MANAGED AGILE DEVELOPMENT
MAKING AGILE WORK FOR YOUR BUSINESS
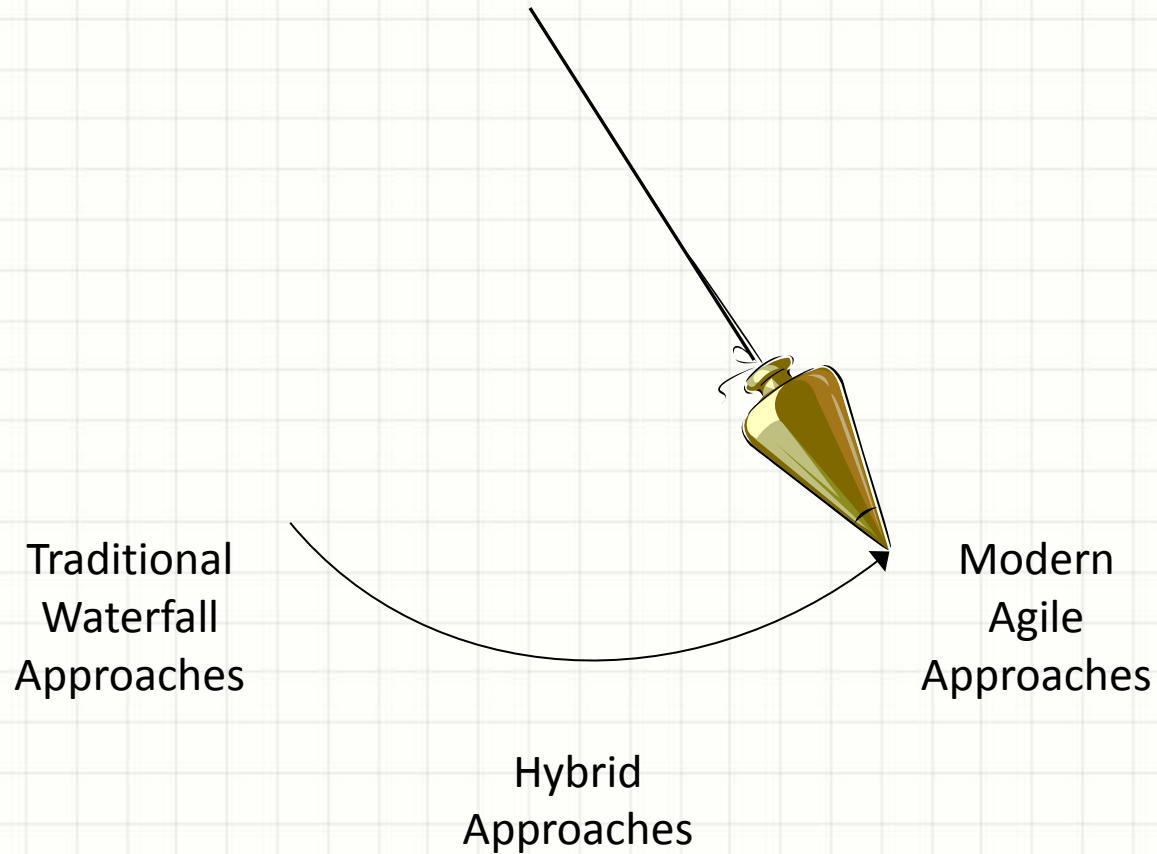
Chuck Cobb
May 20, 2013

The Pendulum Effect

Traditional
Waterfall
Approaches

Modern
Agile
Approaches

Hybrid
Approaches

The Changing Landscape of Project Management

From	To
An emphasis on managing costs and schedules of projects	More emphasis on delivering value as seen by the project stakeholders
An emphasis on control	Balancing a need for control with adaptability

Agile is Not a Solution to Every Problem

Agile Approach

Plan-Driven Approach

Déjà vu -A Very Familiar Situation

The Quality Management Profession in the early 1990's:

| From	To
An emphasis on quality control and inspection to find defects	An emphasis on going upstream in the process and preventing defects at the source
Excessive costs associated with inspection and reworking and rejecting products	A much more efficient and cost-effective approach of building products that are inherently more reliable

