

A Thousand Years of Evolution in a Thousand Days: *Uncovering the Hidden Assets for the Digital Age*

Partha S. Ghosh

November 16, 2000

Content

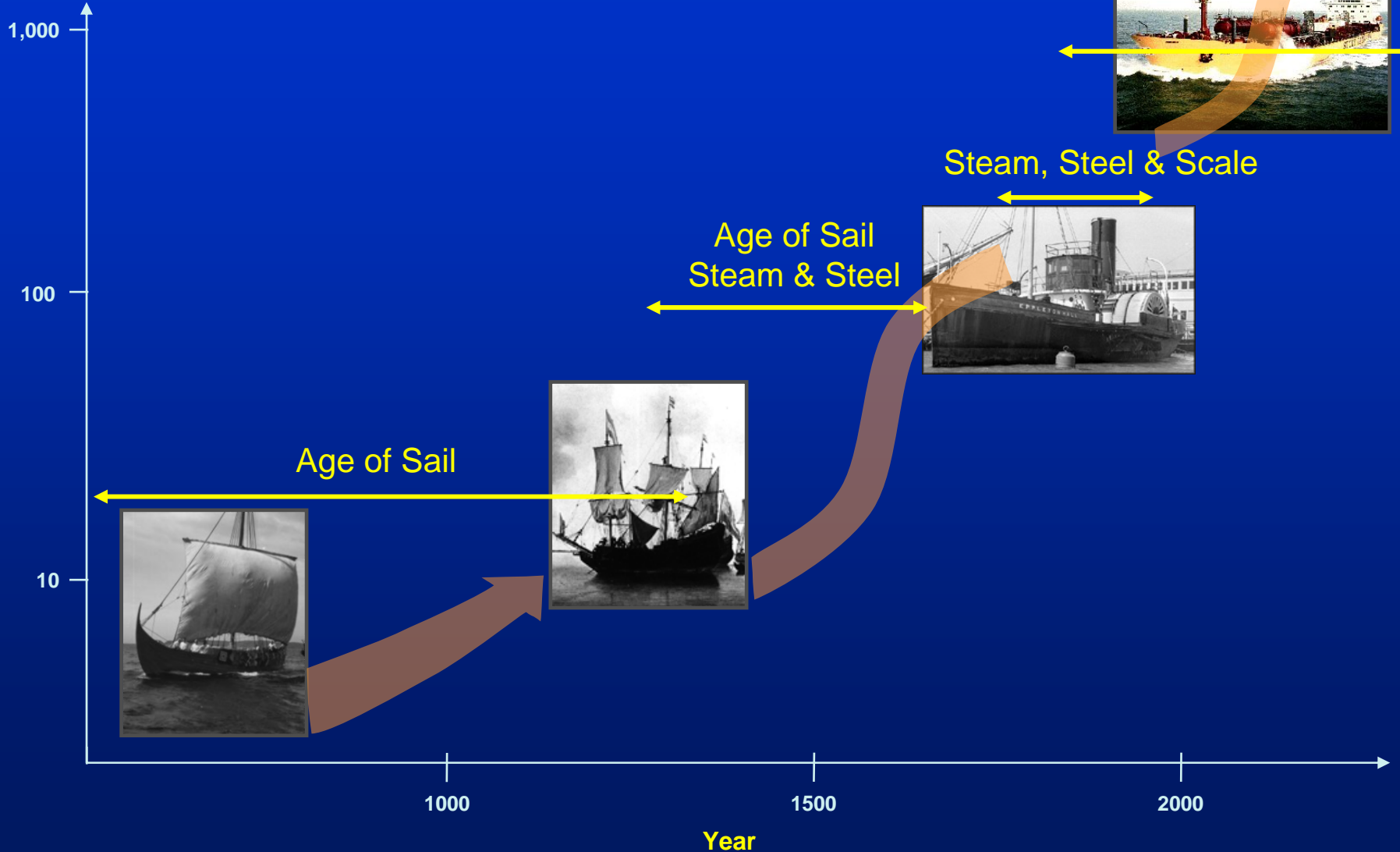
- **A View from the Time Machine: Shifts of Paradigms**

-  **European Advantage**

- The Emerging Challenge: Added Disillusion or Value Added?
- Shaping the Landscape to Your Advantage: Play to “Win” or to “Influence the Game”?

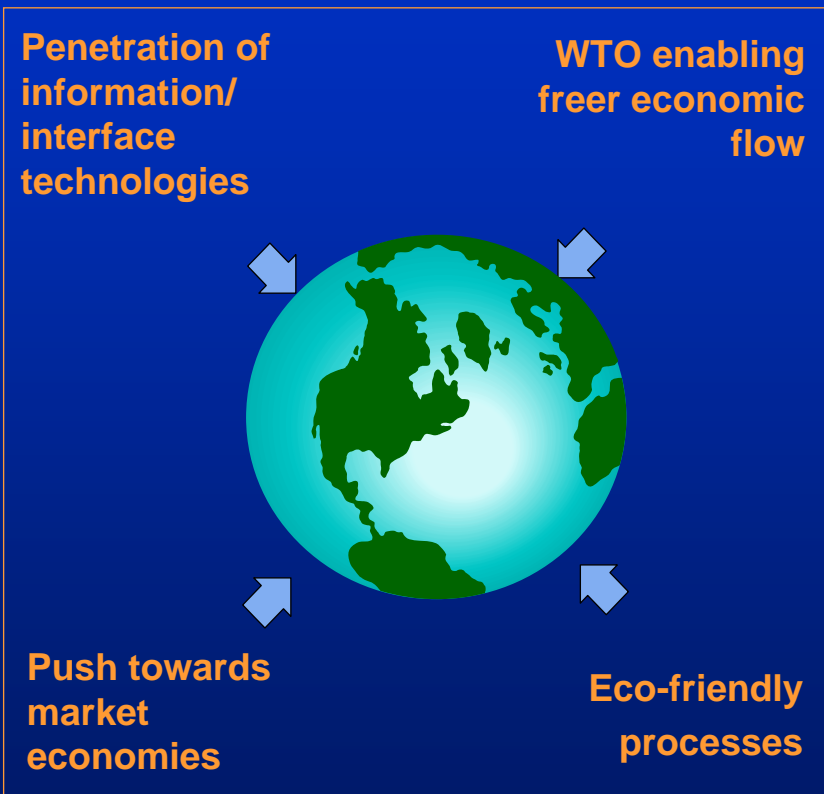
The European Adventurism: "Exploring New Frontiers"

Speed (Knots/day)

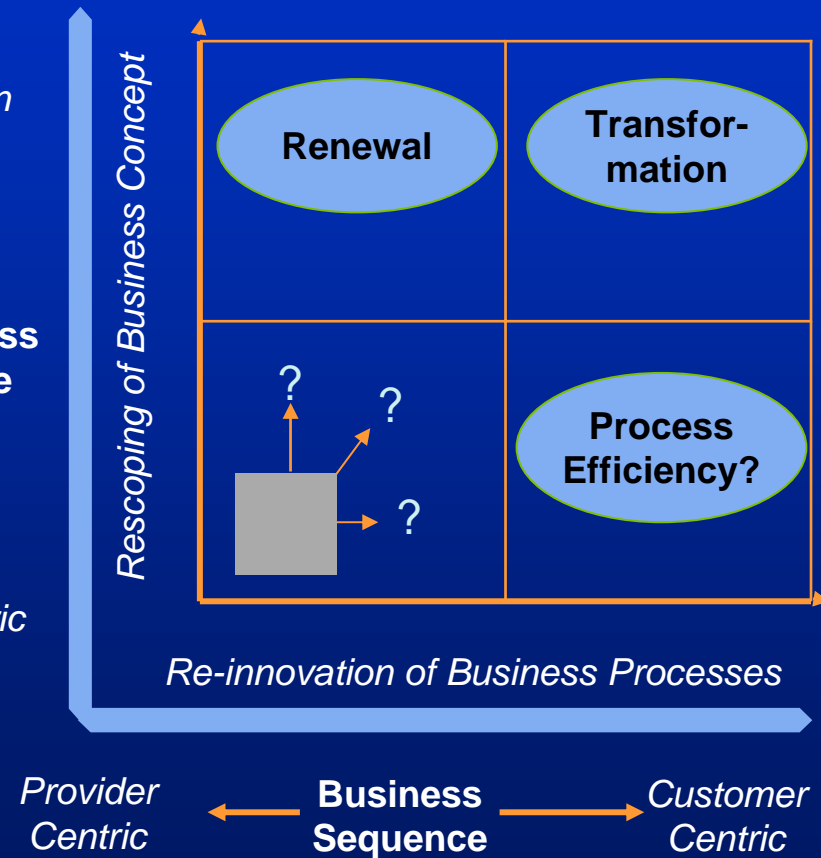


The Emerging Environment

Forces at Work on the Global Economy



The Two Critical Dimensions



Nature of Internet Transformation

The Internet as Change Accelerator

Forces at Work

Democratization of decision making
(Extended work space)

Globalization of supply to demand
(Customers' reach)



Speed of innovation
(Shorter lifecycles)

Multiple choices
(Customers' power)

Economic transparency
(Towards efficient markets)

Shift in power balance in the value chain
(Disintermediation, reintermediation)

Corporate Responses



Direct with customers



Closed 156 brick & mortar stores



"Destroy your Business"



Create scale advantage

Lessons

Extremization

Drastic moves

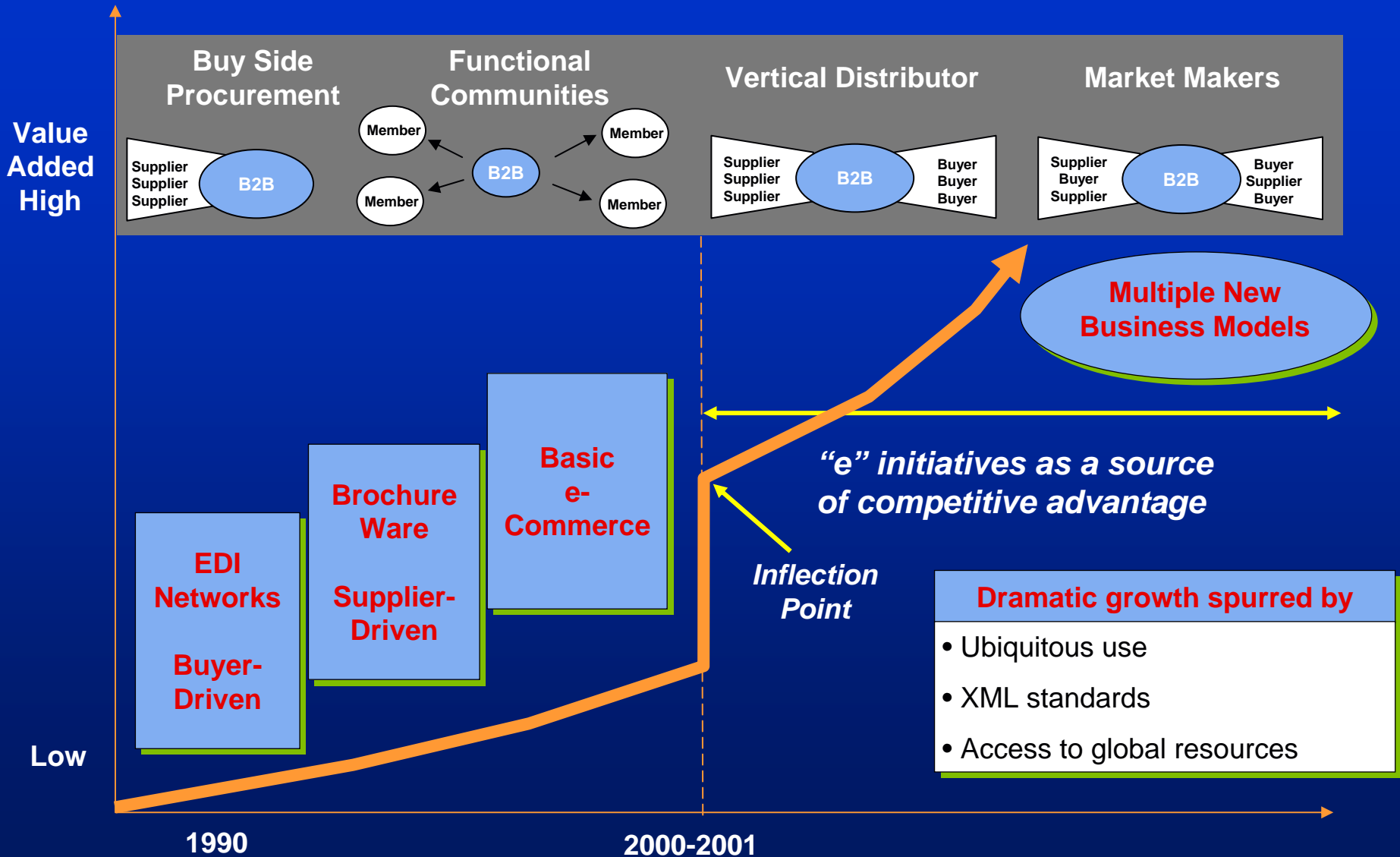
Think new

View competitors innovatively

Evolution of B2B e-Commerce

Illustrative

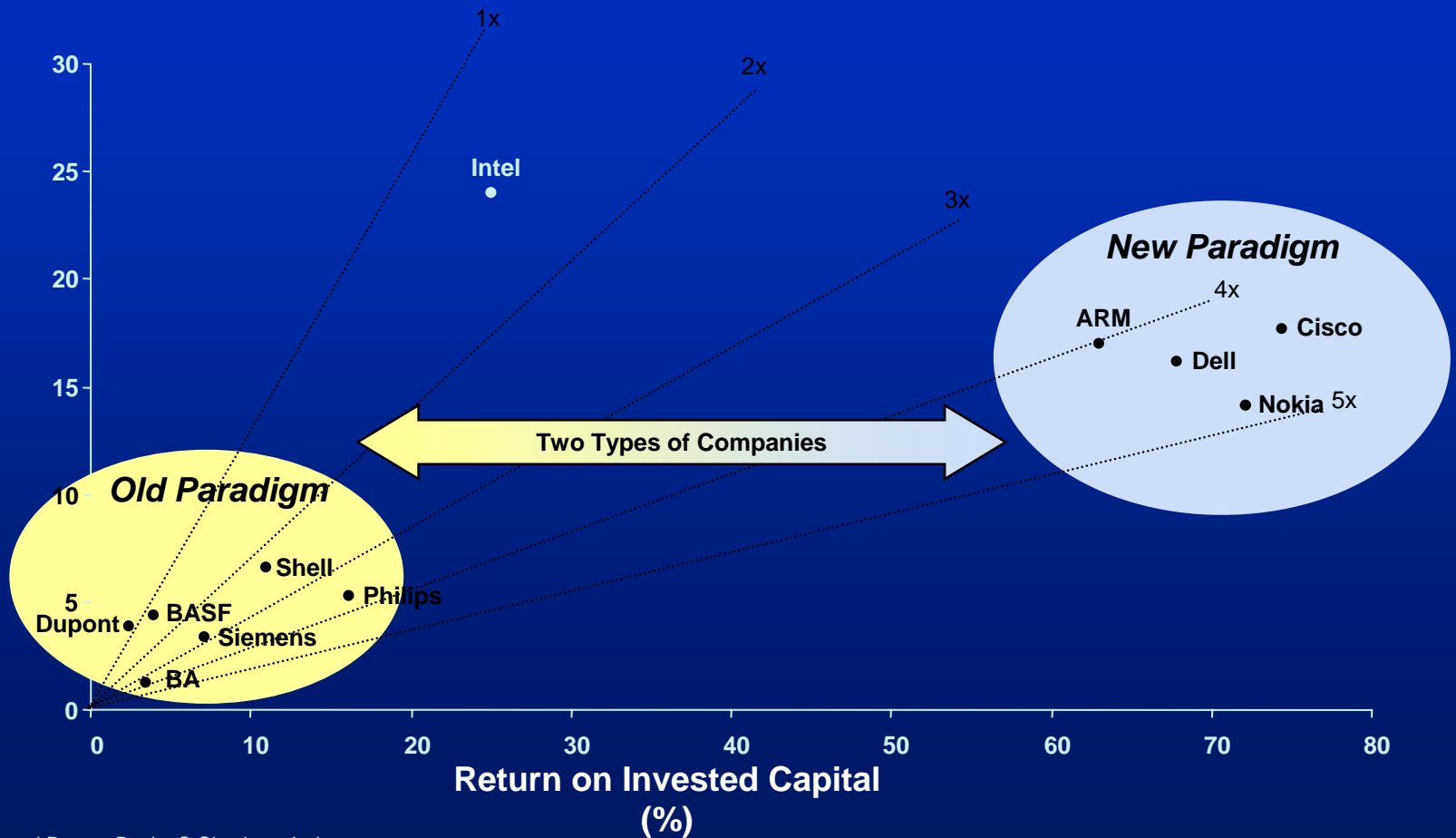
ERA's of Internet Development



Tale of Two Paradigms: ROIC Performance

Relative ROIC
1999 Actual
Percent

NOPAT
Sales
(%)



