The Coming Paradigm Shift in

Strategy & Structure:

from Supply Chains to Value Networks

By Robert Porter Lynch, David N. Burt, James D. Reeds

Introduction

Evolution of Supply Chains

In the early 1990s, thought-leaders in what was then the Purchasing and Procurement profession began to lay out a new vision. Driven by the forces of globalization, emerging data interchanges (pre-internet), and operational efficiency, a new profession was carved out called Supply Chain Management. It linked operations, logistics, and procurement into a more unified system serving burgeoning industries that were stretching their reach into emerging countries like Mexico, China, and Taiwan, to name a few.

Unfortunately, the evolution in thinking stalled. In this article, we seek to move the paradigm of supply management forward to its next stage of evolution. The impacts of this shift are exciting, threatening, and massively impactful.

The Powerful Shift in the Nature of Business

In executive seminars over the last decade we've asked thousands of senior managers all over the U.S., Canada, and Europe to graphically express what the impact was of the rate of change/speed/complexity was since 1970. Amazingly, for over 90% [1]of the executive responses the curve looked are represented in Figure 1.[2] This astounding concurrence represents the dazzling shift that has rocked the very foundations of organizational thinking. But with this shift, executives have been caught flat-footed.

In the first half of this era (1970-1990), the business world was slower moving, a period of far less complexity and slower clock speeds, characterized by five and ten year strategic plans and three year sales forecasts. Organizations were stand-alone and predominantly hierarchical. The rules of management in this era had been developed from years of experience, handed down

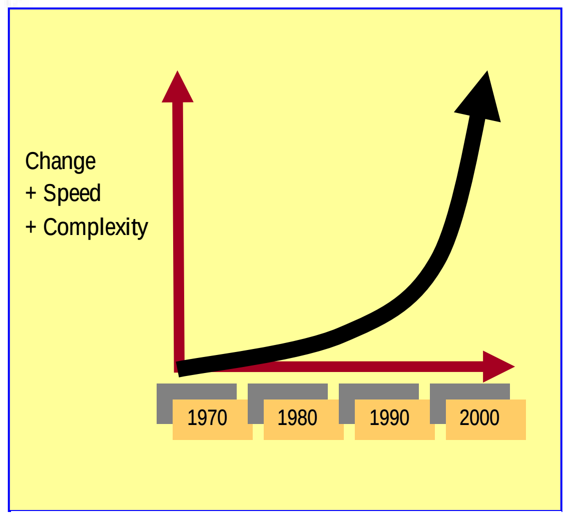


Figure 1: Speed-Complexity Shift – Rate of Change in the Business World (Source: Warren Company Survey)

through generations of tradition and the esteemed learning from our business schools.

Then hell broke loose. Fired by the forces of change (see footnote #1), what was once a somewhat predictable world almost instantaneously suffered a tectonic shift, becoming fast, discontinuous, and unpredictable. Long term strategic plans were suspended, sales forecasts scaled into shorter horizons, and alliances burgeoned to enable adaptation to the shift.

With less predictability came stiffer pressures and penalties from Wall Street. Downsizing, rightsizing, and outsourcing, coupled with cutbacks in R&D were made to boost shareholder's bottom line demands. Criticism was leveled that companies had "hollowed out their core." Strategic alliances began to be formed to match this ever-accelerating rate of change and provide the structural linkages to facilitate innovation flows.

In the face of this massive shift in speed, complexity, and change, the need for innovation becomes essential for business survivability. Out of the survey group, the overwhelming majority concurred that *"In a fast moving, rapidly changing world, the most sustainable competitive advantage is innovation."* Innovation is the most effective strategy for combating competitors with low price structures. Most companies cannot continue to cut costs indefinitely without killing their supply base."

