

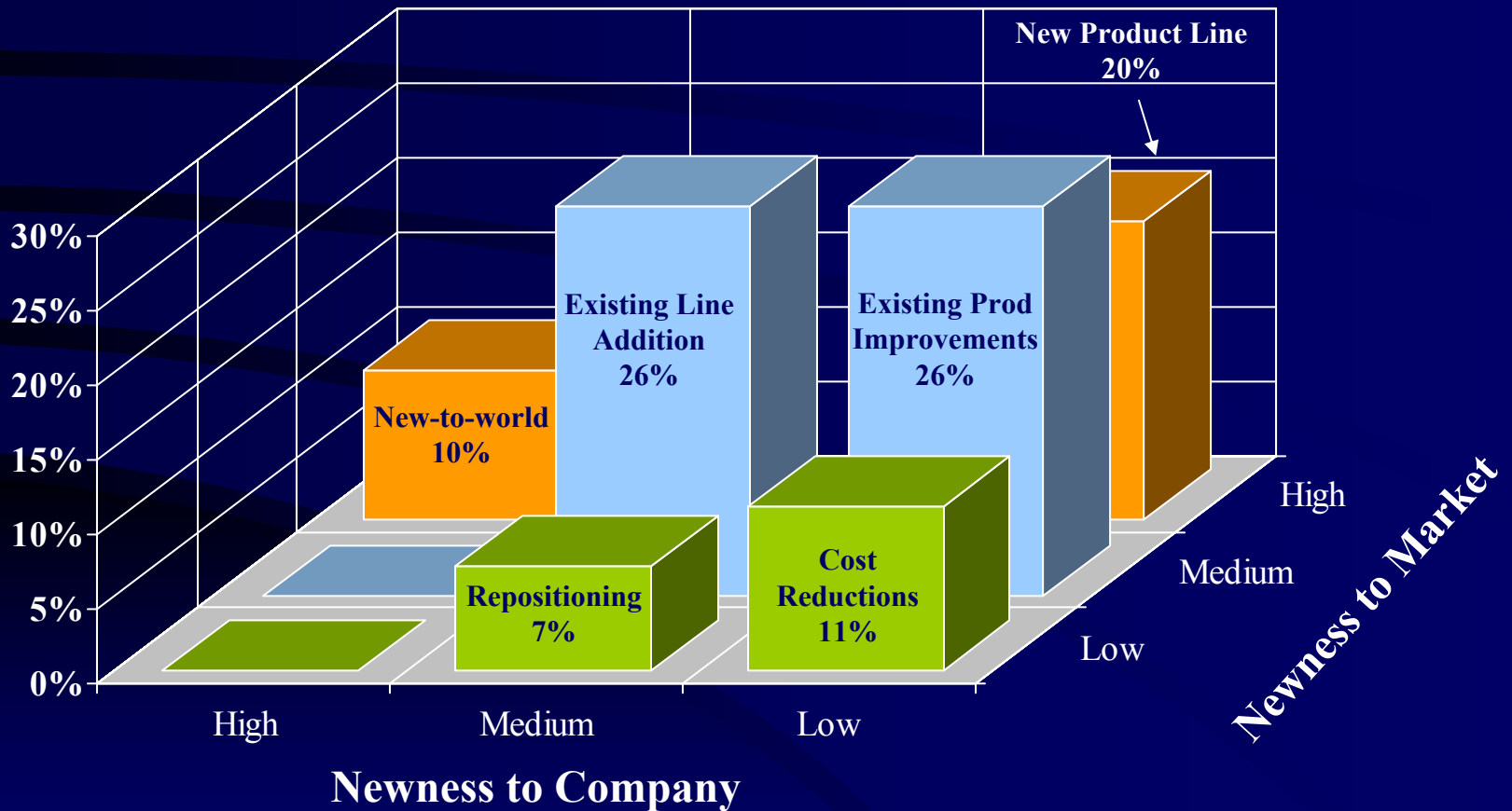
Assuming Doesn't Feed the Bulldog!

