Innovation Project Management

Innovation Project Management Series
Global Project Management

Poor Statistics on Successful Projects



Failed systems projects cost more than \$100 billion per year - Computerworld



One out of every two projects overruns its budget by 180% or more - Computerworld



Survey of 300 large companies 65% reported projects were grossly over budget, behind schedule and technology nonperforming - KPMG

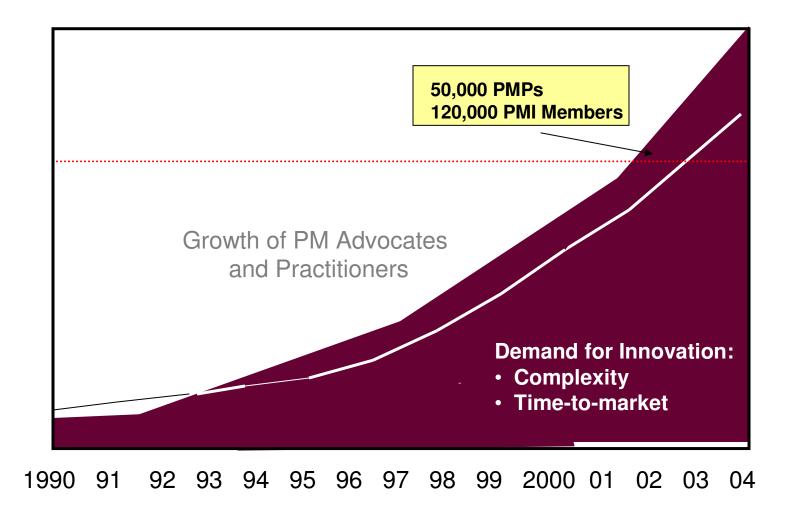


65% of companies have lost control of at least one major project - Forrester Research

31% of 8,380 projects cancelled - while only 16% were on schedule and on budget - Standish Group

Why aren't Project Success Rates Increasing?

> Increasing Complexity due to need for greater innovation



An Innovative Project



A General Definition:

- a significant endeavor, usually mission critical
- unique and unclear as to outcome
- limited skilled resources with extraordinary and dynamic constraints in time, cost and quality
- to bring about a beneficial change which may not be able to be expressed clearly

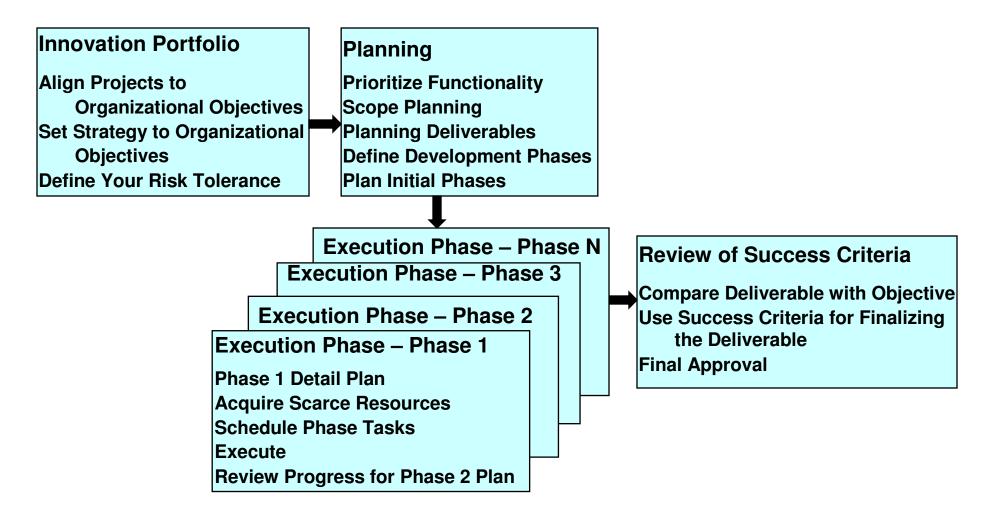
Innovation Projects are Different from Traditional Projects

- 1. Rapid Technological Changes
- 2. Unclear Scope Objectives
- 3. Rapid Changes in the Market
- 4. Scarce Resource Constraints
- 5. Unsure of Time Estimates
- 6. Greater Need for Creativity
- 7. Knowledge Intensive