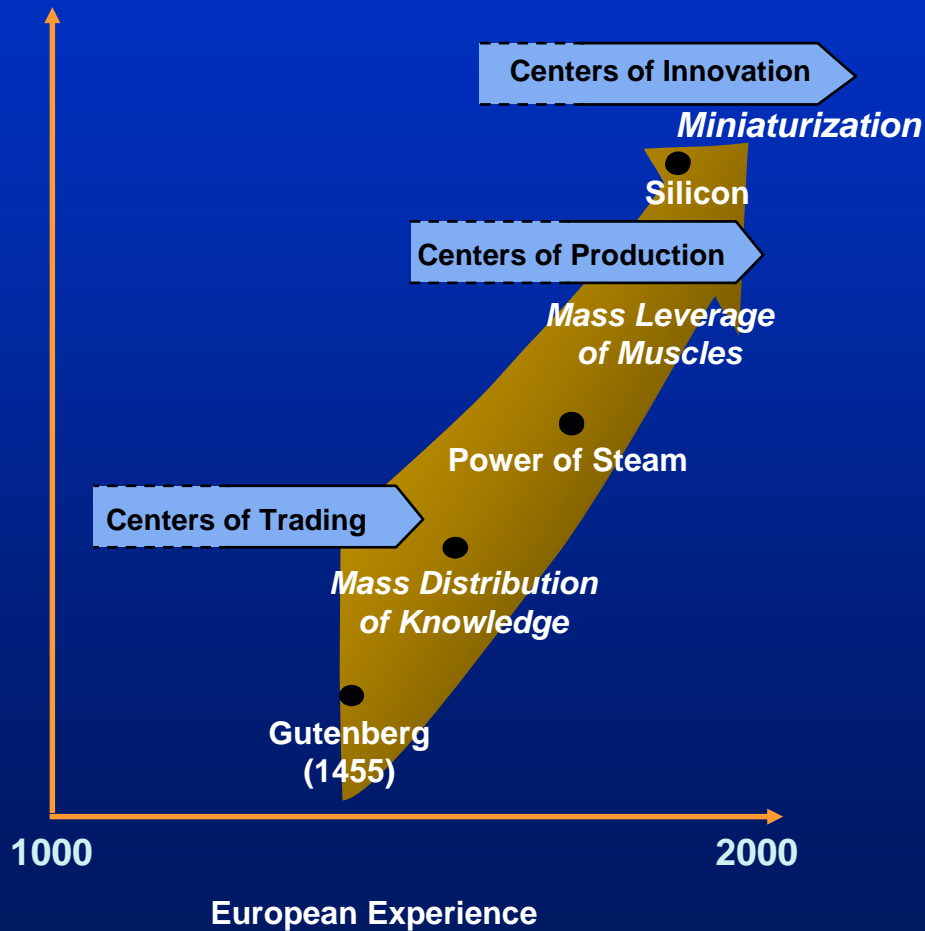
Source: 10K's; Annual Report; Partha S Ghosh analysis

Leveraging European Experience: *It is all about "will"*

Illustrative

European Events in the Last 1000 Years

Economic Impact



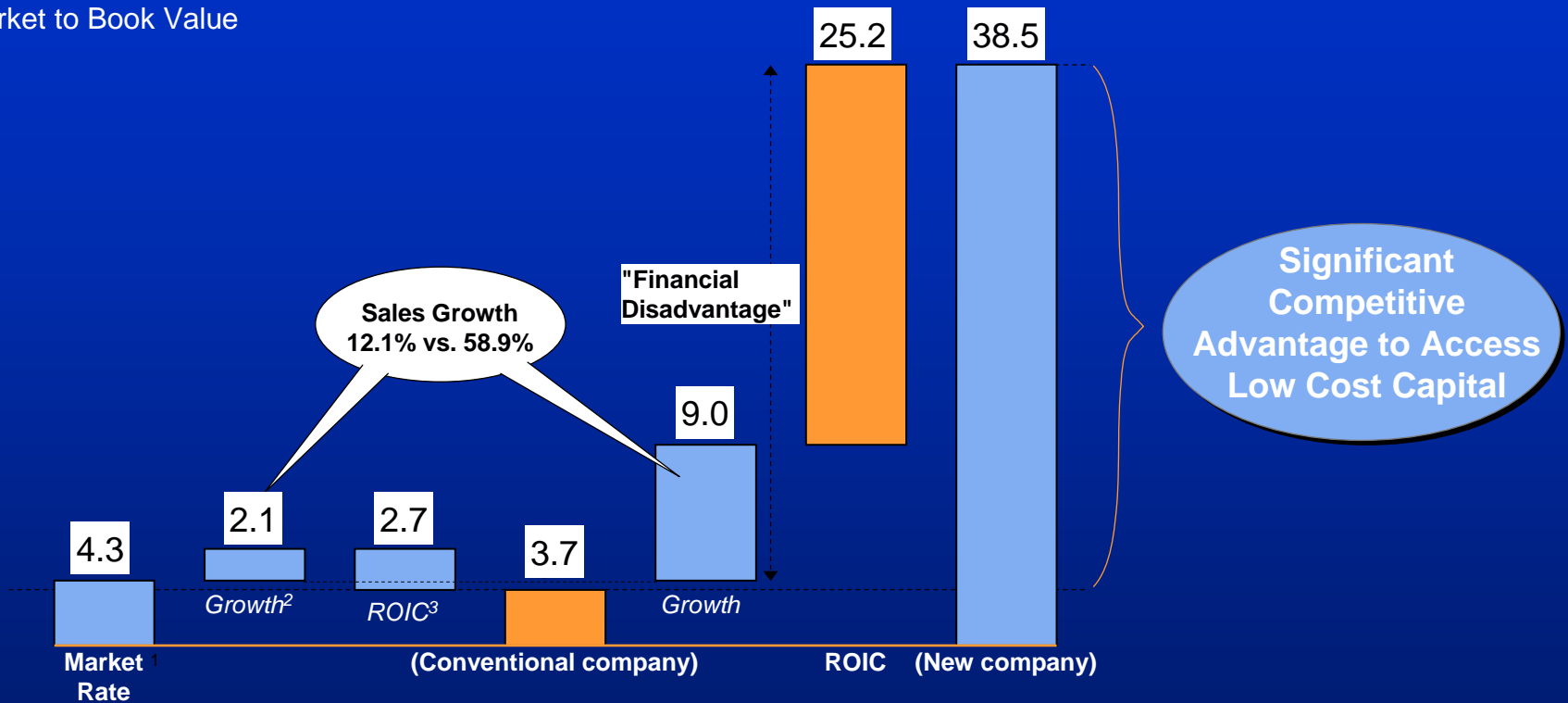
Strategic Implications in the Digital Age

- Value creation based on experience
- Courage based on wisdom
- Symbiosis based on multiplicity

"New Paradigm" Companies Are Generating Superior Market Multiples

Market Valuation

Market to Book Value



1 Market Value of Equity ÷ Book Value of Equity (Market Value weighted for all NYSE stocks)

2 Increase in Market to Book value over NYSE average due to higher revenue growth

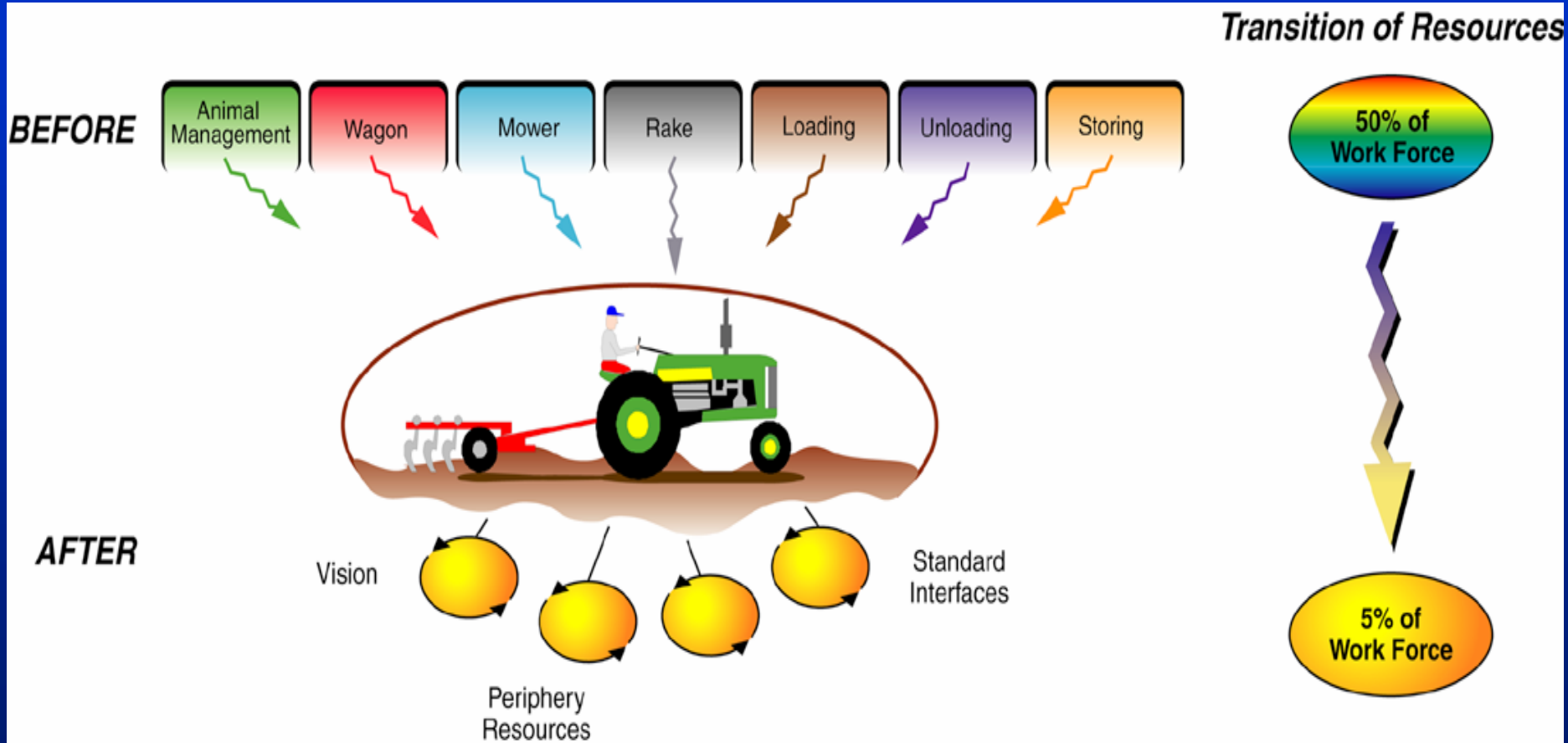
3 Increase (decrease) due to higher (lower) return on Invested Capital (ROIC) in Market to Book value over NYSE average

Source: NYSE; Standard & Poor's; Partha S Ghosh analysis and Financial Model

We Have Been Here Before?

Restructuring of the Agro Industry

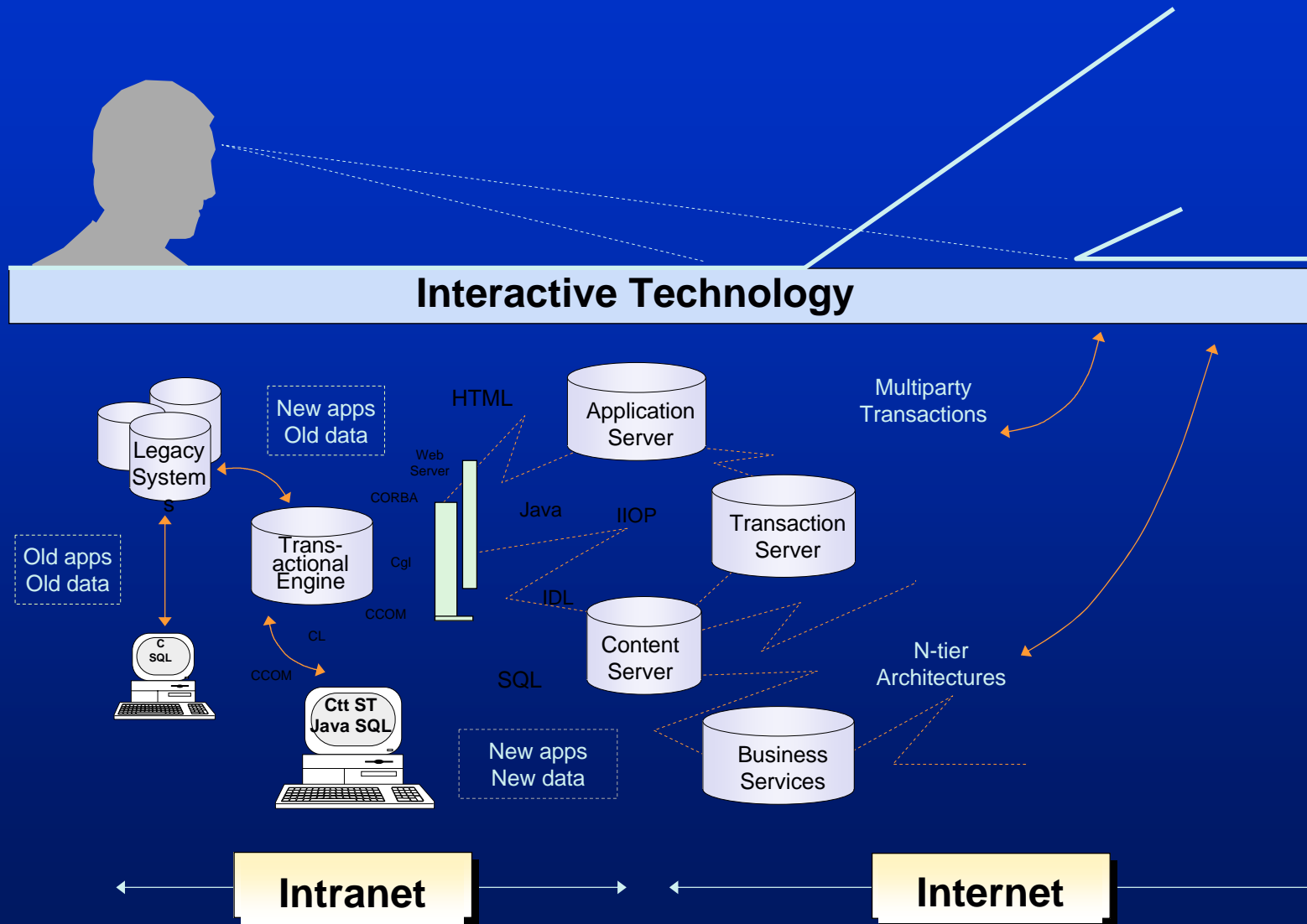
Illustrative



Tractor represents "mechanical" control center with "farmer-friendly" user interface

