

The Questionable Future of Supply Chain Management

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THE WARREN COMPANY

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Harvard Business School Publishing Supply Chain Challenges: Driving Growth & Profitability February 27, 2003











Real Stories About Supply Chain Management

- **Cisco Systems:** "Our key customer just demanded a 35% cut in price for our product. They said if we didn't, they would buy it in China instead." (Our warranty is bullet proof, our quality is second to none, our systems architecture is scalable, our product outperforms the competition, our R&D is cutting edge, and last year we enabled you to get into the market with a great product before the competition.)
- Medical Product Supplier to Johnson & Johnson: "Every year they demand a 5% cut in costs. So I cut costs, but they are not interested in any of my innovations that would increase their sales dramatically."
 - **Firestone:** A 50 cent belt on the tire would have prevented nearly all the blowouts and saved Ford billions of dollars. Instead nearly 300 people are dead.
 - **General Motors in 1990s: "**We squeeze our suppliers" "Our warranty costs are higher than our profits" "Our market share has been slipping for years"
 - **Suppliers about General Motors in 1999: "**We subsidize General Motors" "There's no profit in it" "We don't drive GM cars because we know what goes into them" **in 2002:** "We have left the automobile industry" "We will not engage in the e-bidding debacle; they don't want our innovation"
 - **Large Chemical Company**: "Years of Squeezing our suppliers has decimated our supply base; they're now working for the pharma companies." "We're late to market too often." "Our new Procurement VP just demanded we get a 15% price cut from our suppliers!"
- Large Hi-Tech Company: "Seven years ago there were 21 suppliers of resistors and capacitors. Now only 3; and 2 are on the ropes."
- Large Manufacturer: "Most of our European container suppliers are now out of business."
- Bicycle Manufacturer: "We were number one in our segment. Our supplier of seats came to us each year with new innovations, but we turned them away, seeking price cuts instead. They went to our competitor with the new ideas, who was then #2. Now they are #1, and we are #2."

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The Mistakes We Repeatedly Make

Focus on:

- Tactics and Tools
 Not Strategy & ReEngineering
- Price & Power, Not Innovation, Speed, and Integration
- Destruction of Supply Base by Win-Lose Not Problem Solving & Synergy in the Value Chain
- Raping Suppliers, Onerous Terms & Conditions, Not Building the Supply Base as a Competitive Weapon





Key Principles

- 1. Cost Cut to Survive, INNOVATE TO PROSPER
- 2. VALUE CHAINS are the Future Competitive Battleground
- 3. Supply Management is a STRATEGIC CORPORATE FUNCTION
- 4. RENGINEERING OF VALUE CHAINS is Essential
- 5. Not all Suppliers are Equal; TRIAGE the SUPPLY BASE
- 6. ECONOMICS of ABUNDANCE is Essential to Understand this Shift
- 7. TRUST & ETHICS are a Competitive Advantage
- 8. METRICS Must Change



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Cost Cut to Survive INNOVATE TO PROSPER





Pathway to Prosperity

Cannot Cost-Cut to Prosperity

- Tactical Gains
- Short Term Fix
- Power is a Poor Substitute for
 - Vision & Value Creation
 - Arthritic Value Chains
- Value Chain Reengineering Required
 - Strategic Fix
 - Bigger Pie, Build Value
 - Beat Competition
 - » Differentiation
 - » Speed, Integration, Solutions
 - » Innovation

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Change the Rules of the Game Make Innovation your Priority

- University of San Diego Supply Chain Management Study of 244 companies:
 - 35% of All Product Innovation Comes From Suppliers.
- Evidence Shows That the Best Companies Derive Upwards of 60% of Their New Product Innovation From Their Supply Chains.

Are Your Buyers Demanding Innovation from you?
Are You Demanding Innovation from your Suppliers?
Does Anyone Measure and Reward Innovation?

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Change the Currency from Price to Innovation



- Product Improvements
- Service Improvements
- Technology Improvements
- Forecasting Improvements
- Value Creation
- Productivity Improvements
- Quality Improvements
- Speed/Cycle Time Improvements

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- New Processes
- New Products
- New Services Delivery Capacity
- Integration of Solutions & Systems
- New Core Technologies
- New Delivery Mechanisms
- Technology Breakthroughs
- Effective Use of Information
 Faster Adaptation