InventVermont Meeting

June 9, 2005

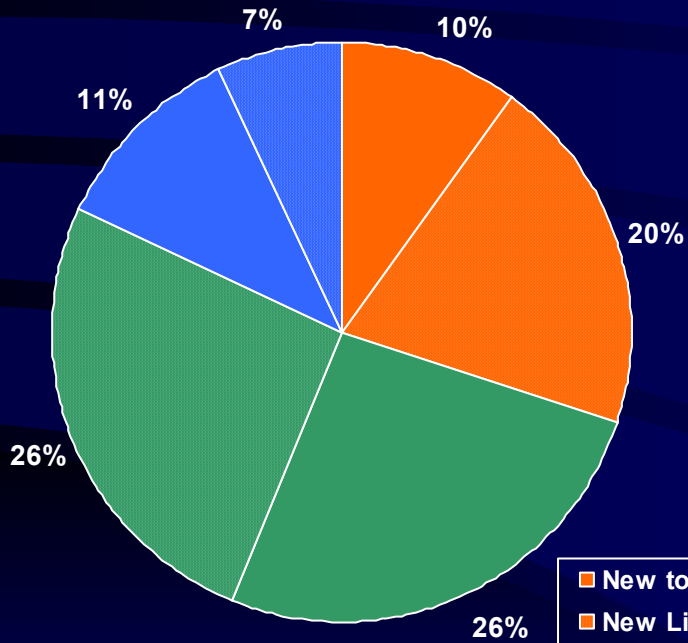
Montpelier, VT

New Product Categories

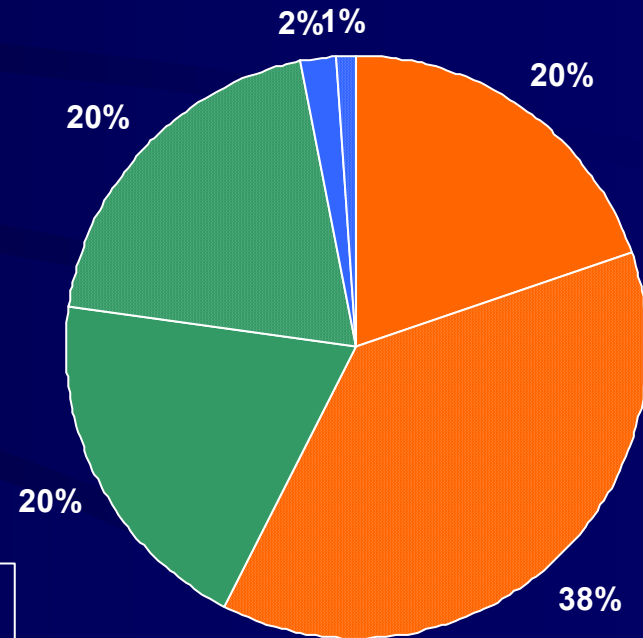


New Product Mix

All Industry



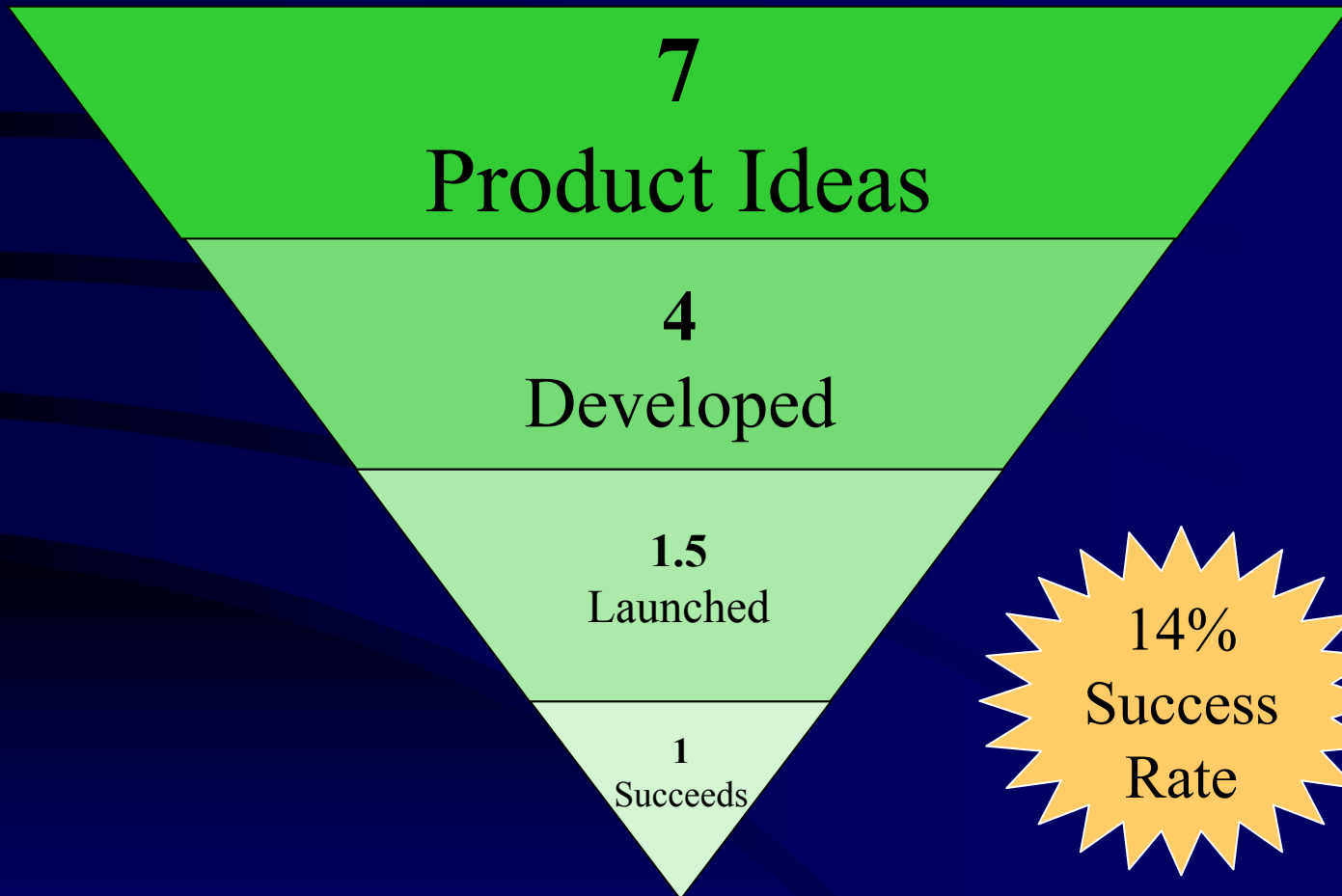
Industrial Product Firms (moderate-to-high technology)



