Size, Failure, and Optimization

Roger Sessions

About Me (Roger Sessions)

- Author of seven books (including Simple Architectures for Complex Enterprises.)
- Author of dozens of white papers on IT Risk and Optimization.
- Fellow of the International Association of Software Architects.
- Multiple patents in software and enterprise architecture.

Wisconsin's Accountability, Consolidation, and Efficiency (ACE)

→ Convert emails to a common system

→ Eliminate duplicate IT functionality

→ Consolidate servers

2005-2009 $121 M

Result?

Roger Sessions, ObjectWatch roger@objectwatch.com

Wisconsin's Accountability, Consolidation, and Efficiency (ACE)

→	Convert emails to a common system	**Done!**
→	Eliminate duplicate IT functionality	**Not Done!**
→	Consolidate servers	**Not Done!**

2005-2009 $121 M

Result?

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Wisconsin's Accountability, Consolidation, and Efficiency (ACE)

→	Convert emails to a common system	**Done!**
→	Eliminate duplicate IT functionality	**Not Done!**
→	Consolidate servers	**Not Done!**

2005-2009 $121 M

Result?

Budgeted Cost: $2.6M

Actual Cost: $13.4 M

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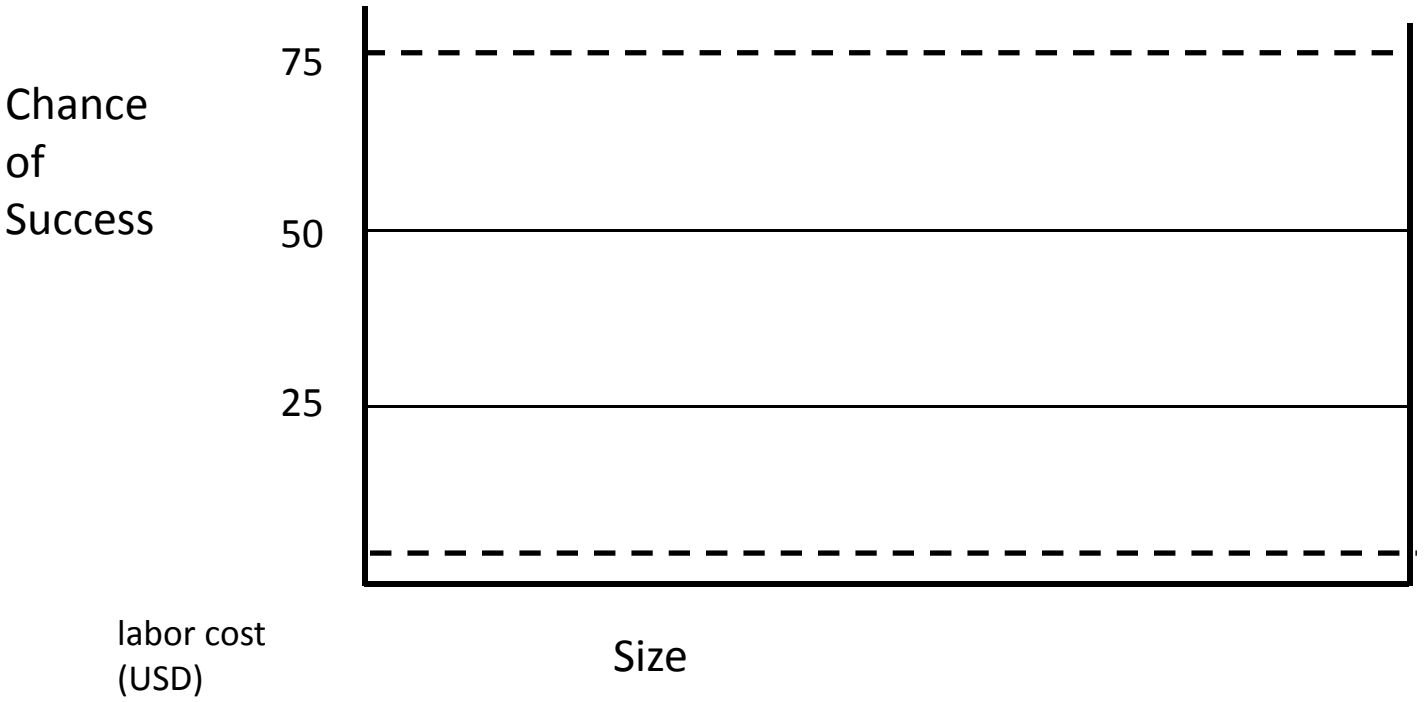
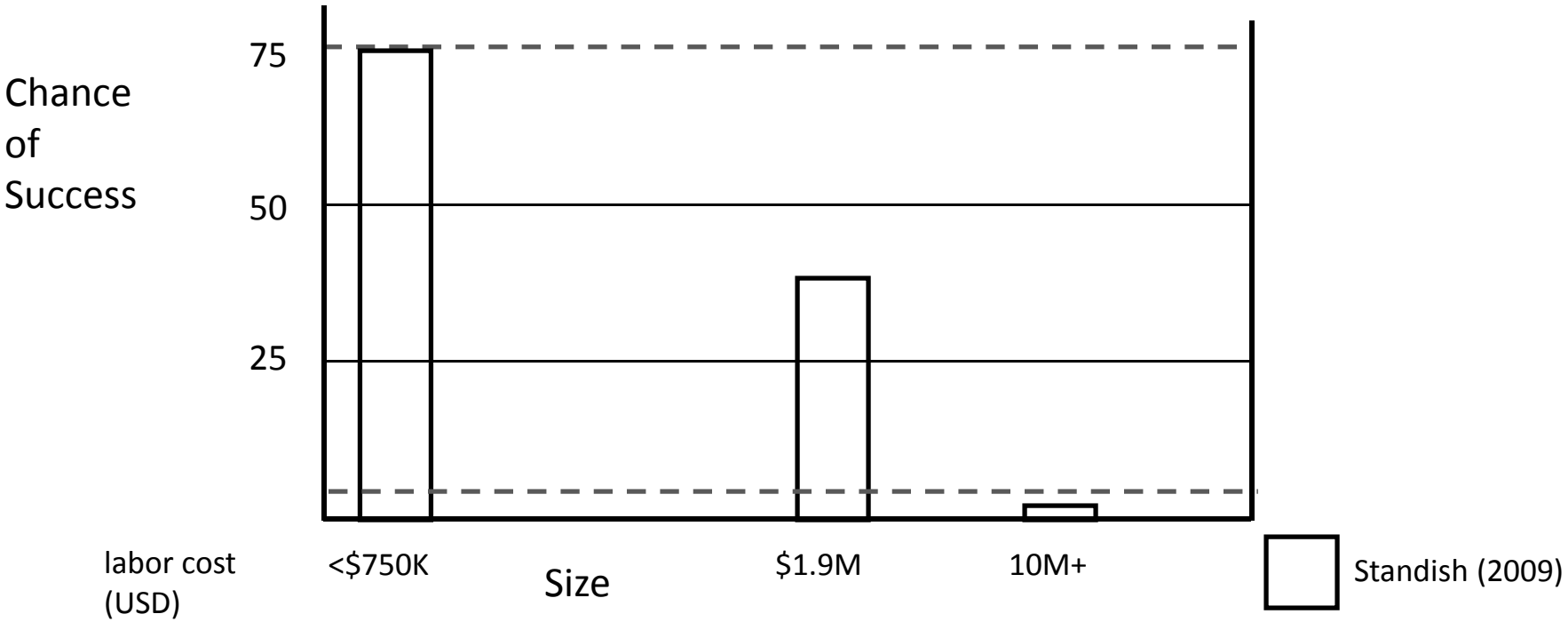
Grim Statistics

An estimated 85 percent of government IT projects are late, over budget or both.

- The Pew Center on the States, “Focus on Performance”, 2010


Chance
of
Success
75
50
25
labor cost
(USD)
Size



(Standish) 2009 Chaos report published by the Standish Group

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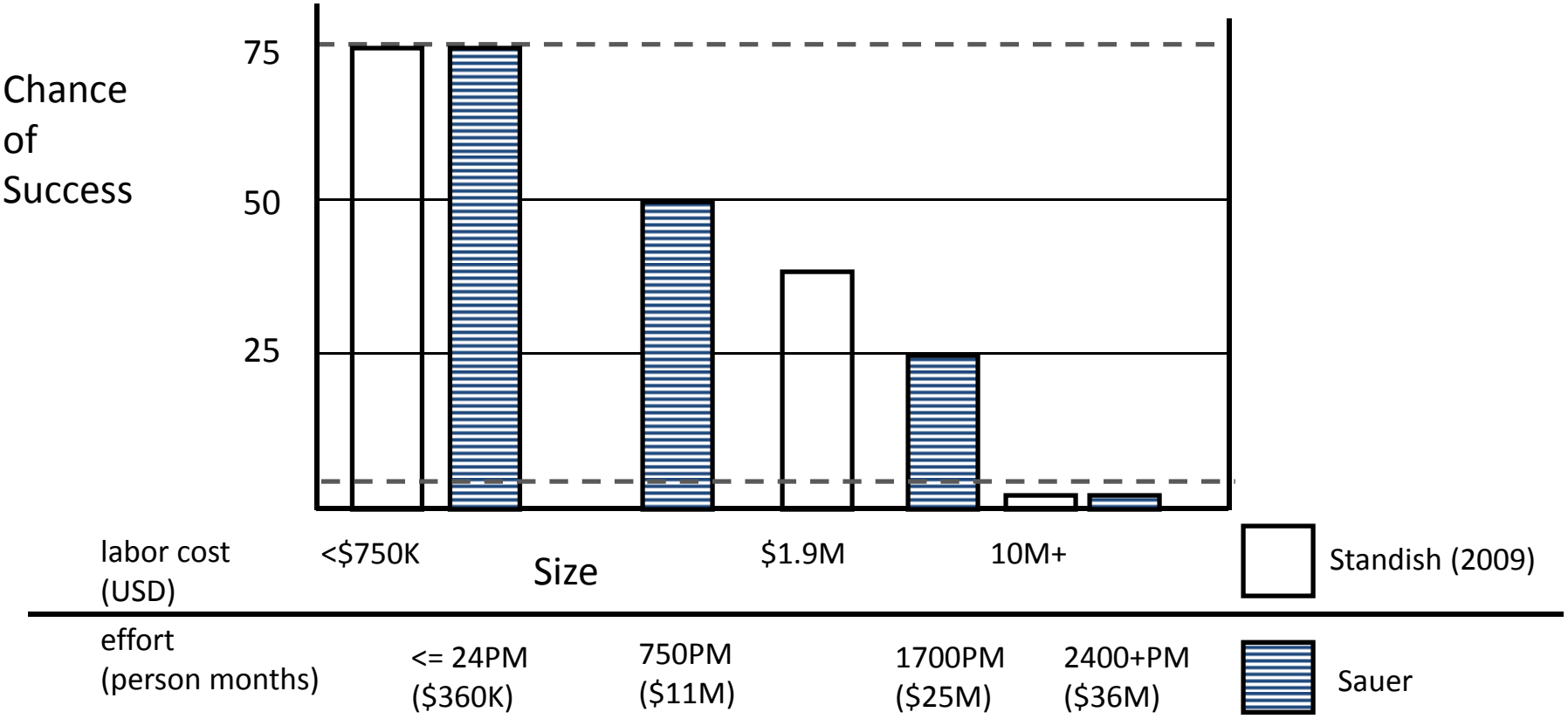