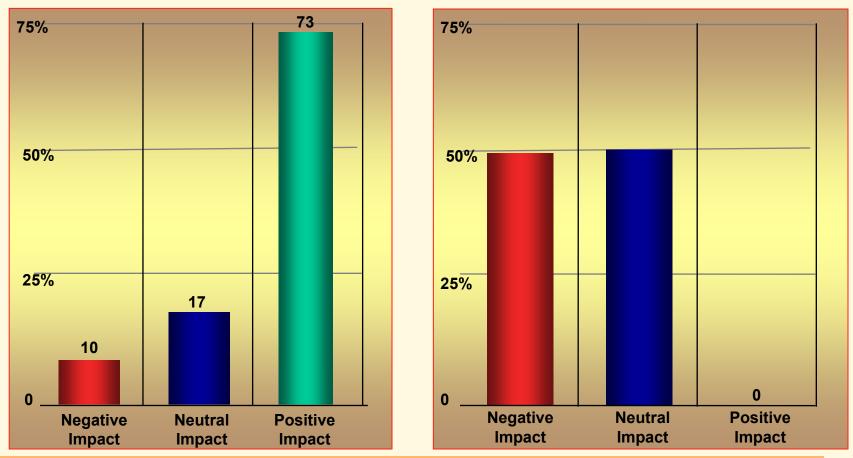




Alliances as Engines of Innovation

Impact of **Alliances** on Innovation

Impact of Mergers & Acquisitions on Innovation



The Questionable Future of Supply Chain Management Source: 2002 Ministry of Economic Affairs in the Netherlands

-University of Einhoven Study Extensive literature review on the available empirical studies regarding the effect of strategic alliances and mergers and acquisitions on innovative performance







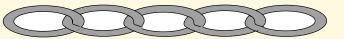
VALUE CHAINS Are the Future Competitive Battleground!

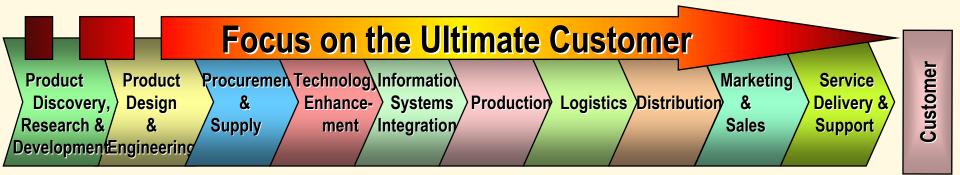




Creating Competitive Advantage

Ultimately, Competitive Advantage is a Battle of Value Chains





The Race will go to the Thoroughbreds -- Swiftest & Best of Breed (Best of Breed is not Price!)

This is a STRATEGIC GAME

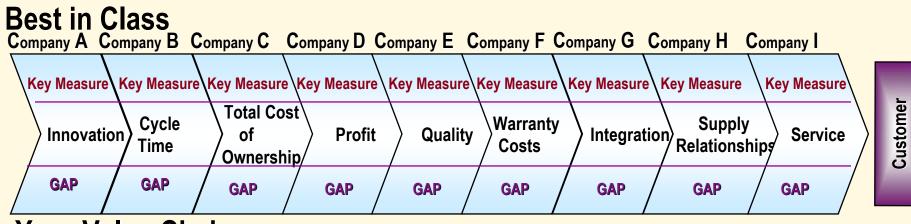
Requires Sponsorship and Direction from the Highest Levels in the Corporation "To delay will mean either you will be left with second class partners in a world class game, or you'll be playing single in a doubles match."

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Creating Competitive Advantage Benchmarking Key Metrics



Your Value Chain

- What are the Key Metrics?
- Are You Best In Class?
- How Far Behind Are You?
- What Does it Cost to be Less than Best?
- Are you using Total Cost of Ownership?
- Do you have Multiple Channels to Market?

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Competitive Advantage.....

Is aimed at Positioning Your Company to Thrive and Your Customer to Thrive



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When we don't think about Competitive Advantage...... When there is no focus on Innovation & Cooperation.....

- Everything Defaults to Price, Power, & Dominance
 - Squeeze the Vendor
 - Reward Cost Cutting
 - Destroy the Supply Basex







Supply Management is a STRATEGIC CORPORATE FUNCTION





Why Supply Must Be a Corporate Function

Trends:

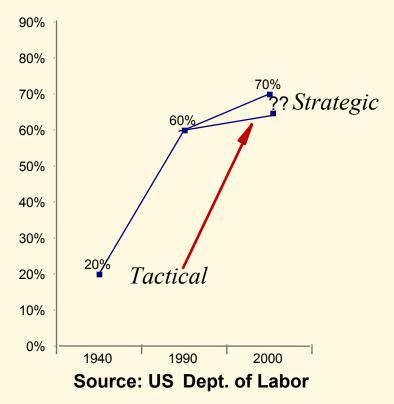
- Massive Shift from 1940-2000
- Sourcing/Supply is a Strategic Weapon (60-70% of your Budget Makes it Strategic)