Taking Agile to the Next Level - Key Challenges

1. Adapting Agile to New Business Environments

2. Blending Agile and Plan-driven Approaches

3. Scaling Agile Practices to an Enterprise Level

Adapting Agile to New Business Environments

1. Adapting Agile to New Business Environments

2. Blending Agile and Plan-driven Approaches

3. Scaling Agile Practices to an Enterprise Level

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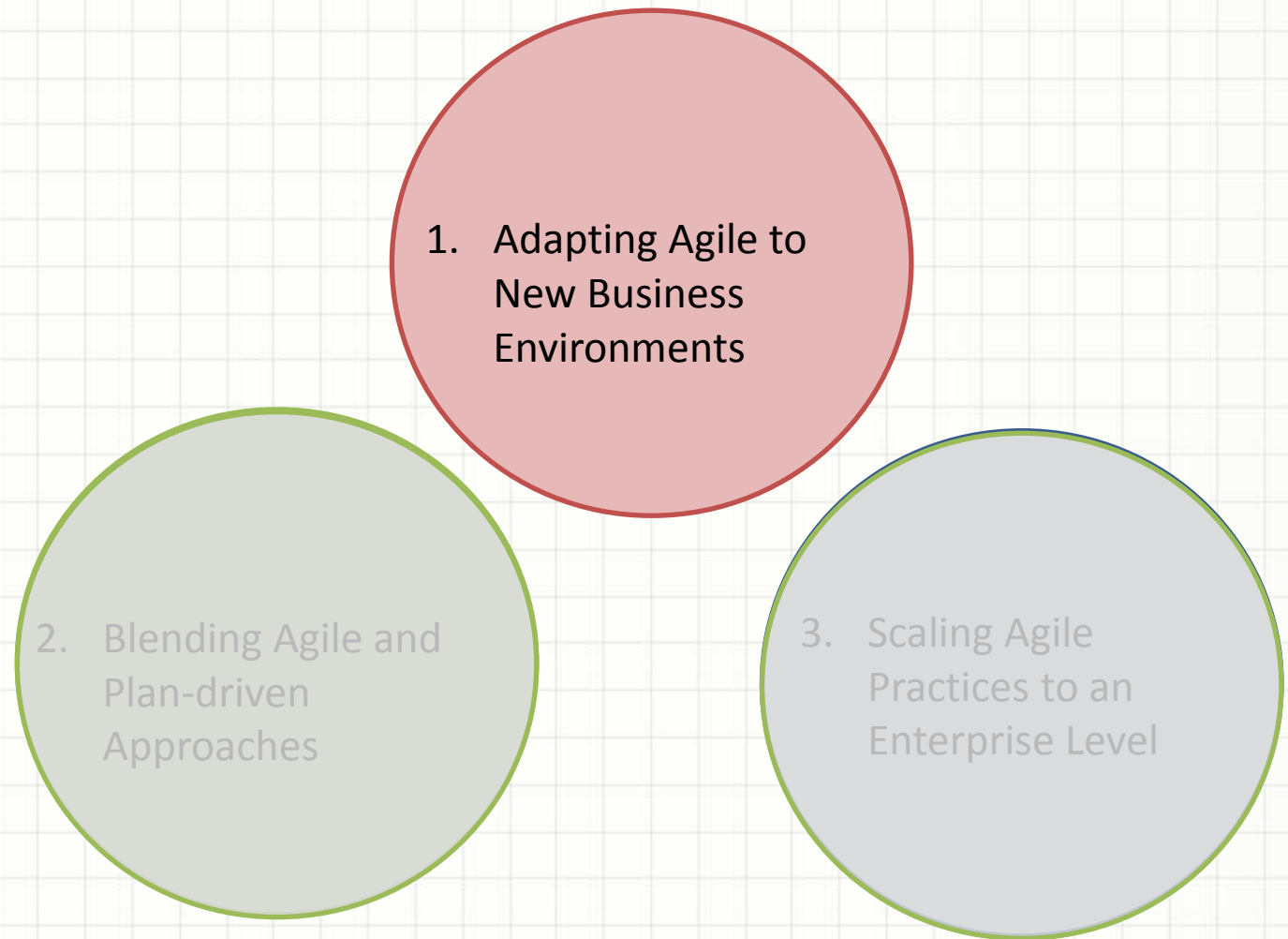
Adapting Agile to New Business Environments Making Agile Work in Different Businesses

**Products for
External Sale**

**IT Projects for
Internal Use Only**

Primary Management Challenge:
Are we developing products and adding the right features fast enough to keep up with what the market wants and to stay ahead of any competition?
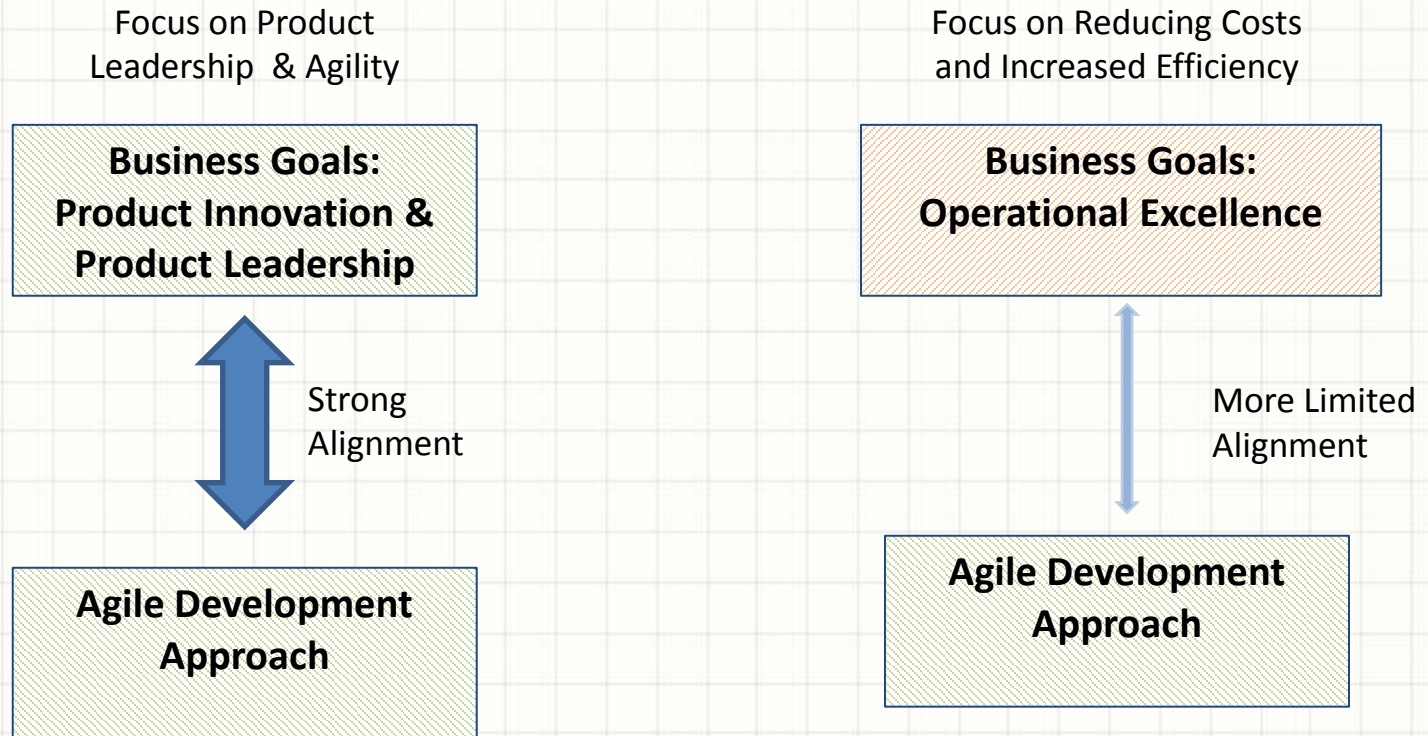
Primary Management Challenge:
Are we investing wisely in projects that will improve our business and are we getting an acceptable return from those investments?