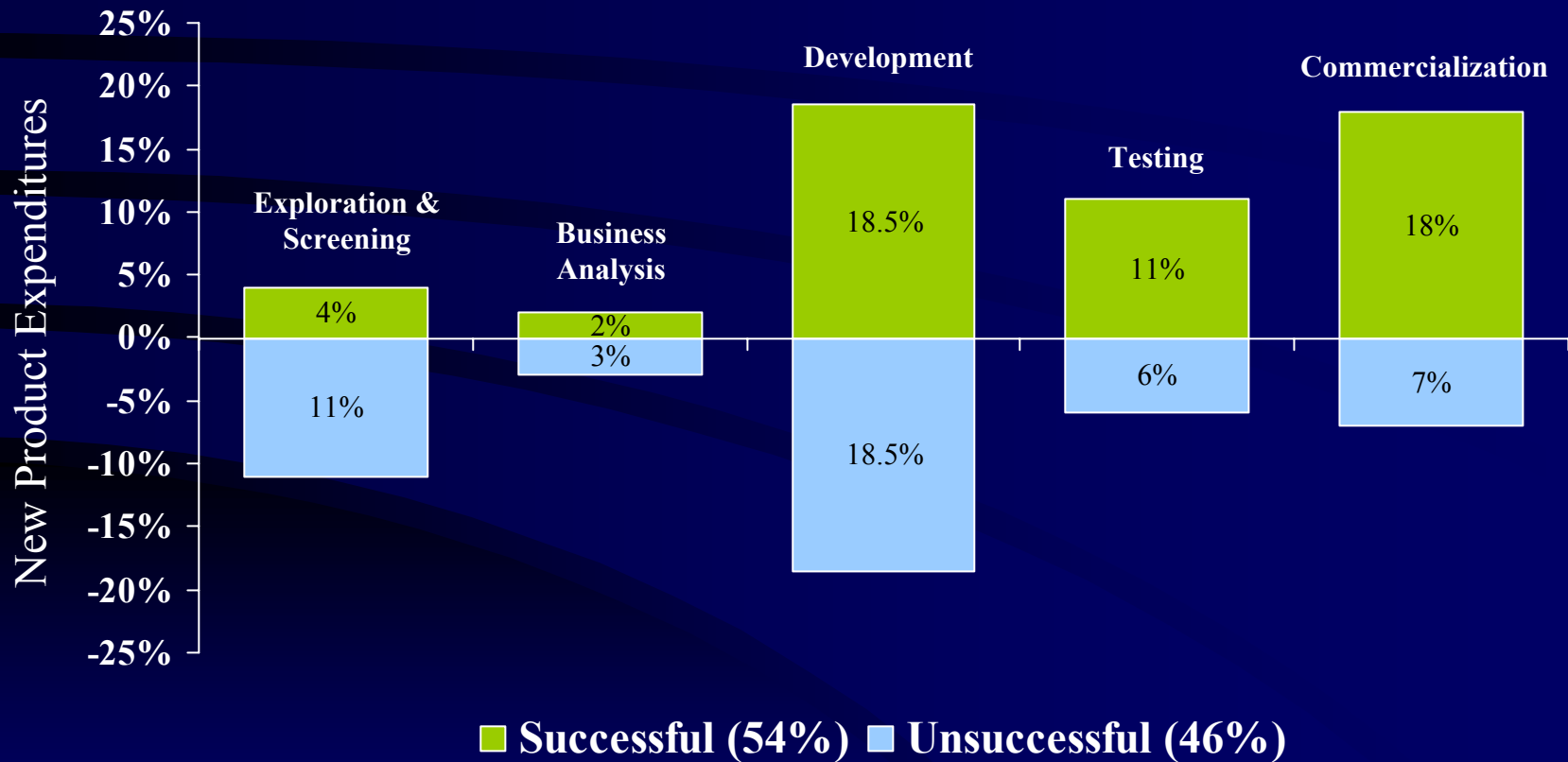
Product Development Challenges

- Technology making more possible
- Life cycles cut by 400%
- Customer expectations increasing
- Global competition strengthening
- Building company “worth”