Corporate Executives Should Be Involved

- CEO
- CFO
- COO

Must Use Best Processes & Practices

Percentage of Goods & Services Purchased from Outside Suppliers



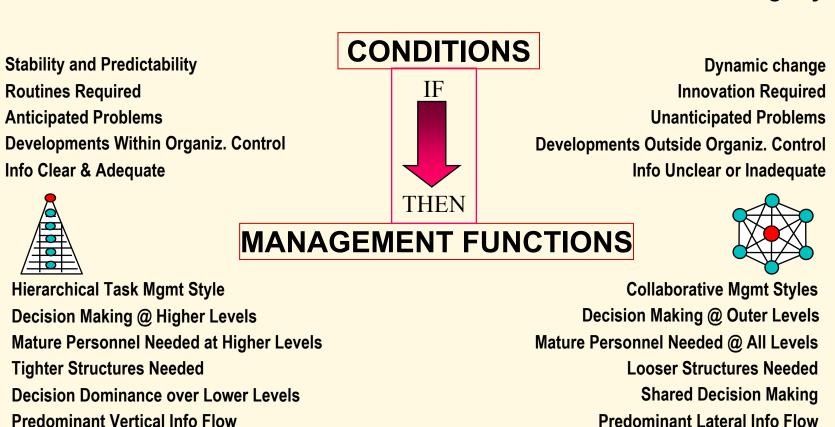






Ambiguity-Certainty Continuum

Certainty



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Ambiguity



Critical Shifts in Organization Structure

Managing Ambiguity & Certainty

(Work in Progress – Your Ideas are Encouraged!)



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Am	big	uity

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Situation is Repetitive Covered by Rules	Situation is Complicated, Multiple Forces	Situation is Complex, Interconnected	Situation is Chaotic, Paradoxical,
Issues Known and Stable Future is Relatively Predictable	Issues Can be Known Future is Probable	Multiple Unknowns Future is Vague	Multiple Unknowns & Changing, Future is Unknown
Impose Laws, Rules & SOPs	Impose Guidelines/Forecasts	Impose Best Process/Practice	Impose Principles
Proven Operating Procedures Stability is Desired/Possible	Use Judgment & Experience Decision Making Criteria	Use Intuitive Thinking Trust is Essential	Use Creativity & Intuitive Thinking, Prolific Innovation
Decide by Reason/Rationality	Analysis of Components	Examine Scenario Options	Create/Influence Scenarios
Everyone Follow the Book/Contract	Use Intelligence & Knowledge	Rely on Wisdom & Principles	Wisdom & Creativity
Focus on the Right Answer, Optimize Efficiency	Focus on Key Priorities Gain Proficiency	Focus on Systems Interaction Manage Interfaces	Focus on Opportunities & Questions, Aim for Zone
Reward Right Behavior Accept No Deviation	Use Teamwork & Alignment Cross Functionality	Flexibility & Coordination Adaptive Frameworks Needed	Rapid Response Teams & Multiple Rapid Experiments
No Tolerance of Differences	Tolerance of Differences	Support & Value Differences	Nurture Differences
Efficiency, Return on Investment	Continuous Improvement	Quantum Jumps in Productivity	Breakthrough Paradigm Shifting
Position in Existing Markets	Multiple Market Forces	Changing Market Conditions	Incubate Emerging Markets

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Portions Adapted from David Snowden, IBM Centre for Organizational Complexity



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REENGINEERING OF VALUE CHAINS Is Essential





10 Critical Architectures for Value Chain ReEngineering Solution-Set Tool-Kit

1) Value Mapping

2) Benchmarking

Analysis



- Identify where Value is
- Created, Lost, Destroyed, or Opportunities are Overlooked
- Value Chain Flow Analysis
- Core Process Analysis

Critical Measures

Competitive Analysis

Future Benchmarking

Best In Class Standards

- Strategic Analysis
- Leverage & Control Points

3) Systems Costing

- Total Cost of Ownership
 - **Target Costing**
 - **Continuous Cost Improvement**
 - Econometric Modeling

4) Non-Value Added Elimination

- Duplication & Needless Transaction Elimination
- Differentiation-Integration
 Analysis
- Frictional Cost Analysis

5) Interface Improvement



- Breakdown Points
- **Misalignments**
- **Cross Functional Interaction**
- Information Flows