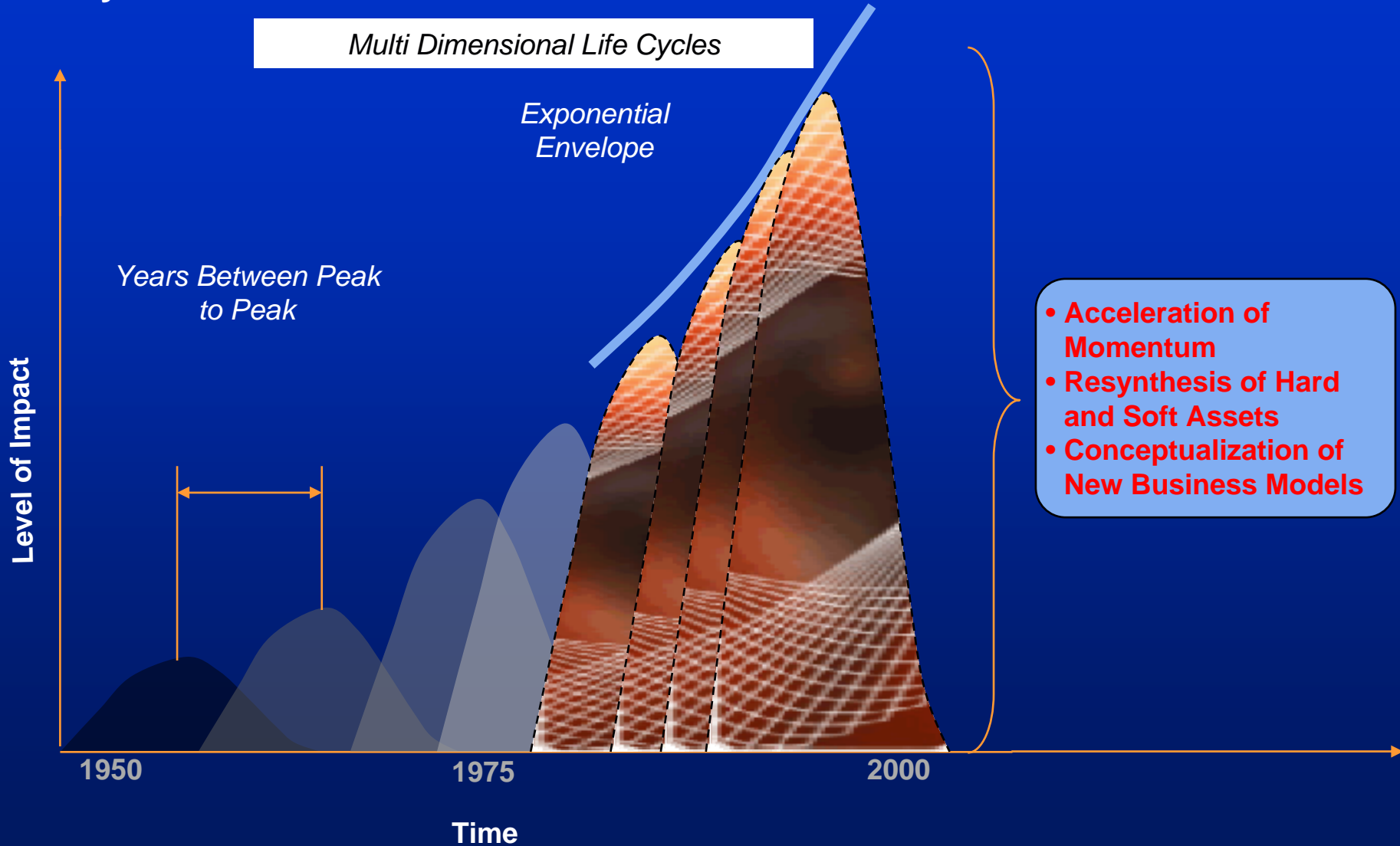
Leverage of Muscles to Leverage of Mind

Interface Technology: A Key Component in the Redesign of Processes

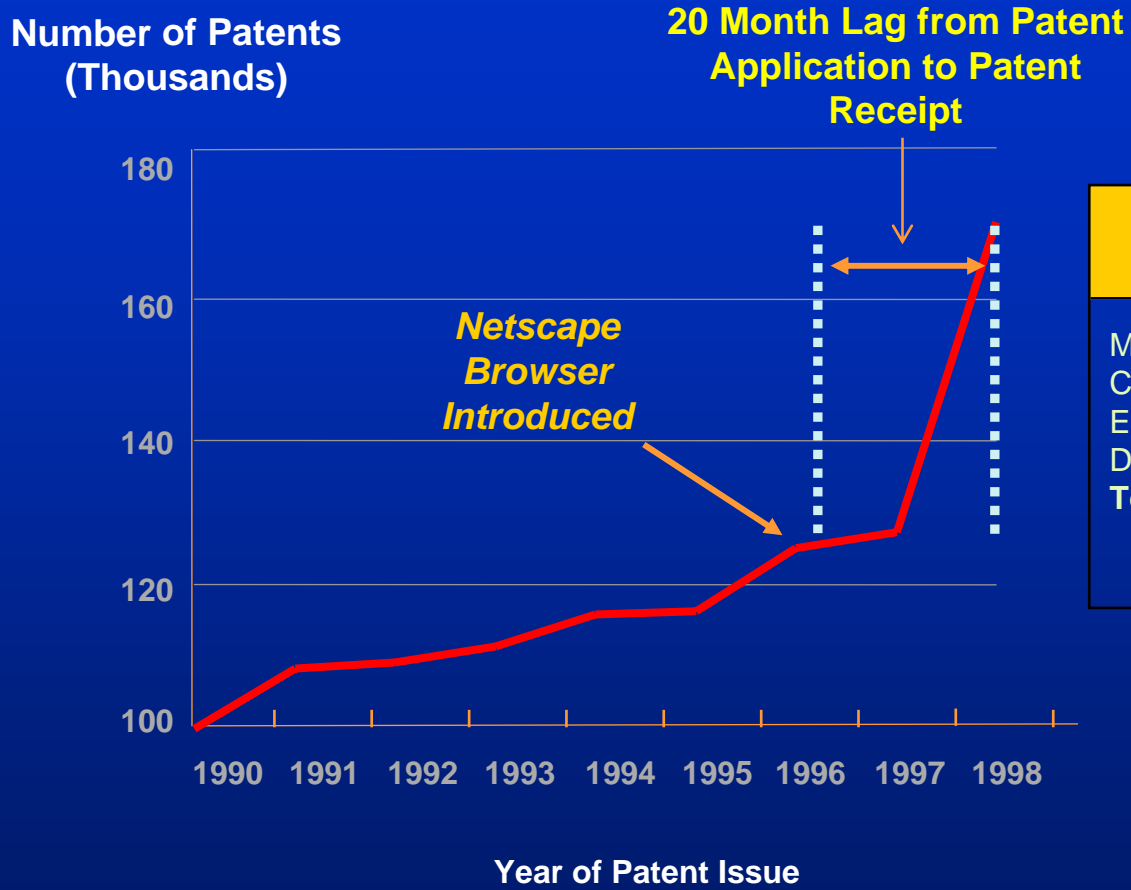


“Exponentially” (?) of Imagination Driven Opportunities

Life Cycle of Products



Patents Issued by Year and Type



Pre-Netscape CAGR		Post-Netscape CAGR	
Mechanical	2.4%	Mechanical	41%
Chemical	5.1%	Chemical	9.4%
Electrical	10.6%	Electrical	17.2%
Design	9.7%	Design	9.7%
Total	5.2%	Total	11.9%

Source: USPTO; Partha S Ghosh analysis

Economics of the Infomediary

Key Factors of Success

Intermediary

- ✓ Toll booth
- ✓ Metered access
- ✓ Trusted
- ✓ Neutral

Network

- ✓ Ubiquitous
- ✓ Non-proprietary transport
- ✓ Networked value chain
- ✓ Broadband

Captivating

- ✓ Personalized content
- ✓ Competitive value proposition
- ✓ High switching costs

Aggregator

- ✓ Extensive geographic coverage
- ✓ Multi-language/cultural
- ✓ Broad range of services

Economic Drivers

Advertising Spend to Sales Ratio

- ✓ Replacement for advertising (Cost per thousand impression)
- ✓ More refined targeting at message

Broker Commission

- ✓ Traditional brokerage role
- ✓ Fee for handling customer transaction
- ✓ Lower cost to serve

Affiliate Payment

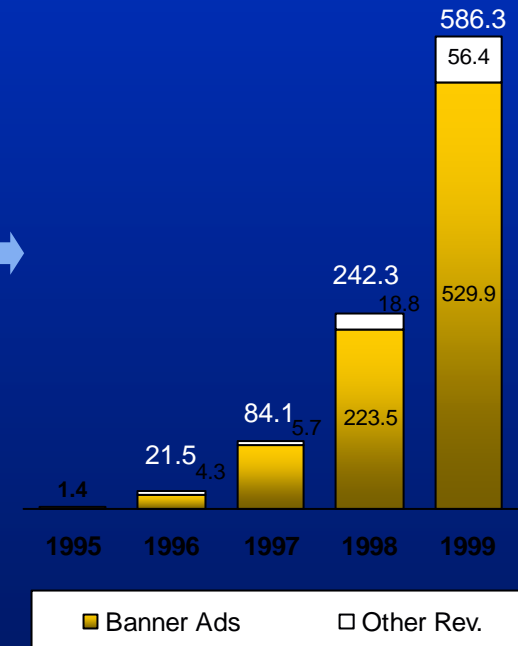
- ✓ Replacement for lead generation
- ✓ Fee for every qualified lead
- ✓ Higher rate of conversion to customers

Average
6%

The Economics of Yahoo!

Yahoo! Revenue Potential

\$ Millions



Content

- A View from the Time Machine: Shifts of Paradigms \cong European Advantage

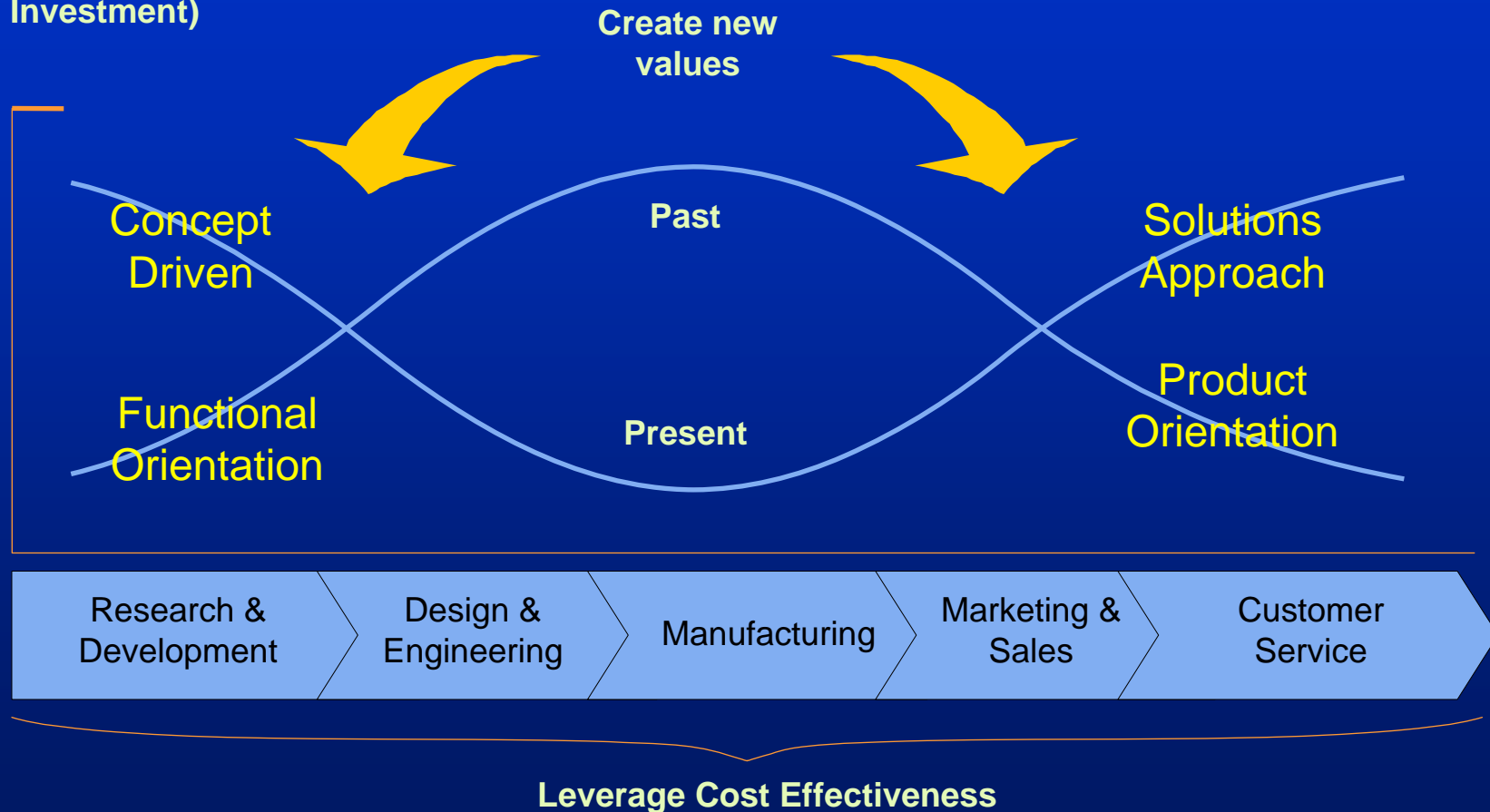
- **The Emerging Challenge: Added Disillusion or Value Added?**

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Changing Value of Business System Functionality

Value Added Along Industrial Business Process

Value (Unit Investment)

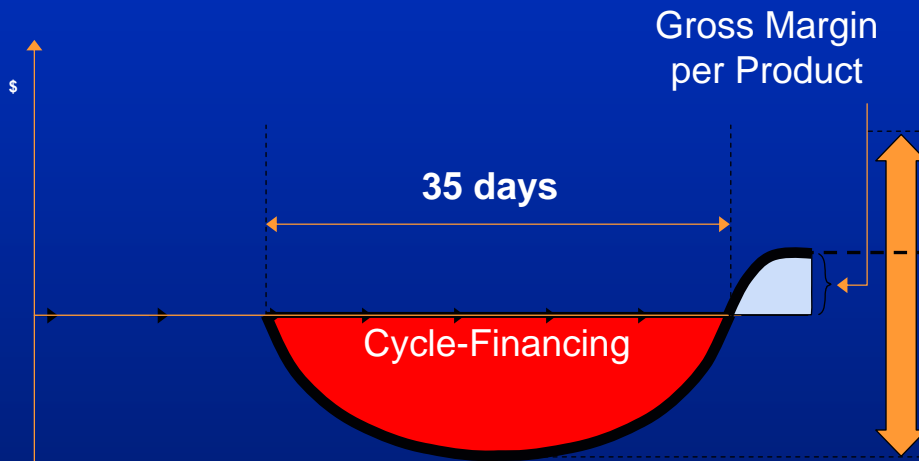


Network Manufacturing: Capital Efficiency Advantage

Conventional Model

Financial Flow/Production Cycle

Dollars

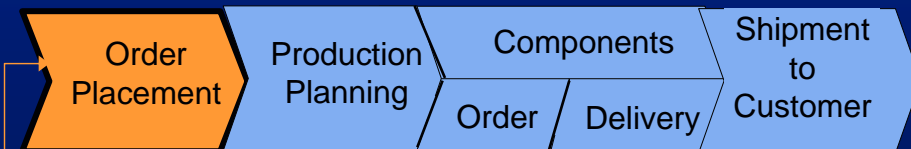
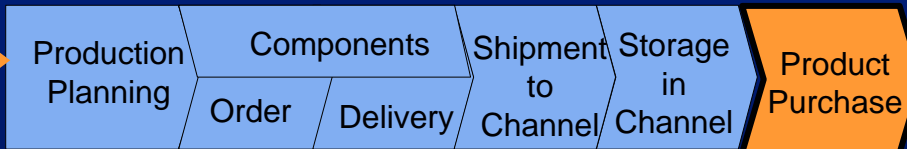
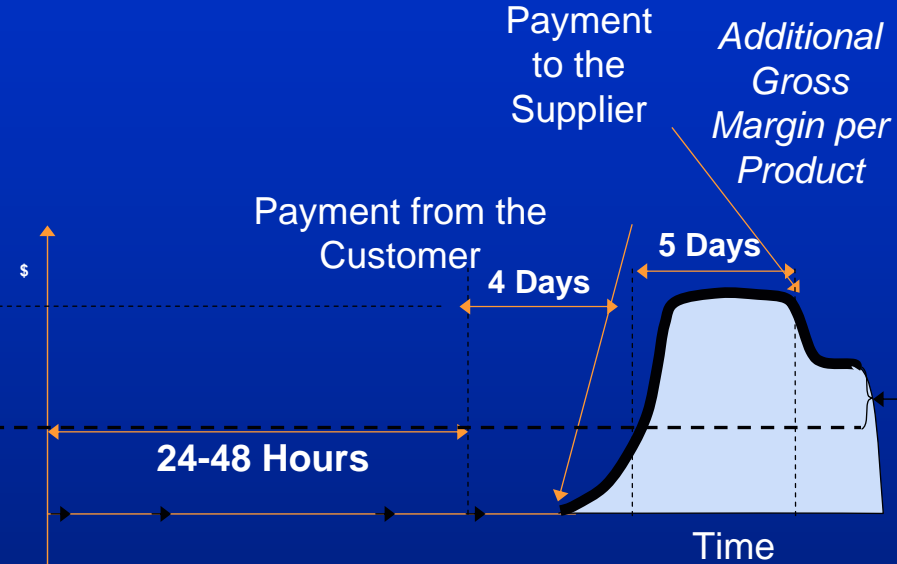