Majority of Ideas Fail

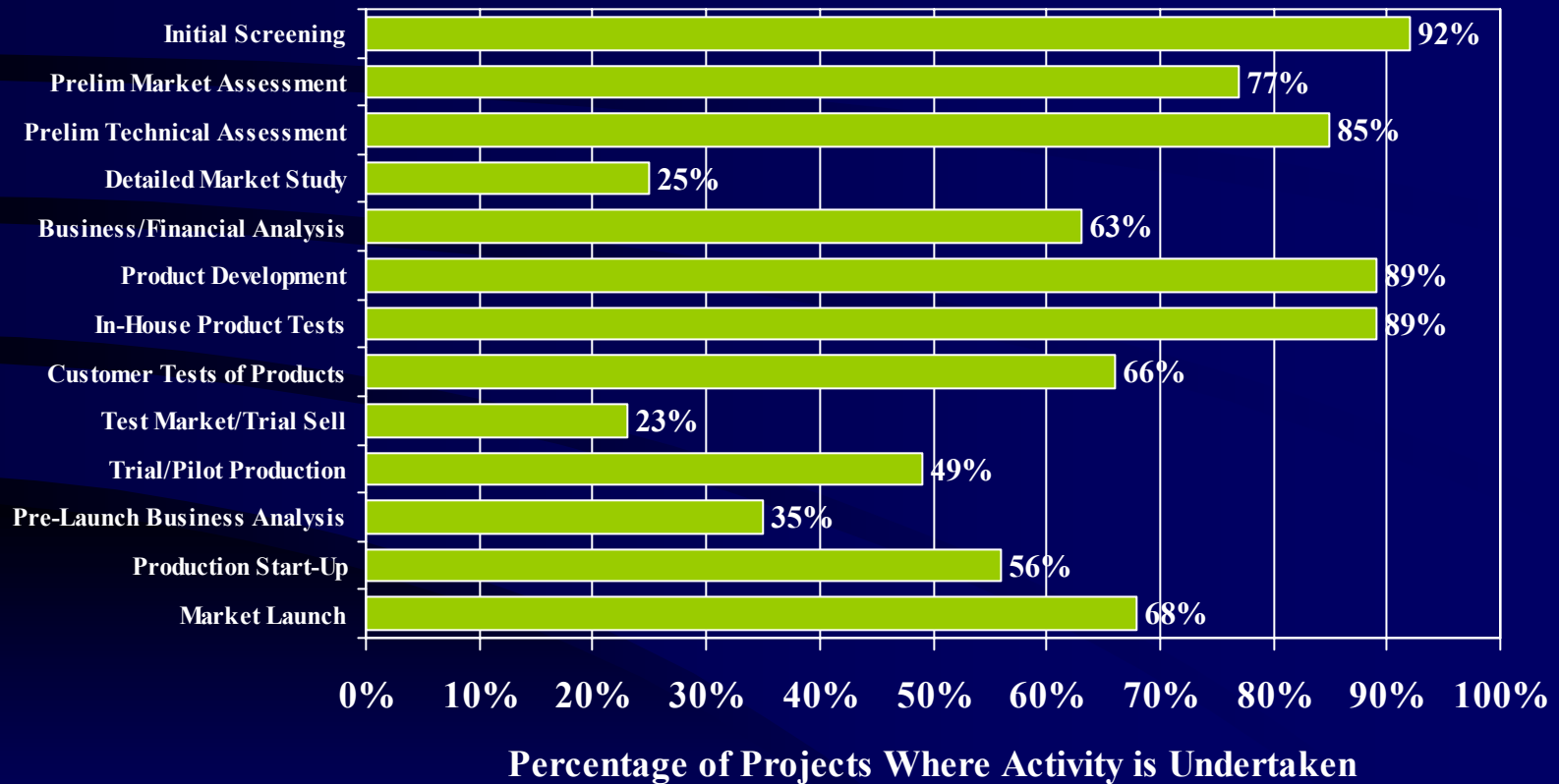


Significant Resources Wasted

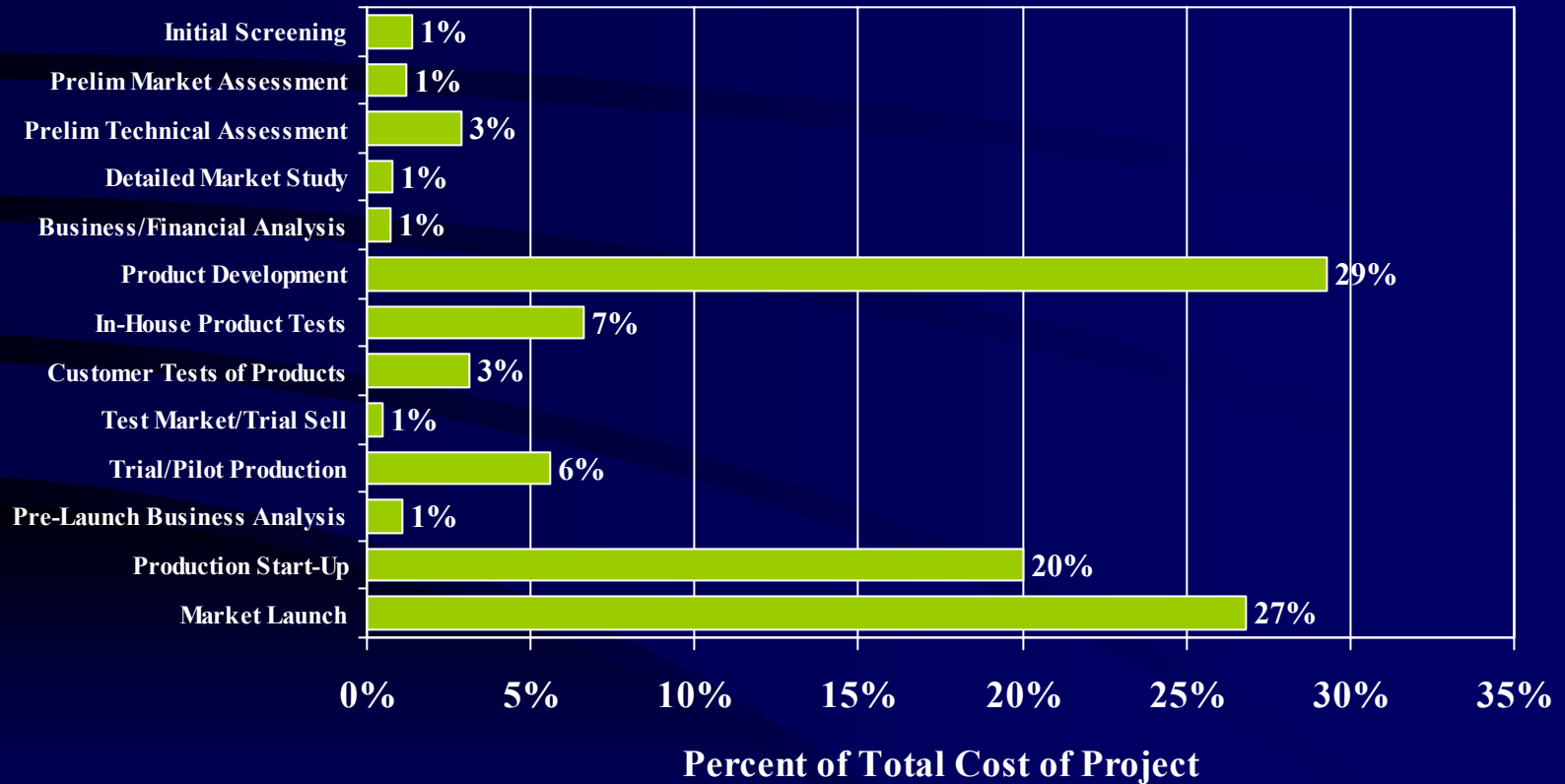