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10 Critical Architectures for Value Chain ReEngineering Solution-Set Tool-Kit

6) Cycle Time Acceleration

- Cycle Time Analysis
- Time to Market
- Leading & Lagging Indicators
- Forecasting Impacts

7) Continuous Innovation

- **Co-Creation Capacity**
 - Designing Breakthroughs
- Process Improvements
- Strengths from Differential Addition

8) Alliance Relationship Building



- Strategic Alignment
- Win-Win & Trust
- Shared Risks & Rewards
- Operating Linkages
- Flexible Agreements

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9) Network Systems Design



- Strategic Portfolio Alignment
- Leadership & Championing
- Organizational Integration Design
- Performance Processes
- Econometrics

10) Performance Measurement



- Measurement
 - Strategic Metrics (STROI)
 - **On-Going Diagnostics**
 - Hi Performance Standards
- Best Practice Benchmarking
- Realignment of Rewards
- Alliance Functioning
- Knowledge Transfer







Not all Suppliers are Created Equal, TRIAGE the SUPPLY BASE





Triage the Supply Base



- Vendors (Commodities)
- Preferred Suppliers (Category Relationships)
- Alliances (Strategic Advantage)



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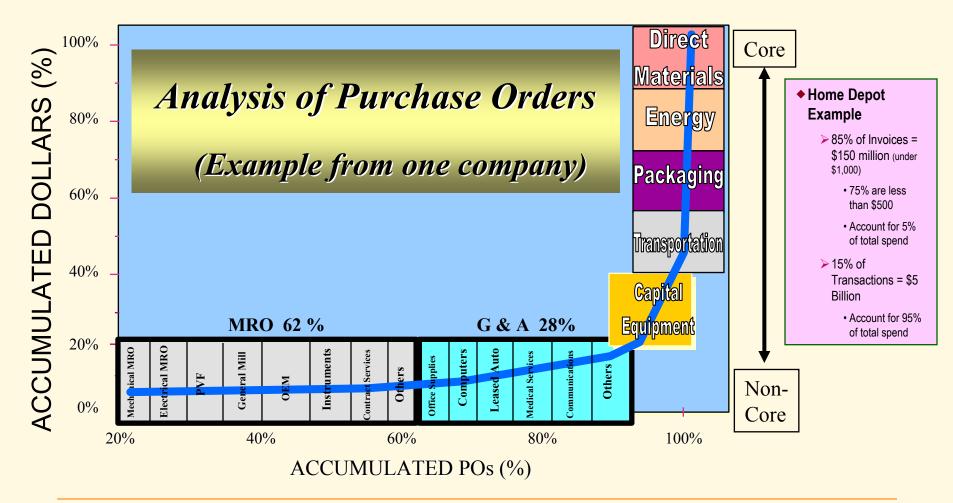


Strategic Spectrum for Supply Management Relationships

FACTOR	VENDOR	PERFERRED SUPPLIER	ALLIANCE
VIEWED AS:	Replaceable Commodity	Unique Specialty	Integrated, Customized Specialty
LEVEL OF INTEGRATION	Low/Not Integrated	Loosely Integrated	Highly Integrated or Inseparable
NUMBER OF SUPPLIERS	Many Suppliers	Several Suppliers	Very Few Suppliers
DISTINGUISHING FEATURES	Mainly Price Driven within min. Quality Standards.	Price plus unique offering (i.e. technology, service, etc)	Synergistic Value Proposition (i.e. mutual growth, etc)
STYLE OF INTERACTION	Tactical Transaction	Preferred and/or Tactical Relationship	Strategic Synergy
DURATION OF TERM	Short Term	Medium Term	Long Term
VALUE PROPOSITION	Price and acceptable quality	Price, superior quality, and excellent service	Strategy, Cost, Quality, Reliability, Speed, Innovation, and more
FRAMEWORK FOR WINNING	Winning is essential for me, What happens to you is your business	A Win is essential for me, and I know I should let you win too if the relationship is to survive	A Win/Win is essential for both of us and is critical if the relationship is to thrive continually
COMPETITIVE ADVANTAGE	Low Competitive Advantage	Moderate Competitive Advantage	High Competitive Advantage
MAKE, BUY, OR ALLY DECISION	Seldom produced internally (not a core competency)	Often Produced Internally (debatable core competency)	Frequently has been an integral part of the internal value chain
TRUST LEVEL	Distrust Prevalent (caveat emptor)	Trust is important to managing the relationship	Trust is essential to generating a continuous stream of new value
DIFFICULTY OF EXIT	Low Impact, Excellent Ability to Switch Vendors quickly	Moderate Impact	High Impact, Switching may have detrimental impact due to disintegration of systems
STRATEGIC ENVIRONMENT	Cost Driven Low Product Differentiation TCO is non-critical Relationships not important	R&D is a Distinguish Value Applications Focus Provider of Performance	Discontinuous Change in Buyer's Industry Fast Time To Market is Essential Innovation & Integration Essential