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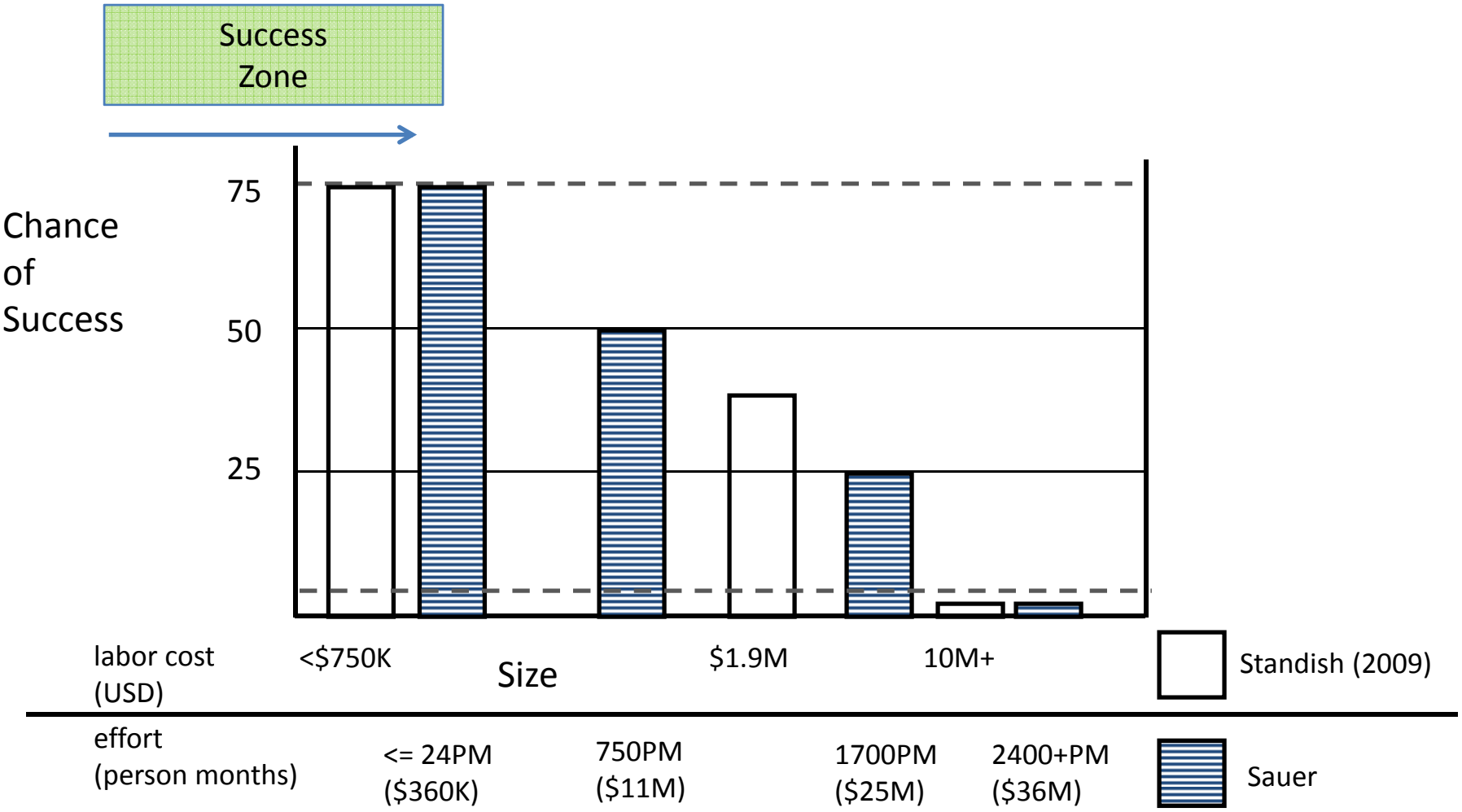

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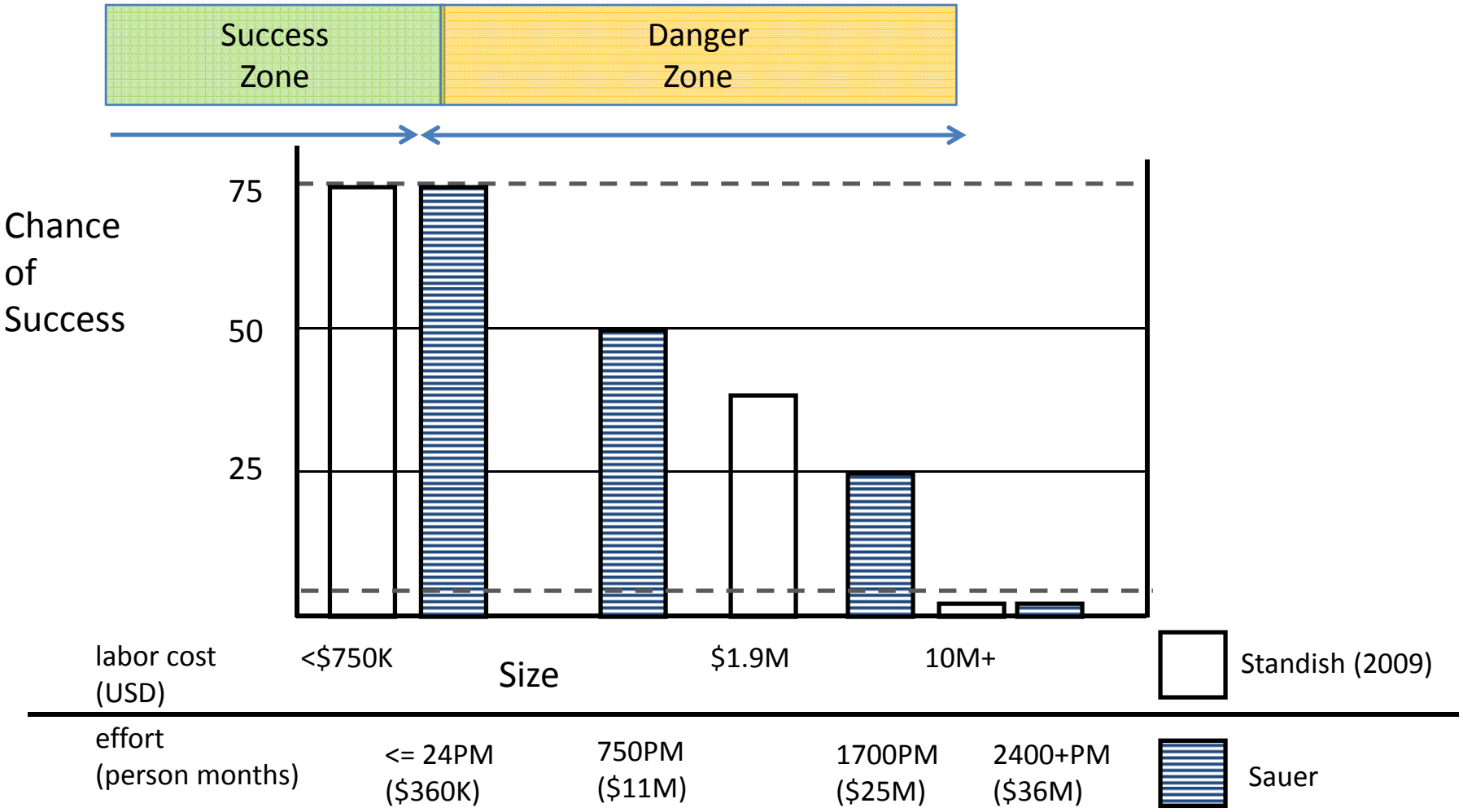

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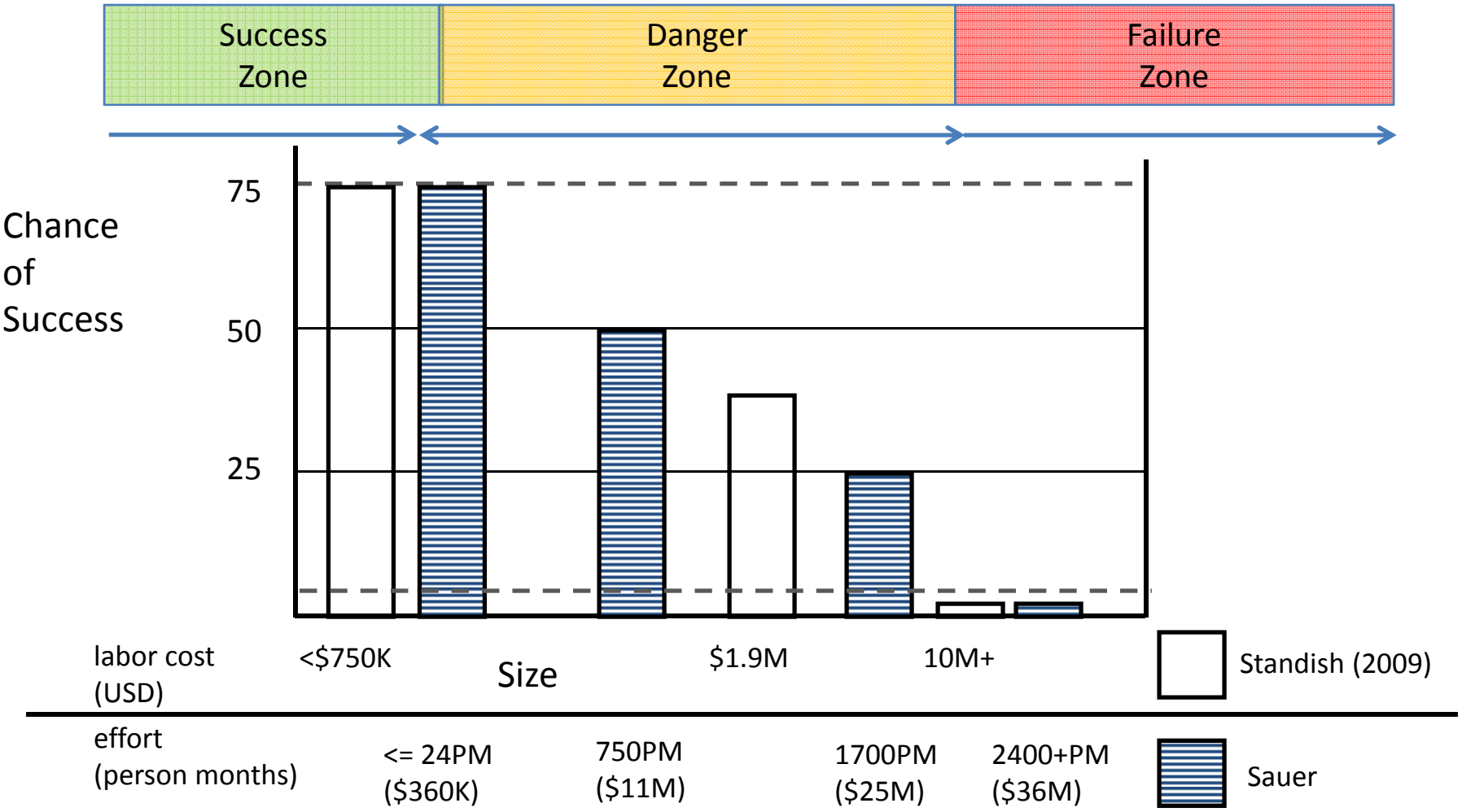

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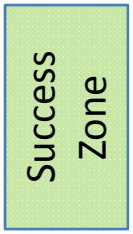
Sessions' Law of Size



IT Projects less than $1M will probably succeed, regardless of how poorly managed they are.