Agile Works Well in This Environment:

- Agile is Well-Aligned With Primary Business Goals and Objectives

- Limited Cultural Change is Necessary

Agile is Much More Difficult to Implement in This Environment:

- Agile May Not be Well-Aligned with Corporate Culture and Goals

- Cultural Change May be Significant or May Require Compromise

Adapting Agile to New Business Environments Making Agile Work in Different Businesses (cont.)
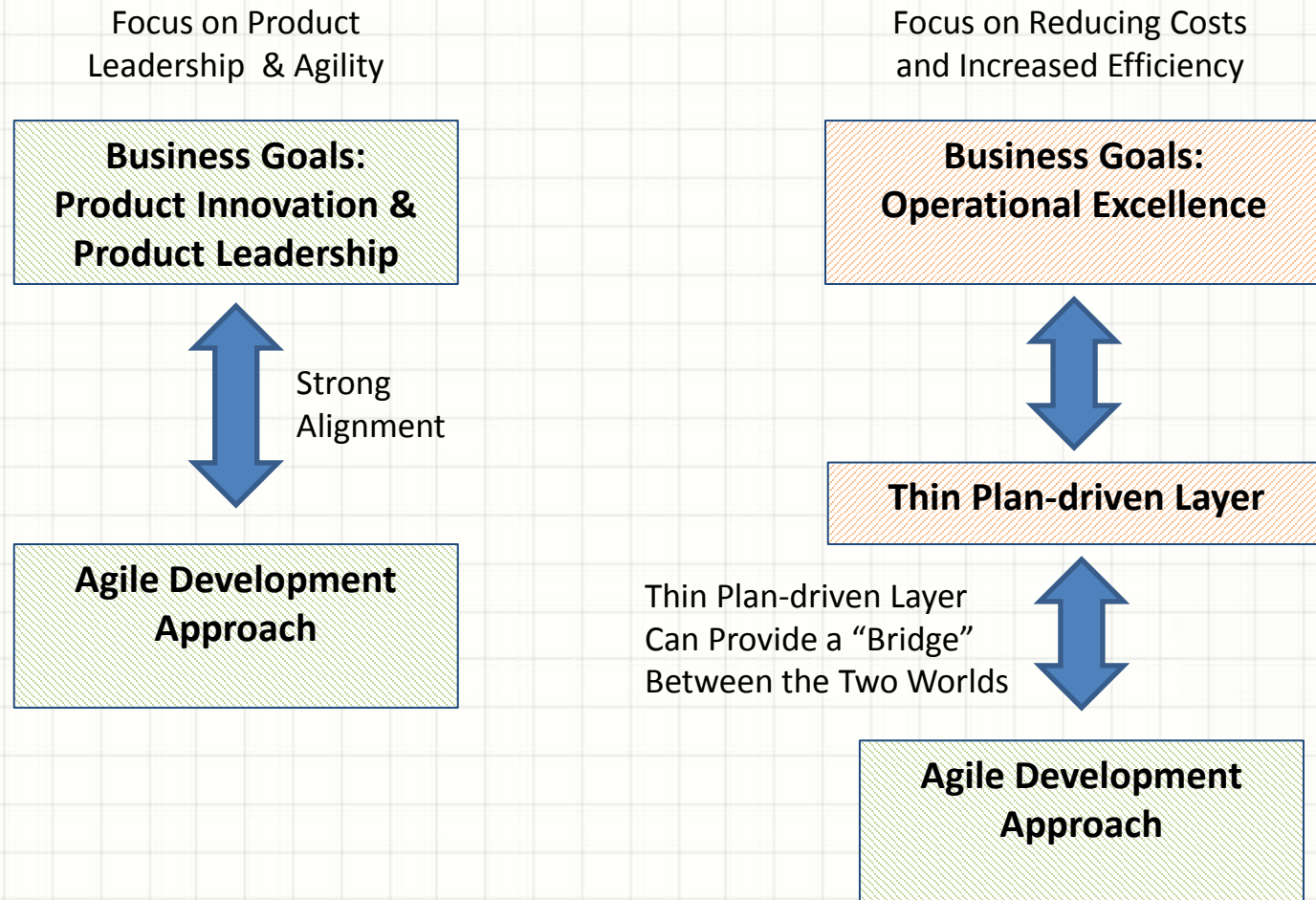
Focus on Product Leadership & Agility

Focus on Reducing Costs and Increased Efficiency

Business Goals: Product Innovation & Product Leadership

Business Goals: Operational Excellence

Strong Alignment

More Limited Alignment

Agile Development Approach

Agile Development Approach

Forcing the Company to Change its Culture to Adapt to an Agile Approach May not be Appropriate or Realistic

Ignoring this Problem and Implementing Agile as a Development Process Only that is Not Well-integrated with the company's business is not a good solution

Adapting Agile to New Business Environments Making Agile Work in Different Businesses (cont.)