Need for a Shift in Supply Chain Thinking

By the late 1990s, it became evident to us (these three authors) that the next evolution of Supply Chain Management would begin as a result of four major driving forces:

1. The strategic nature of supply chains,
2. The massive connectivity created by the internet,
3. The acceleration of the pace of business, and
4. The need to access innovation streams.

Value Network Management addresses the fact that business is the modern world is best served when it is conducted in a network fashion. While supply "chains" may be easier to visual, networks are far more flexible and effective. Linked by communications systems and collaborative relationships, within a network many things are happening simultaneously. Cooperative relationships with ultimate customers, marketing and distribution systems bringing goods and services to the customer, suppliers, and suppliers of suppliers, back to Mother Earth, should be inter-connected to adapt rapidly and innovate effectively. Focusing on value and speed, they are highly integrated.

Ideally, networks are designed and managed to drive cost out while ensuring that each member benefits in proportion to their contribution (and no member gains at the expense of another).

We thought this shift would happen early in this past decade. We called it the "networked enterprise." In 1996, we predicted "the emergence of the networked enterprise" would be "fundamentally the most revolutionary and complex shift in organizational functioning and structure in the history of commerce."[3] We were wrong. With the exception of a few leading organizations, the shift never occurred. Supply Chain Management never entered its next evolutionary stage of development; it has remained stuck; and is growing stale.

What's missing in our current thinking? What caused us to get caught in the rut? What is the next stage? And how will it be different?

Strategic Shift

The Strategic Nature of the Supply Function

First, let's examine what's missing in Supply Chain Management thinking: *strategy.* For the most part, Supply Chain Management is tactical, not strategic in its nature. Most Supply Chain managers focus their daily activities around three things: low cost, ample supply, and efficient logistics. While there is nothing inherently wrong with these three, they do not consider the fundamental question that needs to be asked: How can the Supply Management function create *competitive advantage.* Unless this deeply vital question is asked, we jump immediately into day-to-day operational (tactical) issues such as RFPs, delivery penalties, and the like.

In case you are asking the question "Well, why is Supply Management a strategic function?" just consider this: In most manufacturing companies, the supply function encompasses more than half of the company's expenses. This factor alone makes the function strategic. Prior to World War II, the old purchasing departments controlled less than 20% of the expenses; today it's not unusual for 70%-80% of a company's expenses to go through supply management's hands. In a service industry, such as a hospital, supply management is equally strategic: the late arrival of equipment, the late completion of a construction project, the hygiene of outsourced laundry all impact on the success of the hospital.

CEOs, CFOs, and Boards of Directors should take note. Having such a large portion of expenses be scrutinized only from a "lowest cost" perspective is myopic at best, and foolhardy at worse.

Instead, we should be seeing supply as a critical source of innovation flows from suppliers to customers, thus a means for generating revenues. In this vein, we should be linking the supply functions more closely with research, development, and marketing, as well as its current linkage to operations.

Supply management can be an important resource in finding new ways for products, services, and sub-systems to enter the market place. However, in today's lexicon, the idea of "revenue generation" for supply management not even considered.

Structural Shift

From Chains to Networks

Second, the idea of chains is an anachronism in today's complex, networked world. Chains are simply too simplistic, too linear, and, because of their inherent lack of integration, too adversarial. In the old days of procurement, we had "vendors" who we could "squeeze" for their lowest price. The old idea of "three bids and a buy" was our normal modus operandi. The legacy of this archaic terminology from that era still lingers in the backwaters of most supply managers.

Today, it should be self-evident that the idea of chains is far too linear, slow, and cumbersome. For example, Boeing got in a lot of trouble in the development of its latest commercial airliner because it saw a supply chain as a number of "tiers".

Third tier suppliers were inadequate to the task. If Boeing had seen these suppliers as part of a "value network" then it would have encouraged more communications, integration, and alliance relationships to enable higher levels of planning, coordination and early identification of difficulties. For years in the auto industry, Honda and Toyota have understood the competitive value of collaborative value networks, but their American counterparts, such as GM remained locked in adversarial chains.