8 people
6 months

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Sessions' Law of Size

Success Zone

IT Projects less than $1M will probably succeed, regardless of how poorly managed they are.

8 people
6 months

Danger Zone

IT Projects between $1M and $10M can succeed, if they are very carefully managed.

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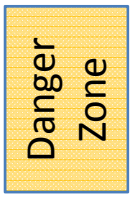
Sessions' Law of Size

IT Projects less than $1M will probably succeed, regardless of how poorly managed they are.

8 people
6 months



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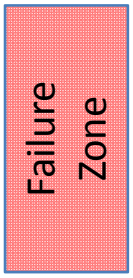

IT Projects over $10M will probably not succeed, regardless of how well managed they are.

20 people
36 months

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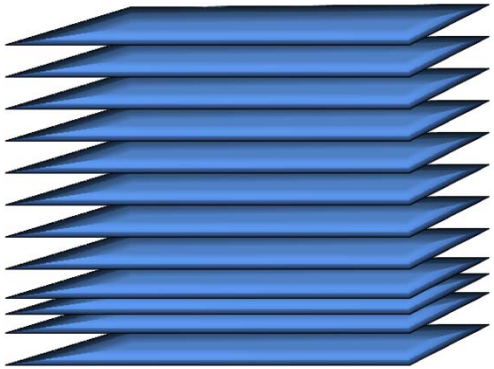
Big IT Methodology