Focus on Product
Leadership & Agility

Focus on Reducing Costs
and Increased Efficiency

**Business Goals:
Product Innovation &
Product Leadership**

**Business Goals:
Operational Excellence**

Strong
Alignment

Thin Plan-driven Layer

**Agile Development
Approach**

Thin Plan-driven Layer
Can Provide a "Bridge"
Between the Two Worlds

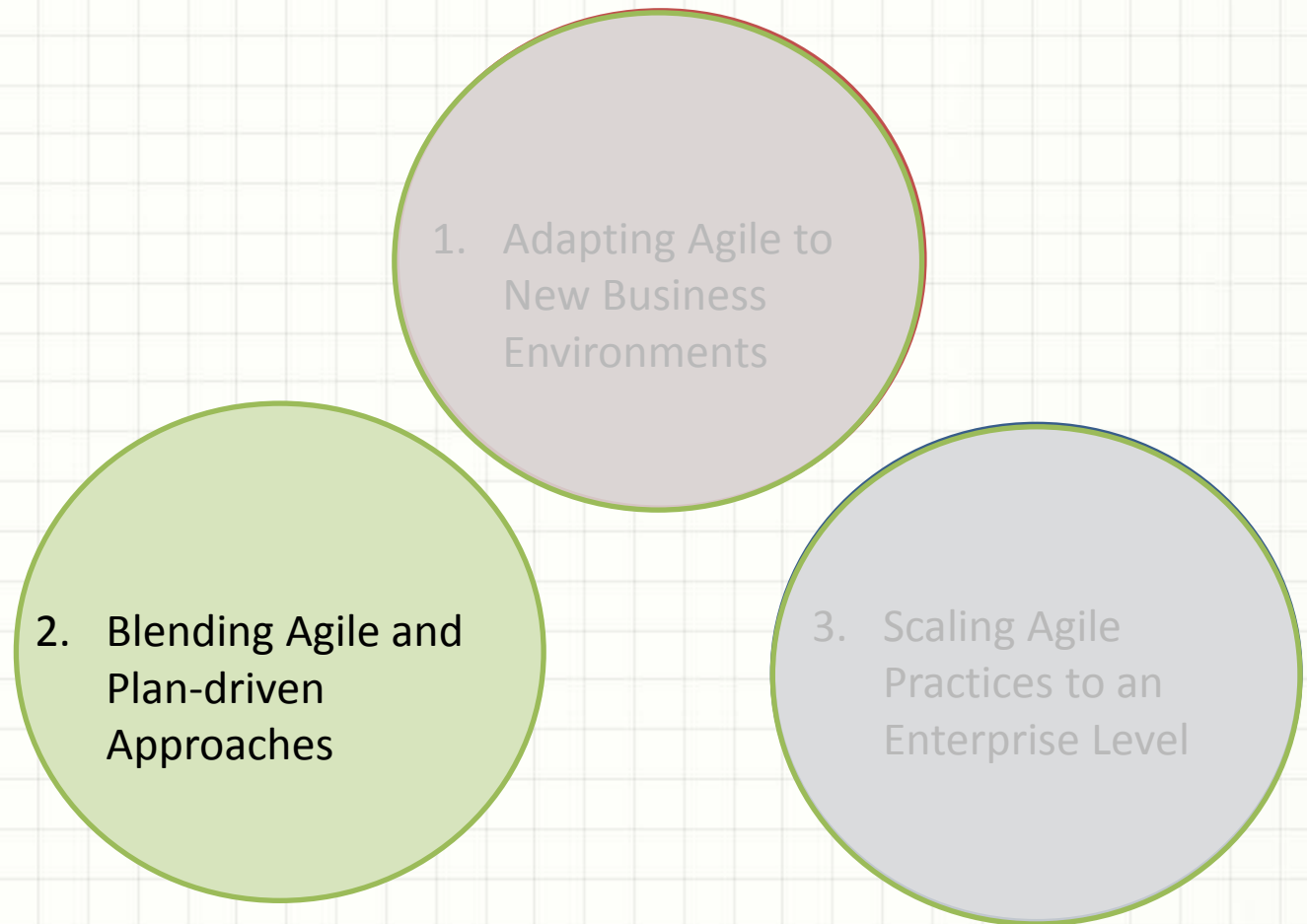**Agile Development
Approach**

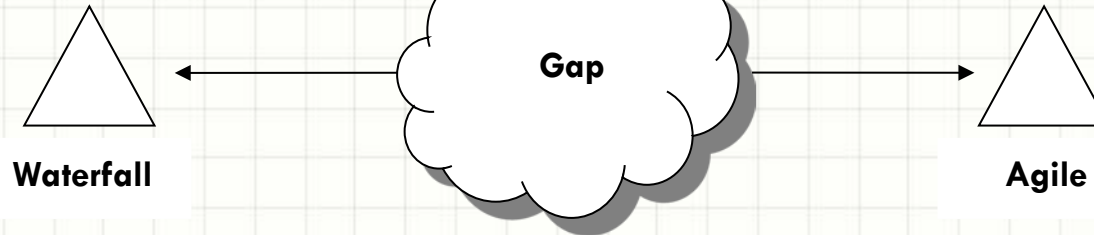# Adapting Agile to New Business Environments Summary of Key Points

- Agile Has Been Much More Widely Implemented and Most Successful in Companies Where Software Development is the Primary Business or is Directly Linked to the Primary Business

- It Can be Much More Challenging in Companies Where That is <u>Not</u> the Case (Example: IT Projects for Internal Use)

- Because of this Difficulty, Many Companies Have Implemented Agile as a Development Process That is Not Fully Integrated With Their Business and Will Not Realize the Full Benefits of an Agile Approach

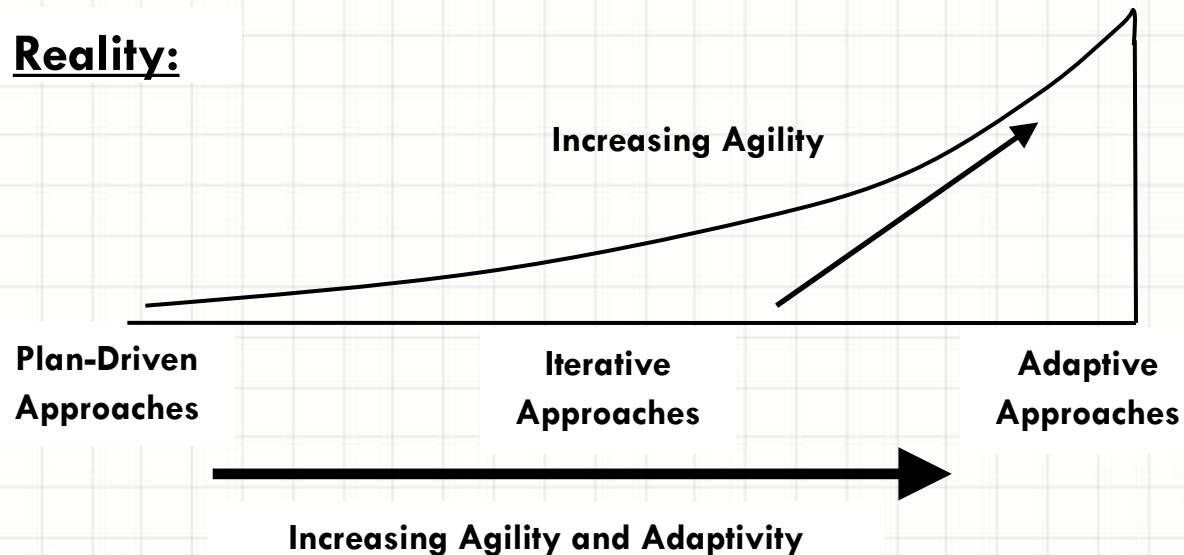# Blending Agile and Plan-driven Approaches

1. Adapting Agile to New Business Environments

2. Blending Agile and Plan-driven Approaches

3. Scaling Agile Practices to an Enterprise Level

Blending Agile and Plan-driven Approaches

Perception:

Waterfall — Gap — Agile

Reality:

Increasing Agility

Plan-Driven Approaches — Iterative Approaches — Adaptive Approaches

Increasing Agility and Adaptivity

Seeing Agile and Plan-driven Approaches as Mutually Exclusive is an example of "Binary Thinking"

Blending Agile and Plan-driven Approaches
Overcoming Misconceptions and Stereotypes

Situation	Misconception	Better Interpretation
Choosing a Project Methodology	The project must be either Agile or Waterfall	There are lots of ways to blend Agile and plan-driven approaches together in the right proportions to fit a situation; it just requires more skill to do that
Implementing an Agile development process	Documented requirements are not consistent with Agile at all	Understand how documentation might add value to the process and how it can be used sensibly to enhance productivity.
Estimating the cost and schedule for an Agile project	It's futile to try to plan and estimate an Agile effort because it is only going to change	By developing a hybrid approach consisting of a plan-driven "envelope" at the macro-level and a more Agile approach at the micro-level, it is not difficult to provide cost and schedule estimates for an Agile project.