Direct/Internet Model

Financial Flow/Production Cycle

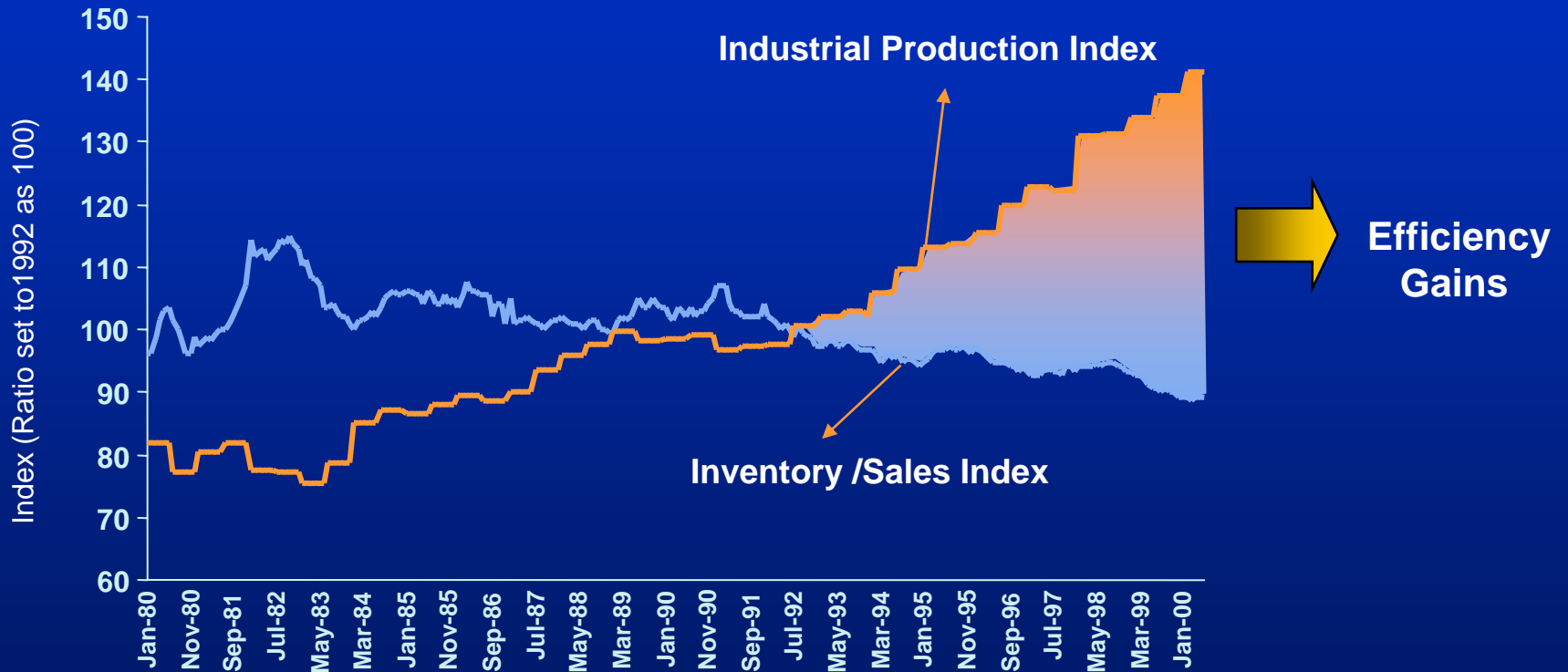
Dollars

Illustrative



Efficiency Gains in Industrial Production

Inventory Productivity



Source: US Census Bureau, Federal Reserve, Partha S Ghosh analysis

Manufacturer's or Infomediary's Business (?)

Estimated Revenue Stream Over 100,000 Miles

Dodge Intrepid (Not Discounted) in Dollars

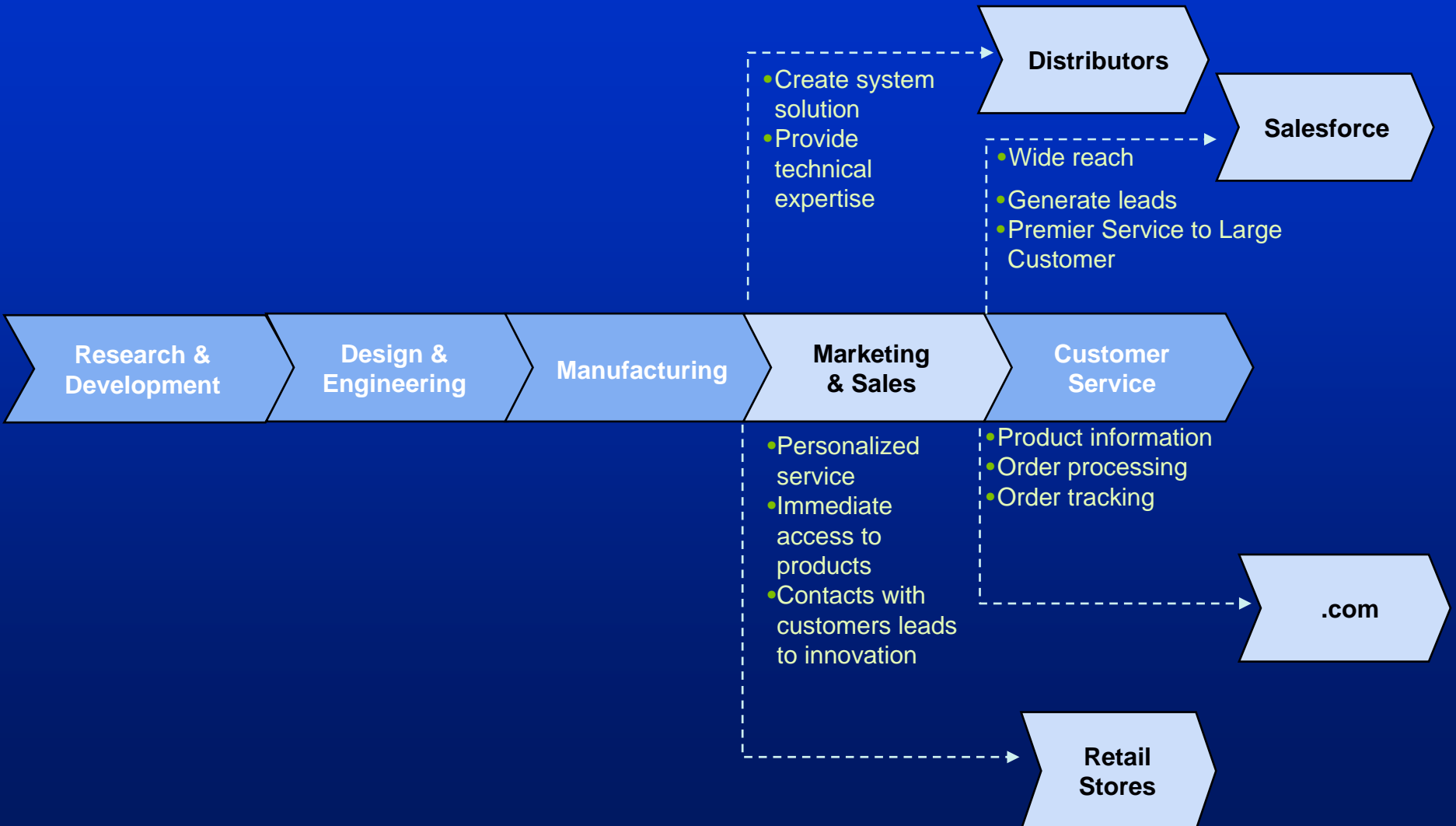


Source: Various research organizations

Creating More Value out of the Distribution Channel

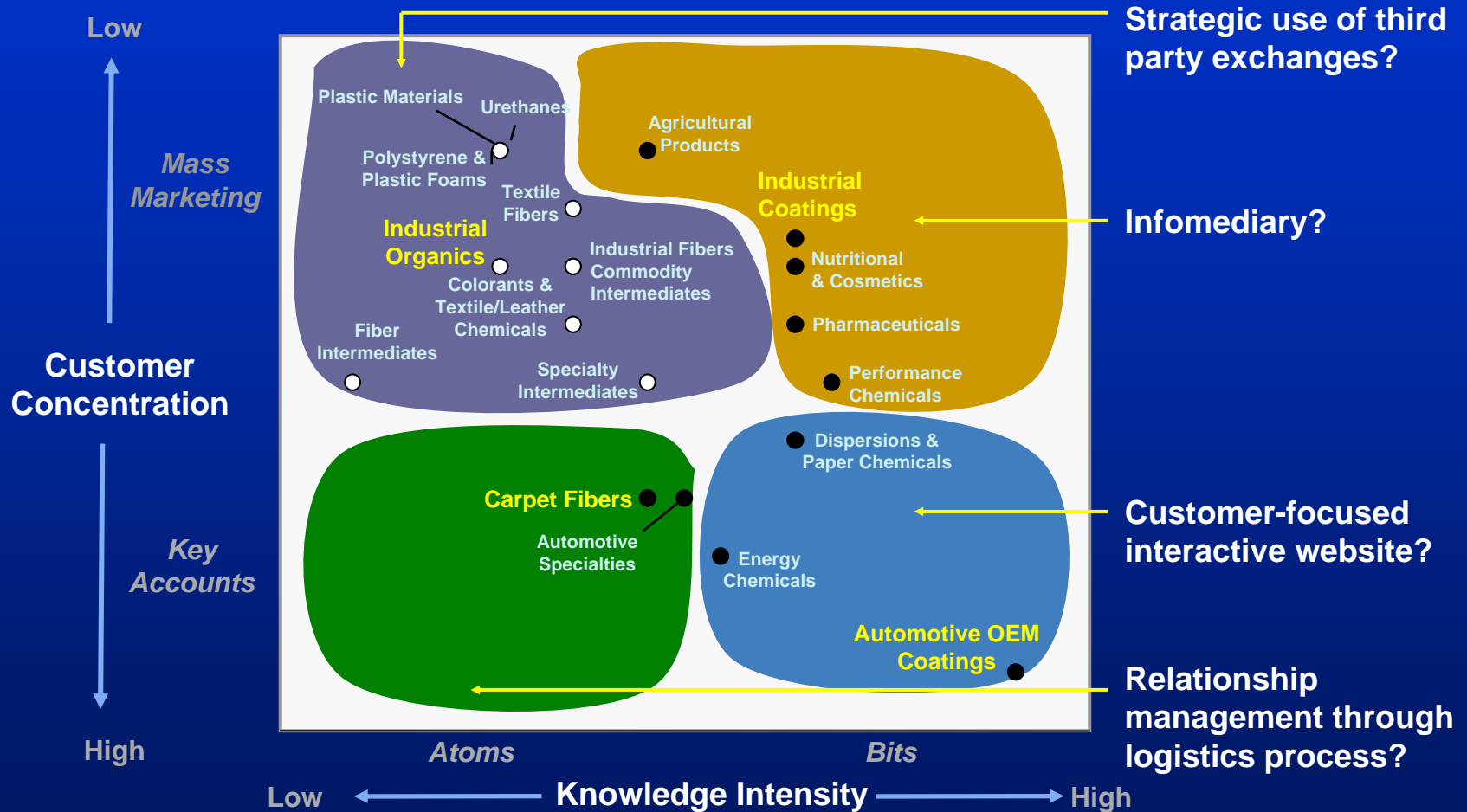
Current Distribution Channel

“Serving through efficient logistics”



Strategic Options (Illustrative: Industry Clusters)

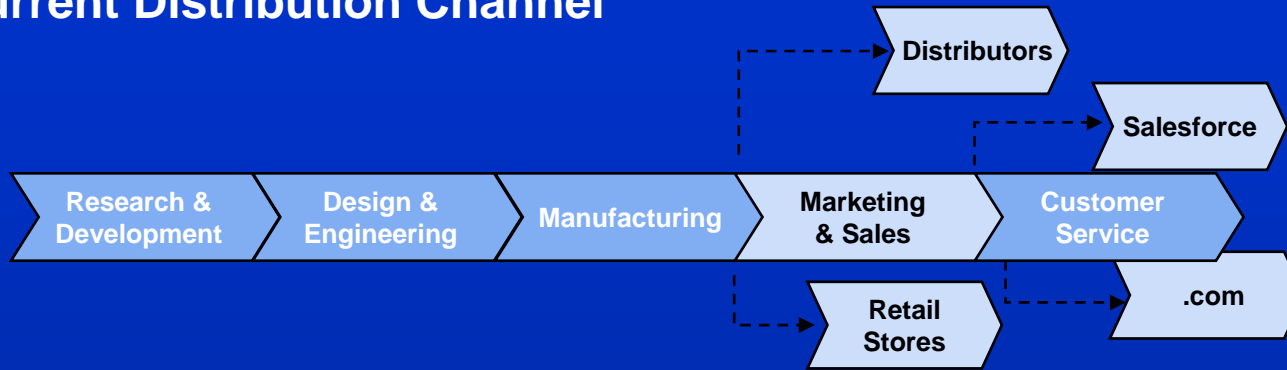
Characteristics of a Chemical Company's Business



Source: Partha S Ghosh Analysis

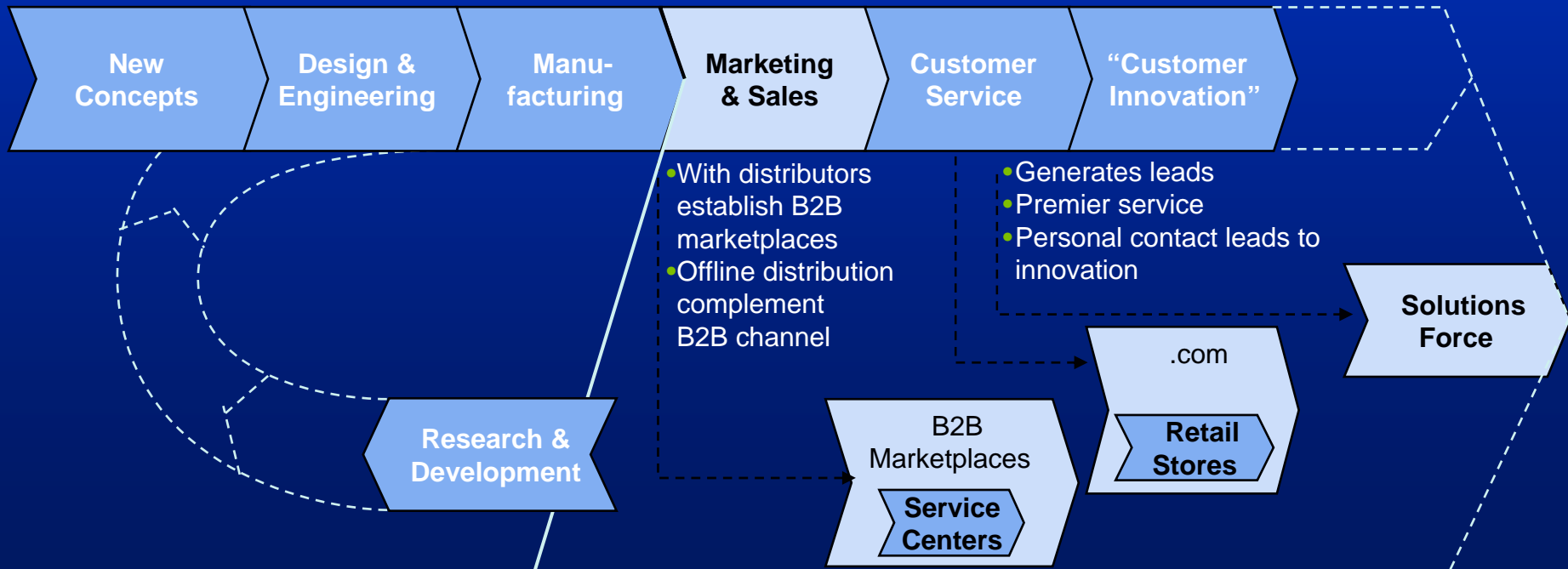
Creating More Value out of the Distribution Channel

Current Distribution Channel



Future Innovation Process

“Branding through superior services”



Content

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- The Emerging Challenge: Added Disillusion or Value Added?