Project Identified

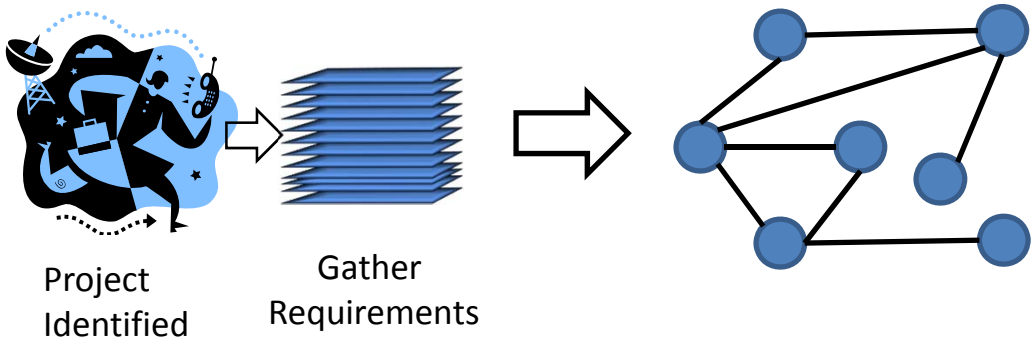
Big IT Methodology

Project Identified



Gather Requirements

Big IT Methodology



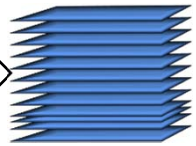
Project Identified

Gather Requirements

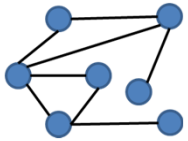
Design Business Architecture

Big IT Methodology

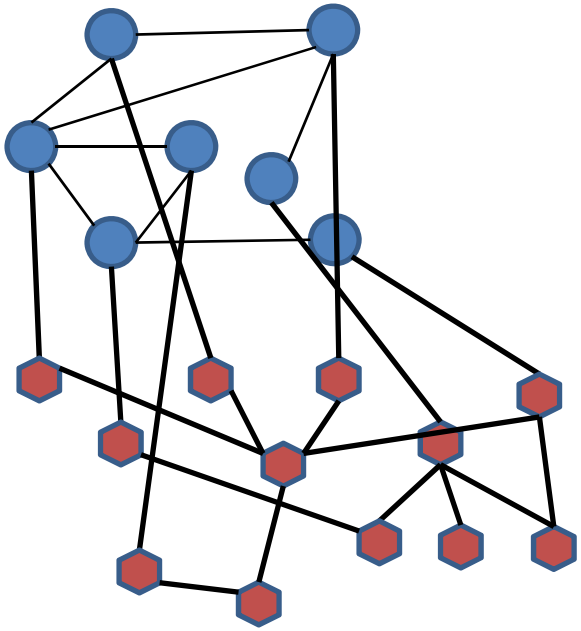
Project Identified



Gather Requirements

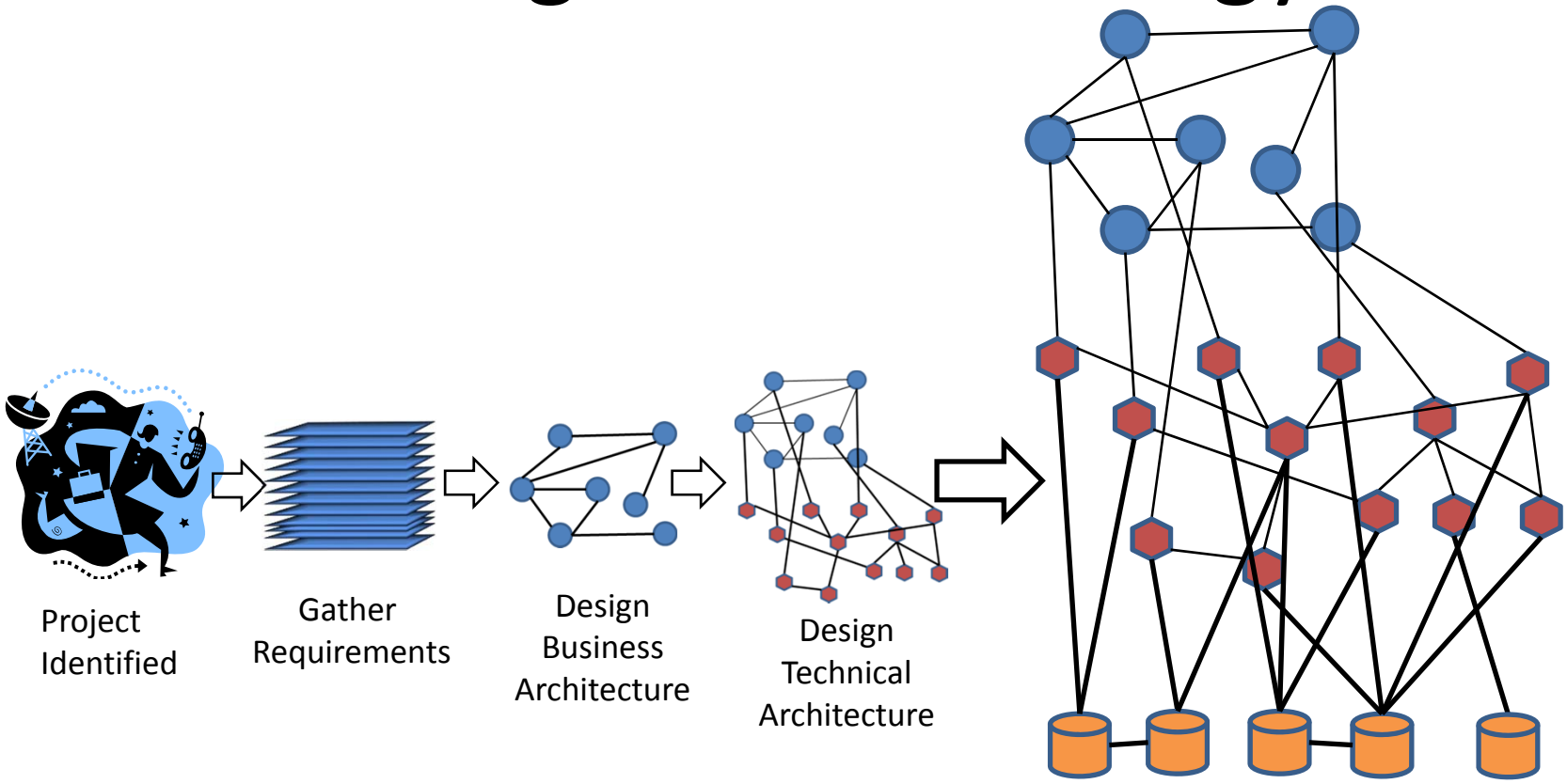


Design Business Architecture



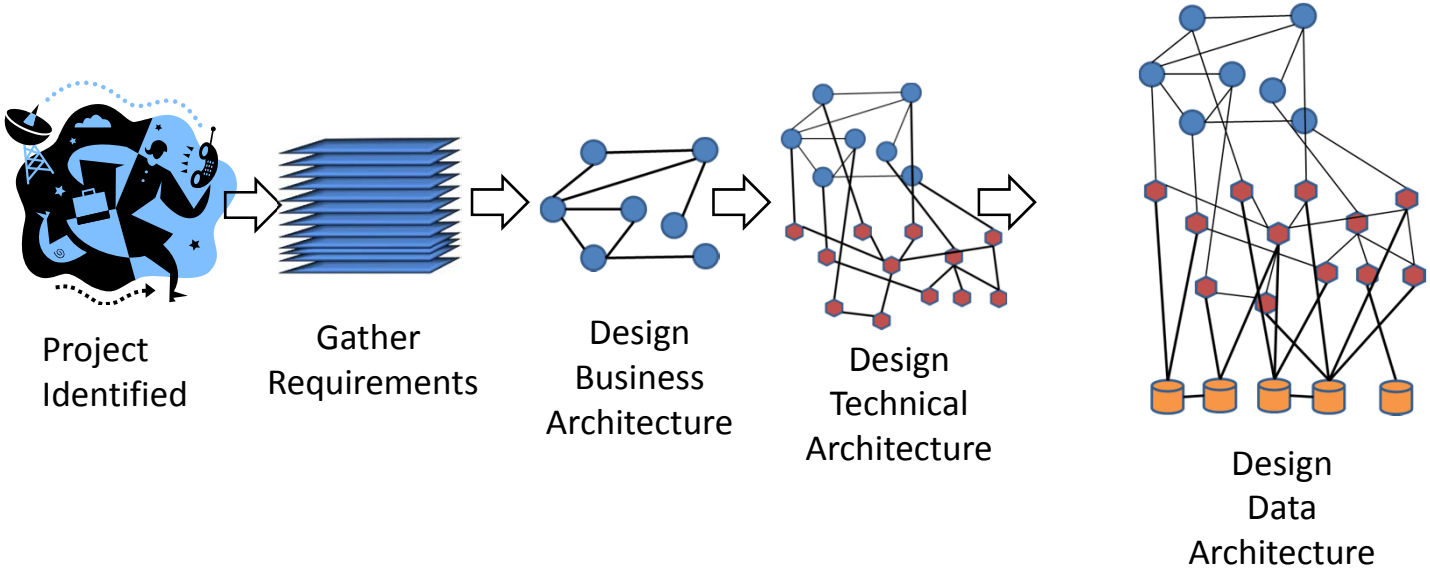
Design Technical Architecture

Big IT Methodology



Design Data Architecture

Fidelity Problem



Project Identified

Gather Requirements

Design Business Architecture

Design Technical Architecture

Design Data Architecture

25% Loss

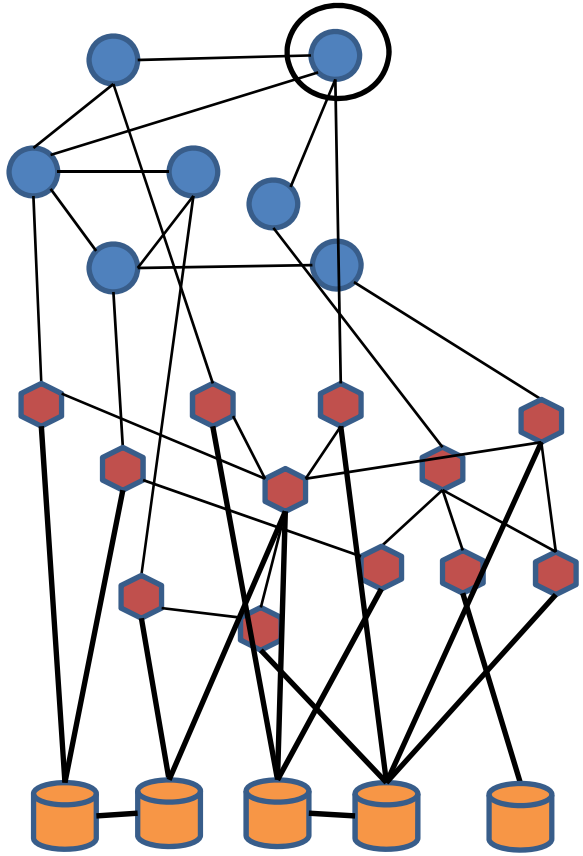
75% Accurate

56% Accurate

42% Accurate

32% Accurate

Agility Problem



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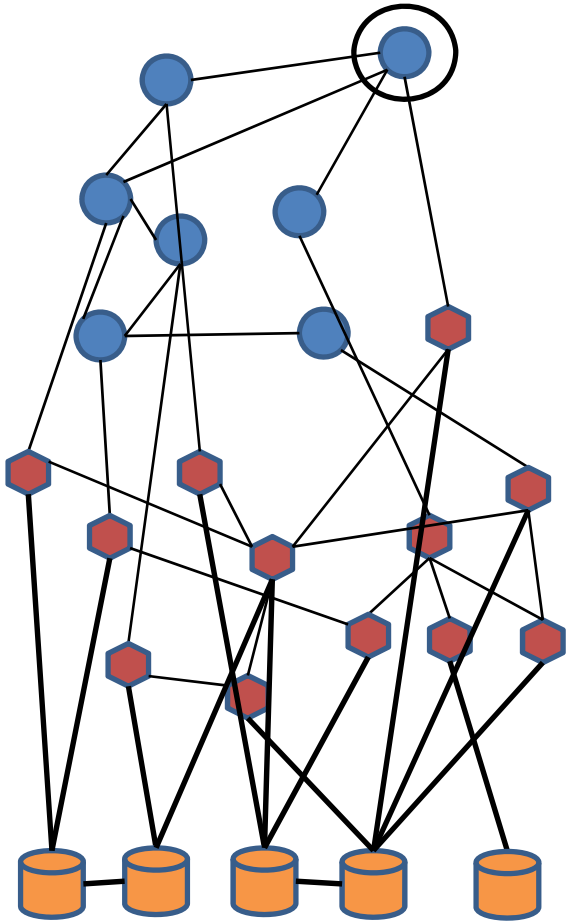

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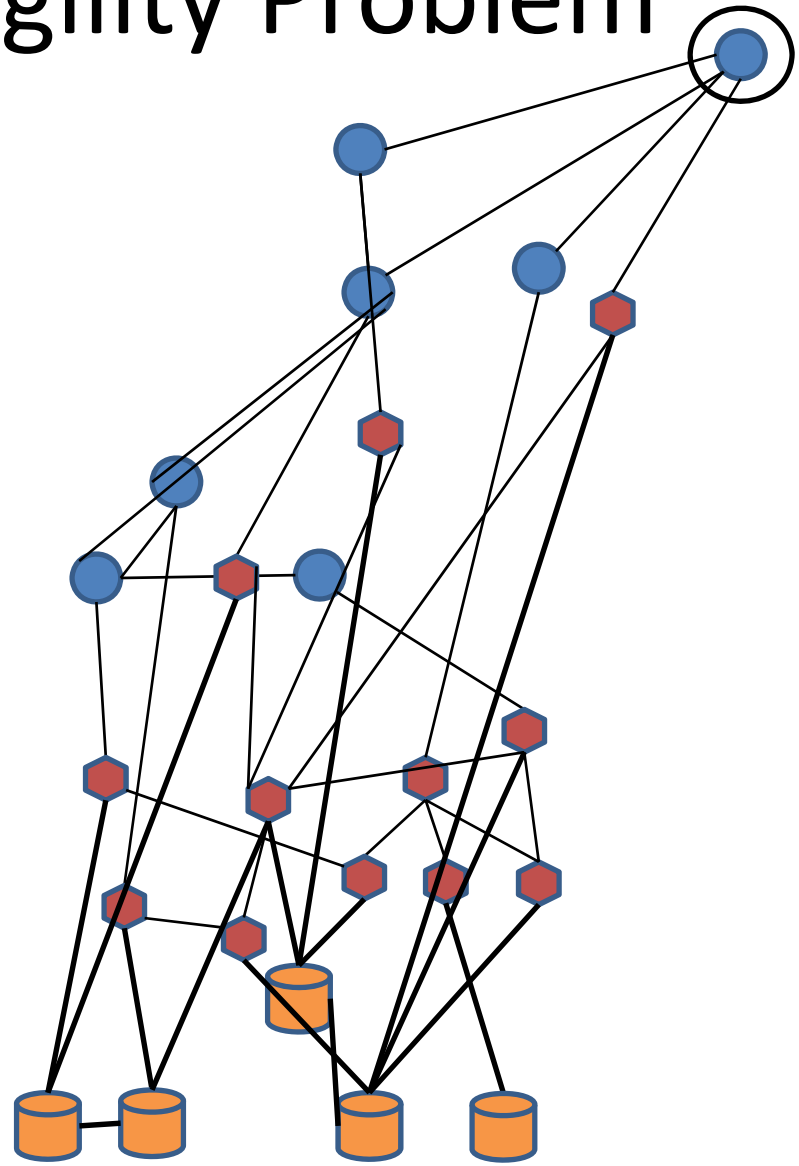

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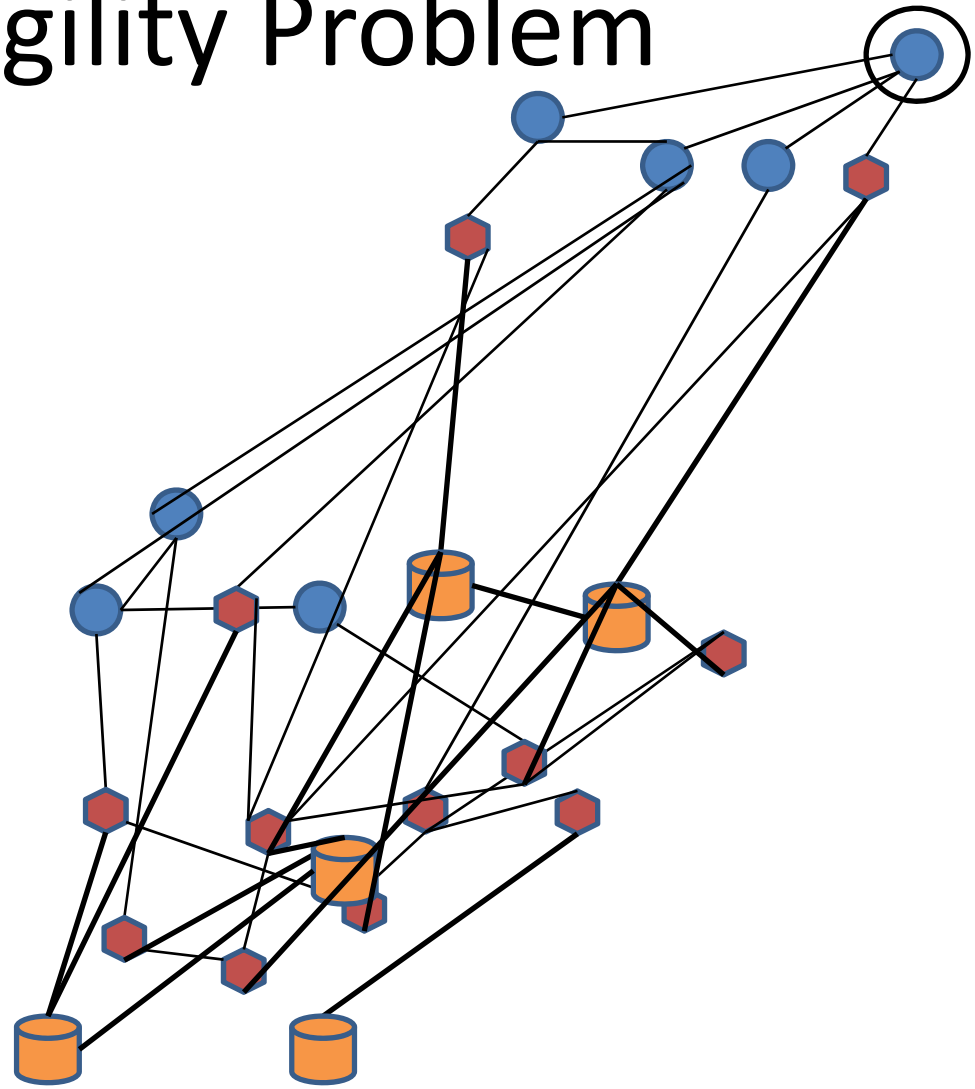