Key Activity Frequency

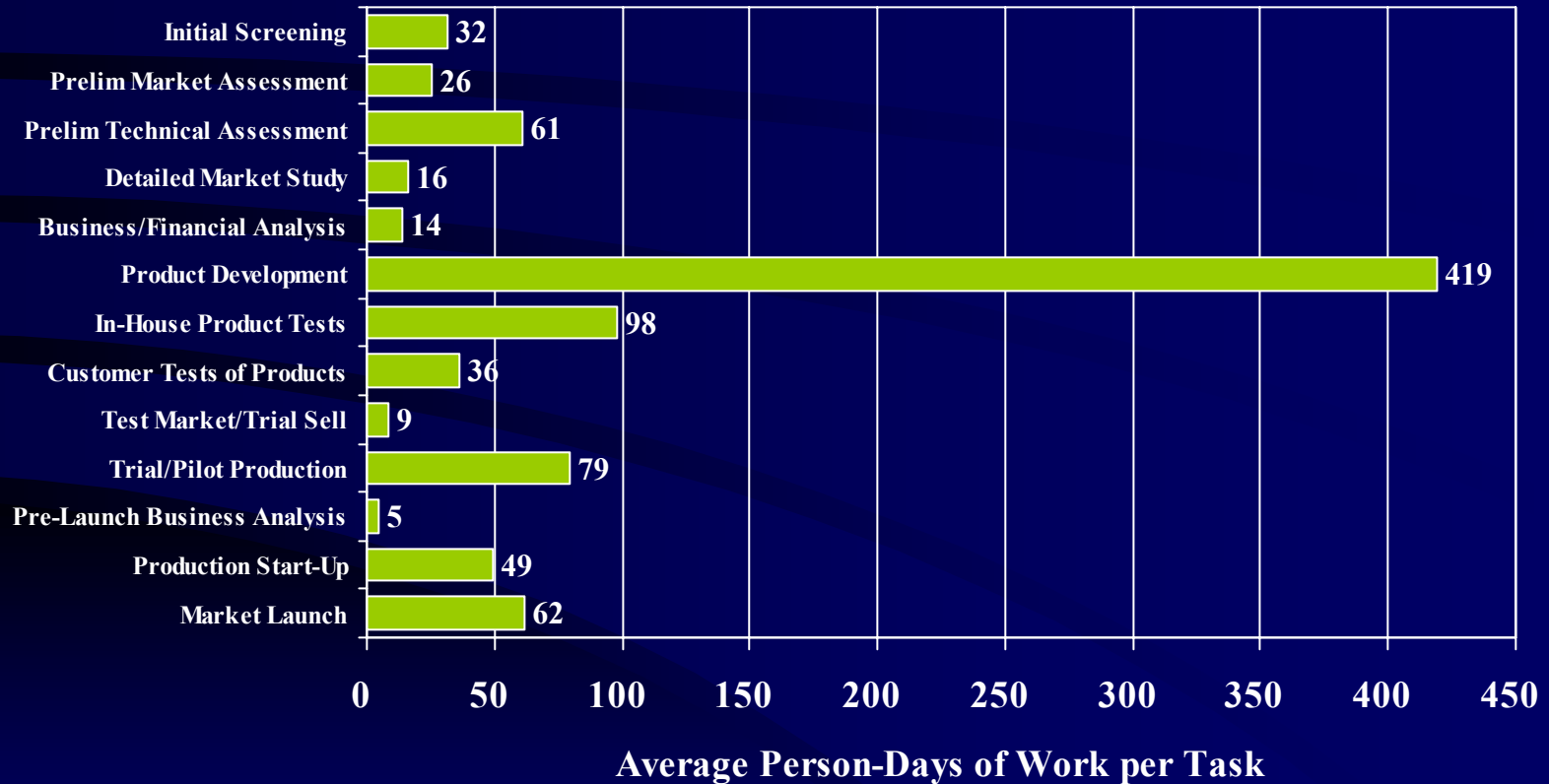
Only 1.9% of projects featured all 13 activities



