



The Human Element:

A Third Dimension of Sustainable Construction

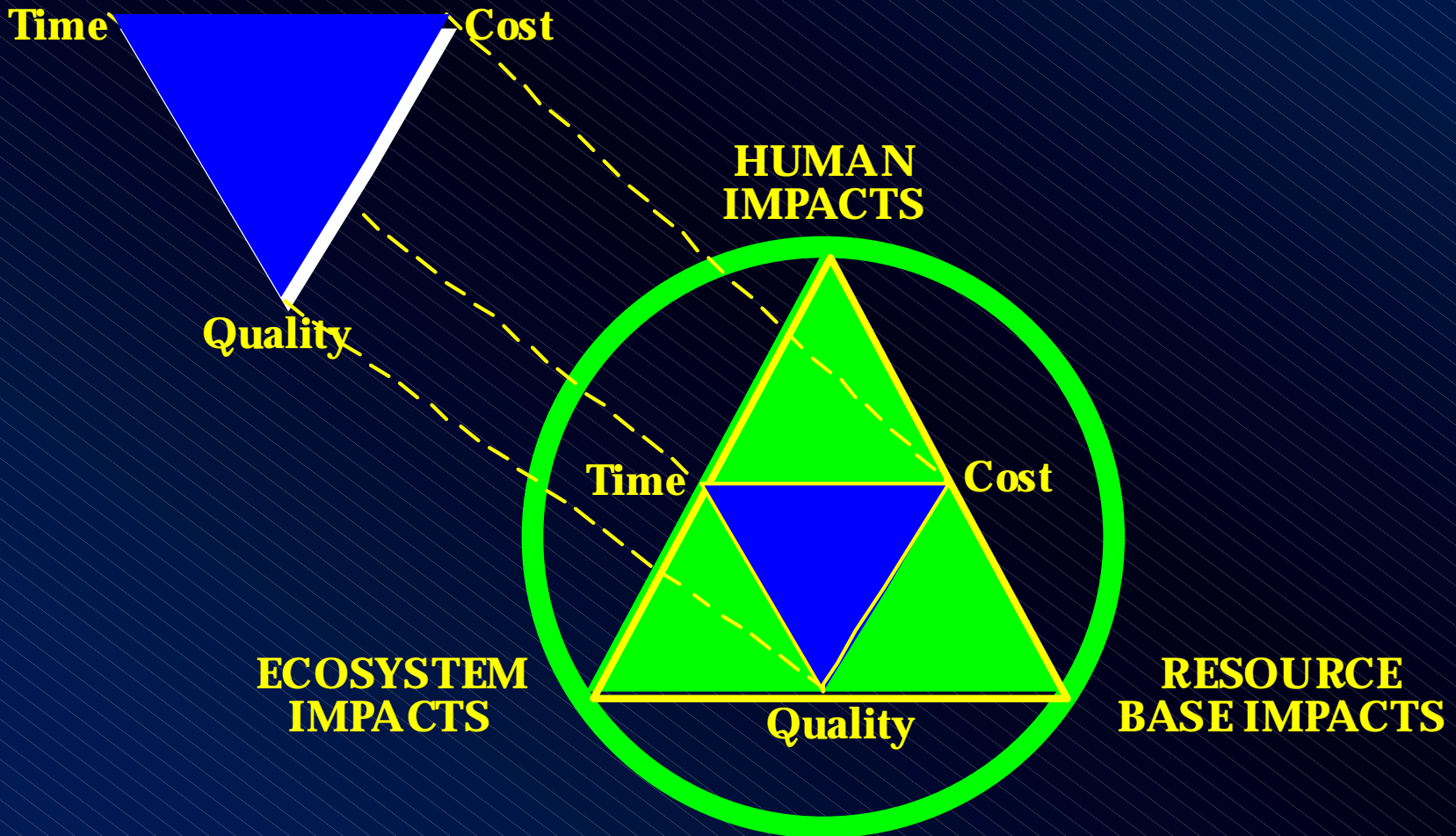
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Overview



- ◆ Where do humans fit?
- ◆ What role do we play?
- ◆ What are the challenges of a human-driven approach to built environment sustainability?
- ◆ How can you as a facility stakeholder get started on the path to sustainability?