Hand-in-hand with networks is the shift from adversarial to collaborative relationships. The adversarial nature of chains leads to seeing "vendors" as second-rate with little to offer, and thus the subject of regular horsewhipping and squeezing. In the auto industry, this practice, mastered to the point of an art-form, has been driving 500 suppliers, along with their critical skills, innovative ideas, and diversity of sources out of the industry.[4]

From Adversarial to Collaborative Relationships

Third, supply chains are inherently adversarial, pitting supplier against supplier against buyer. In industries such as health care, the cost of adversarial relations adds 20 to 30 cents to every dollar spent[5]. And the cost is not just in dollars, but also an enormous cost in lost opportunities. In particular, innovation flow, which is one of the most critical competitive advantages a company can have, virtually dries up when conflict infests a supplier relationship. This was highly evident in the auto industry in the mid 1990s when Chrysler, under the brilliant leadership of Tom Stallkamp, reformed his supply chain from an adversarial to a collaborative relationship. Innovations began to flow to Chrysler, helping it regain a prominent and profitable position in the industry. Stallkamp was extremely cognizant of the value of this move.

> "Adversarial commerce is based on using short-term leverage … to produce quick results … The dominant party applies economic leverage in a dictatorial, arbitrary manner forcing the subordinate party to concede to demands without considering the financial hardship or long-term affects those demands might create. This might seem to be a natural byproduct of size, responsibility, or power…. It forces even the adversarial firm to concentrate on short-term results instead of building a sustainable and growing relationship.
>
> "Adversarial commerce forces the two parties into a defensive posture that is counterproductive to building long-term success. Relationships built on distrust between two parties force them to protect their own profit position instead of work for joint solutions to joint problems. An underlying atmosphere of antagonism and defensiveness permeates the environment under this management style. Even though they are doing business together, the firms build barriers between each other, when they should be working more closely. Under adversarial commerce, companies use tactics that intentionally keep the relationship tense and unstable. The subsequent tendency is for both sides to seek maximum control over the other party and try to gain advantage.[6]
>
> "By sharing information between buyer and supplier, joint planning and sourcing can reduce a buyer's outlay for research and development and ensure less risky, much more secure returns for the supplier. It might sound simple but in practice this type of sharing of information is discouraged under adversarial commerce.[7]
>
> "Collaboration permits companies related in a common enterprise to streamline their mutual operations, reduce overhead costs, and speed up the product-development process. The advantages are that everyone can share in the sustained profitability and security of growth rather than riding the downward spiral of adversarial commerce…The transition will not be easy, nor for the fainthearted, but it certainly is less onerous than waiting for a pink slip or watching stock prices fall because of the

negative results of the command-and-control adversarial style."[8]

Adversarial commerce is synonymous with distrustful commerce. It's rampant; it's costly; it's often subtle and insidious; and it erodes the creation of value. The leader of the future must be ever alert to ferret it out to maintain competitiveness.

When Tom Stallkamp installed this type of thinking and structural support systems, between 1991 and 1998 Chrysler's profit performance shifted dramatically from virtual bankruptcy to a market capitalization of $35 billion, and $7 billion in cash. It was considered a miracle in the auto industry. It wasn't due to smoke and mirrors, but instead because of the shift in thinking, systems, and tools Stallkamp used for implementation.

Now the sad part of the story: When Daimler bought Chrysler in 1998, the golden goose was decapitated immediately. Stallkamp, the only supply executive to become CEO of a major U.S. company was fired, old adversarial "squeeze the vendor" tactics were reinstated, Chrysler began to experience a continuous series of losses, and a decade later was back in bankruptcy. Go figure!

Collaborative Imperative and Strategic Suppliers

Thus the very nature of the supply function must embrace collaboration as both a strategic and structural imperative. This alone has major implications on the mindsets, skill sets, and toolsets of the supply profession.