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Source: Ted Ramstad, The Warren Company Debbie Rich WalkerPurchase Card Administrator, Home Depot





Sourcing Alliances

Core

- Mission **Centric** The Function is **ESSENTIAL** to our success:
 - One of our Key Market
 Differentiators
 - Essence of our
 Competitive Advantage
- Absolutely **Integral** to Support the Mission
- We *must maintain* a World Class Competency in order to sustain our Competitive Advantage

Shared Core

- **Mission** Critical The Function is FUNDAMENTAL to our success:
 - Closely Tied to our Core Functions
 - Not one of our Key Market
 Differentiators
 - Not the Essence of our Competitive Advantage
- Highly Integral Must Maintain Organizational Connectivity Tight Connection to our Organization and Core Competencies is Essential .
 Cannot and must not split the provider functions away from your mainstream business.
- A World Class Competency would provide real competitive advantage, however, we are not be able to justify economically a World Class Competency in this area of our business

Non-Core

- Mission Peripheral The Function is SECONDARY to our success:
 - Useful but not Essential
 - Usually a Support
 Function
 - Can be provided by a variety of specialists
- Easily Separated away from the Organization
- Maintaining a World Class Competitive Advantage is not of high importance.



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The Area for Sourcing Alliances The Questionable Future of Supply Chain Management



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Don't Kill Your Supplier!!!! Nurture the BEST!



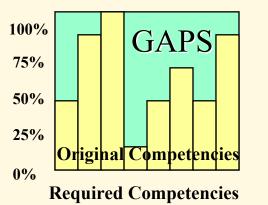


Supplier Alliances Partner Selection & Supplier Development Strategy

Year One



Year Three



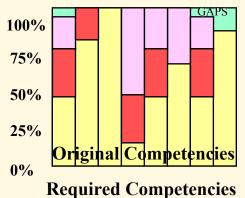
 100%
 GAPS

 75%
 GAPS

 50%
 Gaps

 25%
 Original Competencies

 0%
 Required Competencies



Shift from Vendor-Based Relationships to Strategic Alliances requires that:

Suppliers Must be Developed, Nurtured, Rewarded, and Focused

Multi-Dimensional Approach

- Quality Assurance Visits
- Supplier Monthly Seminars
- Top Management Business Meetings
- Training Classes
- Supplier Study Groups
- Supplier Quality Circles
- Supplier Performance Reporting
- Supplier Conferences

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If Business is Warfare, Then....

- Let Your Competition Destroy Their Supply Base:
 - > By Ruinous Squeezing of Their Supplier's Margins,
 - Forcing their Suppliers Into Alternative Markets With More Compassionate Customers
- Ultimately Deprive Your Competition of Their Logistic Lines of Supply



	Power & vers Price SPECT	Conparation
FOCUS	Power	Customer
MANAGEMENT STYLE	Control	Coordination
RELATIONSHIP	Position Against	Competitive Adv. For/With
CURRENCY	Price	Innovation
MANAGEMENT CENTER	Procurement	Senior Executive
INTEGRATION	Low	High
NEGOTIATION STYLE	Win-Lose, Auction	Win-Win, Co-Creative
KEY METRIC	Price/Cost	TCO/TCV (Total Competitive Value)
RISK/REWARD	Shed Risk, Horde Reward	Share Risks & Rewards
SCOPE	Component Buying	Systems/Solutions
INTELLECTUAL PROPERTY	Buyer Based, Protectionist	Mutual Interchange, Expansionist/Regenerative
NVA	High-Medium	Low
TRUST	Low/None	High
ORGANIZ. FORM	Contract	Alliance
ULTIMATE END	Force Supplier Out of Business	Focus Supplier to Innovate
RESULTS	High Warranty Costs	High Customer Advantage

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ECONOMICS OF ABUNDANCE Are Necessary to Understand the Shift





Two Different & Interactive Economic Systems

Traditional Economics of Limits & Scarcity

Things that are Expendable:

(they get converted, used up, disappear, and are either inherently useless or have significantly diminished utility once it is gone):

- -Hardware and Equipment
- Time
- Commodities, Fuel, Electricity, etc.
- Materials for Production
- -Money