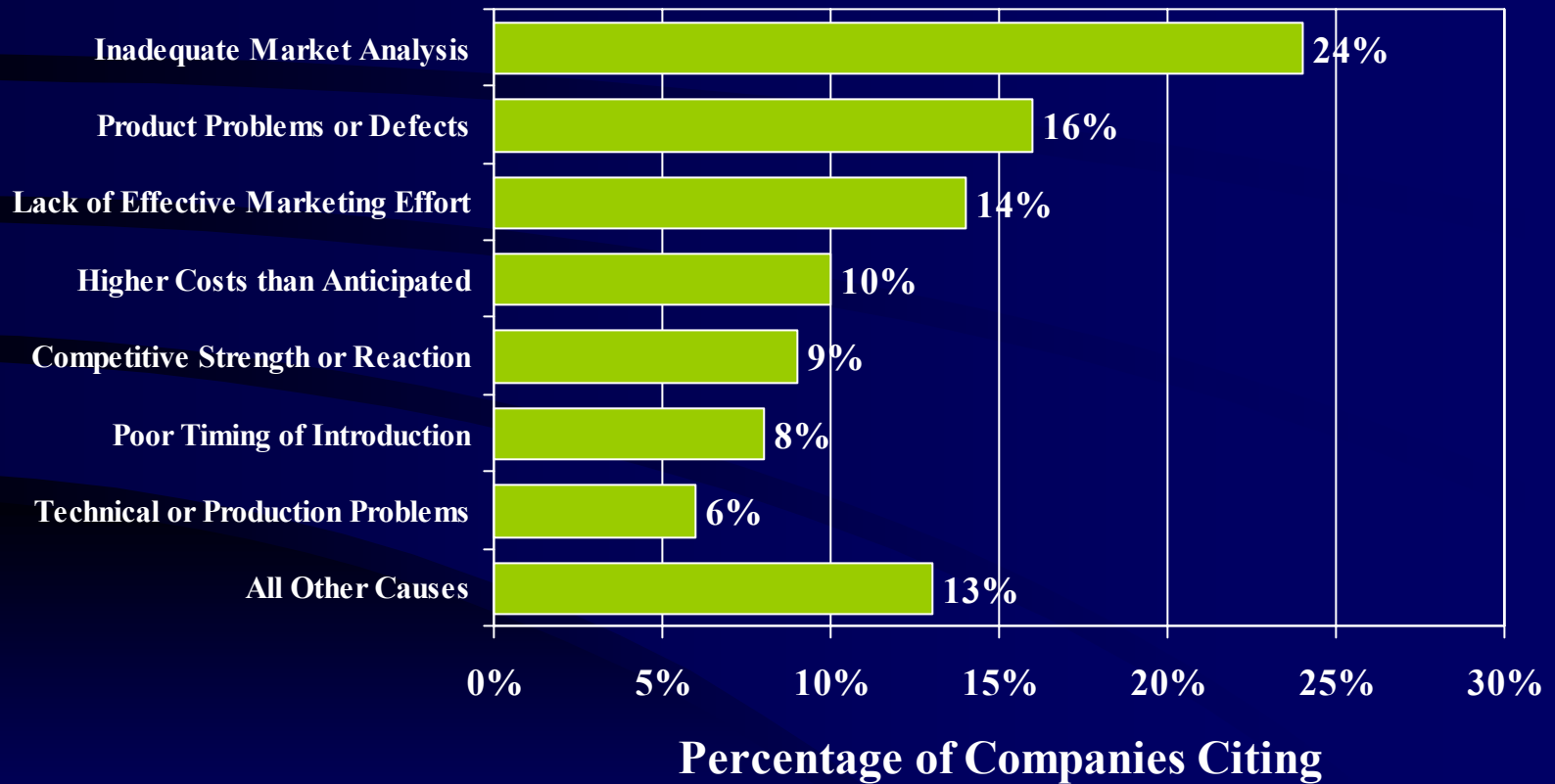
Key Activity Dollars



Key Activity Time



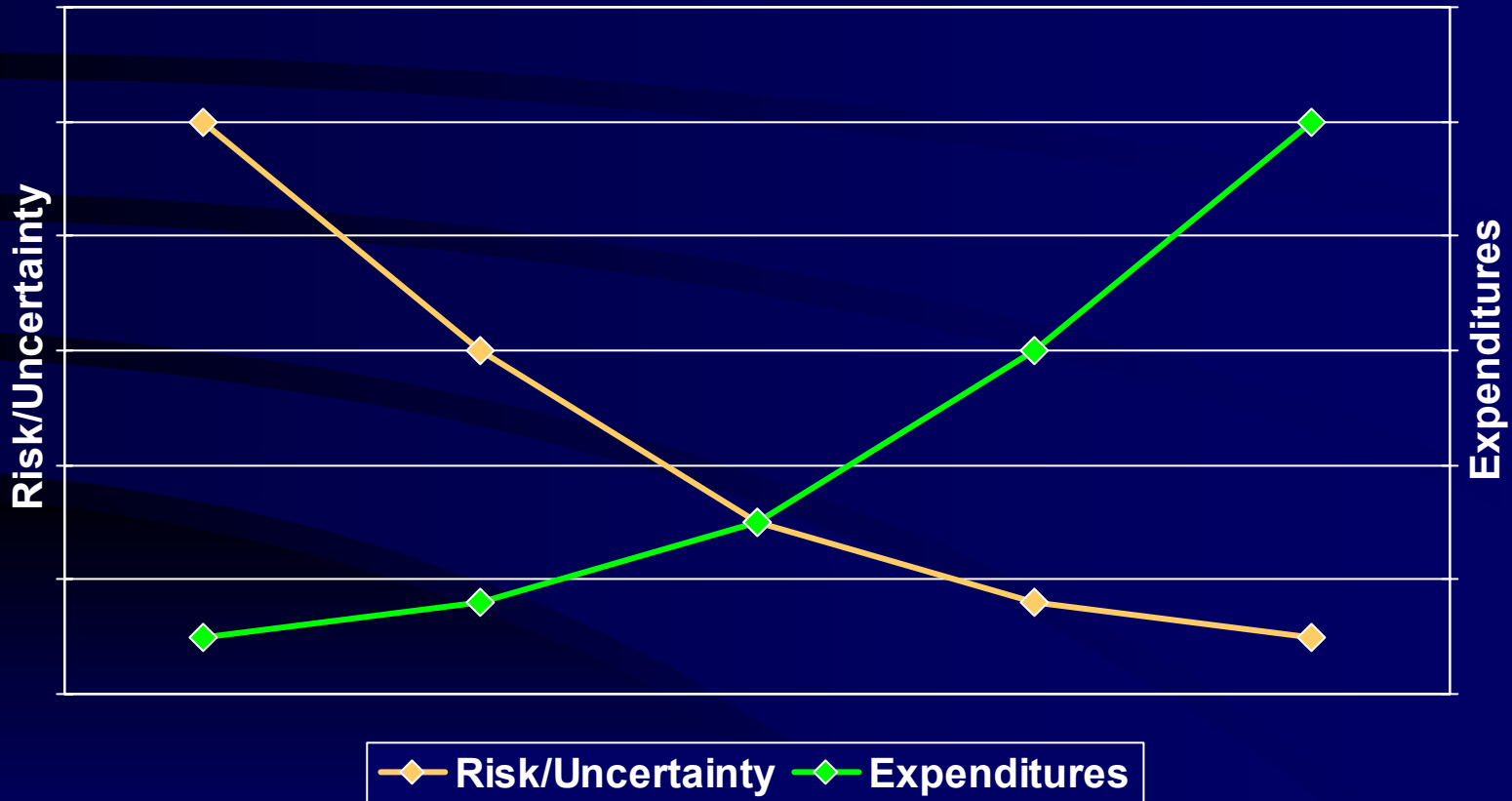
Top Reasons for Failures



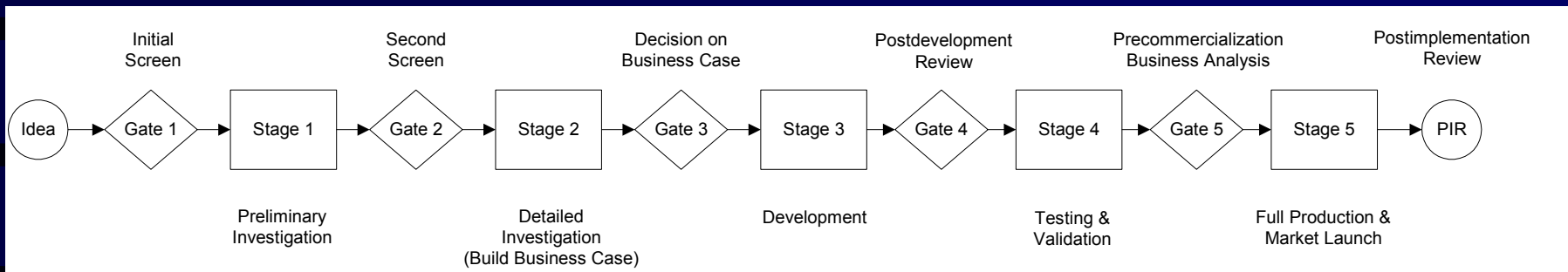
Best Companies Do Better

- 22% of companies surveyed
- 3.5 ideas to achieve “winner” (*v. 8.4 ideas*)
- 49% of sales (*v. 25%*)
- 49% of profits (*versus 22%*)
- 97% return on investment (*median $\geq 33%$*)
- 47% market share (*median $> 35%$*)

Managing Risk-Reward



Stage-Gate™ System



- Robert Cooper – “*Winning at New Products*”
- Incremental (staged) commitment process
- Successfully implemented in many companies
- Scales from small to large organizations

Stage Framework

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Market	Preliminary Market Assessment	Market Requirement Document	Formalized Marketing Plan	Initiate Marketing Plan	Fully Execute Marketing Plan
Product	Technical Feasibility	Product Requirement Document	Prototype Development	Production-Ready Product	Production & Launch
Business	Strategic Alignment	Revenue & Financial Plans	Refine Financials	Refine Financials	Manage Product (P&L)

Keys to Effective Gates

- Seasoned gatekeepers
- Cross-functional representation
- Control over required resources
- Constructively critical discussions
- Portfolio and other tools