Collaboration is an essential element in working with *strategic* suppliers. Who are these "strategic suppliers?" In our analysis of suppliers, we have found that in most organizations, 80% of the supply spend is done with 6% (+/-2%) of the supply base. For example, if your supply base is composed of 1000 suppliers, about 60 will be truly strategic for you; the other 90%-94% will be tactical. [9]

It is with these strategic suppliers of supplies, services and equipments that alliances must be built to enable the collaboration to produce innovation streams that will create competitive advantage. Ultimately, winning in business is, more and more, due to who has the best supplier networks delivering the highest value products and services. In the end, the most innovative value network is most likely to be the winner in the game. For example, when P&G shifted to a value network model in the early 2000s, it caught its competitors, such as Clorox, flat-footed with a dearth of innovations. The stock prices of the companies in P&G's market segments reflected the value of innovations flowing through the supply chain.

Differentiating the Collaborative and Adversarial Systems

The mind-sets, system-sets, skill-sets, and toolsets that support this change are quite different. In Table 1, we briefly outline the core differences. [10]

<table>
<tr><th>#</th><th>ATTRIBUTE</th><th>ADVERSARIAL STANCE</th><th>COLLABORATIVE STANCE</th></tr>
<tr><td>1.</td><td>Business Strategy</td><td>"Bury the Competition."
Control Resources;
Exert Power Over Suppliers;
Control Market Positioning.</td><td>Seek Collaborative Alliances Throughout the Value Networks:
Employ Useful/Leading Innovation (Inspiration).
Adaptive Behavior.
Meet Changing Customer Needs.</td></tr>
<tr><td>2.</td><td>Belief System</td><td>Corporation Exists To Create Shareholder Value;
Seeks Lowest Labor Costs Globally;
Financial Capital Is More Important Than Employee Intellectual Capital;
Employees Are A Liability – Not An Asset.</td><td>Collaborative Alliances Exist To Maximize Every Enterprise's Growth, Profitability, and Sustainability:
Employees' Intellectual Capital Is A Major Source Of Competitive Advantage;
Thus Employees Are A Great Asset;
Profit-Sharing And Employee Stock Ownership As A Means Of Engaging & Aligning All</td></tr>
<tr><td>3.</td><td>Strategic Goal:</td><td>To Maximize Power Position;
Every Enterprise is Viewed As A Competitor.</td><td>To Maximize Network Alignment and Goal-Setting:
Helps Define Common/Mutual Goals, Purposes, Interests And Processes.</td></tr>
<tr><td>4.</td><td>Market Growth and Expansion</td><td>Growth Model:
Via Acquisition (Which May Often Remove A Competitor),
Mistrust Of Alliances (Which Cannot Be "Controlled").</td><td>Growth Model:
Preference:Internal Growth & Alliance Formation.
Will Use Acquisitions Only If the Enterprise candidate Is Trustworthy & Synergistic.</td></tr>
<tr><td>5.</td><td>Organizational Assumptions</td><td>The "Nature" of Self-Interest:
Narrow, Short-Term Interests Of Functional Organizations Assume Priority Over Strategic Objectives;
Frequently in Conflict with Strategic Objectives of Enterprise.
Maximize Power Maximized Via a Command & Control Model.</td><td>The "Nature" of Self-Interests:
"Working Together" In Cross-Enterprise Teams is in the Nature of Most People
Maximize Mutual Interests.
Maximize Profitability Via Network Collaboration And Innovation.</td></tr>
<tr><td>6.</td><td>Organizational Perspective</td><td>Bias:
Finance And Legal Are The Core Operational Units.
Value Is Created By Selection of The Lowest Price Providers (Price Competition).</td><td>Bias:
No Operational Unit Is More Important.
Working Synergistically Is The Vital Issue For Creating Highest Value To Cost Ratio.</td></tr>
<tr><td>7.</td><td>Power Base</td><td>Power Projected and Maintained Via:
"Command and Control" Organizational Hierarchy;
Scale;
Financial Advantage.</td><td>Collective Competitive Advantage Maintained Via:
Agility (Speed).
Flexibility.
Creativity.
Low Levels Of Non-Value Added Functions High Levels Of Human Empowerment.</td></tr>
<tr><td>8.</td><td>Assumptions Driving Organizational Advantages</td><td>Focus:
Greed (Enlightened Self-Interest);
Competitive Toughness;
'Siege' Mentality.</td><td>Focus:
Shared Strategic Vision.
Collaborative Innovation.
Based Upon A Foundation Of Trust.</td></tr>
</table>

