

# Defining Product Requirements using MBSE

Joe Fuller



JOHN DEERE



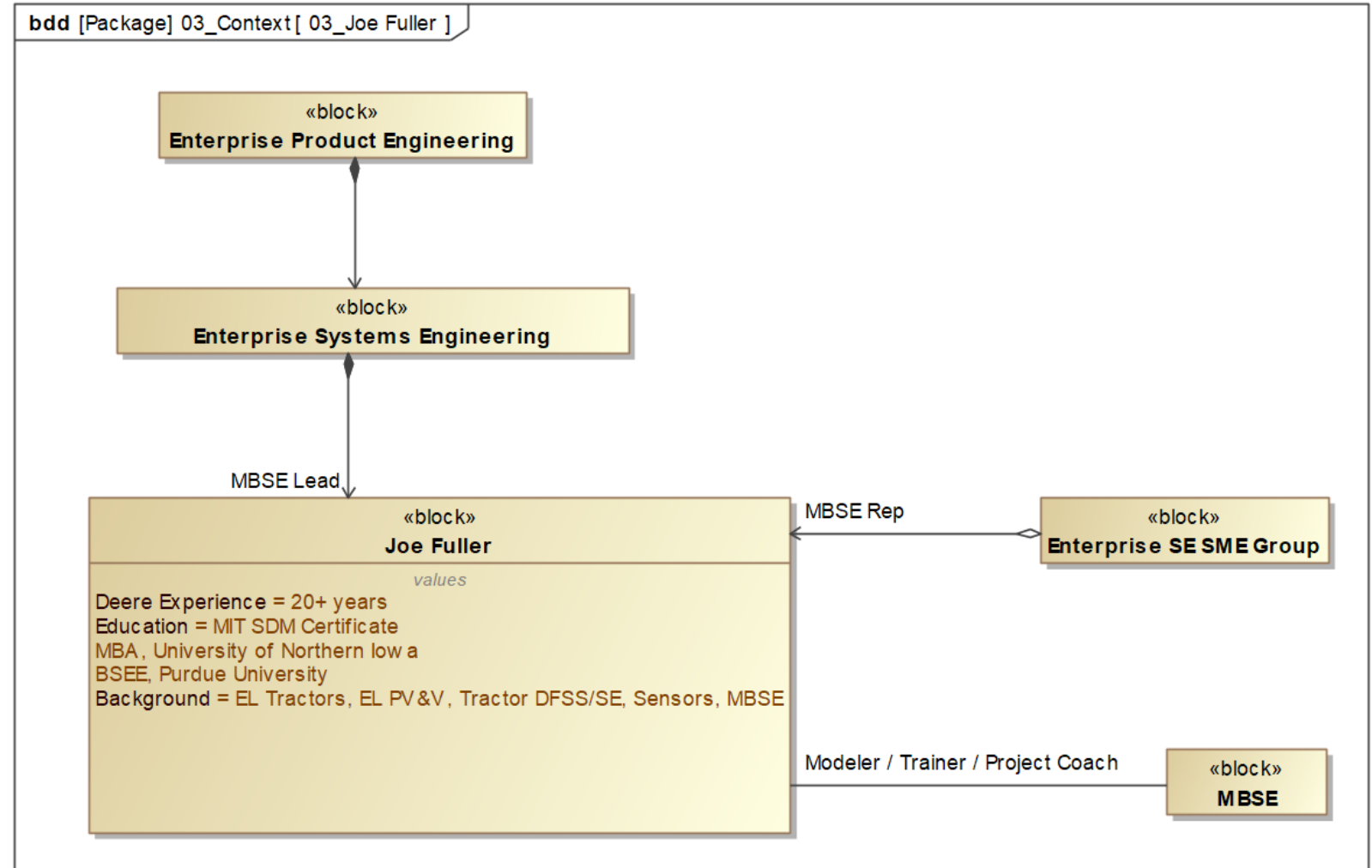