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Non-Traditional Economics of Abundance & Prosperity

- Things that are
 Expandable: (and don't get used up the more you use them):
 - Software
 - Technology
 - Networks & Information
 - Innovation and Breakthroughs
 - Teamwork, Trust & Cooperation
 - Communications
 - Caring, Happiness, Compassion

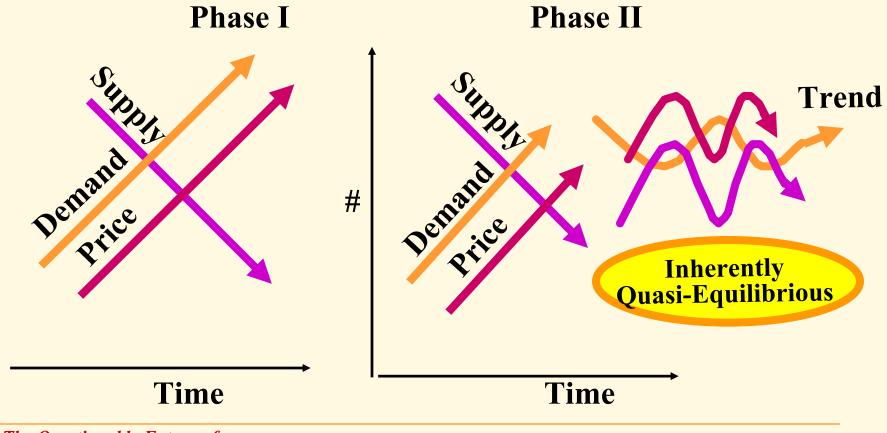




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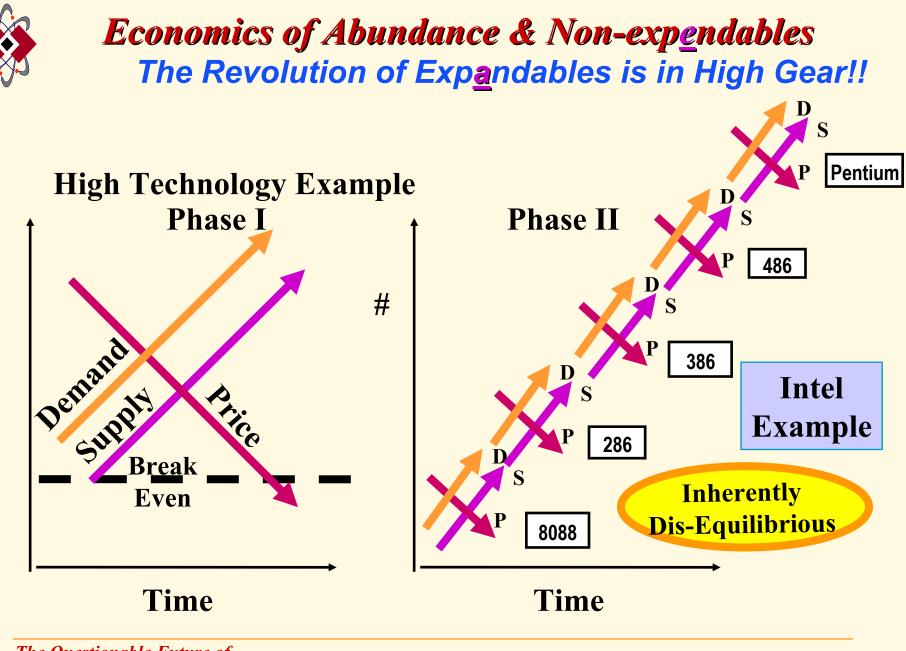
Traditional Economics

Economics of Limits and Expendables



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The Parallel Economic Systems

The Economics of Limits-Expendables exist side-byside with the Economics of Abundance-Expandables

- Integration & Synergy require the measuring of effective use of resources in <u>both</u> economic models simultaneously
- Tremendous Value Creation occurs when both economic models are working in harmony with each other.

Because Abundant-Expandable Systems have economic Supply-Demand-Price relationships that are inherently Dis-Equilibrious, they create a situation where stagnation and static behavior will not be sustainable in a highly competitive environment.

Therefore, in fast changing strategic environments, only Dynamic, Regenerative, and Breakthrough behaviors will create sustainable competitive advantage.