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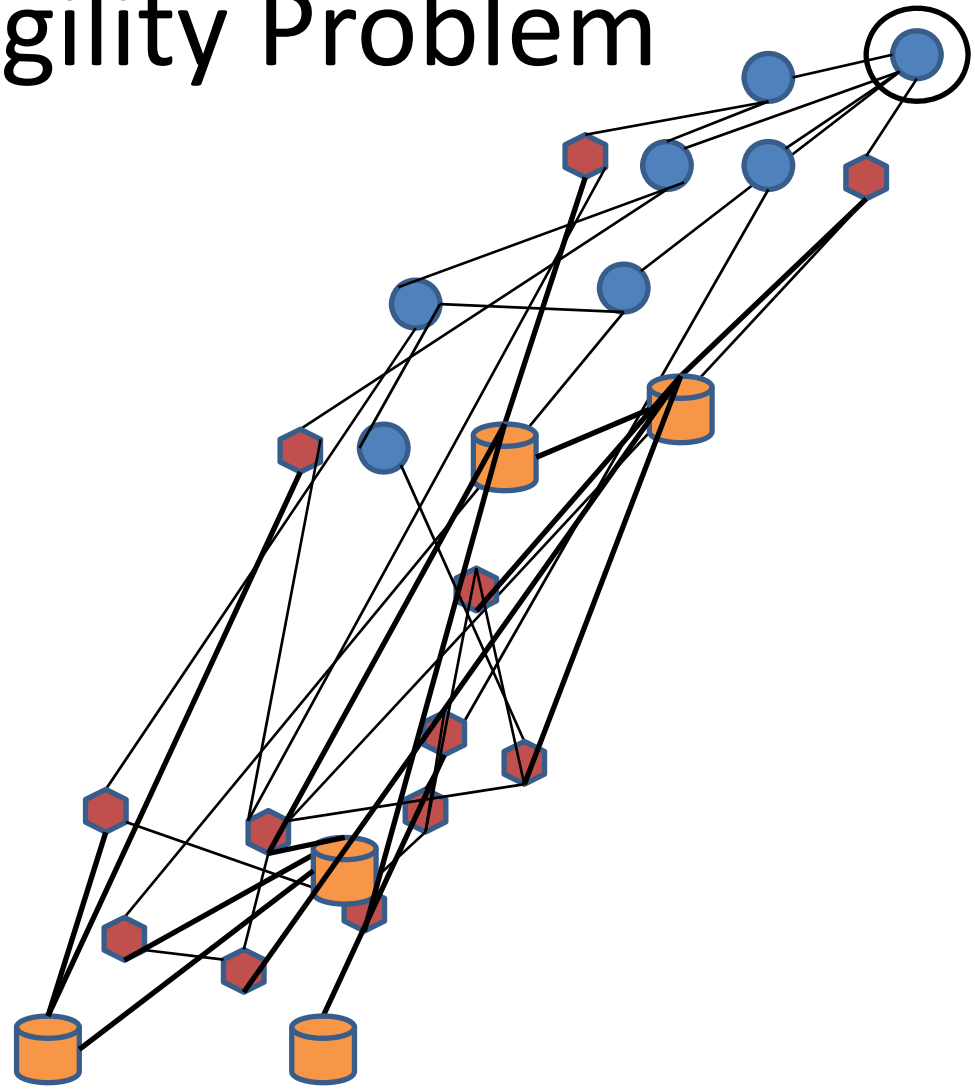
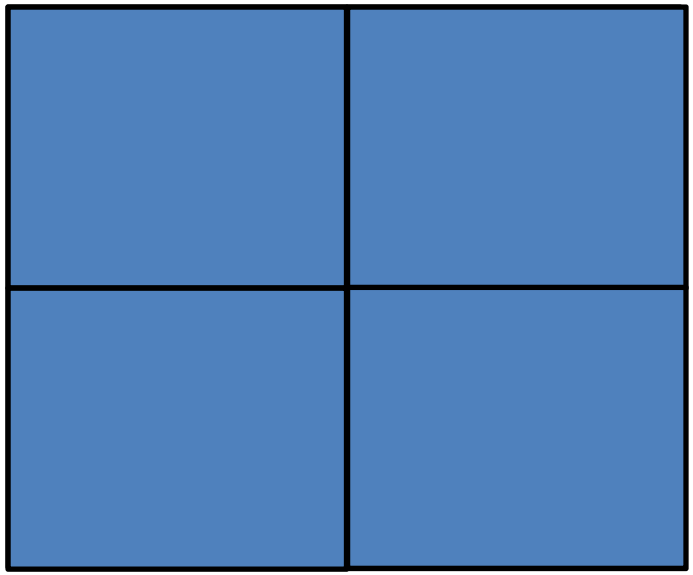


How to do Big IT

Don’t do Big IT.

Do Little IT



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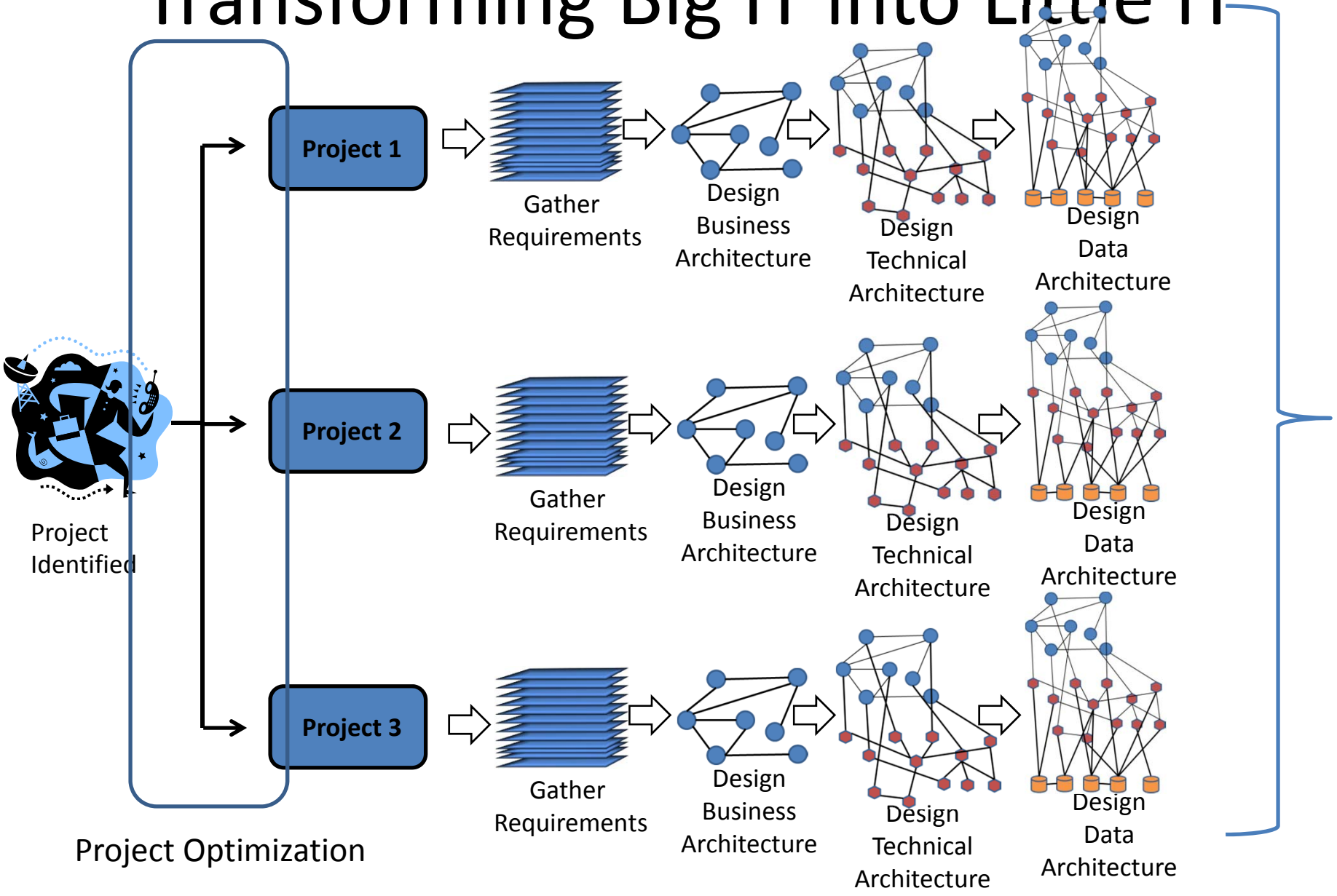
Transforming Big IT into Little IT



Three problems with splitting up IT projects.

1. Dependencies
2. Sensitivity
3. Timing

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Dependencies

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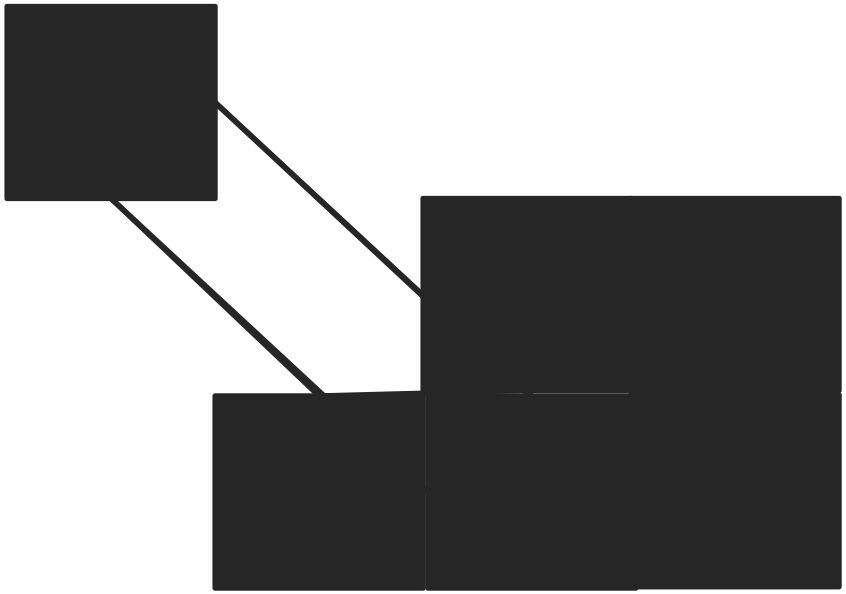
Dependencies