# Introduction – Joe Fuller

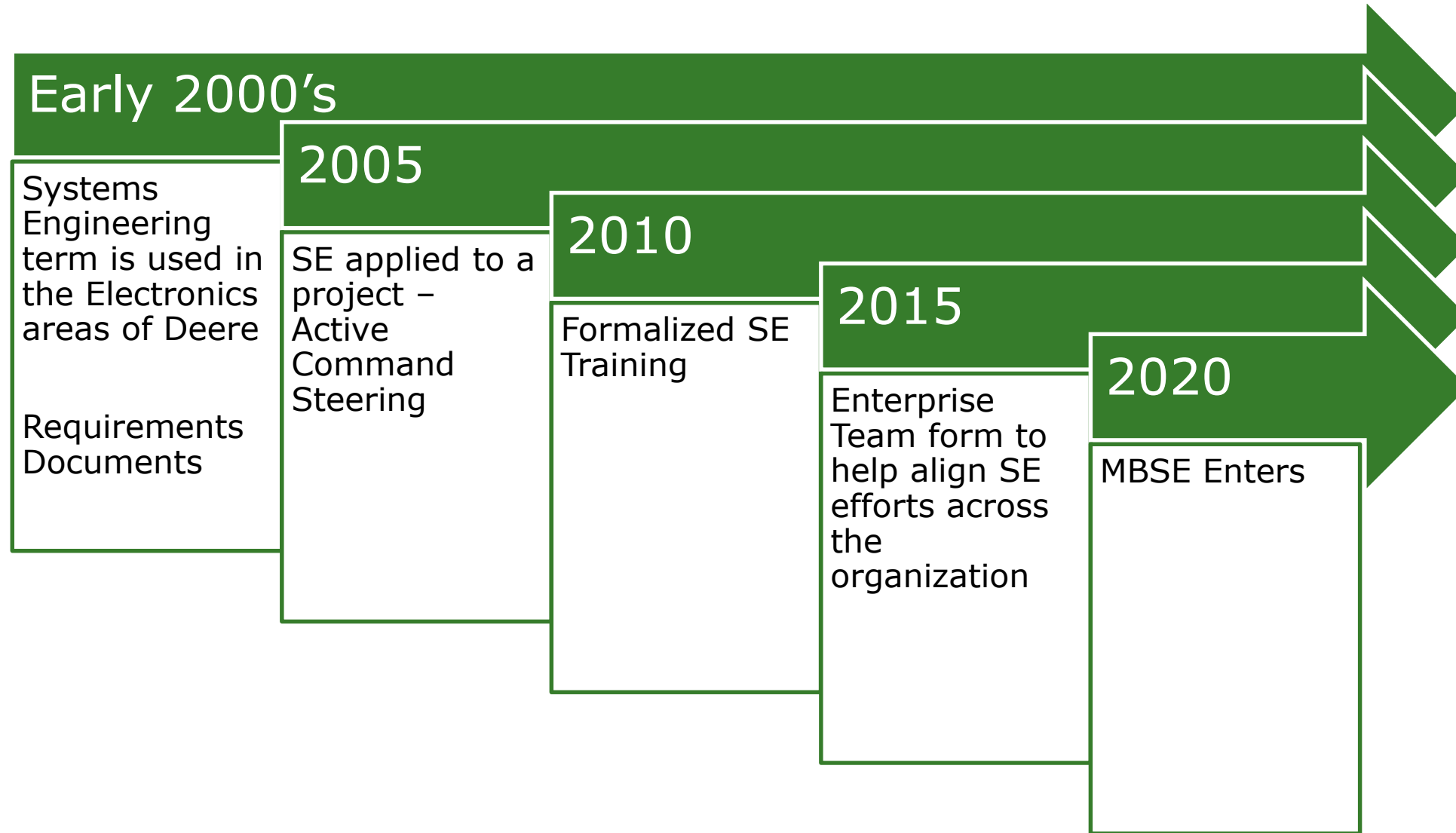


## Current Role:

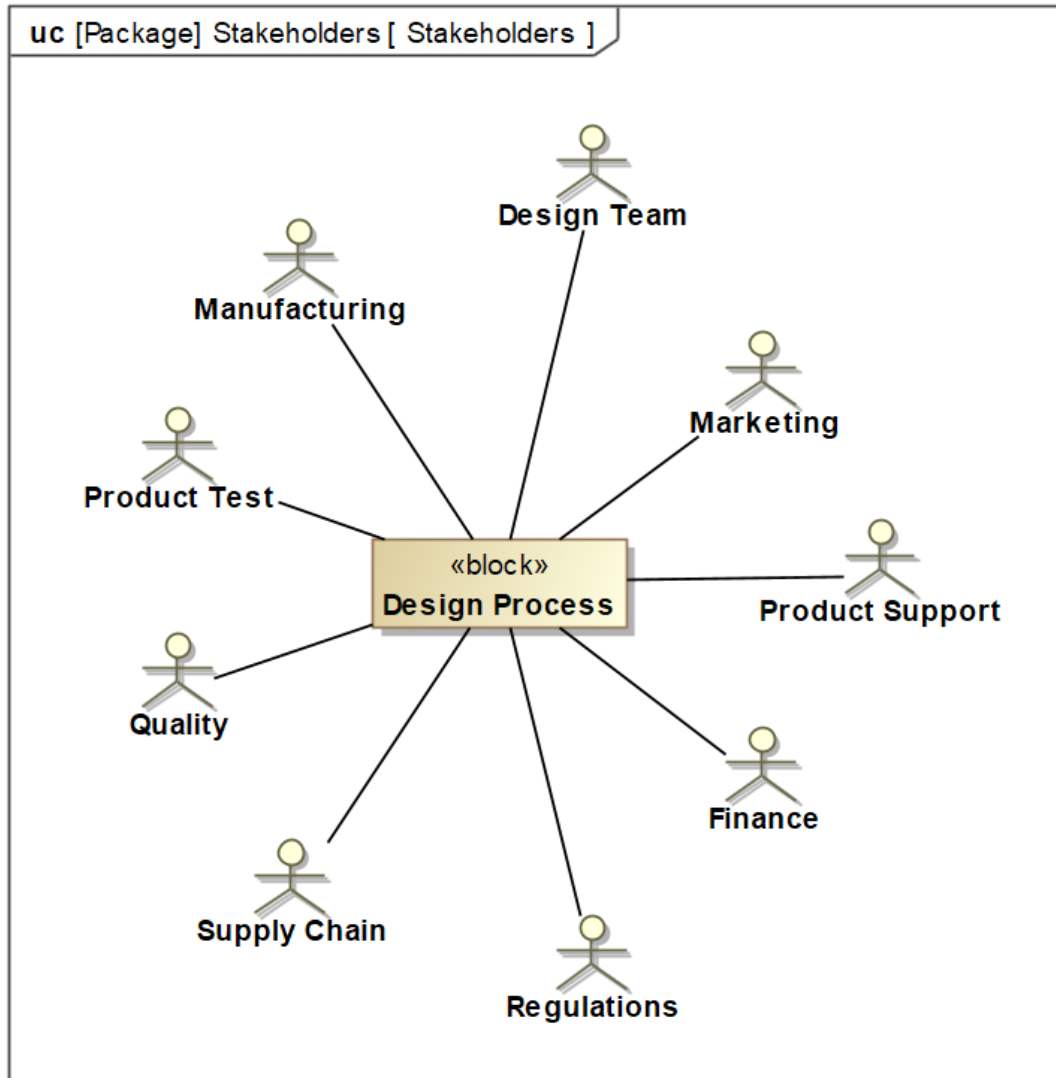
- Enterprise MBSE Lead



# Timeline of SE @ Deere