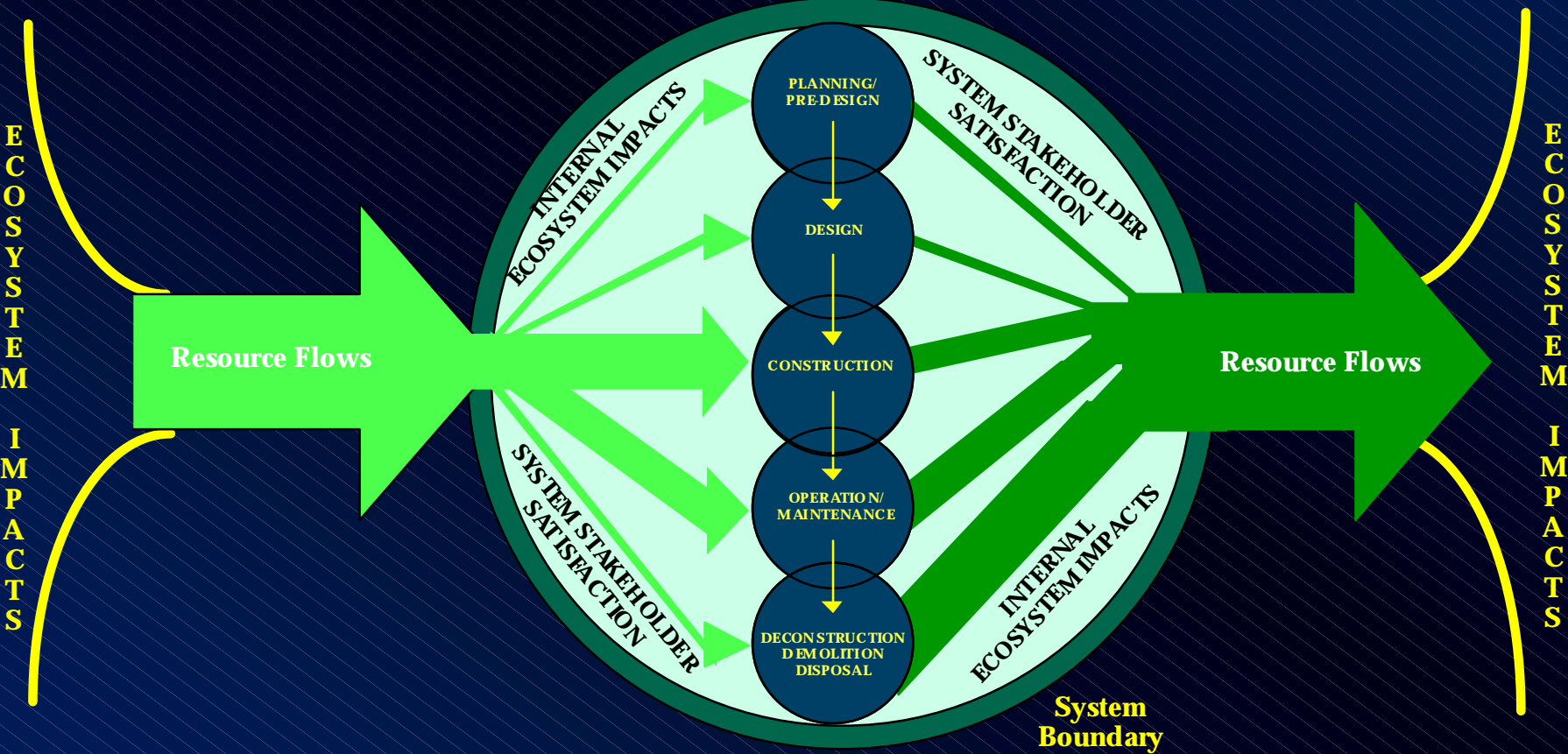
Sustainability Considerations



Where do humans fit? What roles do we play?