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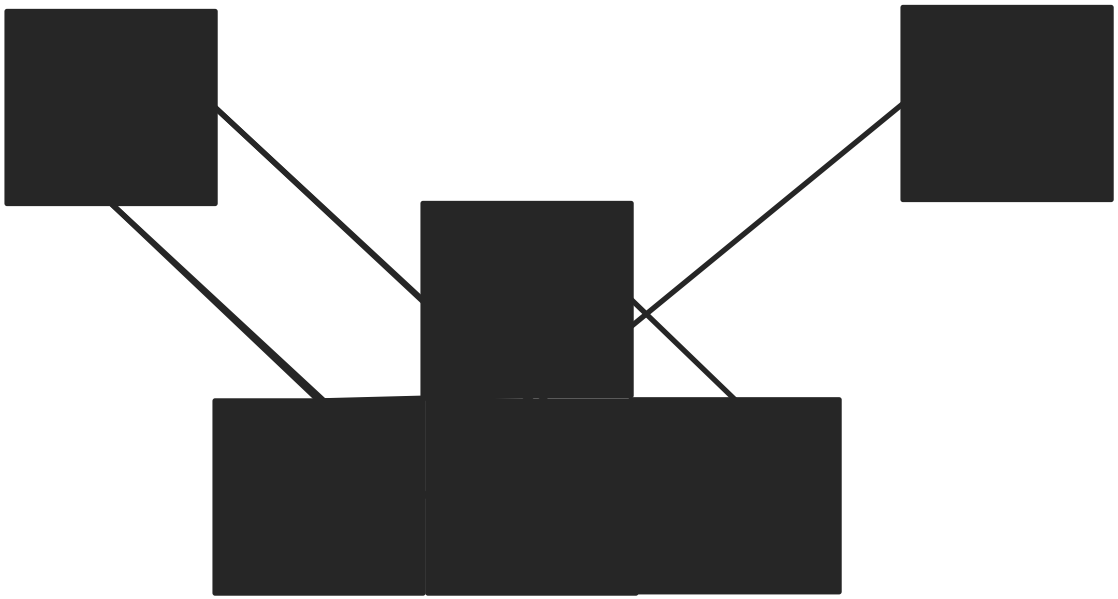

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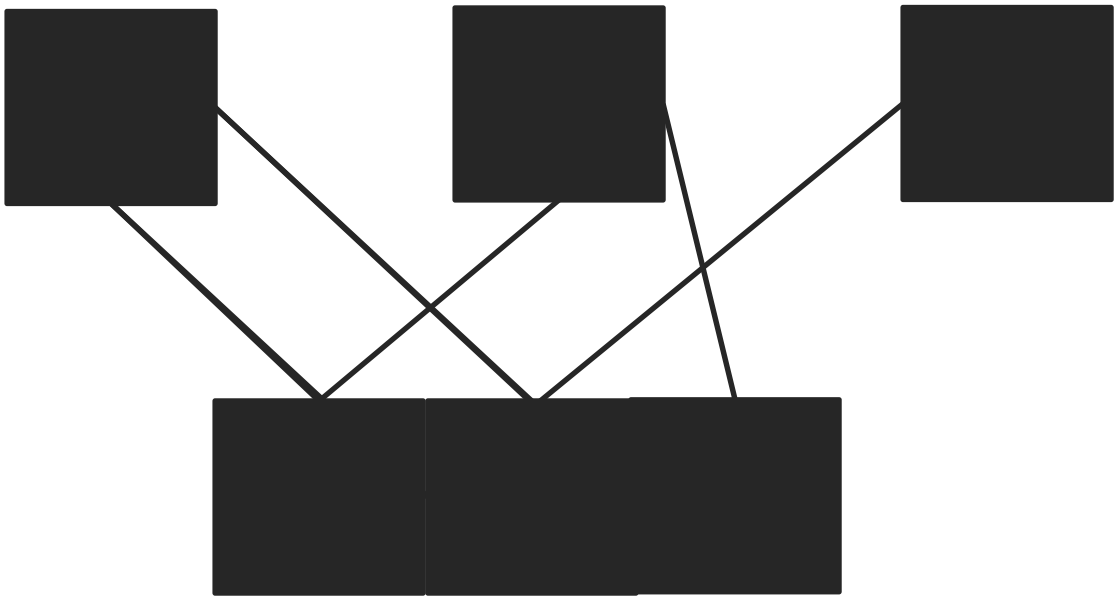

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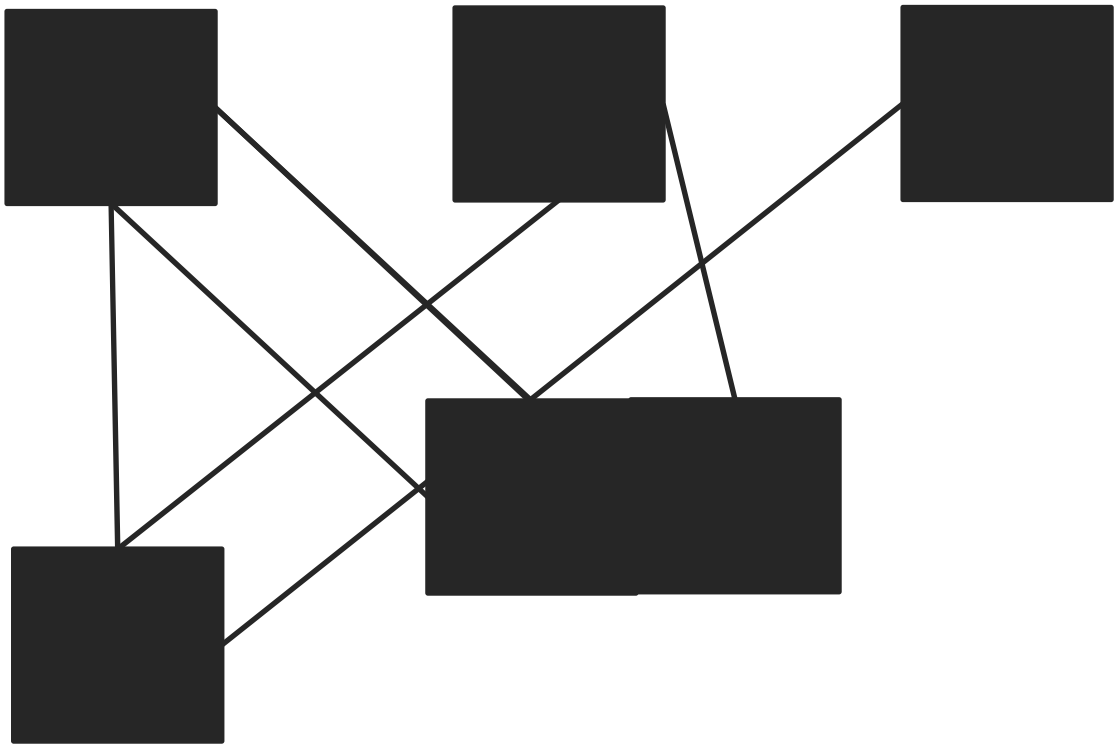

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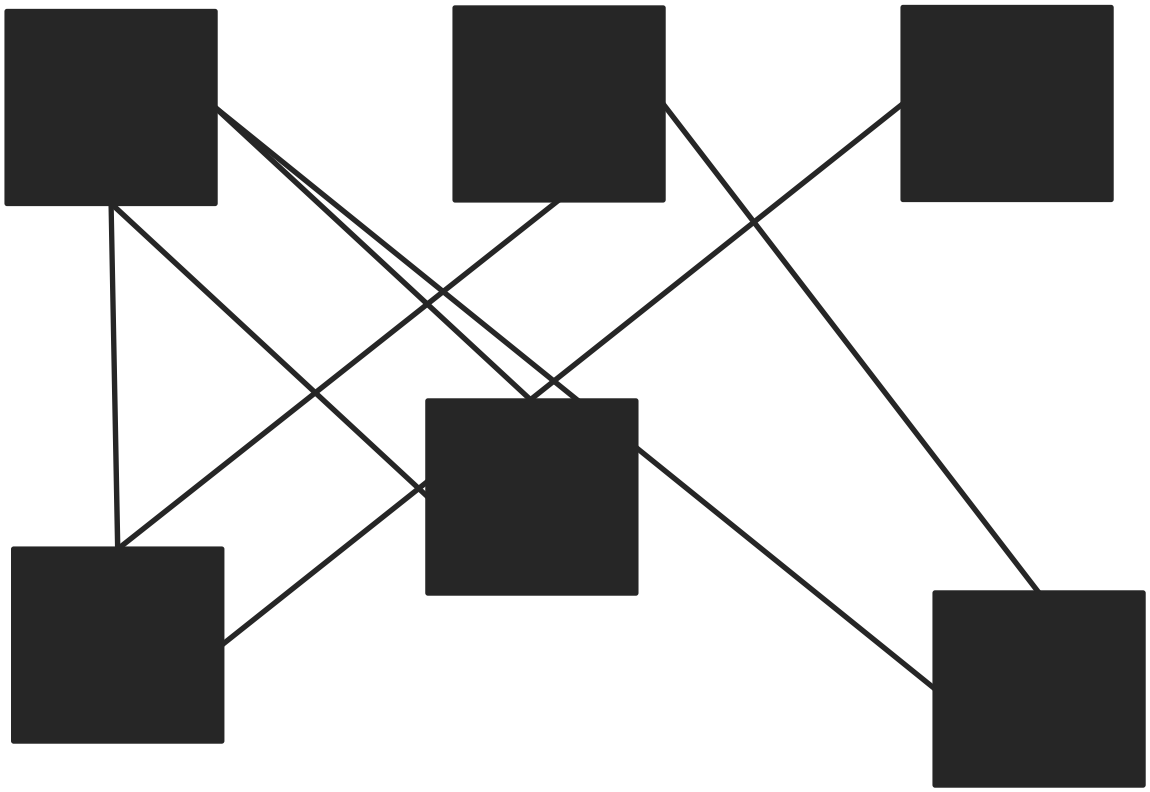