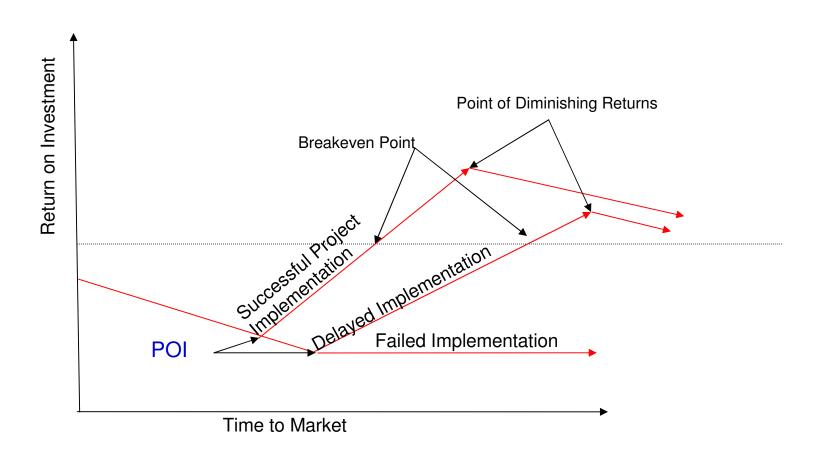
New Approach for Innovation Projects

- 1. The Need for Portfolio Management Techniques
- Being Scope Change Friendly
- 3. Planning Done on a Shorter Time Frame
- 4. The Need for Managing Knowledge
- 5. Planning for Rapid Phased Deliverables
- 6. Working with Scarce Resources
- 7. Fully Engaging Team Creativity
- 8. Deploying Highly Talented People