- ◆ **System stakeholders**
 - Decision makers/designers
 - Users and beneficiaries of design
 - Future users
- ◆ **Extra-system stakeholders**
 - Local communities
 - Other

Built Environment Systems and Their Impacts



(Source: Pearce 1999)

The Challenges: Making Tradeoffs



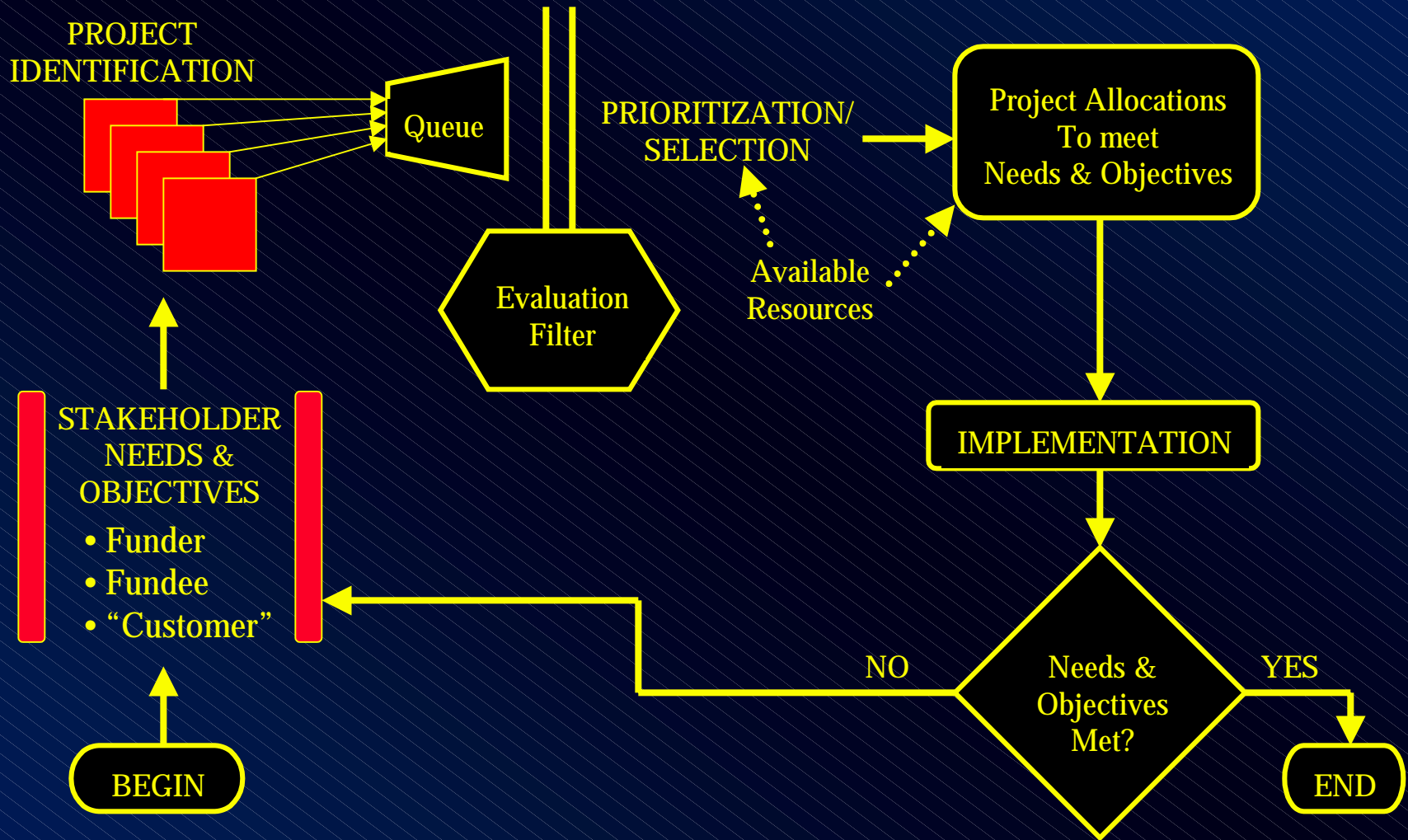
- ◆ Transparent or “satisfaction-neutral” solutions
- ◆ Win-win solutions
- ◆ Choosing among imperfect solutions...
 - Decision-related issues
 - Outcome-related issues