Blending Agile and Plan-driven Approaches Summary of Key Points

- Agile Does Not Make All Traditional Plan-driven Principles and Practices Obsolete; They Just Need To Be Used Intelligently in a Different Context

- Agile and Plan-Driven Practices Can be Complementary To Each Other Rather Than Competitive

- Achieving That Goal Requires Overcoming Many of the Misconceptions, Myths, and Stereotypes that Exist About Both Agile and Plan-driven Approaches

Scaling Agile Practices to an Enterprise Level

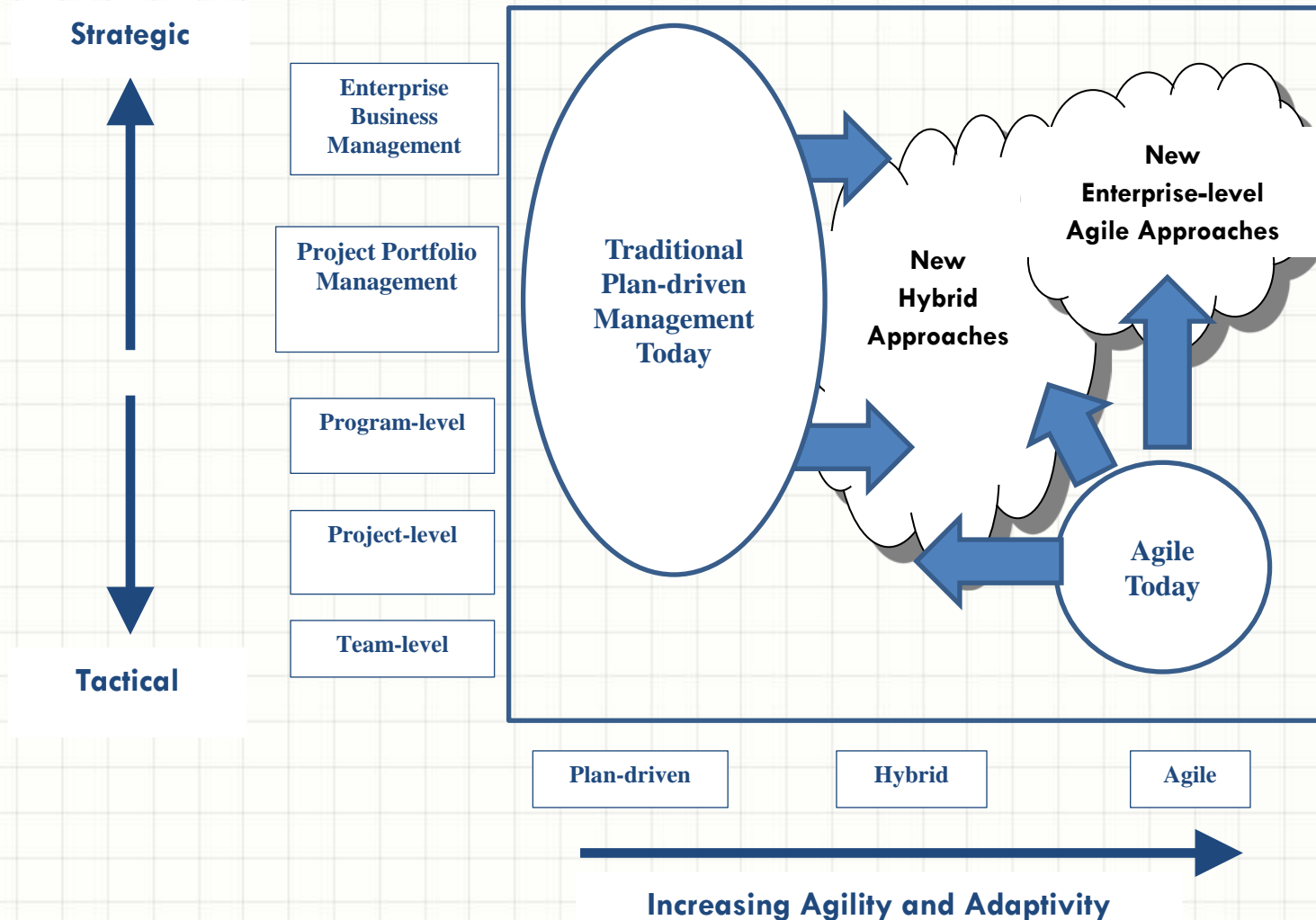1. Adapting Agile to New Business Environments