Innovation Projects

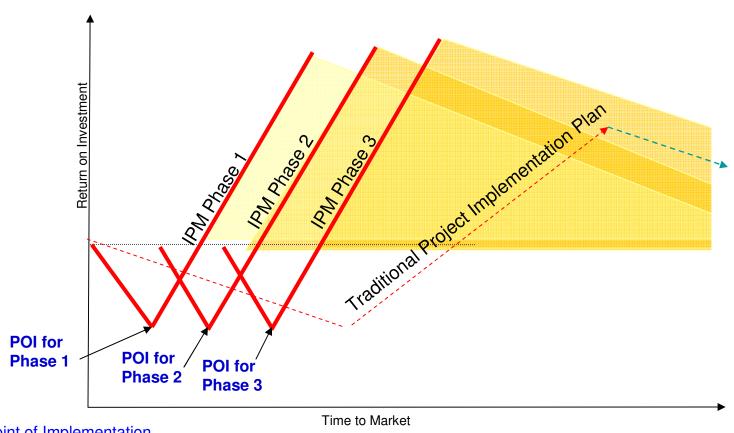


Traditional Project Investment Profile



POI = Point of Implementation

IPM Intensive Project Investment Profile



POI = Point of Implementation

Return on investment

Added return due to Intensive project Return from Traditional project

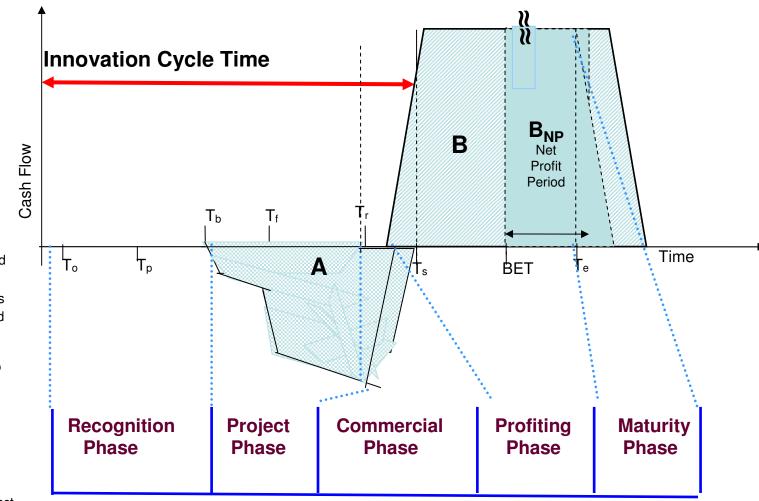


Setting the Development Plan

Example: PDA Upgrade Project

Proposed Phases		Aggressive High Value Low Risk Strategy Strategy				
			Estimate in Days		Estimate in Days	
Phase		Bluetooth Communication	178	Infra Red Input/Interface	54	Disas
One		Infra Red Input/Interface	54	Larger Display	84	Phas One
Phase		Faster Com Link	102	Larger keypad	34	
Two		Cell phone Capability	154	New Exterior Design	66	Phase
		New Exterior Design	66	Faster Com Link	102	Two
Phase Three	1	Larger Display	84	Bluetooth Communication	178	Phase Three
rmed		Milspec Durability	76	Milspec Durability	76	
— Pha	00-	Larger keypad	34	Cell phone Capability	154	 Phas
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The Traditional Approach to Innovation



Recognition Phase To Opportunity occurs

T_p Opportunity perceived

Project Phase

 $T_{\text{b}}\,$ Project activity begins

T_f Product definition and plans freeze

Commercial Phase

Tr Product is released to production

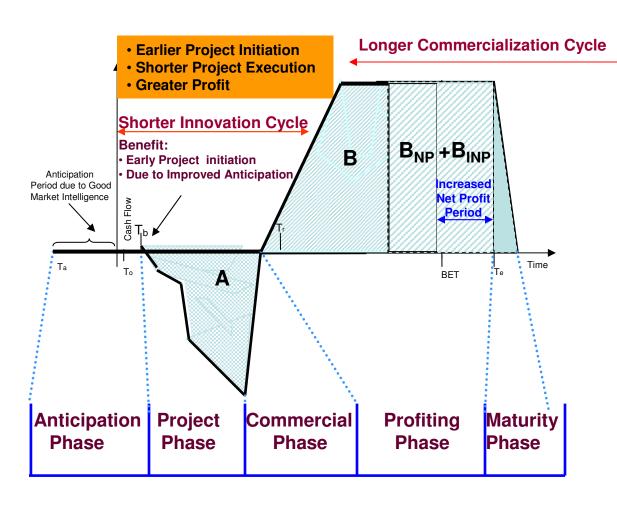
Profiting Phase

Ts First customers are satisfied BET Break-Even Time

Maturity Phase

T_e Project becomes extinct

An Enhanced Innovation Life Cycle

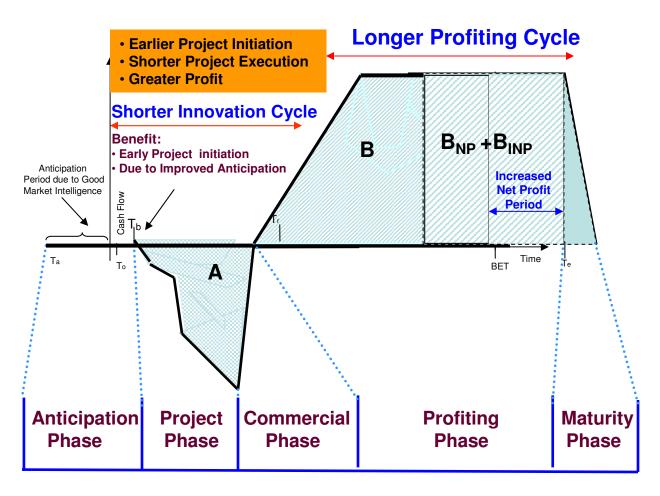


2 Step Strategy:

- 1. Develop strong market intelligence
- 2. Use intensive project investment to meet the earliest release date

This maximizes profits and improves the overall competitiveness

An Enhanced Innovation Life Cycle



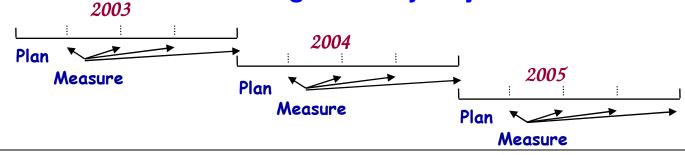
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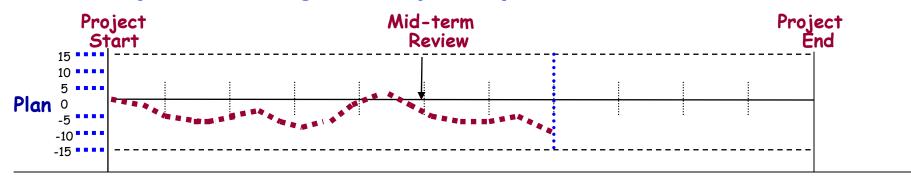
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Management Techniques