Decision-Related Issues



- ◆ You don't have the luxury of:
 - Unlimited resources
 - Perfect understanding of users, context, or the future
 - Complete knowledge
 - Comprehensive analysis
 - Risk-friendly decision environments

The Resource Allocation Process



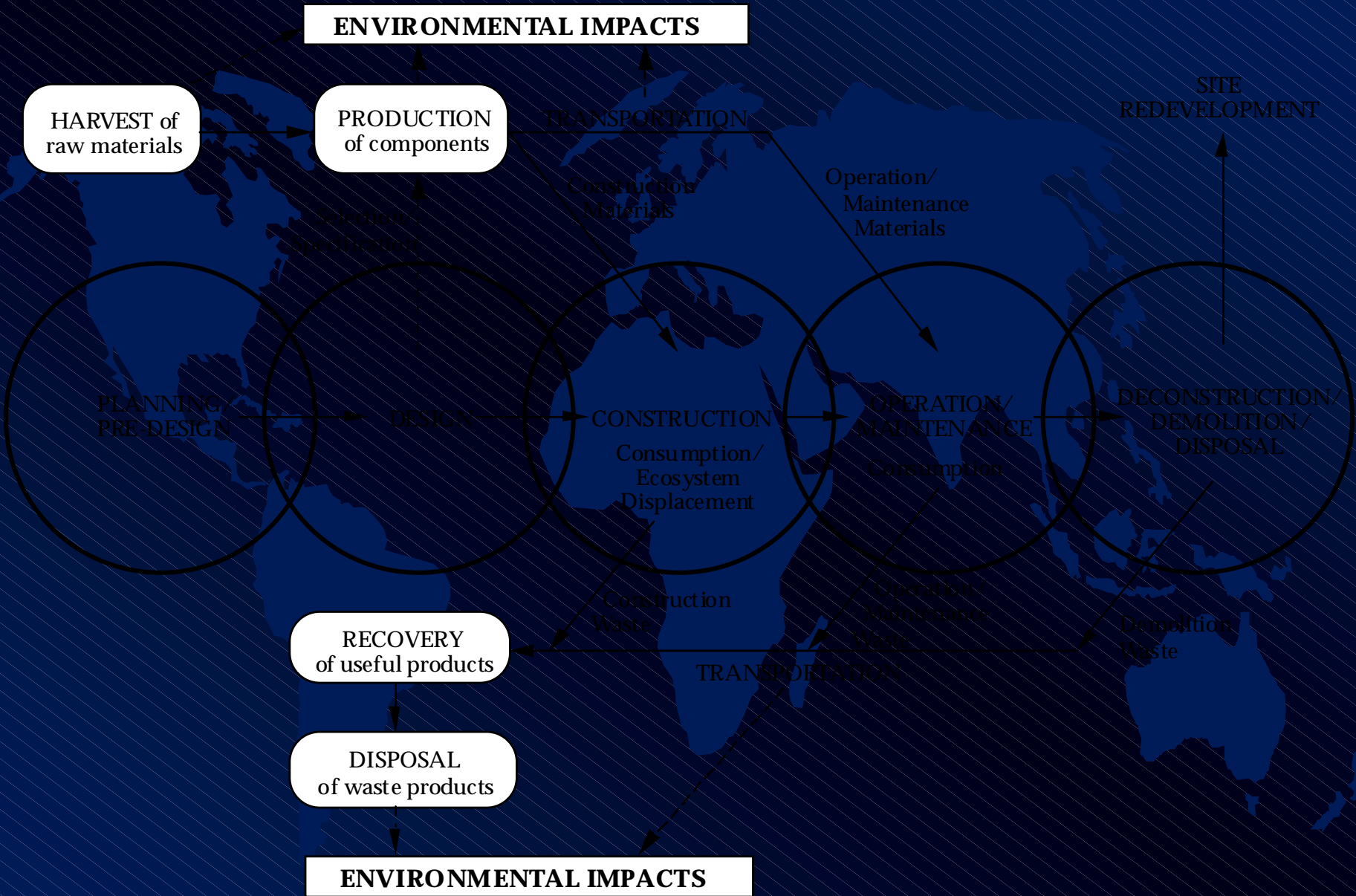
Outcome-Related Issues



- ◆ The beneficiaries of design/decision making are not:
 - Homogeneous
 - Always rational or predictable
 - Always unbiased
 - Receptacles of perfect knowledge
 - Ideal synthesizers of information

How Should You Start?