9.	Assumption About Human Motivation and Behavior	Guiding Principle: • Control Resources; • Defend Interests; • Motivate People Via Competition.	Guiding Principle: • Co-Create, Understand Inter-Relationships & Systems. • Motivate and Energize People to Work Collaboratively using inherent drive to create.
10.	Intellectual Property	Rigid/Static View: • Considered A Defensible Property Right; • Must Be Vigilantly Protected, With Adversarial Win-Lose Litigation.	Flexible/Adaptive View: • Business Environment is An Ever-Changing Landscape; • Employs a Combination Of Open And Closed Systems For Intellectual Property. • Upgrading Is Seen As Essential For Future Competitive Advantage.
11.	Customer-Supplier Relationships	Competitors That Cannot Be Trusted.	Potential Allies With The Potential To Create "Systems Synergy."
12.	Negotiation Stance	Win-Lose. • Short-Term Transactional Relationships.	Win-Win. • Seek Long-Term Collaborative Relationships.
13.	Strengths	Fundamental Strength(s): • Straight-Forward, Top-Down Driven. • Comparatively Easy, Simplistic to Implement and Deploy. • Relatively Quick to Engage and Implement.	Fundamental Strengths: • Collaboration seen as Competitive Advantage • More Cost Effective and Profitable. • Trust is Essential to Ensure Long-Term Relationships. • Screens Out Non-Collaborative Talent In The Hiring Process. • Future Orientation: Seek New Ways of Doing Things. • Proactive/Innovative/Creative, • Must Realign Culture, Metrics & Rewards to Support the Collaborative Strategy.
14.	Weaknesses	Fundamental Weakness: • Lacks A Foundation Of Trust That Underpins Individual, Functional Organization And Network Relationships. • Short-Sighted, Opportunistic Near-Term View of Business. • Is More Costly o Ignores Total Cost of Acquisition and Relationship Maintenance. • Past Orientation: Seeks to Preserve a Status Quo. o Reactive/Passive "That's The Way-We've Always Done It."	Fundamental Weakness(es): • Requires Hard Work Across Functional and Enterprise Boundaries. • Open-ended Time Horizon. • Task of Alliance-Building Never-Ending. • Requires Organizational Top-to-Bottom Buy-In. • Requires Enterprise-to-enterprise Buy-In. • Underlying Premises Not Easily Understood. • Requires System-wide Transformation in Thinking and Behavior.

Table 1. Business Attributes and the Shift from an adversarial to a Collaborative Stance

In the new world we live in, particularly during this time of transition, a company must have a mastery of both models – particularly knowing when to enact *defensive* strategies against adversarial attackers or when engaging strictly in commodity buying, and a *collaborative offensive* strategy to create real competitive advantages and innovation flows in the marketplace with strategic suppliers, compatible co-deliverers of value, and customers.

The Muddy Mixed-Metaphor

Most companies/organizations have never clarified the distinctions in Table 1, thus they grab a little theory from one side, some practices from the other side, a few tips and tools from either or both stances, a metric from one column, and a reward from another, resulting in a muddy organizational system, design, and strategy for operations. The Muddy Mixed-Metaphor is like mixing oil and water, or like mixing non-compatible colors from an artist's palette – resulting in muddy color and not very satisfactory.