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In the process, the firm should rapidly make conventional consulting “terms” obsolete.

Preliminary

Intellectual Challenge of the Industrial Practice – Illustrative Strategy?


A Prestigious Consulting Firm’s Definition

~~“An integrated set of actions to secure competitive advantage”~~

Proposed Definitions in the New Paradigm (Ghosh/GIP Definition)

“Synchronized set of creative and collaborative power plays to secure superior influence in the confluence of Digital and Cartesian economies”

Purpose?
Setting standards in creating “first mover advantage”

Where?
Digital

Physical

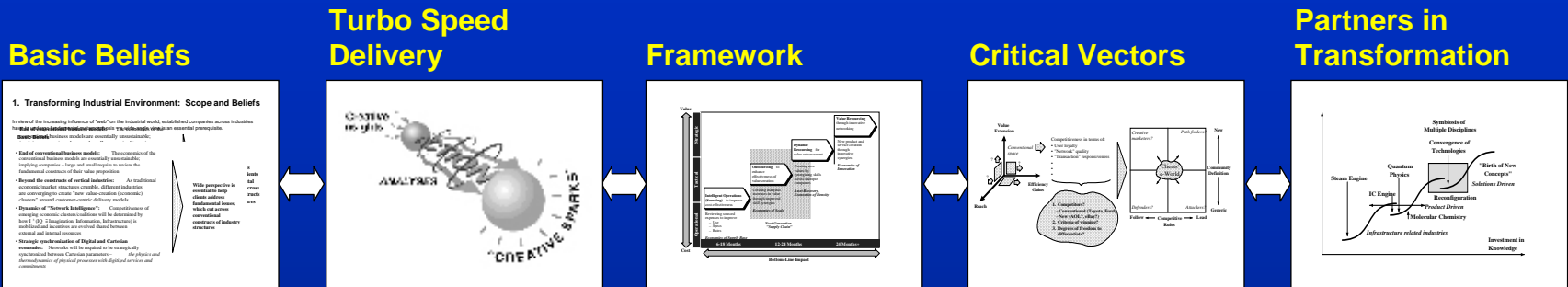
Driver?
Innovative network

* Included in Appendix

Industrial Competitiveness

Ability to package unique sets of skills, perspective and framework to make a difference, will be basic source of competitive advantage.

Basic Sources of Competitive Advantage



Web Technology

Sourcing (Micro-transaction knowledge)

"Sources of Competitive Advantage"

Branding/Marketing

Strategic Problem Solving & Change Management

Basic Beliefs

In view of the increasing influence of the "Web" on the industrial world, established companies across industries have to undergo fundamental metamorphosis – a wide-angle view is an essential prerequisite.

End of Conventional Business Models

Beyond the constructs of vertical industries:

As traditional economic/market structures crumble, different industries are converging to create "new value-creation (economic) clusters" around customer-centric delivery models

Dynamics of "Network Intelligence":

Competitiveness of emerging economic clusters/coalitions will be determined by how I³ (IQ – Imagination, Information, Infrastructure) is mobilized and incentives are evolved and shared between external and internal resources

Strategic synchronization of Digital and Cartesian economies:

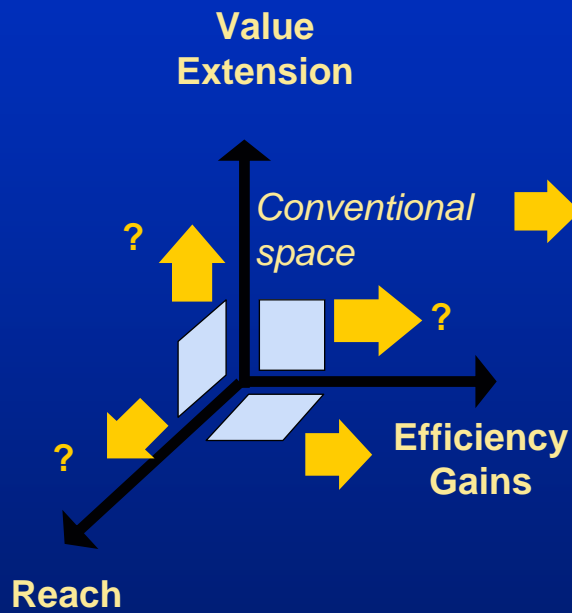
Networks will be required to be strategically synchronized between Cartesian parameters – *the physics and thermodynamics of physical processes with digitized services and commitments*



Wide perspective
which cuts across
conventional
constructs of
industry structures

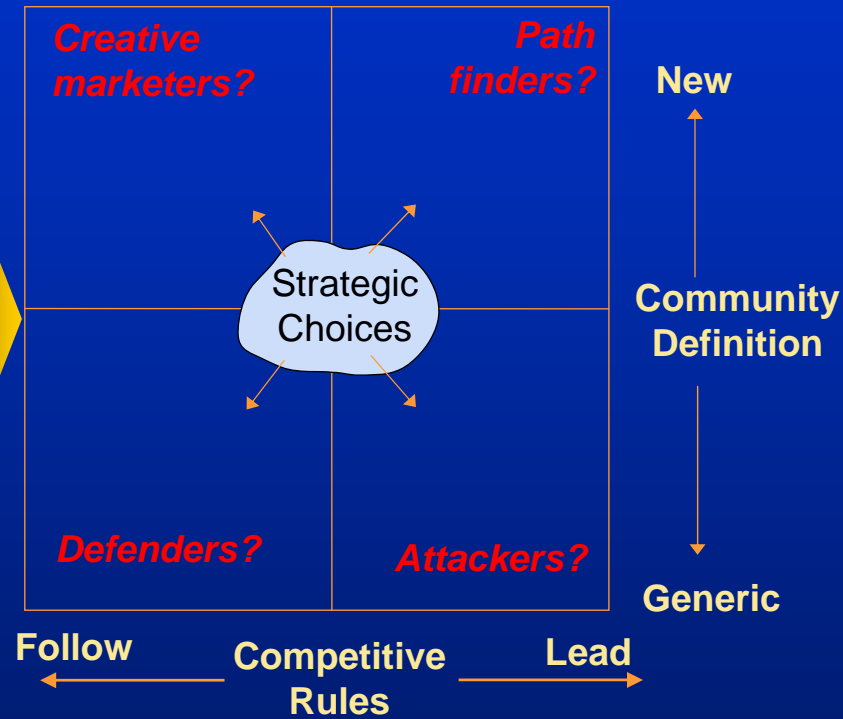
Critical Vectors to Win

Industrial's Strategic Vectors



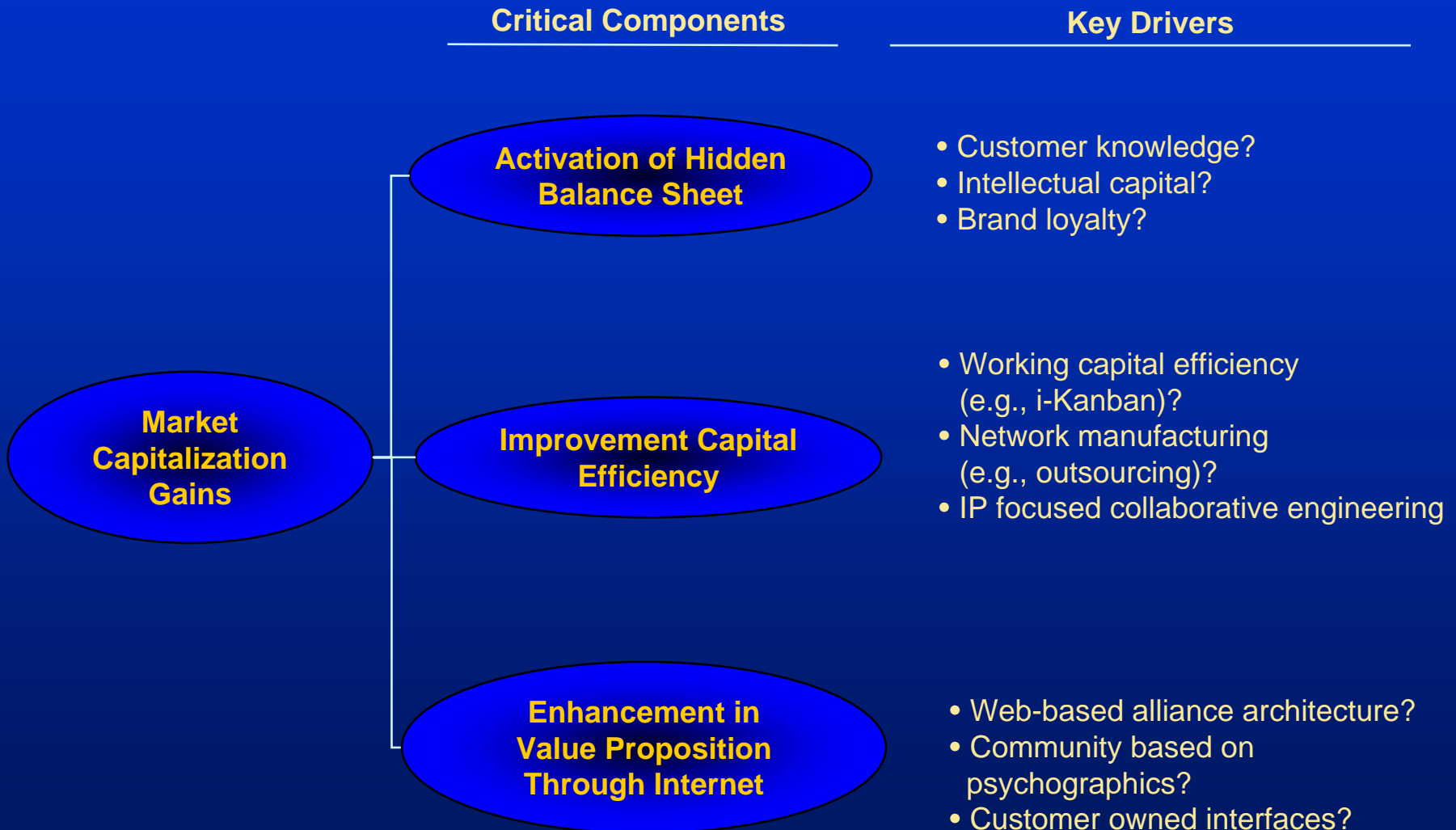
- Competitiveness in terms of:
- User loyalty
 - "Network" quality
 - "Transaction" responsiveness

Strategic Gameboard



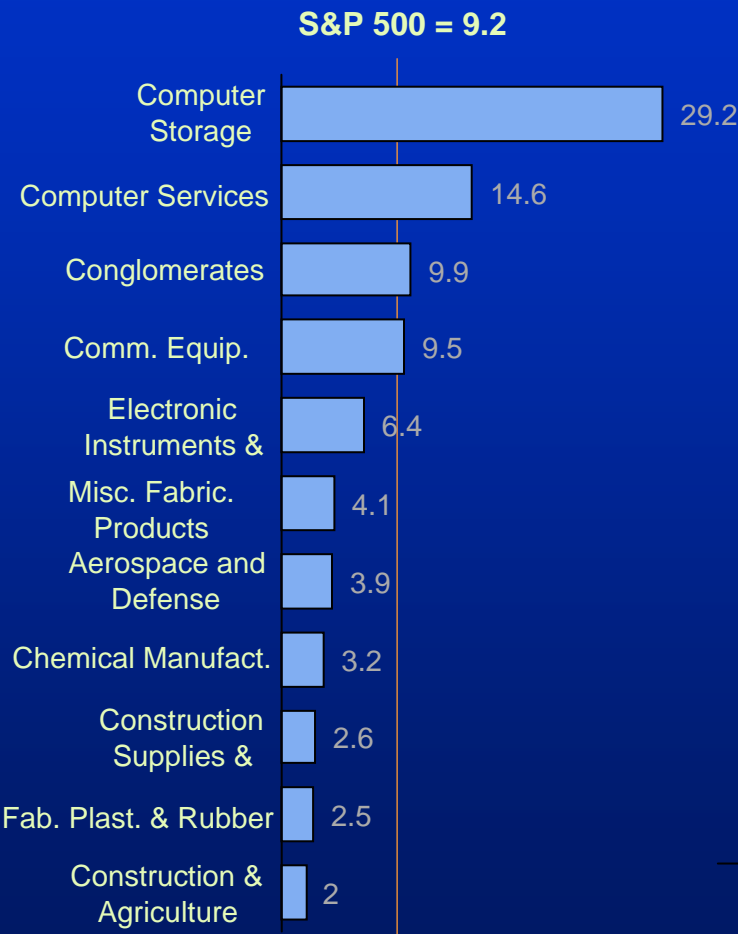
Leveraging Off-Line And Off-Balance Sheet Assets

Critical Components to Secure Market Capitalization Gains

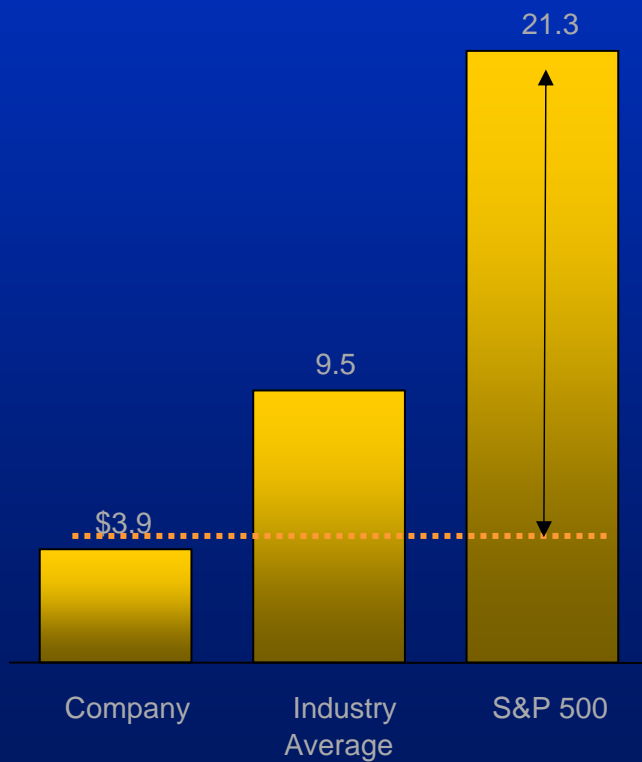


Setting Ambitious Targets

Market-to-Book Value
(Most Recent Quarter 2000)

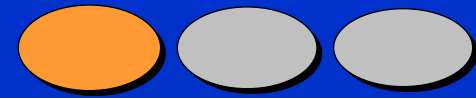


Market Capitalization (\$ Billions)
(Most Recent Quarter 2000)



- 1. Activation of hidden balance sheet assets
- 2. Effective utilization of physical assets
- 3. Innovative on-line presence