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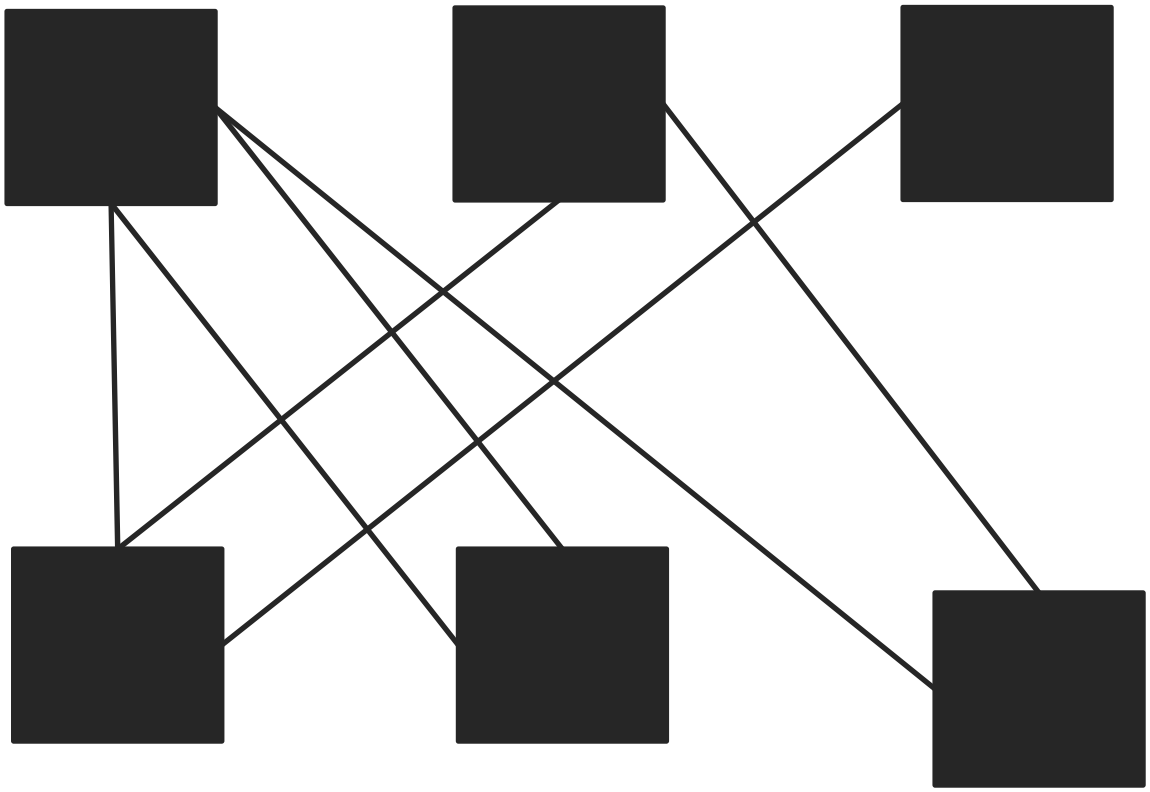

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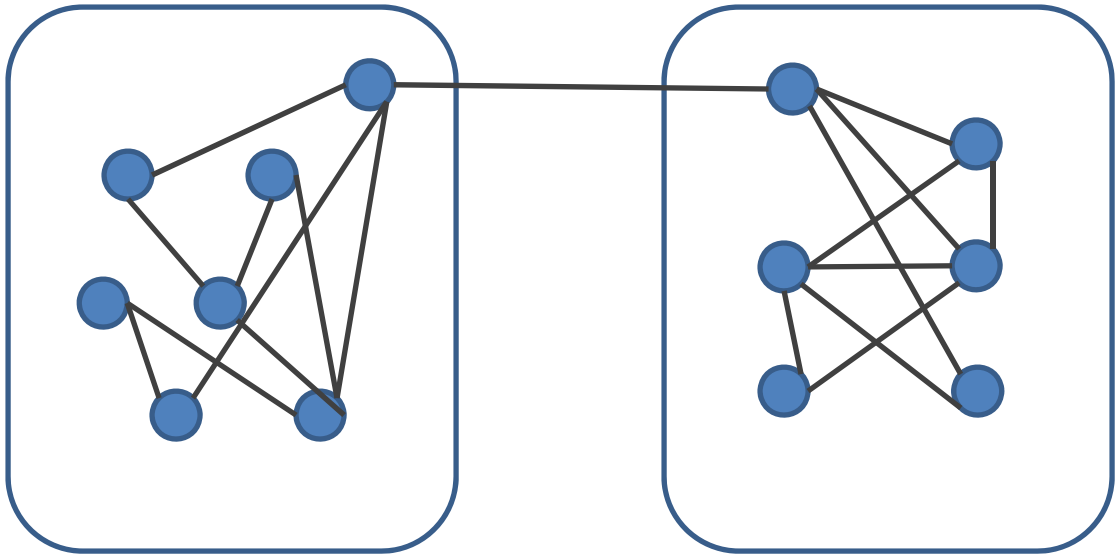
Sensitivity



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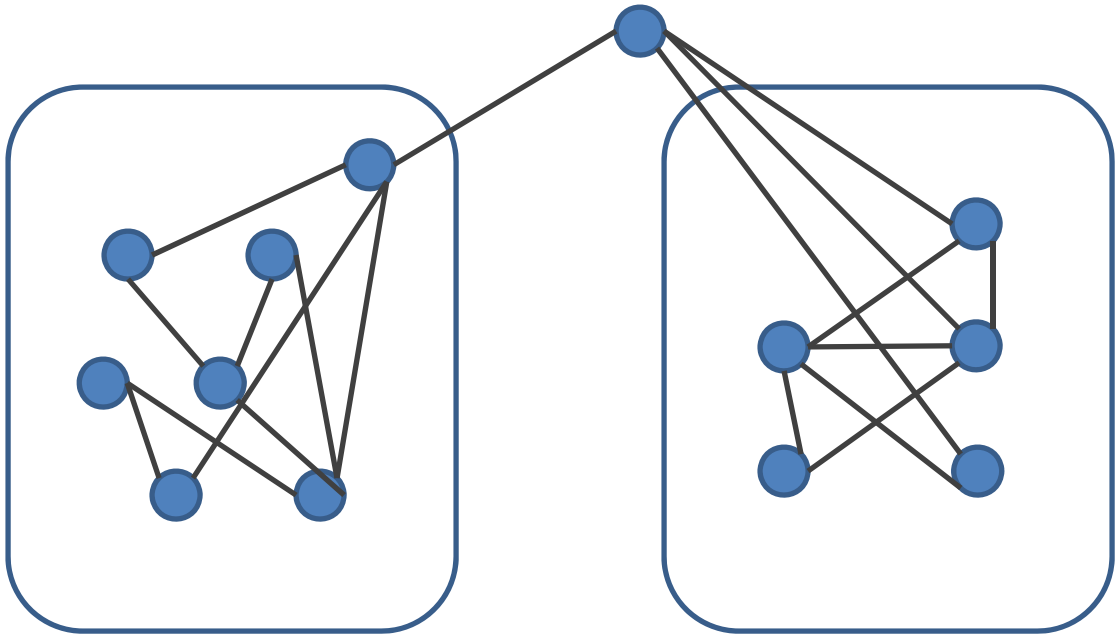

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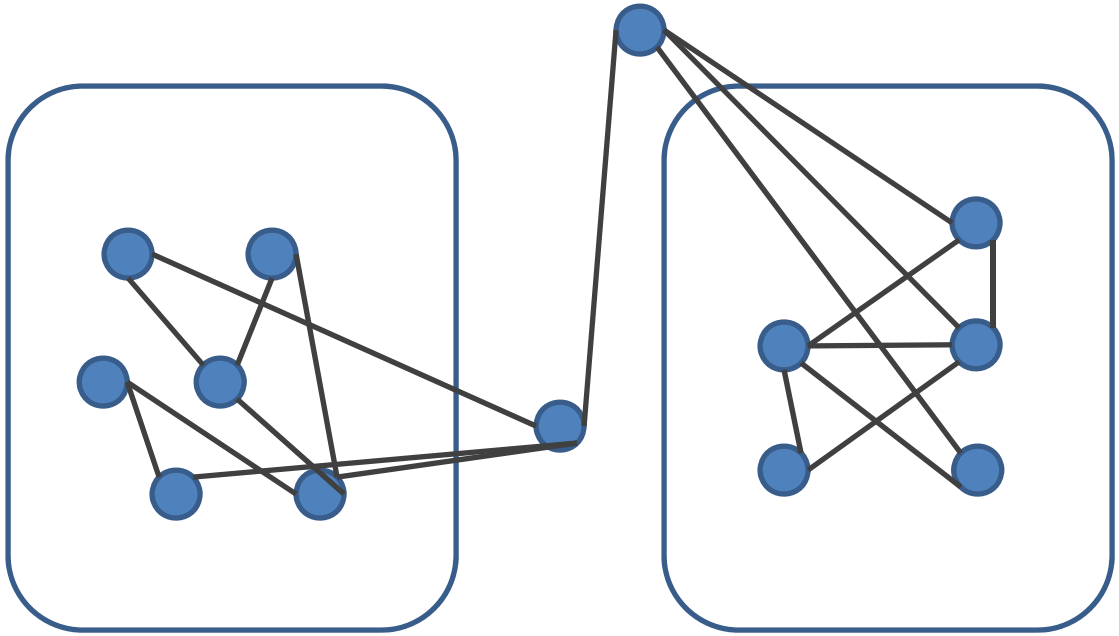

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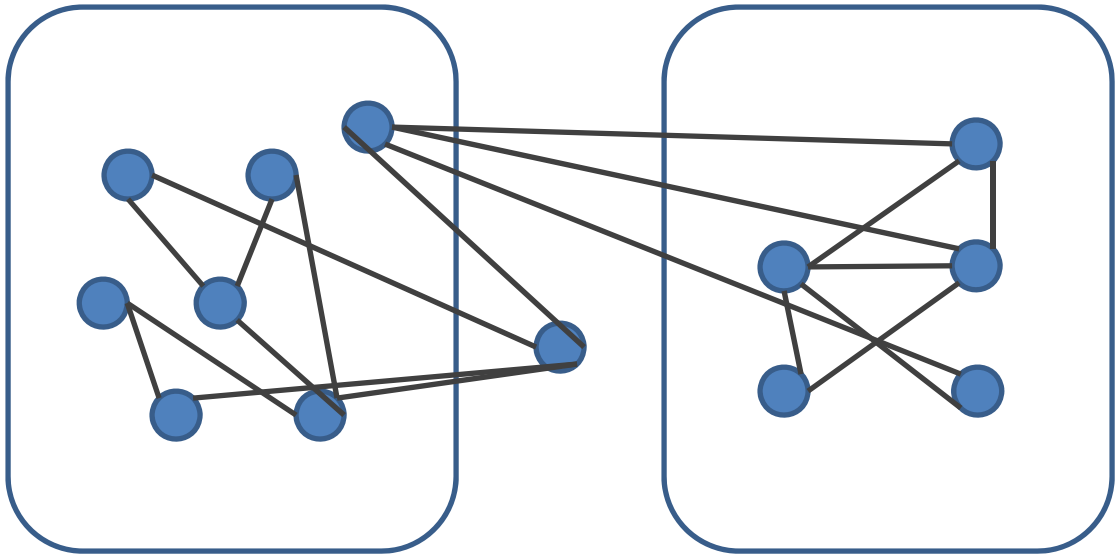