Heroes and idols exist on both sides of the equation. Companies have produced results using either model. Why? Because both work, but the Adversarial Model is less effective because it is much more difficult to *sustain* – it's is always balanced on the precarious brink of doom by internal revolt.

Think of these two stances as paths on a road to destiny. The great maharishi of all yogis, Yogi Berra, once said, "When you come to a fork in the road, Take It!" This is exactly what leaders have inadvertently done, and gotten marginal results – the mediocre outcome from the mixed metaphor.

Think of the two paths as either side of a barbed-wire fence, and we straddle this fence every day.

Implications for Business

Understanding the Impact of this Shift

Now, ten years after having realized we were wrong about the timing of this shift, we believe we understand why. There are major structural forces inside the current of supply management that prevent this shift in most organizations:

1. Operations & Finance: In a very large number of organizations, the supply function is tied tightly to operations and finance. Thus logistics and cost, not strategy and innovation, are the key drivers and rewards for supply managers. To prevent this, P&G's supply and value function has become linked with R&D. Further, the financial metrics of a networked model requires a shift from component-costing to total-cost-of-ownership. Most financial measurement systems are simply not geared to this advanced level of insight.

2. Mind-Sets: The installed base of professionals making up the supply management function have been self-selected and promoted because of their excellent logical, analytic, and computational skills. The new world of the networked enterprise requires a different mind-set: oriented to strategy, creativity, and relationships to build trust. These are not the mind-sets of the typical supply manager currently employed.

3. Professional Training: To shift into this new mode of thinking requires professors of supply management in business schools to create books and courses in this genre. When one reads most of the current level of leading thinking in supply management, one is struck by how thinking still stuck in the old "chain" paradigm. The idea of value networks isn't even an afterthought. Without a change in thinking in universities, the new systems- models required to implement value networks will remain both ephemeral and ethereal.

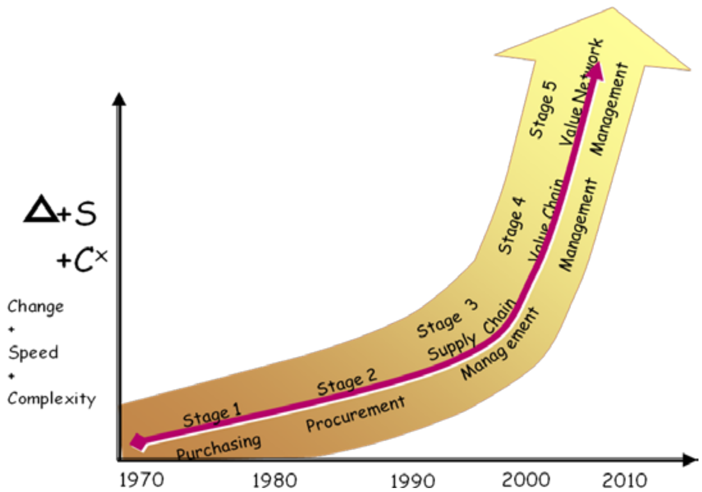
4. Lack of Senior Executive Demand: Lastly, there is no real pressure from senior executives on the supply profession to make this shift. C-level leaders, not having any

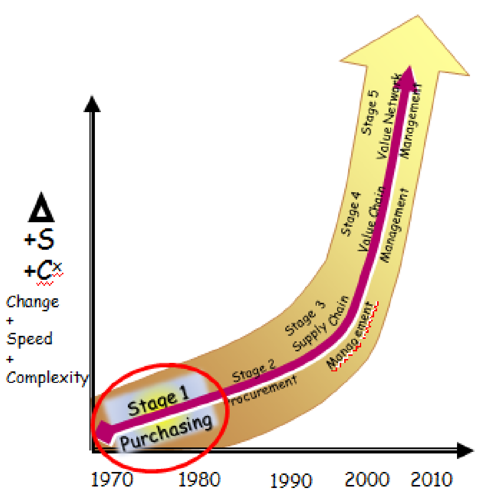
greater expectations from the supply function than cost-cutting and logistics, are content. Thus, without greater expectations, there is no real change.