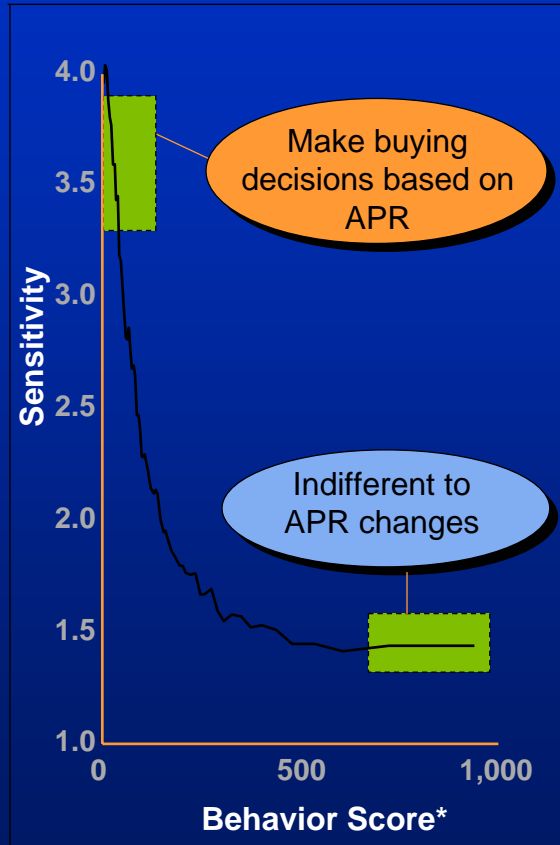
De-Averaging the Customer Base



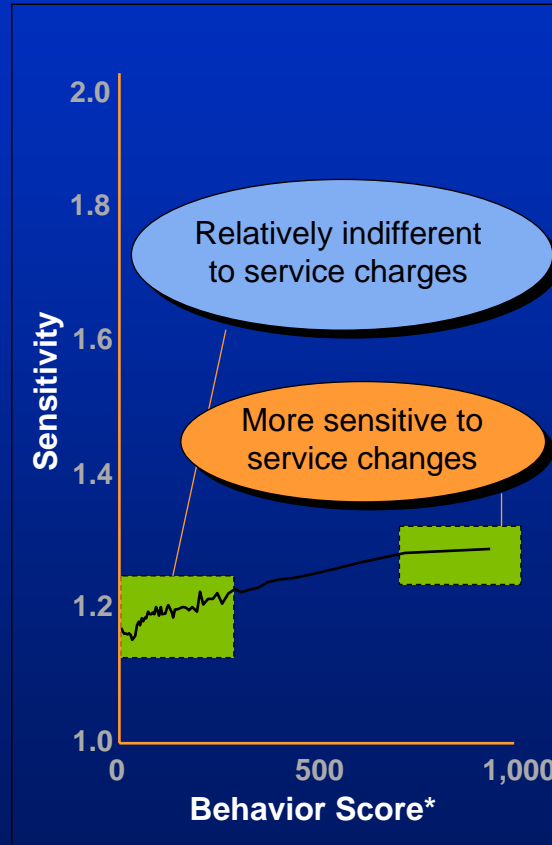
Disguised Client Example

Understanding Customer Value Perception (Credit Cards)

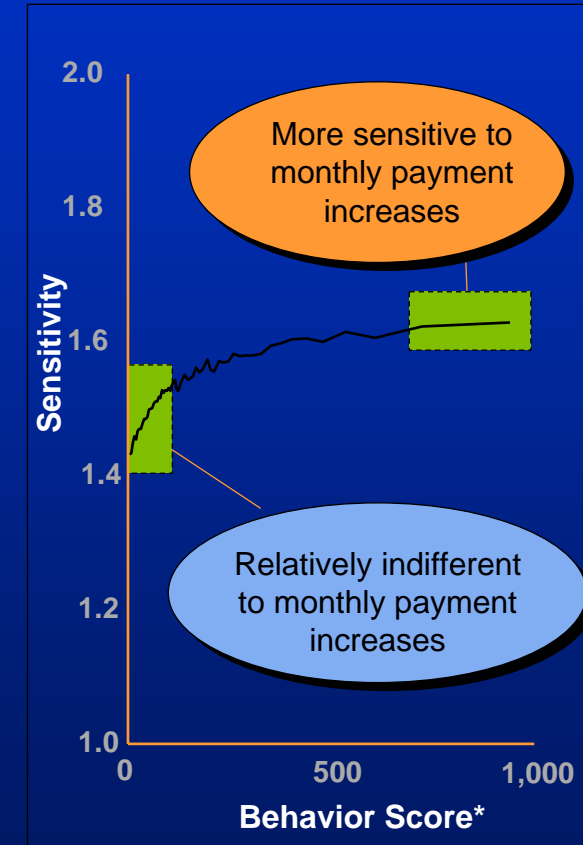
Sensitivity to APR



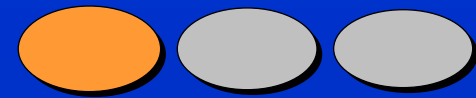
Sensitivity to Service Charges



Sensitivity to Monthly Payment

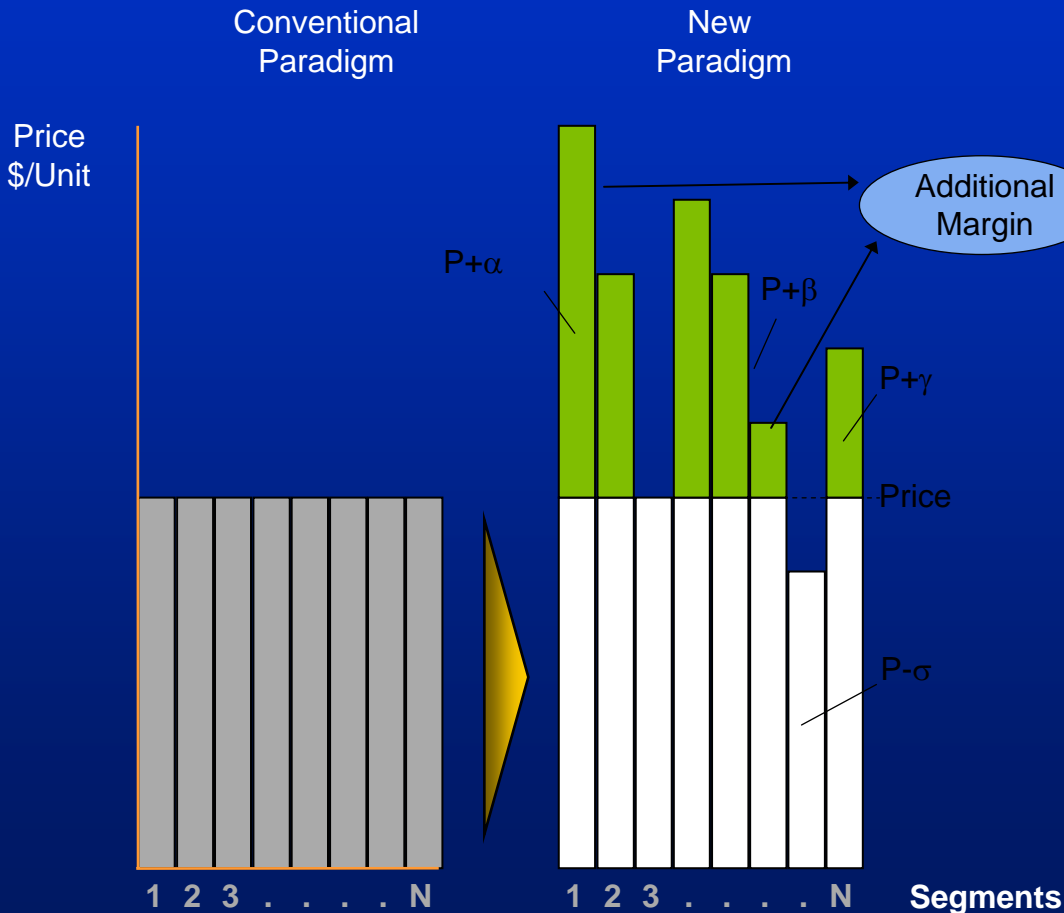


Unbundling Invisible Customer Requirements for Sustained Pricing Gains



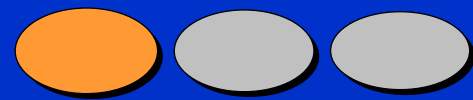
Illustrative

Revenue Effect by Hypersegment



Likely Options in the B2B Environment

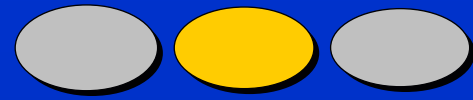
New Factors	Specific Actions
$\alpha =$ Technical Conoscent	<ul style="list-style-type: none"> • Pre-release technical announcements • Private chat site
$\beta =$ Convenience buyers	<ul style="list-style-type: none"> • Delivery timing • Free returns • Priority availability
$\gamma =$ Affinity Group	<ul style="list-style-type: none"> • Targeted mailing • Targeted media • Targeted timing
$\sigma =$ Pricing Anchors	<ul style="list-style-type: none"> • Price competitive on anchor item only to pull through high margin items



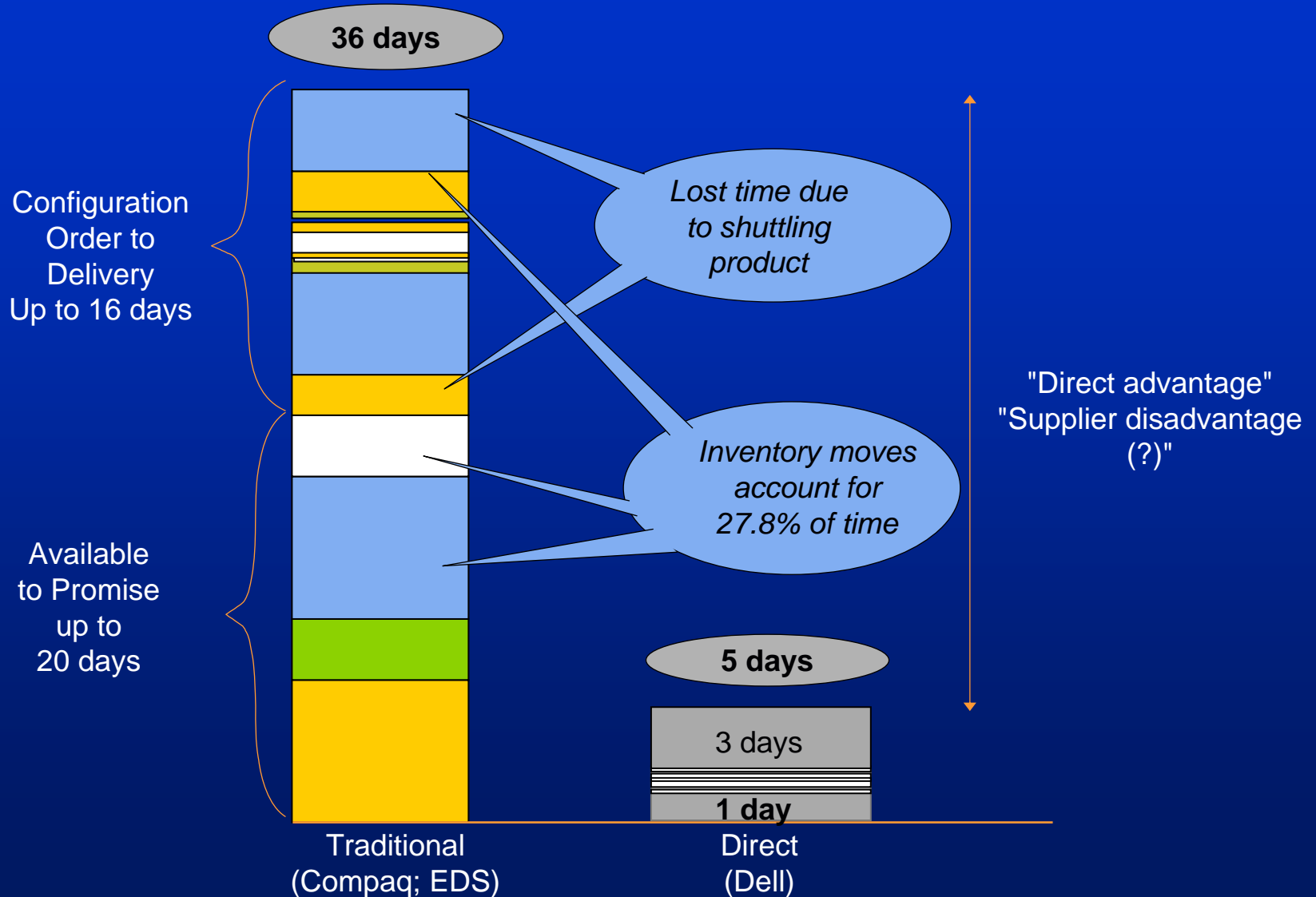
Customer Interface Mechanisms

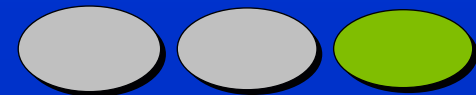
Mechanism	Definition
Personalization	User chooses content based on preferences
Cross-Selling/ Promoting	<ul style="list-style-type: none">• User chooses content; site suggests additional content• User gives preferences; site suggests content
Targeting	<ul style="list-style-type: none">• User does nothing; site gathers basic user info and suggests content by E-mail• Site suggests content via on-site promotion
Personalized Targeting	<ul style="list-style-type: none">• User provides detailed preferences; site delivers personalized content
Loyalty Programs	<ul style="list-style-type: none">• “Frequent Flyer”-type programs

Cycle Time Could Be Dramatically Reduced

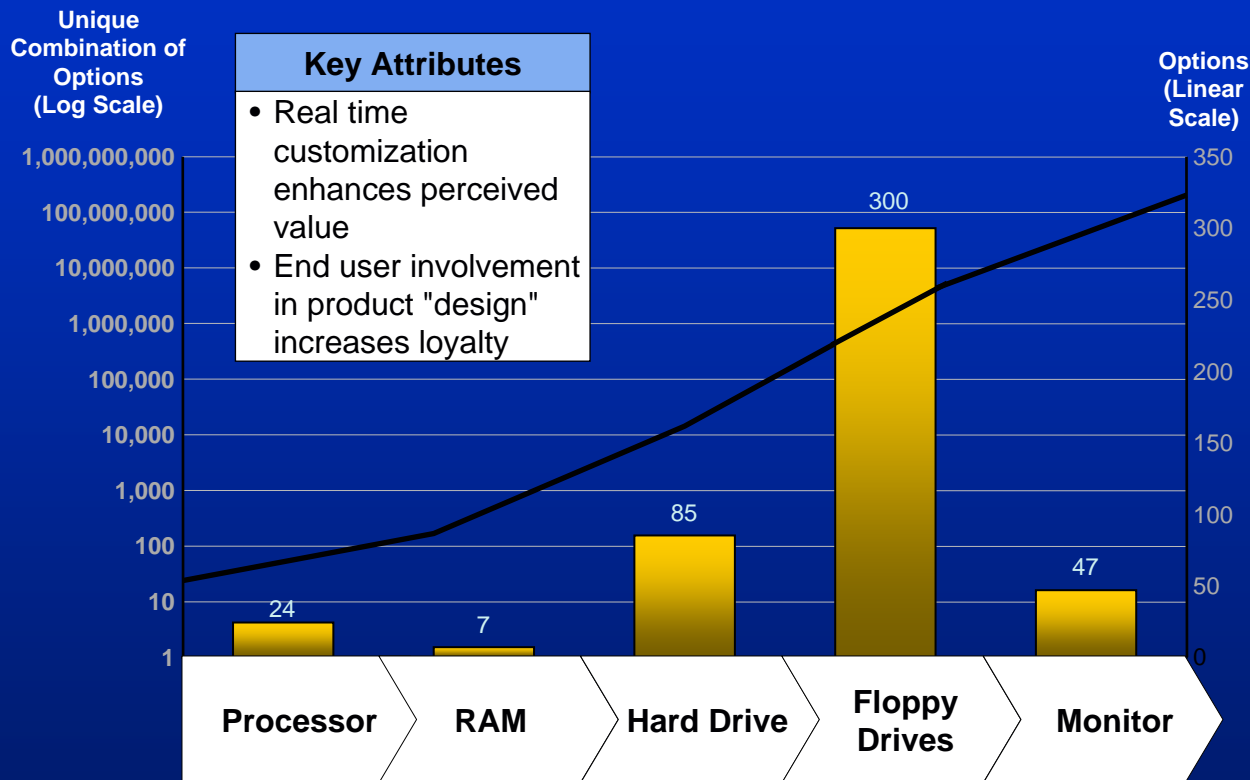


Cycle Time – Order Entry to Delivery





Customer Driven Configuration: Dell Computer



Key Attributes

- Real time customization enhances perceived value
- End user involvement in product "design" increases loyalty

New Paradigm

Over **200 million** possibilities between \$1,000–\$2,300

Versus

Old Paradigm "Bricks and Mortar"

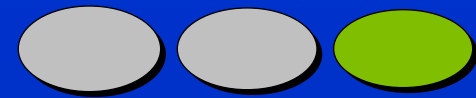
30-70 possibilities between \$1,100-\$2,300