2. Blending Agile and Plan-driven Approaches

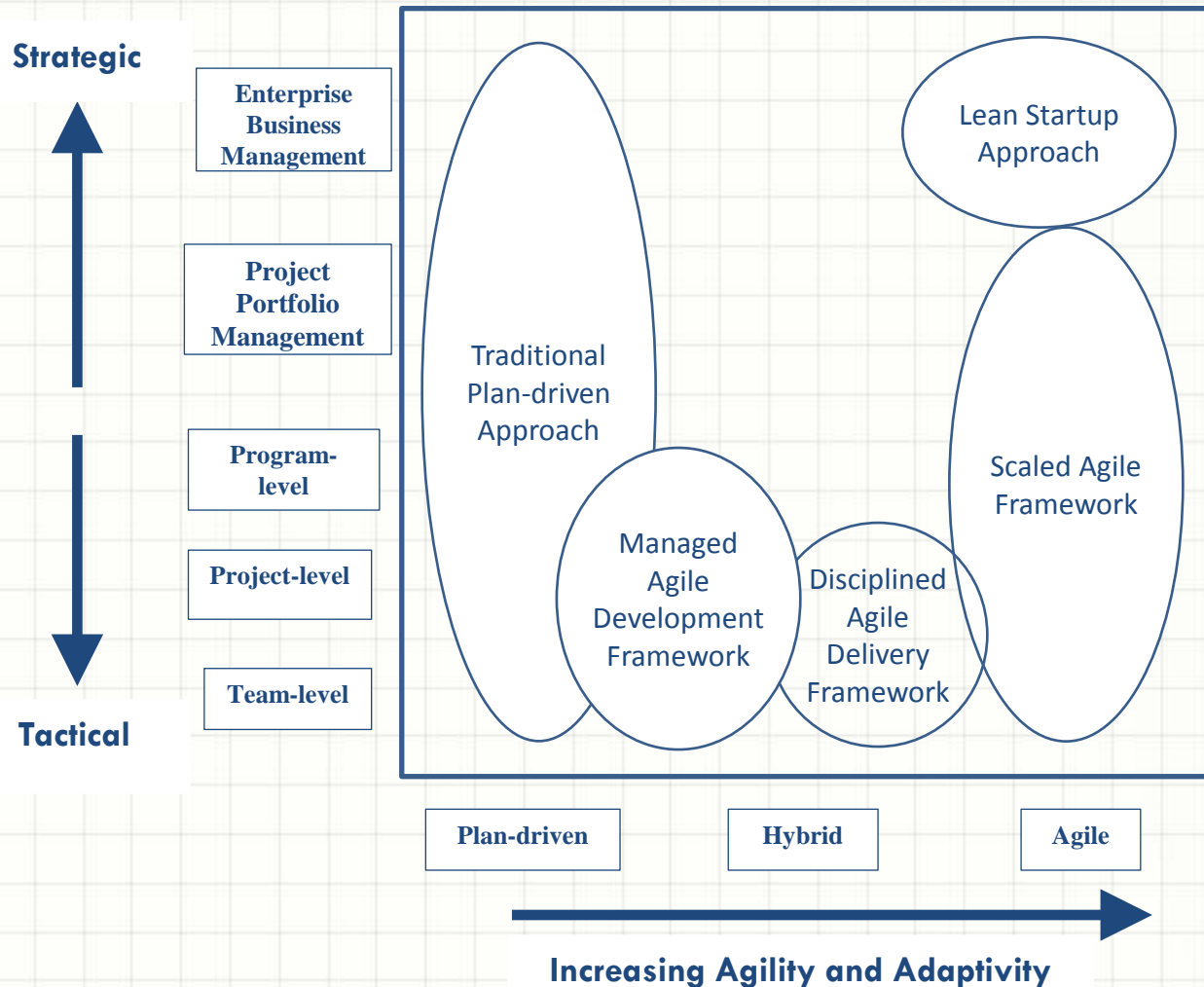3. Scaling Agile Practices to an Enterprise Level

Scaling Agile to an Enterprise Level - Primary Challenges

- Solutions are Larger and More Complex - Typically Require Multiple Teams

- Numerous Stakeholders Require Coordination and Engagement

- Integration with the Business Becomes Much More Important

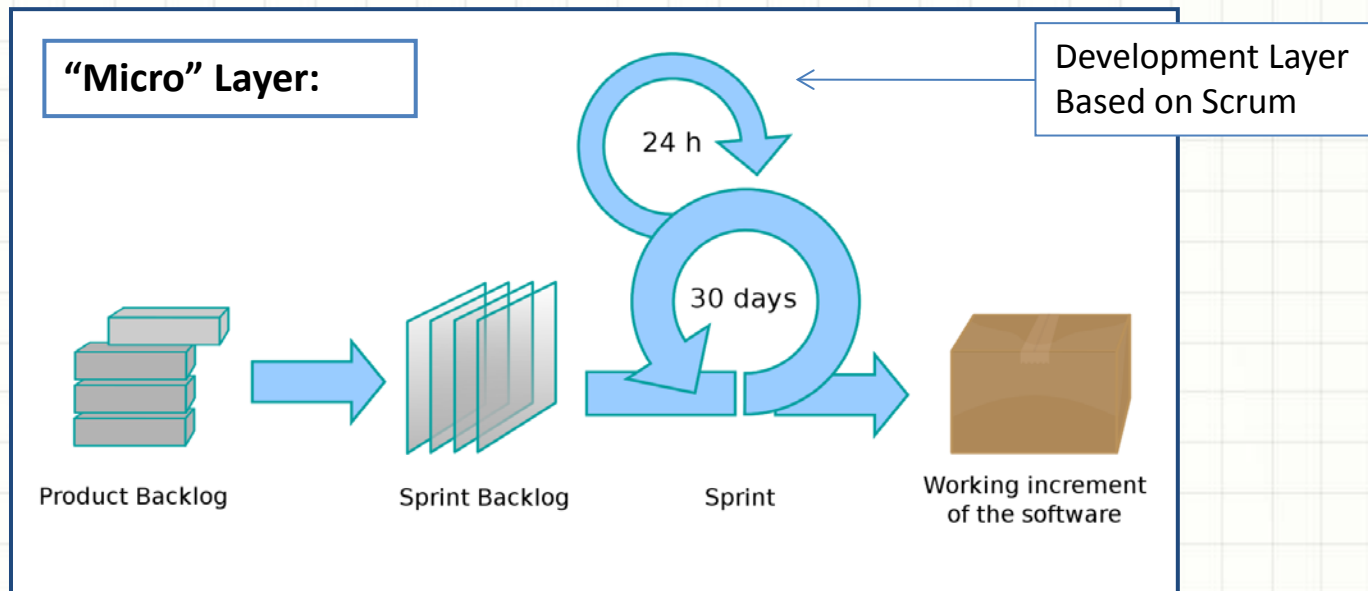- Multiple Layers of Management May be Needed

Scaling Agile to an Enterprise Level – Levels of Management

Scaling Agile to an Enterprise Level - Enterprise-level Frameworks

Strategic

Enterprise Business Management

Project Portfolio Management

Program-level

Project-level

Team-level

Tactical

Traditional Plan-driven Approach

Lean Startup Approach

Scaled Agile Framework

Managed Agile Development Framework

Disciplined Agile Delivery Framework

Plan-driven   Hybrid   Agile

Increasing Agility and Adaptivity

Managed Agile Development Process

"Macro" Layer:

Traditional
Project Management Layer

Project Charter → Limited Form of Change Management

Project Schedule → On-going Project Management

"Micro" Layer:

Development Layer
Based on Scrum

24 h

30 days

Product Backlog → Sprint Backlog → Sprint → Working increment of the software

Scaled Agile Framework (Dean Leffingwell)