- ◆ Experiment with life cycle awareness
- ◆ Choice of Scope - Choose your battles wisely!
- ◆ Benchmark within *your* system
- ◆ Think systems - do things in the right order
- ◆ Context is key!
- ◆ The earlier the start, the greater the impact
- ◆ Seek transparent solutions



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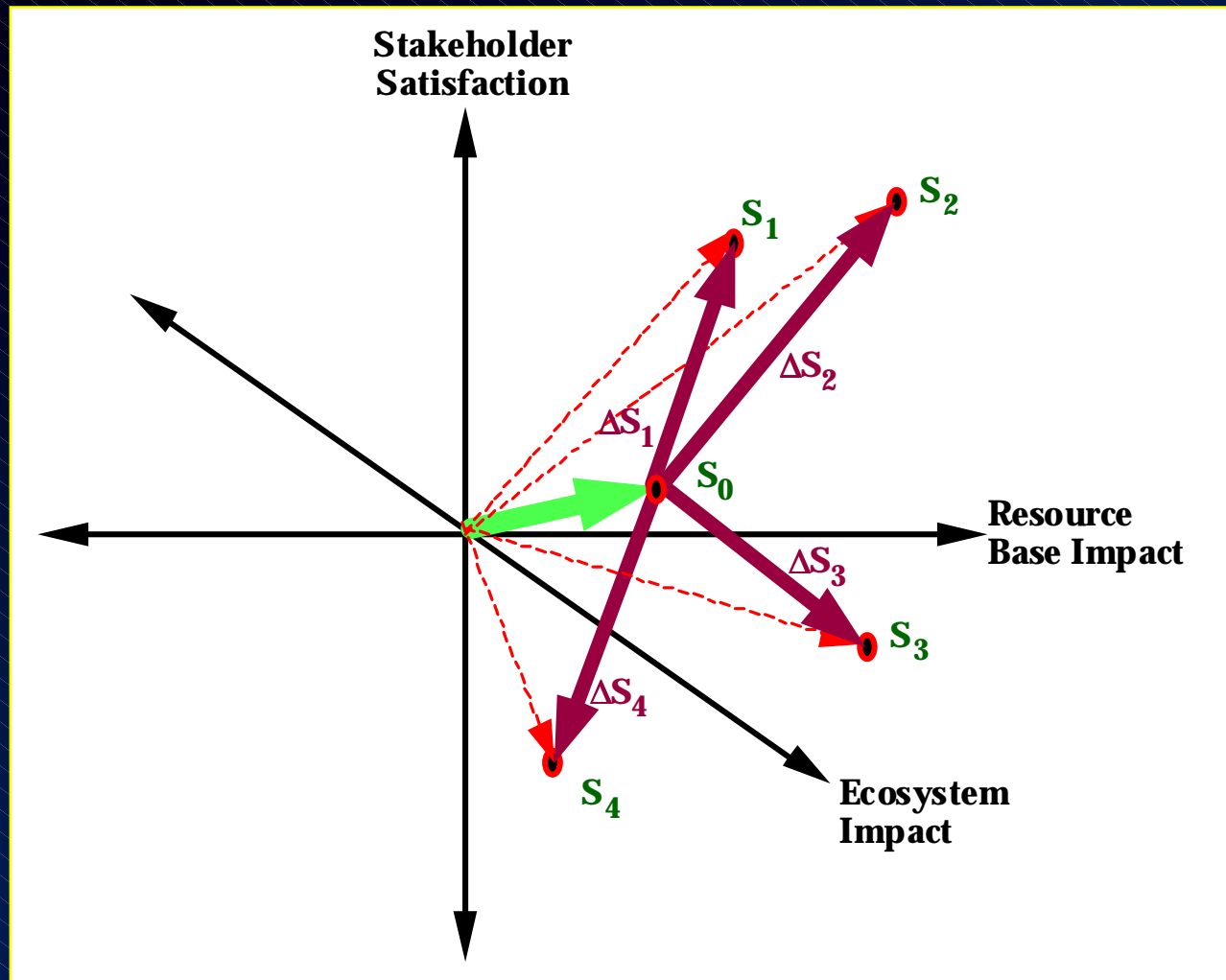
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Benchmarking *Within* the System