High-Level Criteria

Company – *strategic fit, core competencies*

Market – *segments, customers, competitors*

Product – *unique advantages, feasibility*

Business – *capital requirements, financials*

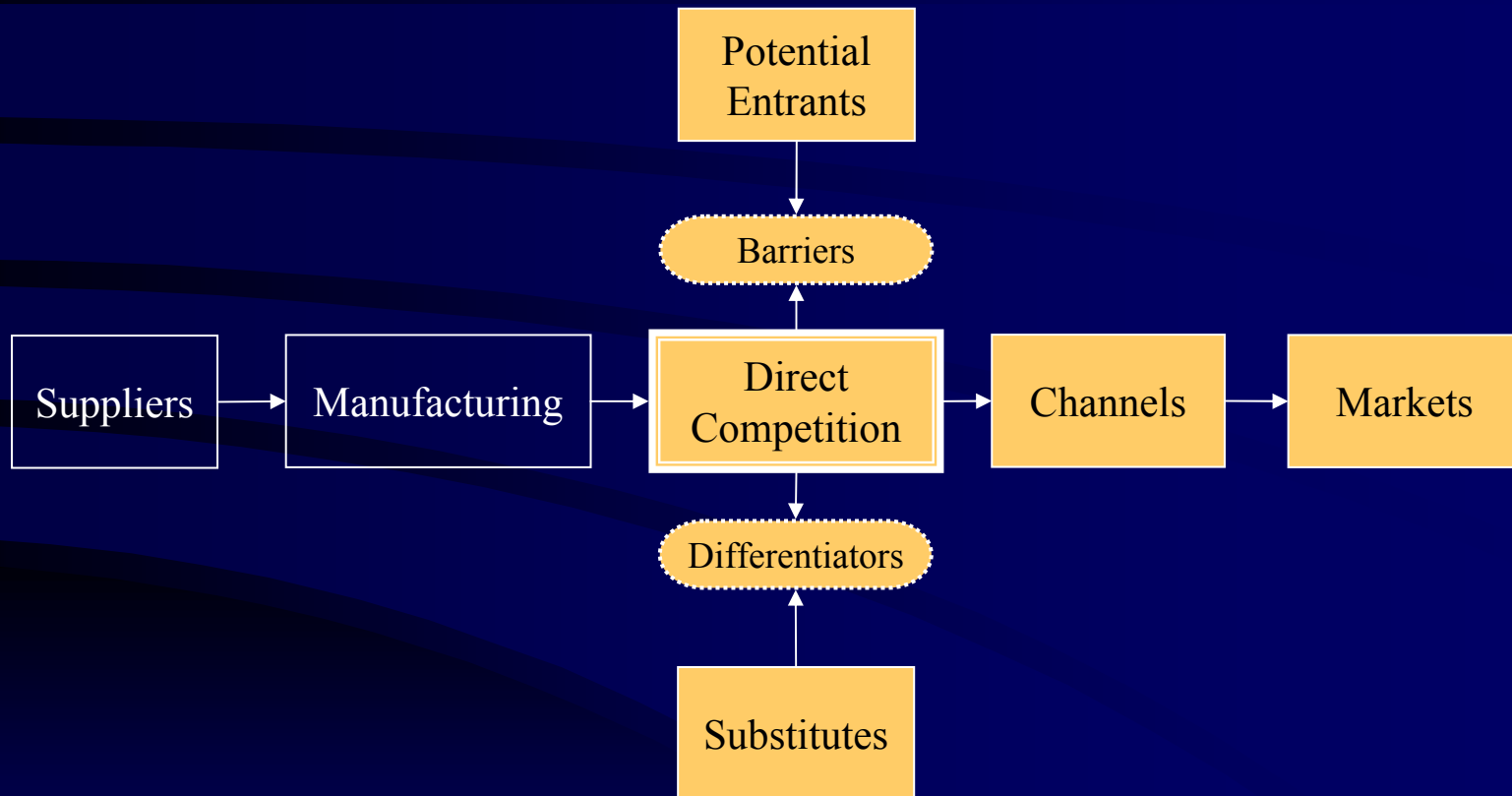
Company Criteria

- Strategically aligns with defined objectives
- Leverages:
 - Organizational capabilities, structure
 - Technical know-how
 - Operational (supply channel) infrastructure
- Limited-to-no new competencies