Scaled Agile Framework™ Big Picture
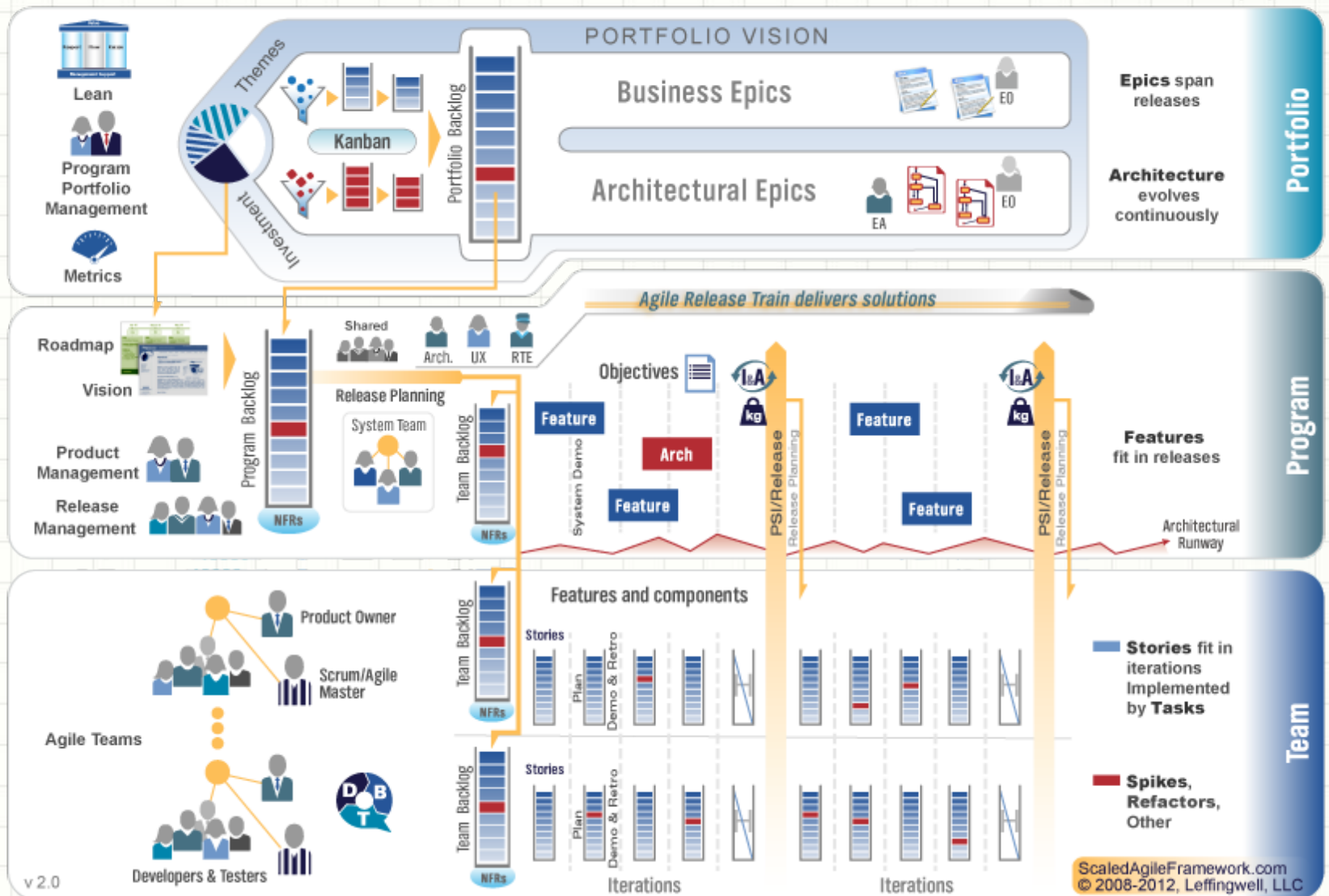
Disciplined Agile Delivery (Scott Ambler)

Inception Phase

- Form initial team
- Identify the vision for the project
- Bring stakeholders to agreement around the vision
- Align with enterprise direction
- Identify initial technical strategy, initial requirements, and initial release plan
- Set up the work environment
- Secure funding
- Identify risks

One or More
Short Iterations

Construction Phase

- Produce a potentially consumable solution
- Address changing stakeholder needs
- Move closer to deployable release
- Maintain or improve upon existing levels of quality
- Prove architecture early

Many Short Iterations Each Producing a Potentially Shippable Solution

(Based on Scrum)