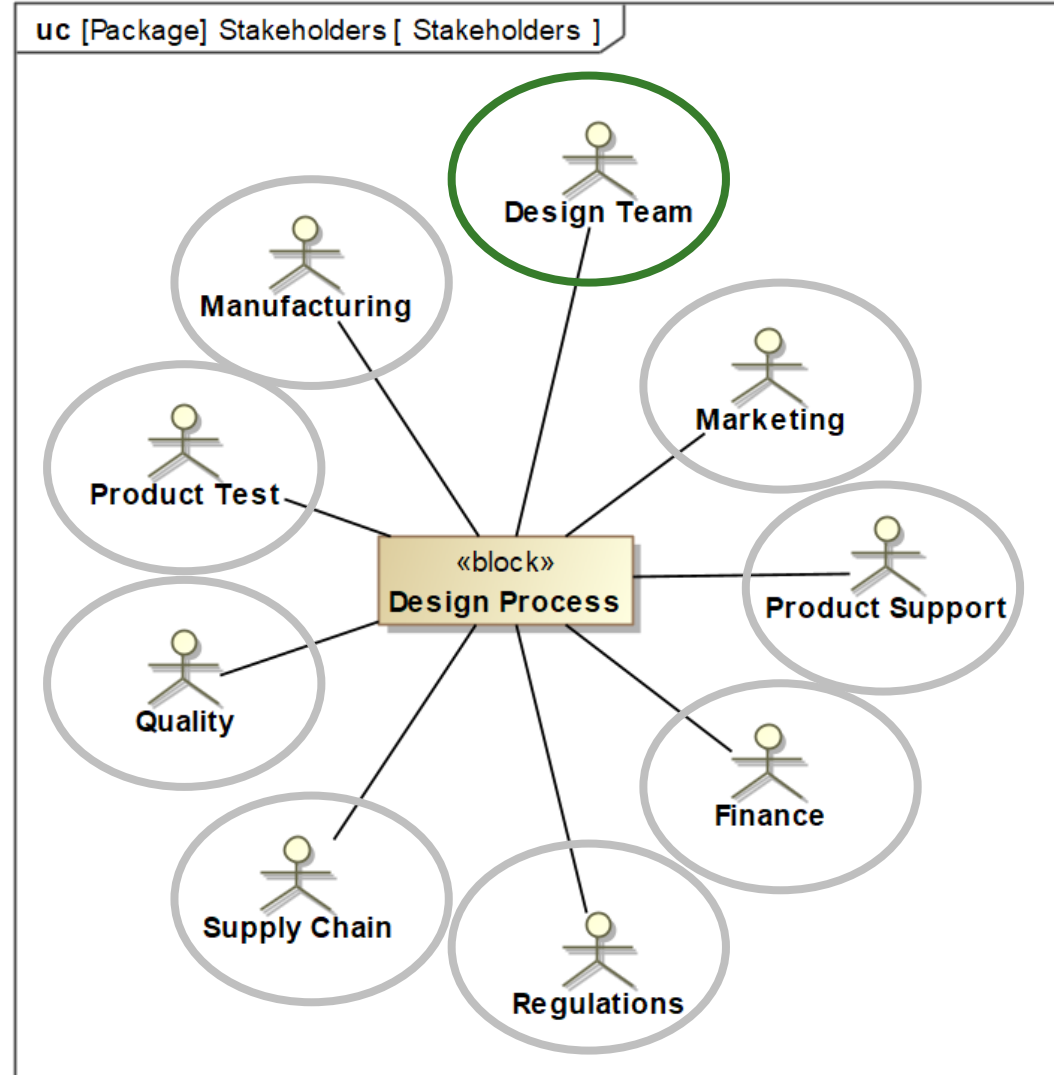
# Sources of Information



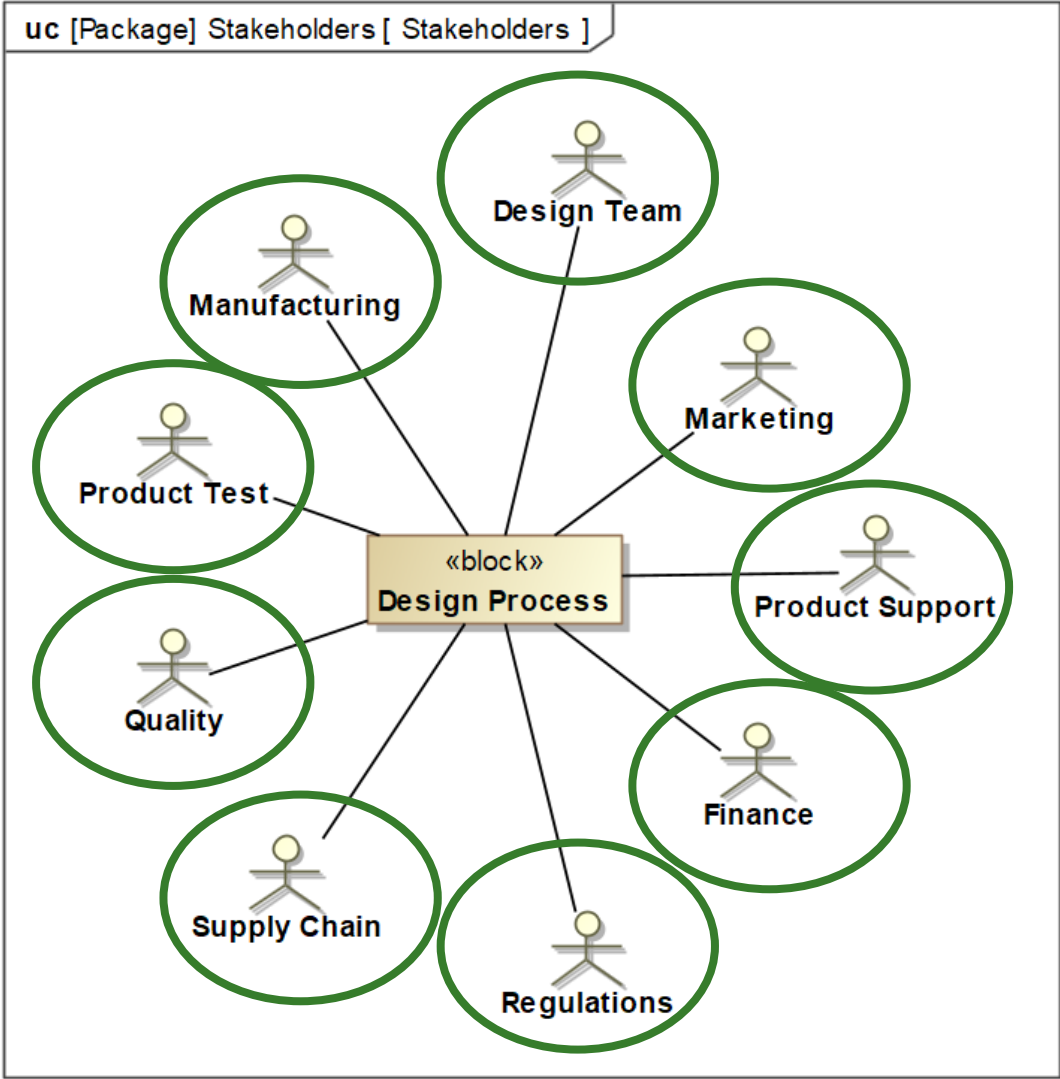
## Typical Process

- Identify Stakeholders
- Gather Stakeholder Needs
- Define Requirements from Needs