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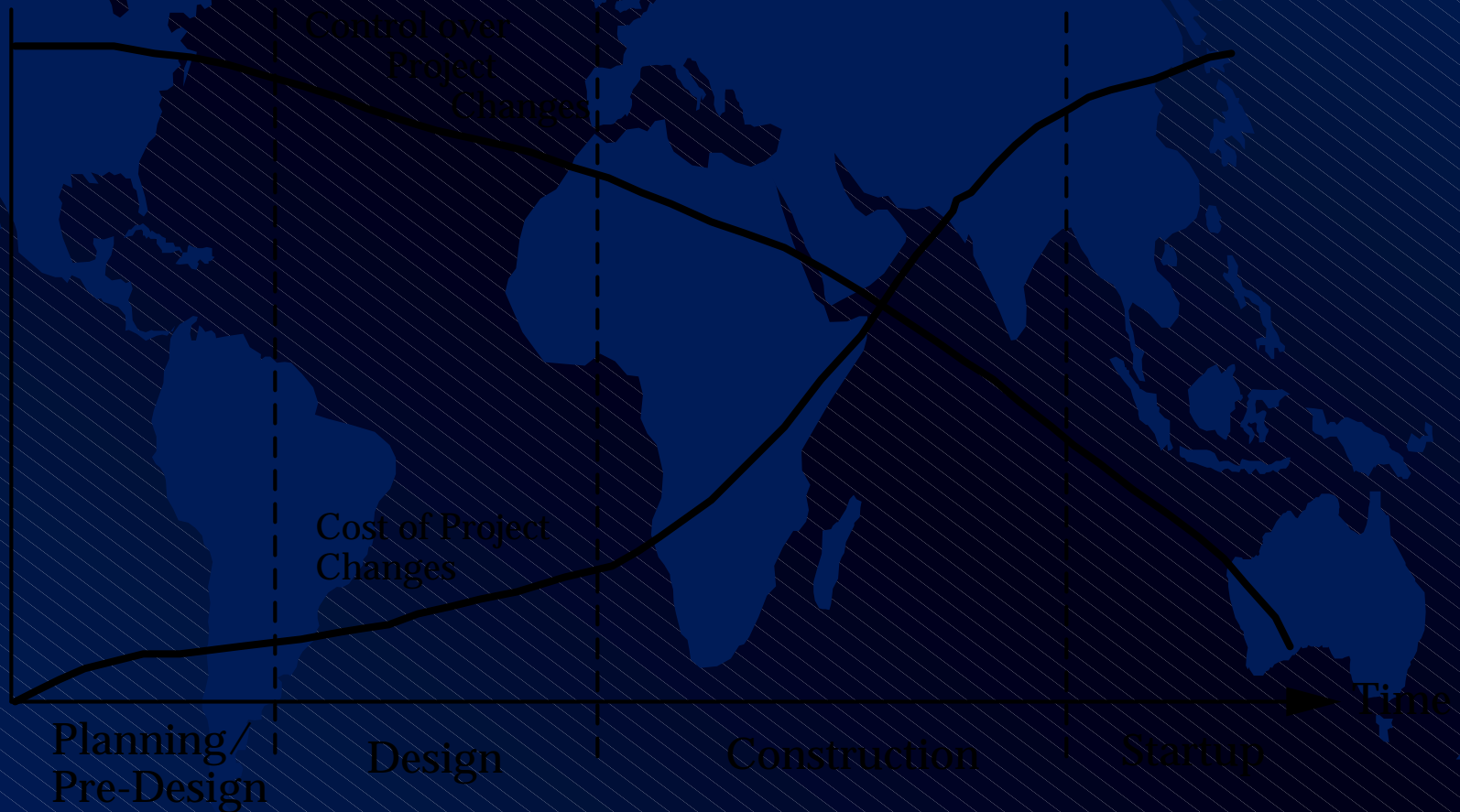
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Influence vs. Time



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Questions?