* Main classes, over 1,500 memory options

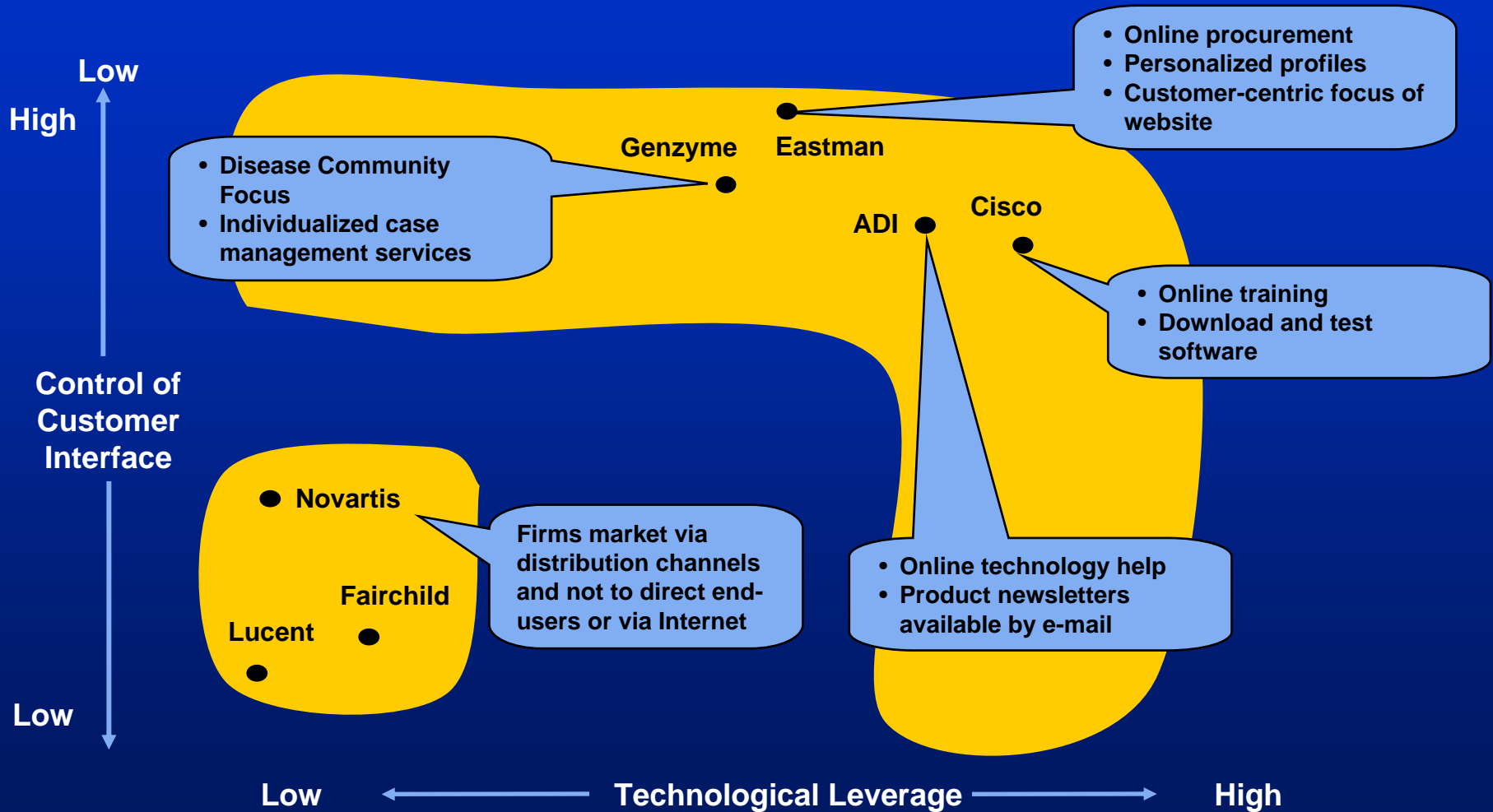
** Based on these 5 criteria actual total can be much bigger depending on peripheral selection

Source: Dell; Consumer Electronics Manufacturing Association; Partha S Ghosh analysis

The Path from R&D to Product Launch



Technology Leverage for Improved Customer Interface



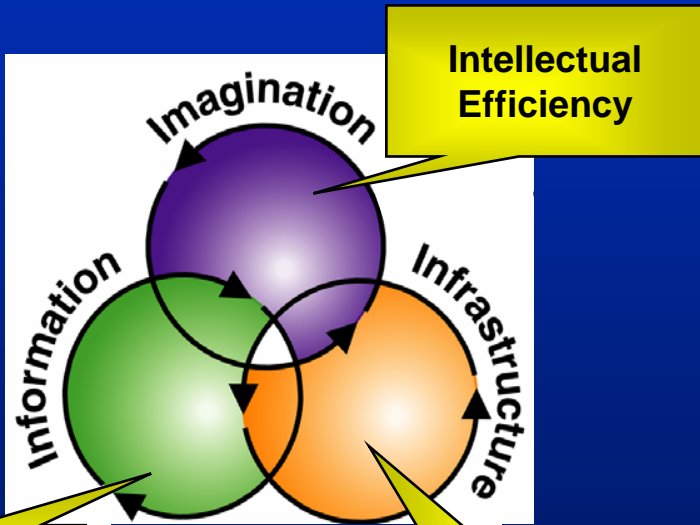
Source: company websites, Annual report, Partha S Ghosh analysis

Structuring to Secure Market Cap Gains

Rejuvenating Conventional Assets to . . .

. . . to create Extra-Ordinary Gains in Market Capitalization

Business Processes



Interface Efficiency

Capital Efficiency

Hidden Assets Activation

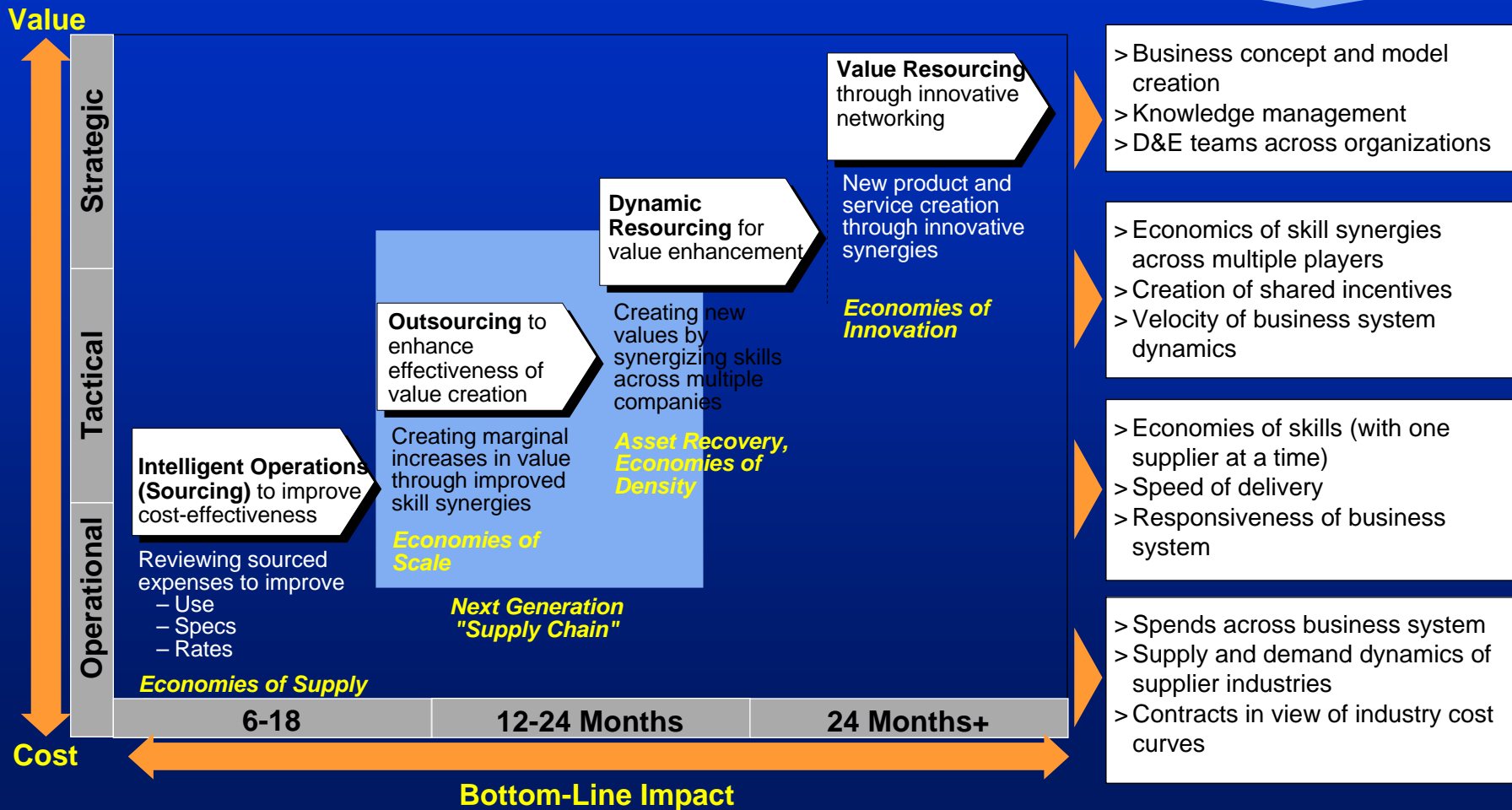
Physical Assets Leverage

Enhancement in Value Proposition

\$ Market Capitalization

The Industrial Practice has been helping clients use the Strategic Resourcing Framework to follow a step-by-step process to enable companies to develop "competitive networks"; Strategic Resourcing is the true embodiment of the emerging "network economics."

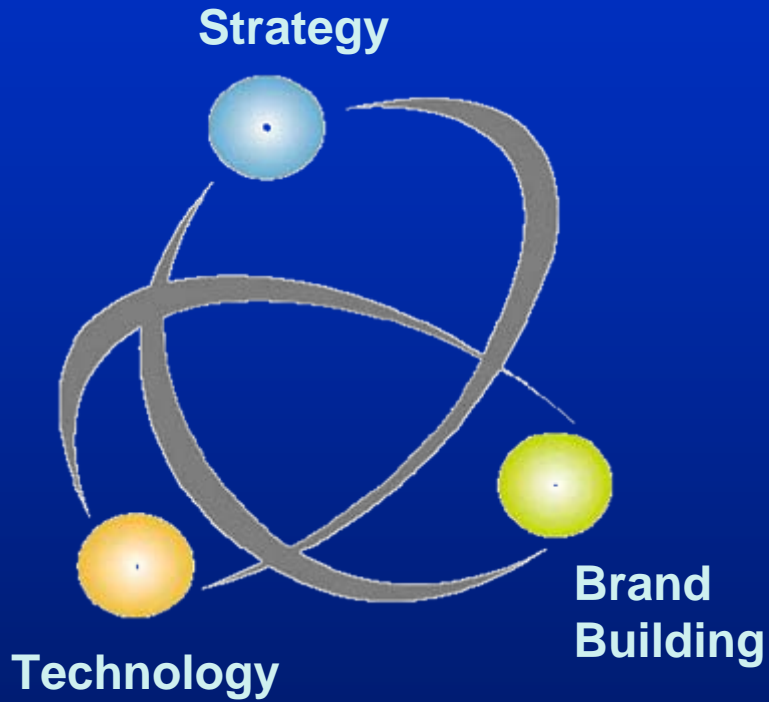
Evolution Dynamics of Strategic Resourcing



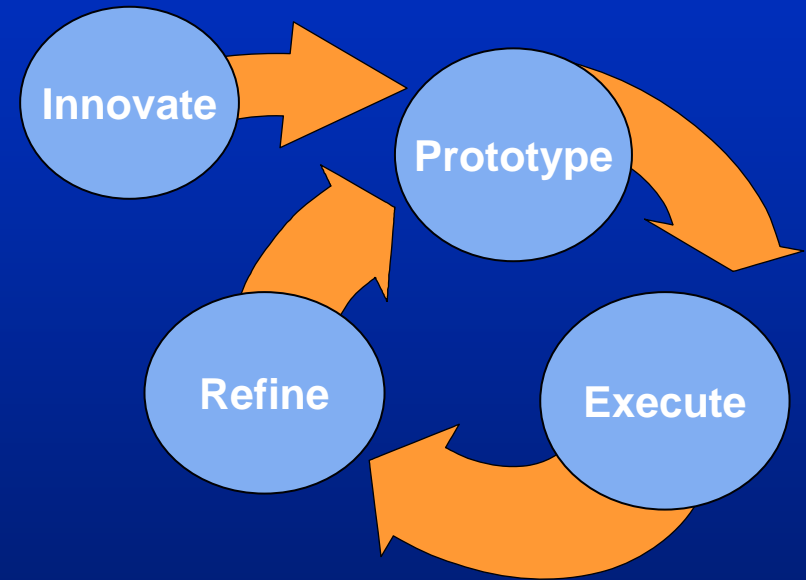
* Included in Appendix

Ensuring Value Addition Is Self-Perpetuating

Key Capabilities

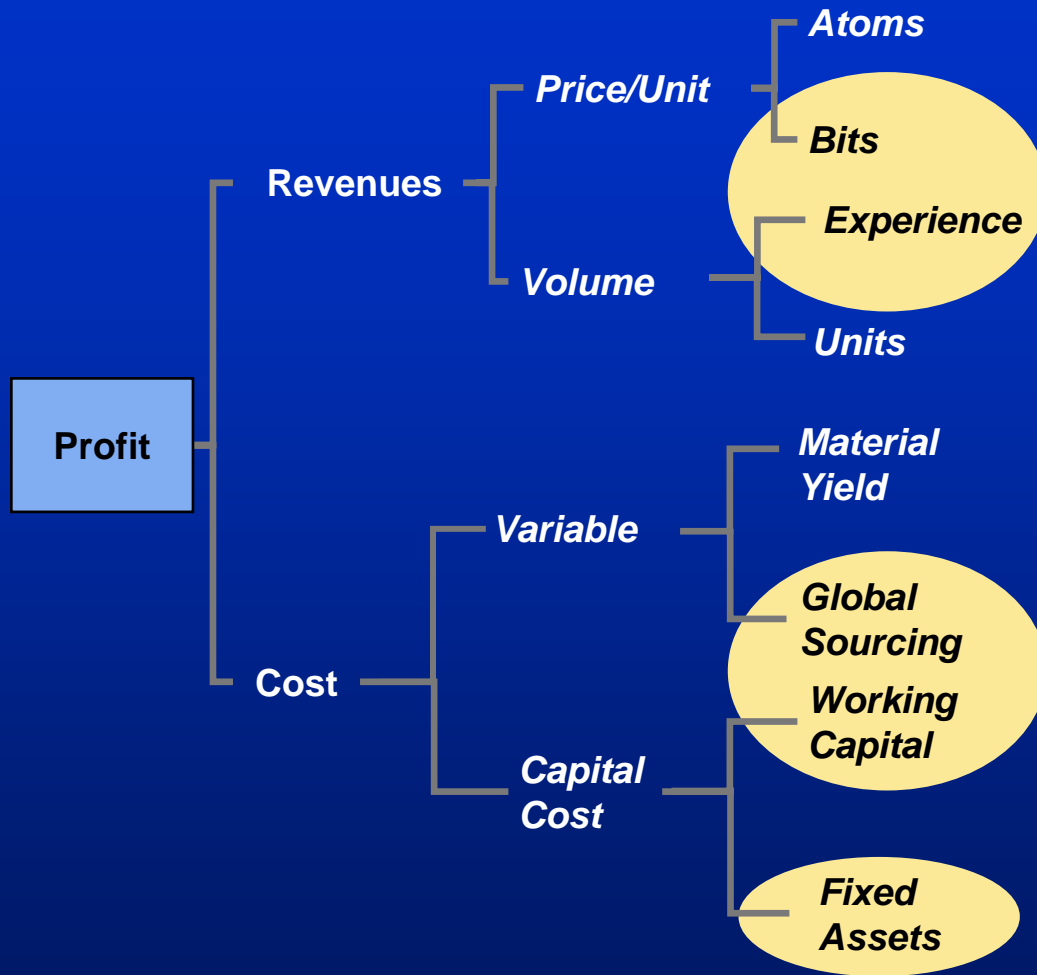


A Typical Problem Solving Approach



Realizing the “Upside”