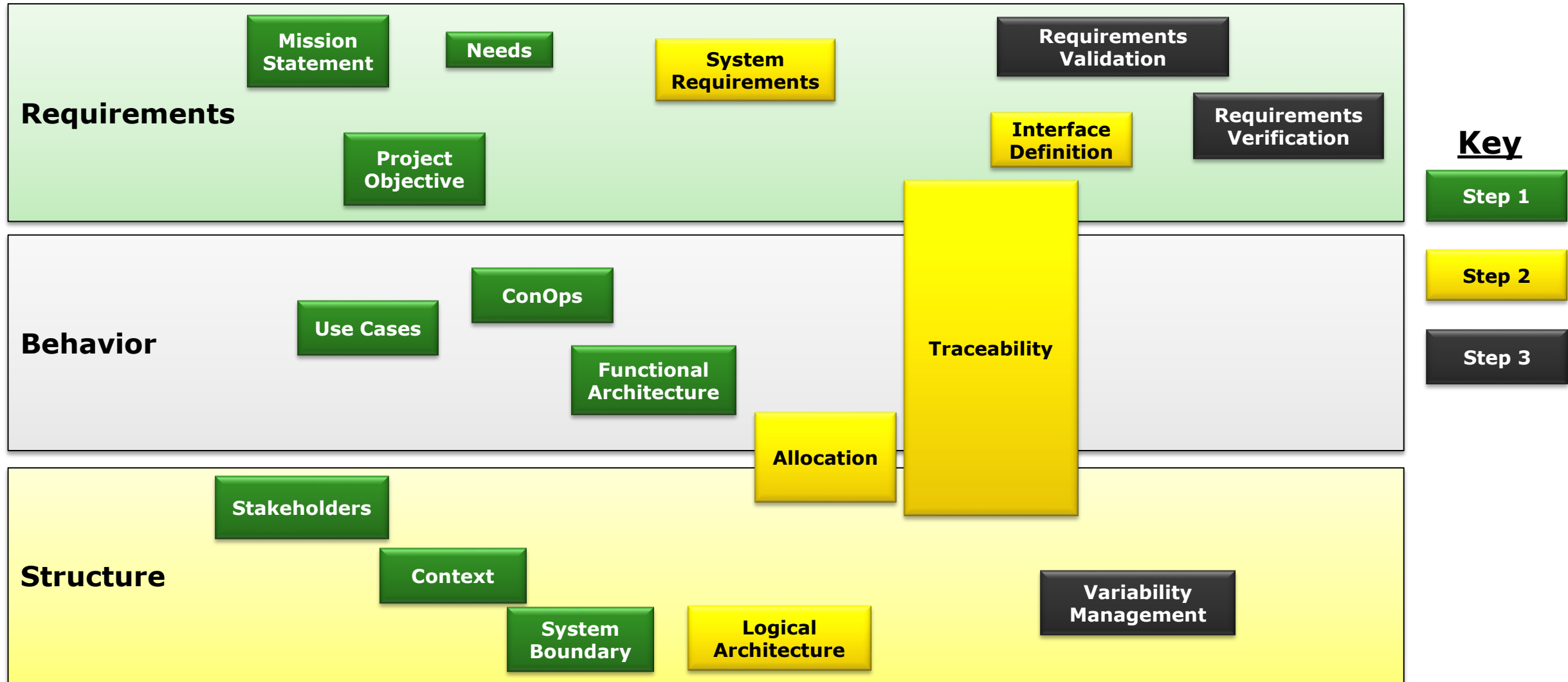
# Who's involved in the process?



# Users of Information



# How to capture Requirements in Models? – Simplified Example



# Challenges and benefits

## Challenges

- Large Organization
- Competing Initiatives
- Organizational Inertia

## Benefits

- Better understanding of system
- Enriched Requirements
- Interface Management
- Simulation of Requirements
- Traceability



# Best Practices / Lessons Learned

- Grassroots Effort to Explore the Space
- Identify and Develop key Subject Matter Experts
- Develop Quick Wins
- Migrate from document based centric to model based
- Upfront behavior analysis vs requirements text
  
- Remember, it doesn't have to be perfect at day one; let the model/process evolve
- 70/20/10 Learning Model (Experiential/Coaching/Formal Training)
- It is not a linear process; it is iterative and recursive!



**JOHN DEERE**