Contrasting Two Different Schools of Thought from the Parallel Economic Systems



- Immediate Viewpoint: Survival -- My
 intellectual Property is MINE
- I will protect the property with Legal Means, penalties, and Litigation
- You pay me Royalties and a Licensing Fee
- Horde, Defend, & Protect
- Patent Protection, Non-Compete, Exclusivity
- Legal Doctrine
 - » Owner enforces
 - » Clear ownership
 - » Rights to market, sell, etc
- This works best in a Slow Moving world where the technology has long lifetimes

Generative New School of Thought

- Future Viewpoint: Co-Generation of the Next Generation is Essential for Thrival
- Regeneration/OPEN Systems
- Optimize Value thru Know-How
- Collaboration Extension
- License old technology, Cross License
- Share & Proliferation
- Joint Patents, Joint Development Agreements, Tech Transfer, Joint Ownership
- Fairness Doctrine
 - » Deepest Interest Enforces
 - » Change terms to keep Win-Win
- This works best in a Fast Moving world where the technology has a short lifetime









TRUST & ETHICS

Are a Major Competitive Advantage







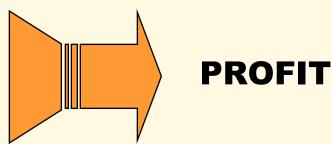


Rule: Trust and Ethics are:

- Foundation of All Cooperative Enterprise
- Pivotal to Co-Creative Innovation
- Essential in the Fast Time, Networked World
- Massive Competitive Advantage in the Age of Speed & Innovation

What Trust Provides

- More Creativity & Synergy
- Speedier Action
- Expansion of Possibilities
- Enhanced Problem Resolution
- Lower Transaction Costs
- Lower "Risk Profile



Corollary: Intellectual Property is only as safe as your ability to create the next generation





10 Commandments for World Class Supplier Alliance Partner Honesty & Performance

1. Aligned Strategies

- Focus on the Customer
- How to Beat the Competition
- Make Innovation a Major Priority
- Next Stage of Evolution

2. Mutual Responsibility to Gain Continuous Improvements

- Process Improvements
- Technology Improvements
- Fast Cycle Times
- Elimination of Non-Value Add
- Emphasis on Competitive Advantage

3. Begin with a Pilot Project

- Demonstrate ability to get Results
- Test and Create Evidence

4. Build Trusting Relationships

- Share Personnel to build trust relationships
- Signed Statement of Principals & Understandings &
- Charter of Expectations
- Champions build Relationship
- Exile those who Lack Integrity

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- 5. Use Alliance Best Practices for Formation & Management
- 6. Insist on Top Rank Commitment and Continuity of Champions

7. Fair & Clear Rules of Engagement

- Commitment to Win-Win
- Co-Creative Negotiations
- Open Books
- Mutual Shared Risk and Mutual Shared Reward

8. Performance Econo-Metrics

- Total Cost of Ownership & Total Value
- Benchmark Regularly
- Ensure Highest Performance Standards
- 9. Regular Evaluation of Progress

10. Rapid Problem Resolution

- Clear Process
- Turn Breakdowns into Breakthroughs
- Focus on Learning not Blame
- Transform Problems into Opportunities



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METRICS MUST CHANGE To Reflect Shifts in Thinking







Value of Metrics Drive Strategic Performance Motivate Mind to Action

If you can't Measure It, You Can't:

- » See It
- » Drive It
- » Manage It
- » Change It
- » Resource It
- » Value It
- » Reward It
- » Negotiate it
- » Sustain it
- » Celebrate it
- » Align it

Interview with Bob Eaton, just retiring from Chrysler:

- **Our alliances:**
 - > were invaluable

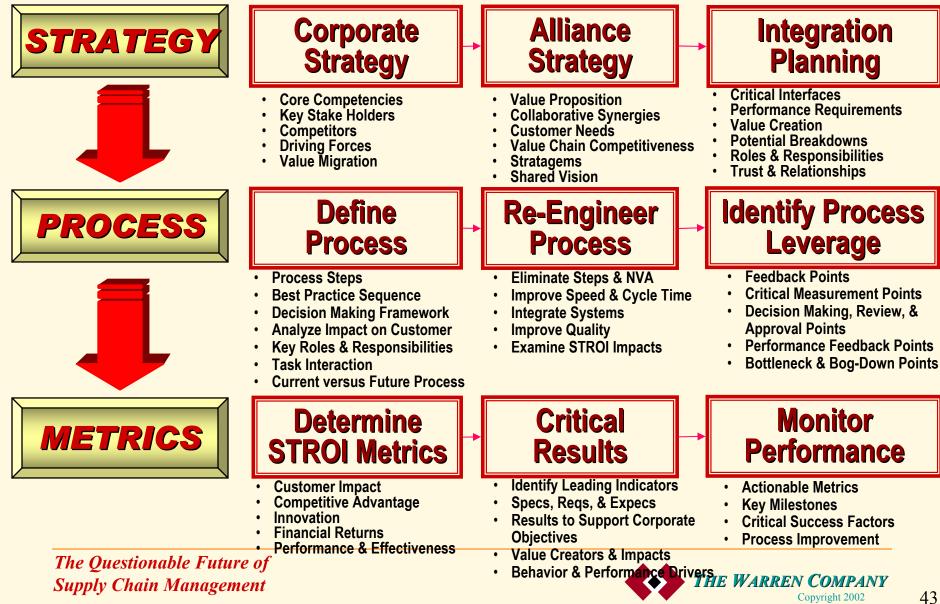
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- They brought us a continuing stream of innovation
- we did not measure their economic impact