P&L Revitalization



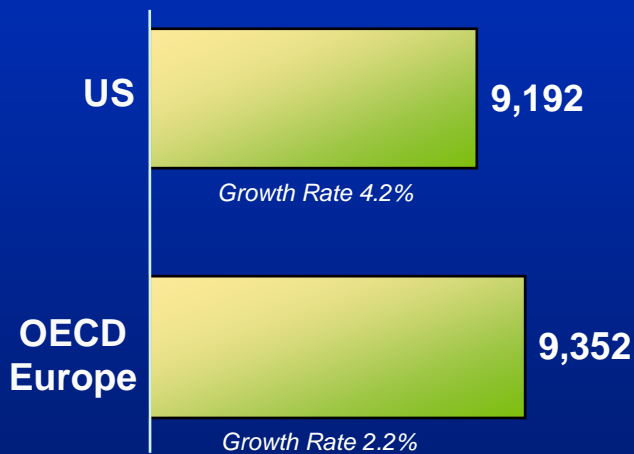
Balance Sheet Restructuring

Assets	Liabilities
<ul style="list-style-type: none"> • <i>Capital Equipment</i> • <i>Net Receivables</i> • <i>Cash</i> 	<ul style="list-style-type: none"> • <i>Net Debt</i> • <i>Shareholders Equity</i>
<hr/> <hr/>	<hr/> <hr/>
<div style="border: 1px solid black; padding: 10px; width: fit-content; margin: auto;"> <ul style="list-style-type: none"> • <i>Relationships</i> • <i>Knowledge</i> </div>	<div style="border: 1px solid black; padding: 10px; width: fit-content; margin: auto;"> <ul style="list-style-type: none"> • <i>Expanded Value</i> </div>
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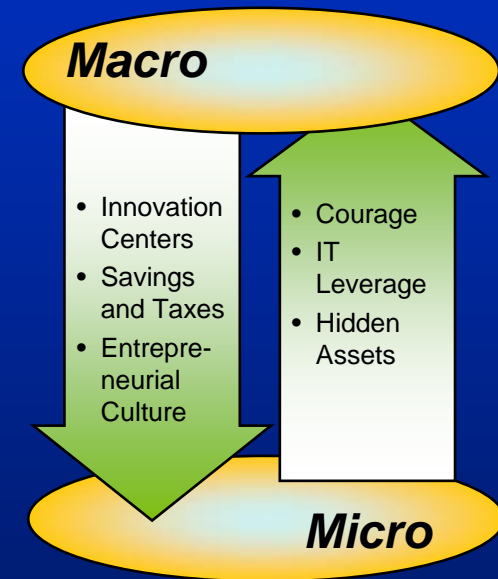
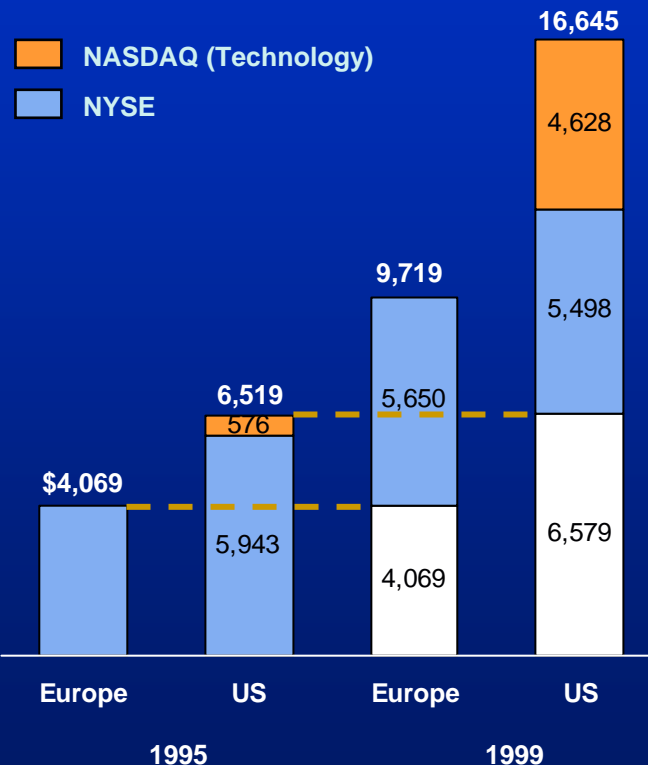
European Challenge: Creating Wealth Equal to Its Productive Capacity

Gross Domestic Product

1999 (Billions, \$US)



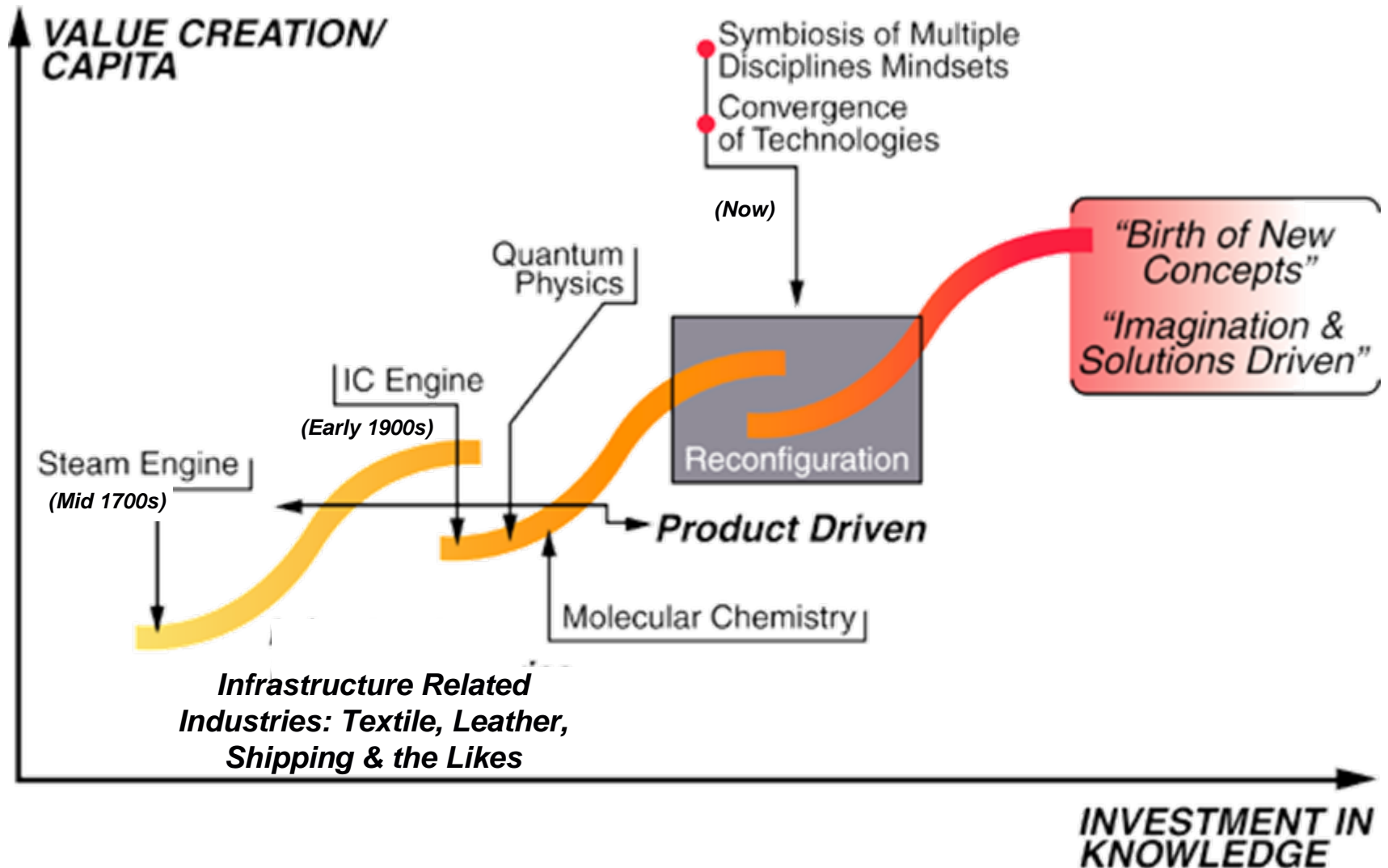
Market Capitalization



Source: OECD, NYSE, Duetche Borse, NASDAQ

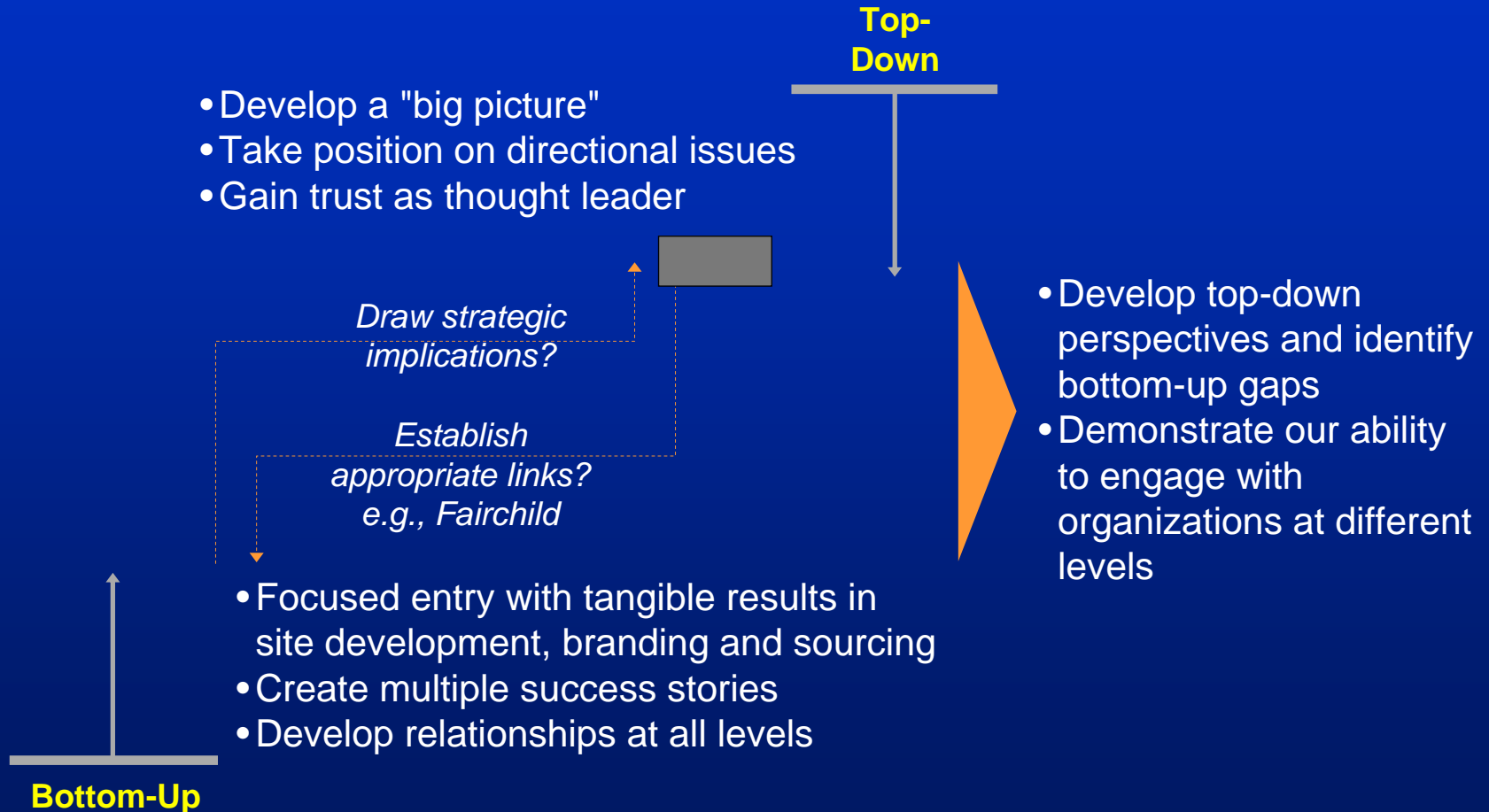
The New S-Curve: The Challenge of Transformation

Waves of Wealth Creation Possibilities

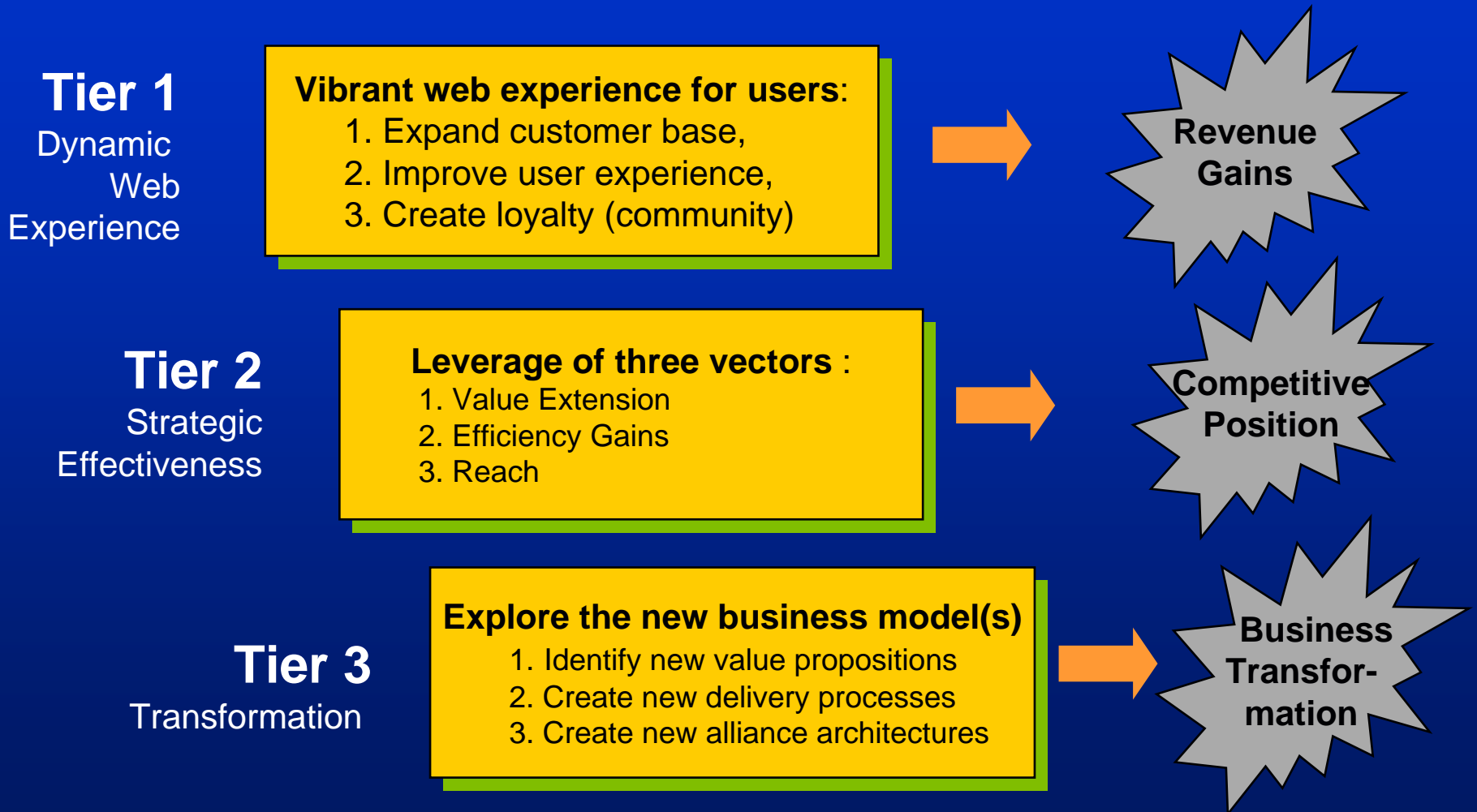


Relationship Building Strategy with Industrial Clients

We should consider to adopt both a "bottom-up" and "top-down" approach in building relationships in global industries.



Providing Clients with a Choice in the e-Space



Creating the Momentum for the Industrial Practice

90-Day Plan

Day 1

Day 90

Organize/Focus Existing Capabilities

- Intellectual Capital
- Existing Clients
- Geographic Leaders

Early Wins

Establish Near Term Priorities

- Industry – Focus insights and target clients
- Financial Plan
- People Plan – Building Scale

Focus On Growing

Build Practice Backbone

- Leadership Group – cover 80% of target markets
- Client Development Centers
- Knowledge Management
- Practice Calendar

Speed Growth

Gaining the Momentum