Transition Phase

- Ensure the solution is production ready
- Ensure the stakeholders are prepared to receive the solution
- Deploy the solution into production
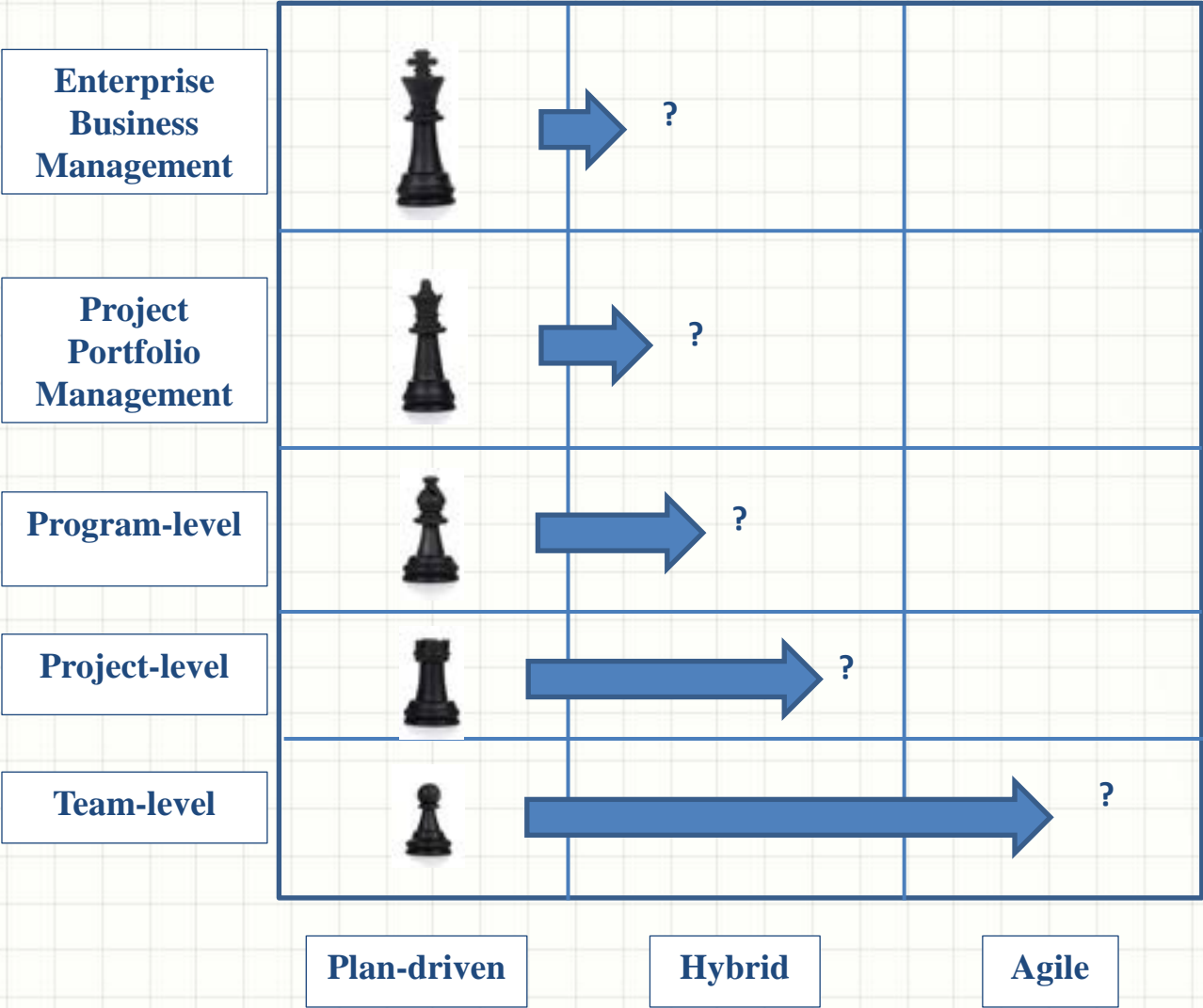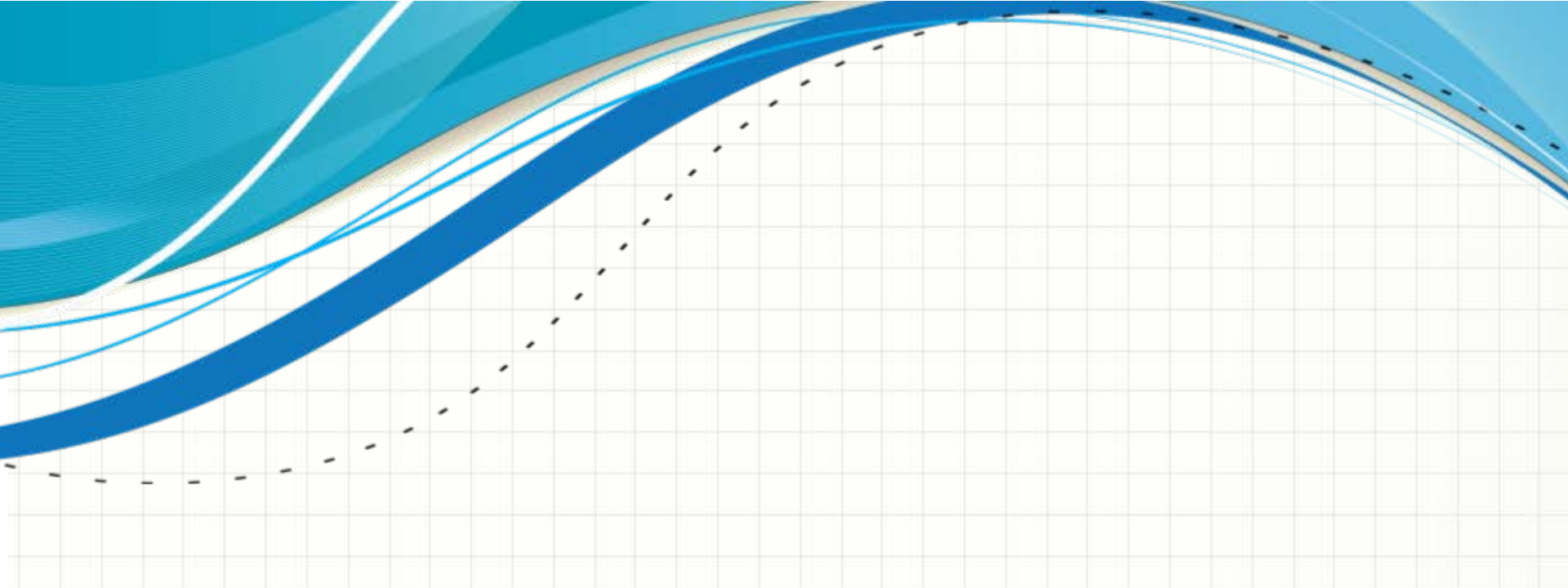
One or More
Short Iterations

Ambler, Scott W.; Lines, Mark (2012-05-31). Disciplined Agile Delivery: A Practitioner's Guide to Agile Software Delivery in the Enterprise (IBM Press) (Kindle Locations 533-535). Pearson Education (USA). Kindle Edition

Enterprise-level Agile Frameworks - Summary

Framework	Pro's	Con's
Scaled Agile Framework	• More of a complete top-to-bottom Agile approach	• Requires a more significant transformation to Agile • May not be appropriate for many companies
Disciplined Agile Delivery Framework	• Based on a standard Agile development process (Scrum) • Provides extensions to the Agile development process for scaling to the enterprise level	• Limited to project-level layer only • Not a complete enterprise-level framework
Managed Agile Development Framework	• Hybrid process with a blend of traditional plan-driven and Agile approaches • Minimizes the level of organizational transformation needed in organizations with a traditional management structure (Could be done as an interim step in an Agile transformation)	• Limited to project-level layer but is easily adaptable to existing higher-level management levels

Enterprise-level Agile Strategy

	Plan-driven	Hybrid	Agile
Enterprise Business Management	? →		
Project Portfolio Management	? →		
Program-level	? →		
Project-level		? →	
Team-level			? →

OVERALL SUMMARY

Key Recommendations

- Recognize that Plan-driven and Agile Principles and Practices Can be Complementary to Each Other

    - Focus on the Principles, Not the Mechanics

    - Use Systems Thinking To Better Understand the Management Process

- Agile is Not Just a Development Process

    - Adapt the Agile Approach to Fit Your Business

    - Scale to an Enterprise Level as Necessary

- Plan the Transformation

    - Don't "Just Start"

    - Treat an Agile Transformation as an Agile Project

THANK YOU!

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