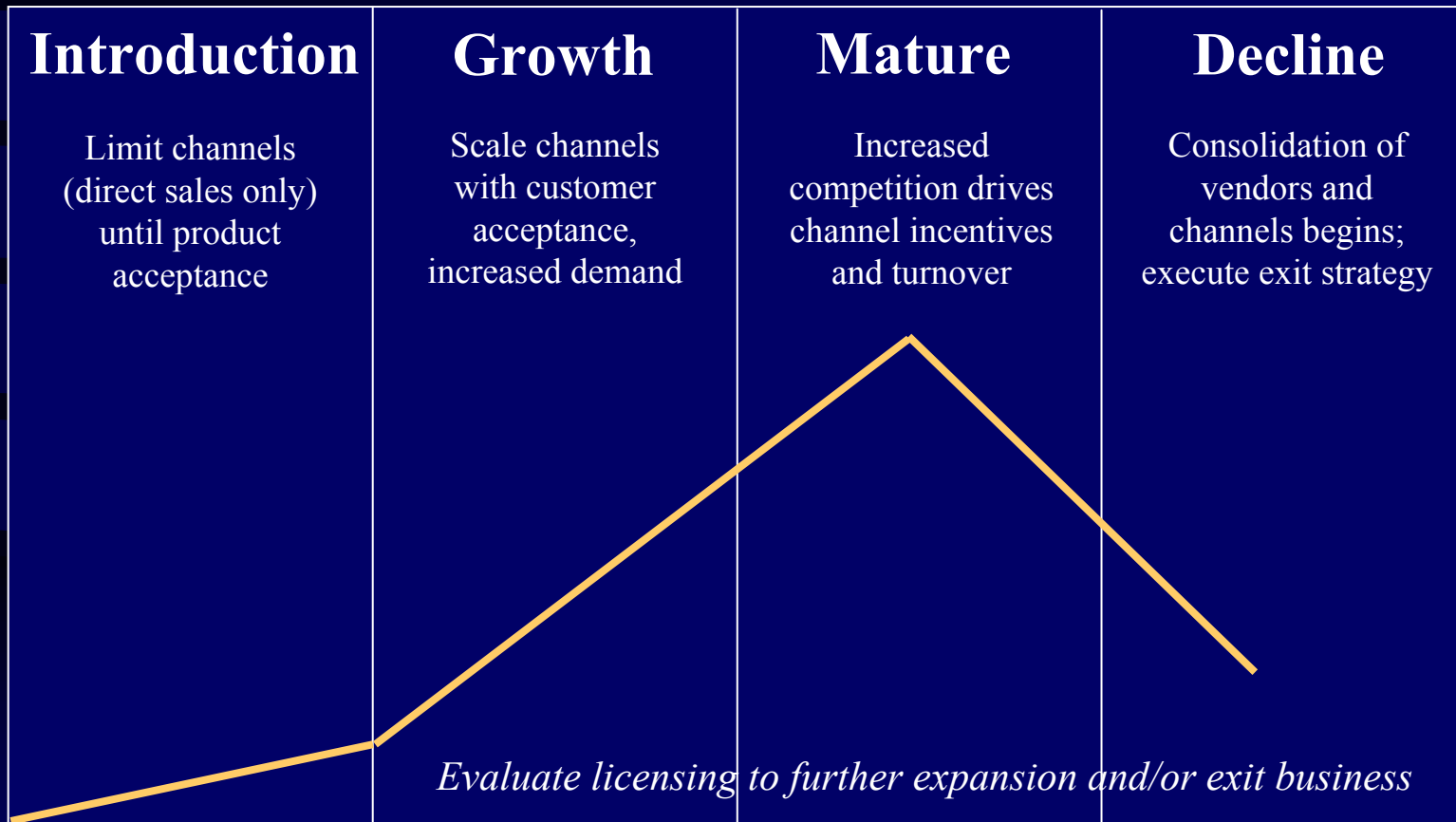
Market Criteria

- Sizable, growing target market(s)
- Confirmed market requirements
- First-to-market advantage
- Defendable competitive position
- Clear channels to customers

Porter's Industry Structure



Sales Channels



Marketing Communications

	Objectives	Messages	Programs	Budget
Customer	<ul style="list-style-type: none">• Rapidly build awareness• Drive request for information	<ul style="list-style-type: none">• Must-have features• Lowest overall cost solution	<ul style="list-style-type: none">• Direct mail• Tradeshows• Advertising	\$\$\$\$
Direct Influencers	<ul style="list-style-type: none">• TBD	<ul style="list-style-type: none">• TBD	<ul style="list-style-type: none">• TBD	\$\$
Indirect Influencers	<ul style="list-style-type: none">• TBD	<ul style="list-style-type: none">• TBD	<ul style="list-style-type: none">• TBD	\$
Sales Channels	<ul style="list-style-type: none">• TBD	<ul style="list-style-type: none">• TBD	<ul style="list-style-type: none">• TBD	\$

Product & Technical Criteria

- Unique product capabilities
- Technical feasibility
- Clear and compelling value
- Sustainable leadership position

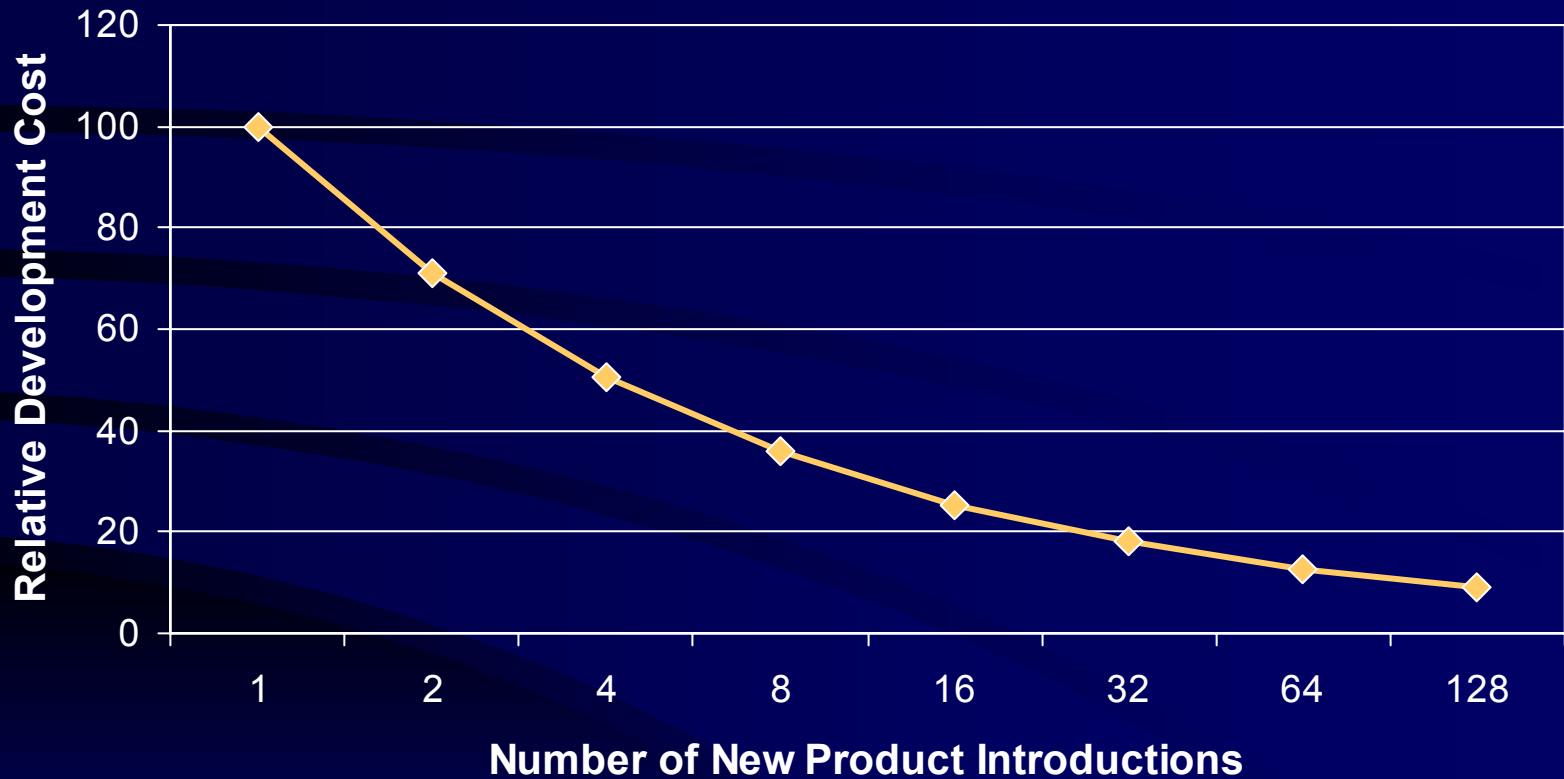
Business & Financial Criteria

- Revenue & profit contributions
- Operating expenses & capital requirements
- Financial metrics:
 - Net present value
 - Internal rate of return
 - Payback period
- Sensitivity analysis

Built-In Success Factors

- Emphasizes homework
- Multidisciplinary and cross-functional
- Parallel processing
- No single department ownership
- Strong market orientation
- Weed out weak early
- Pre-development product definition

The Experience Effect



Every 2X introductions leads to 29% cost reduction

Thank You!