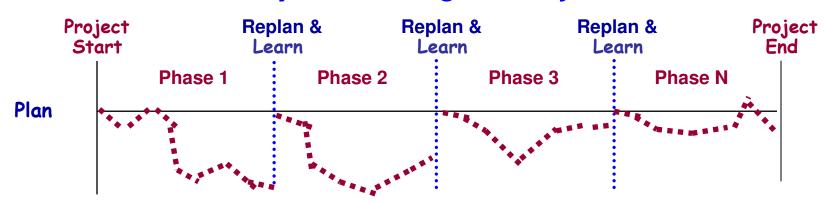
Business - Management by Objectives



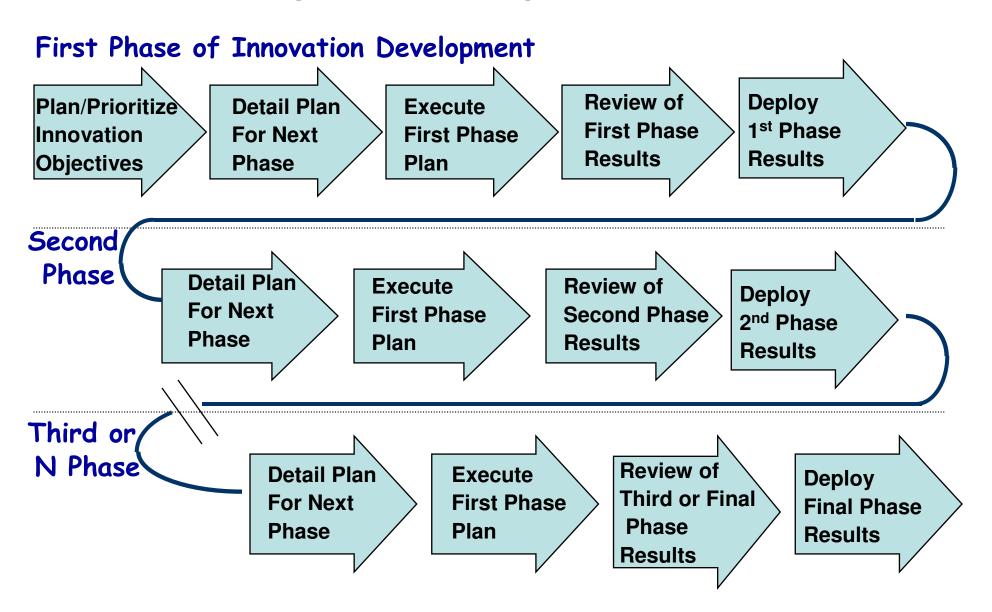
Projects - Management by Exception



Innovation Projects - Management by Transition



Management by Transition



Paradigm Shifts in Industry Traditional PM Innovation PM

Managing Team Energy Managing Time **Purpose Fuels Performance** Rewards Fuel Performance Work is a Series of Sprints Work is a Marathon **Downtime is Productive Time Downtime is Wasted Time Focus on Full Engagement Positive Thinking**

Basic Principles of APM:

- Ψ Satisfy the customer through early and continuous delivery of valuable deliverables (software);
- Ψ Changing requirements, even late in development means responding for competitive advantage;
- Ψ Delivering working solutions frequently with a preference to shorter timescale;
- Ψ Business & technical developers must work closely;
- Ψ Projects must be built around motivated teams and support them with a supportive environment;

- Ψ Always use face-to-face communication;
- Ψ Working deliverables is the primary measure of progress;
- Ψ The Agile process is sustainable development in being able to maintain a constant pace indefinitely;
- Ψ Agility is continuous attention to technical excellence and good design;
- Ψ Simplicity rules;
- Ψ A self-organizing team will naturally emerge into the best architecture, requirements and designs;
- Ψ Frequently a team should reflect on how to become more effective, then readjusts itself to become more

Source: Agile Software Development, Robert C. Martin, Prentice Hall, 2003