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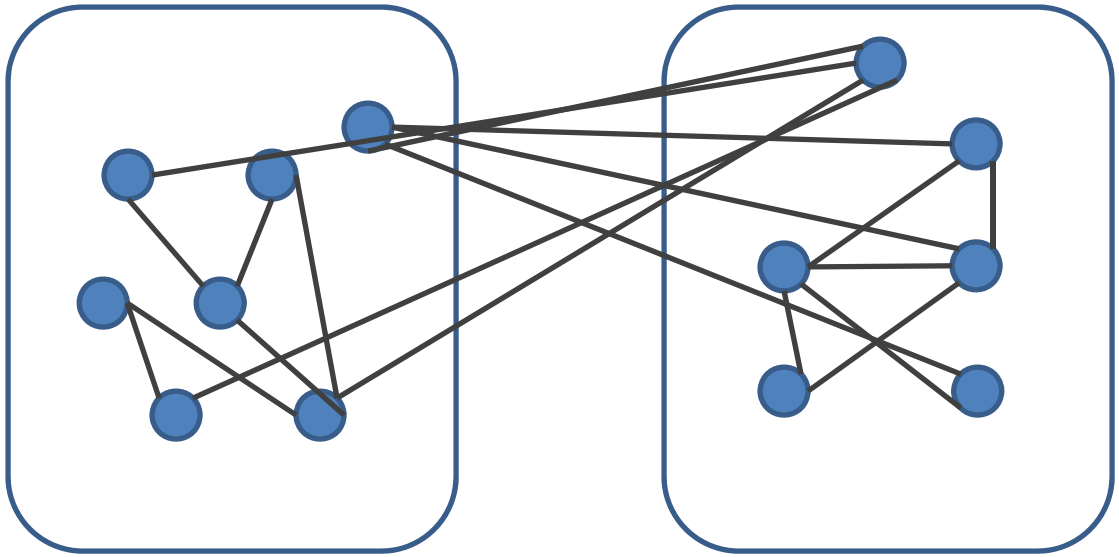

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Timing

It is very difficult to gather requirements on large projects.

It is very difficult to split up large projects until you know the requirements.

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So How Do You Manage The Split?

It depends….

At less than $1M, the project doesn’t need to be split.

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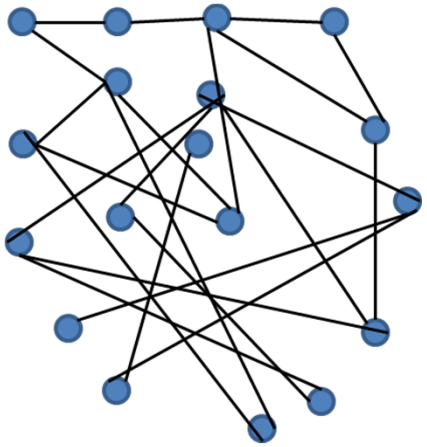
Between $1-5M, the project can be split by eyeball.

Between $5-10M, the split requires a Project Optimization Methodology.

Over $10M, the split requires a formal pre-planning process, a dedicated team, and a Project Optimization Methodology.

Project Optimization Methodology (PrOM)

Non-Optimized Project (NOP)



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Project Optimization Methodology (PrOM)

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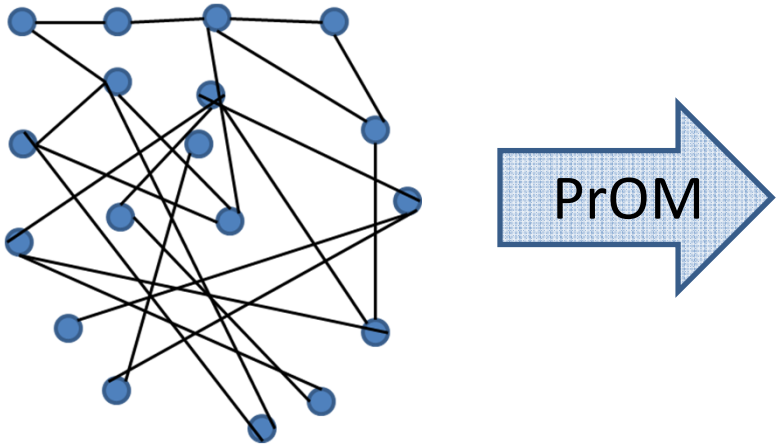

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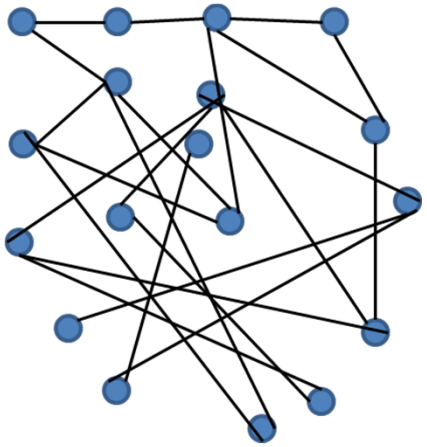
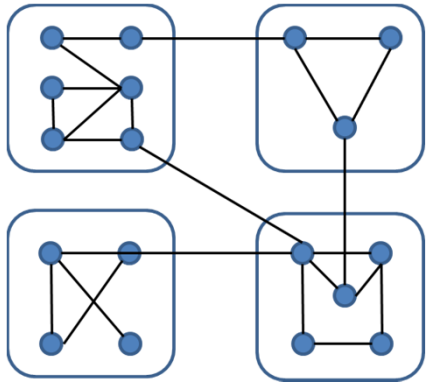


PrOM

Highly Optimized Project (HOP)



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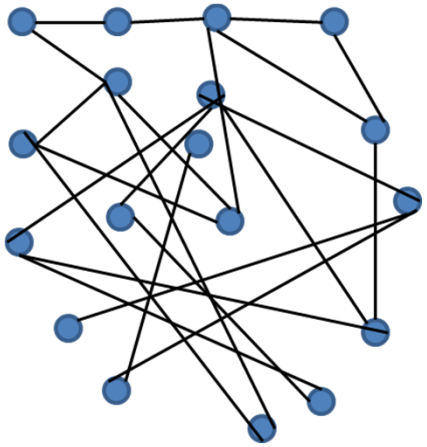

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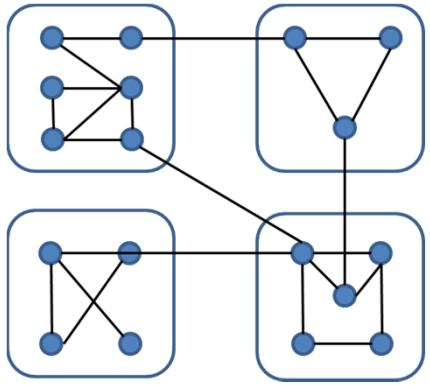

Example of PrOM:

Simple Iterative Partitions (SIP)

Mathematical	Analytical
Predictive	Patented

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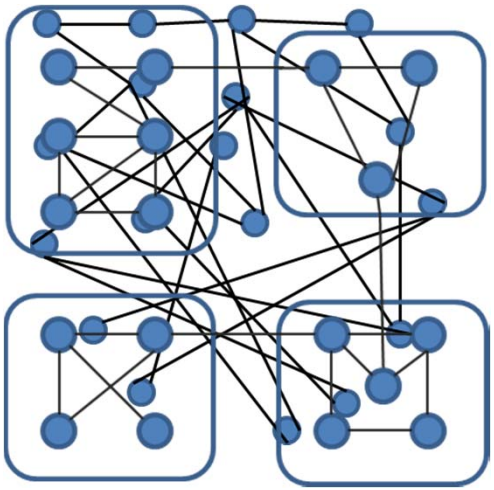
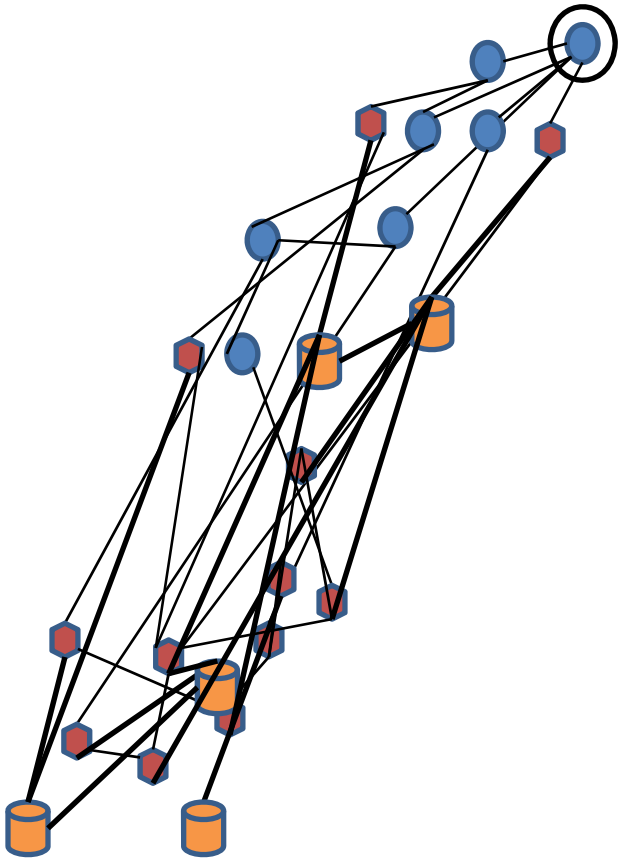
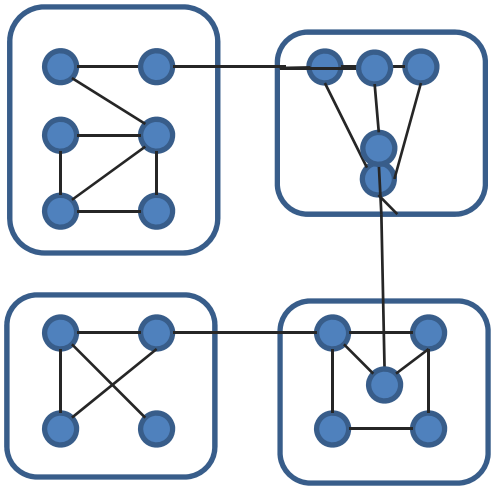
Impact on Failure



Success Zone	Danger Zone	Failure Zone

Impact on Agility





Summary

Size Matters!

In a bad way.

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Summary

Size Matters!

Don’t worry about how to manage large projects.

In a bad way.

They are unmanageable.

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Summary

Size Matters!

Don’t worry about how to manage large projects.

Worry about how to split large projects into an optimal collection of small projects.

In a bad way.

They are unmanageable.

Easier said than done.

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Summary

Size Matters!	In a bad way.
Don’t worry about how to manage large projects.	They are unmanageable.
Worry about how to split large projects into an optimal collection of small projects.	Easier said than done.
Don’t worry about how to manage small projects.	It is hard to mess them up!

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Thank You!

Upcoming Web Shorts:

The Mathematics of Optimization

Size and Agility

Risk in the Cloud

Simple Iterative Partitions (SIP): A Project Optimization Methodology

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Let's talk! Twitter: @RSessions; Link-in, Roger Sessions; Email, roger@objectwatch.com

The End

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