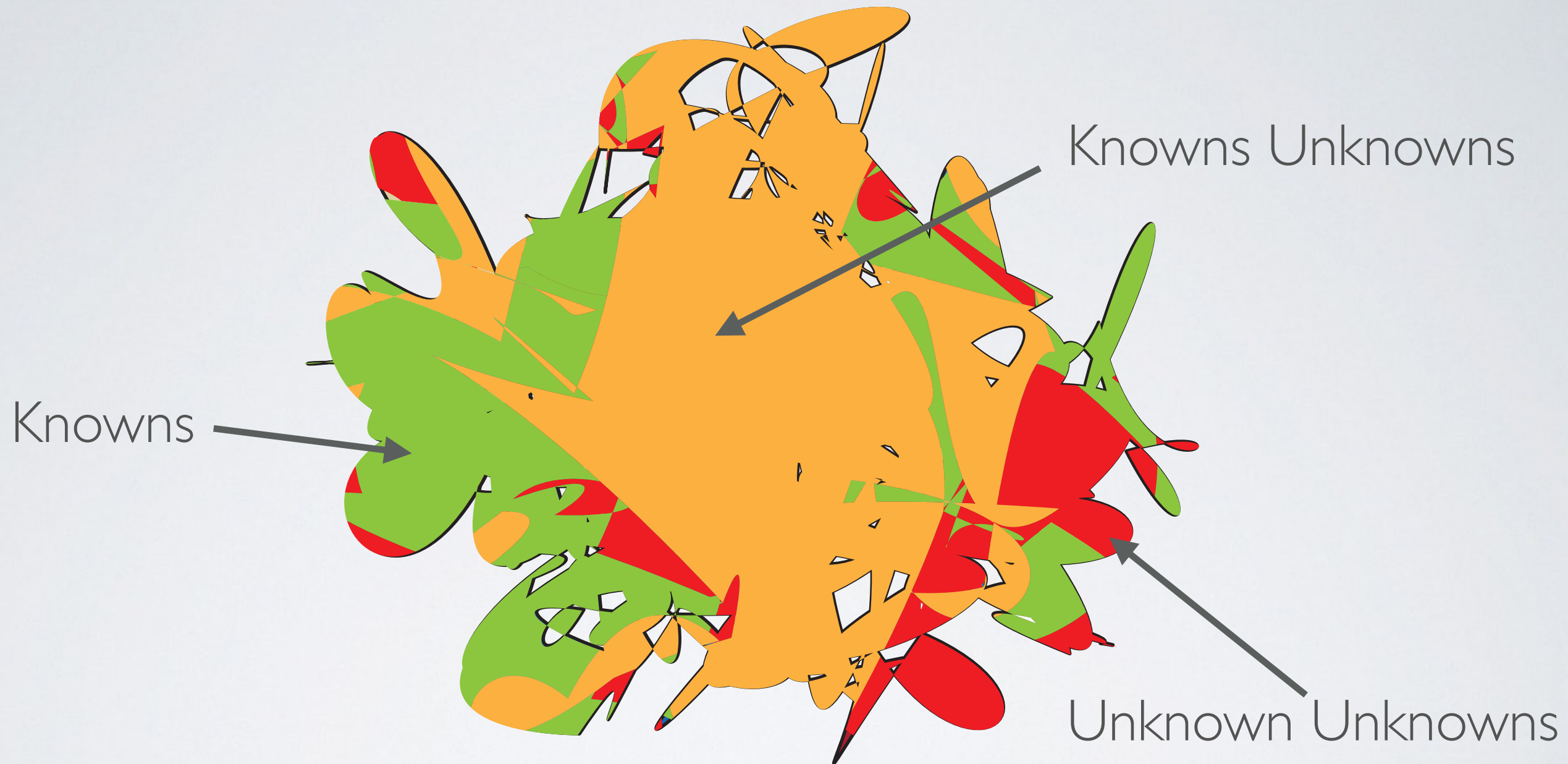
- Validates Realization Path for each Feature, Behavior or Interface.
- Development Process in its own right

CONSTRAINTS

- Component Sourcing and BOM Costing
- Regulations
- Standards
- Environment
- Human Factors

WHAT DO YOU WORK ON
FIRST?

KNOWNS AND UNKNOWNNS



START WITH WHAT YOU
KNOW LEAST ABOUT

DELIVERABLES

- Major Components BOM
 - Manufacturer and Vendor information for IC, Connectors, etc
- Product Architecture
 - Major Signals Characteristics
 - Current Budget
 - Pinouts
 - Calculations
- Engineering Block Diagram
 - Connections between major components
- (Board Outline Drawing)

WHAT IS COMPLETE

- Major Components are determined
- Overlaps are enumerated
- When you are confident that all functionality can be made