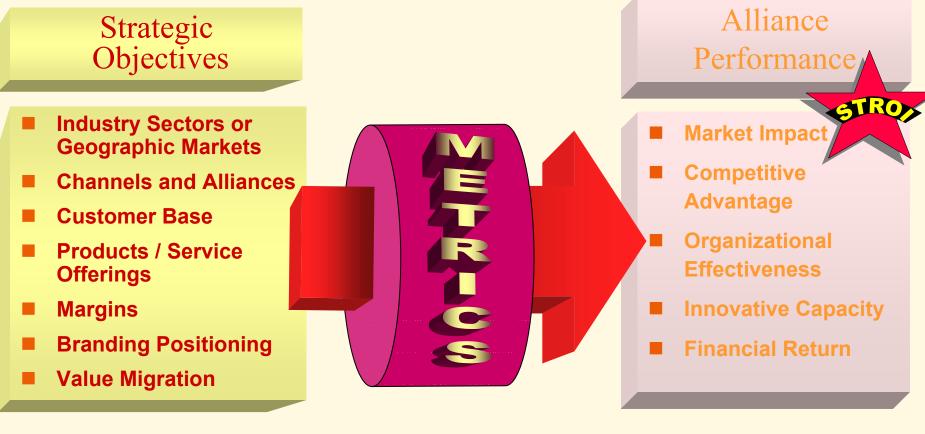


Developing Accurate Metrics





What are the Right Metrics? Linkage of Strategy to Performance



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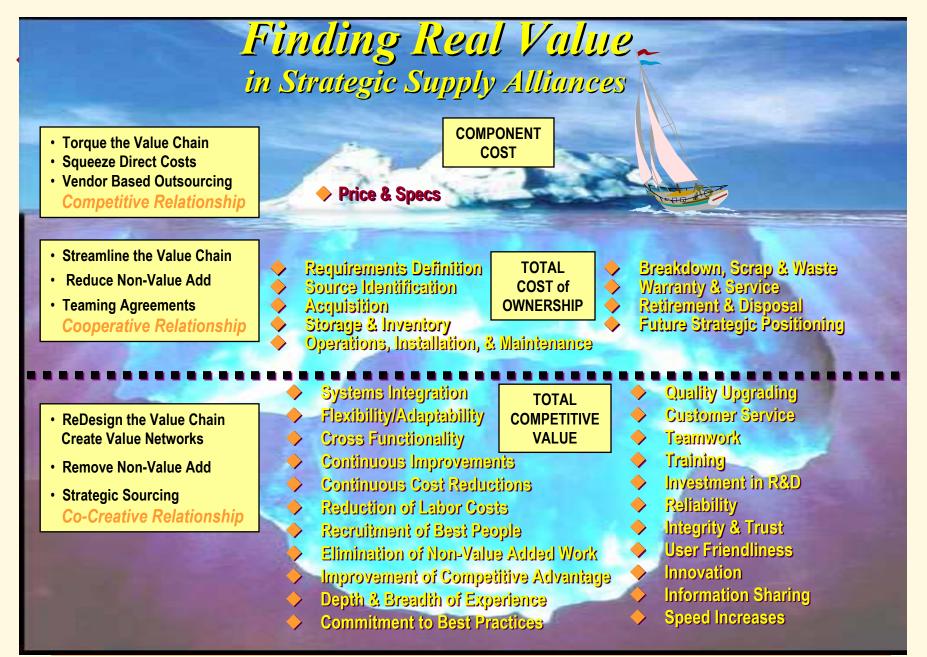




What are the Right Metrics? Strategic Return on Investment (STROI)



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The Opportunity is Enormous! So is the Challenge!

Questions? Observations? Comments? Experiences? Alternative Points of View?