Burt-Lynch Model of Supply Evolution

To help facilitate this required shift in mind-sets, system-sets, skill-sets, and tool-sets, we have developed a visual model describing the brave new world. We have tied the model to Figure 1 – the shift in complexity, speed, and change – thus illustrating the idea of the shift into both an historic and futuristic context.

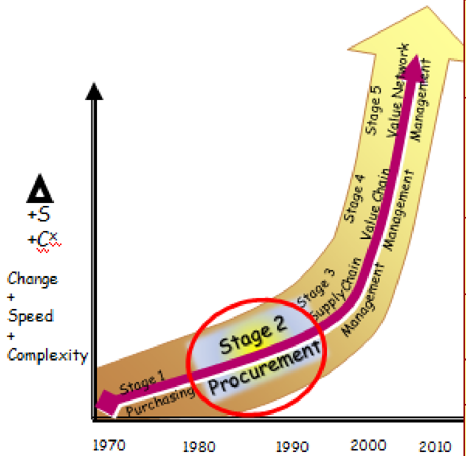
Figure 1: Shift from Purchasing to Value Networks (overview)





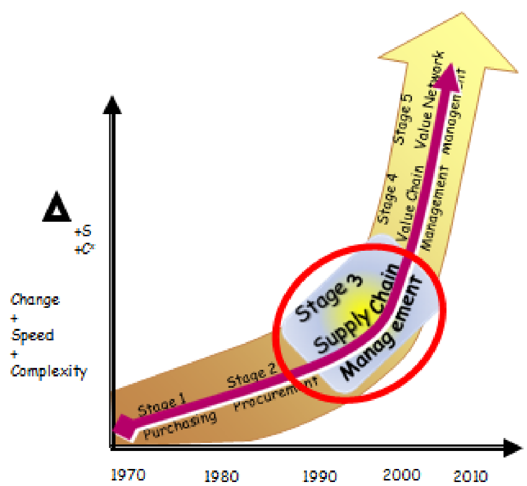
	STAGE 1. Purchasing
VARIABLES	*Clerical Tactical Buying*
Value Driver	Timely Availability, Convenience
Financial Impact	Overhead-Cost Center
Integration Level & Functional Elements	No Internal Integration Purchasing
Basis of Competitive Advantage	Do the Job
Performance Metrics	Timeliness & Efficiency
Innovation Metrics	Nothing
Knowledge	Thomas Directory Phone Book Rolodex
Supplier Relationships	Personal
Time Focus	Isolated from Customer
Environmental	Not Considered

Figure 2: Stage 1 -- Purchasing



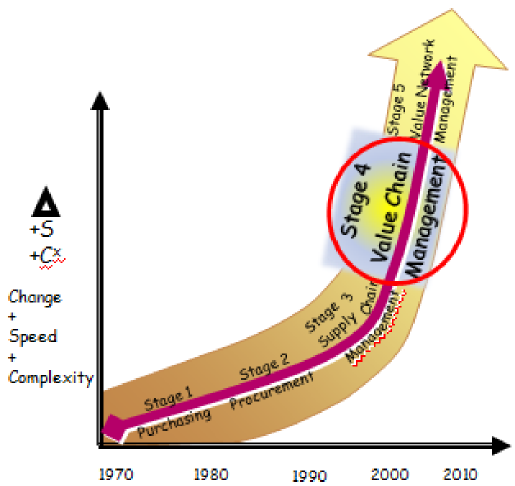
VARIABLES	STAGE 2. Procurement *Transactional Bid-Based Buying*
Value Driver	• Purchase Price
Financial Impact	• Improve Bottom Line. • No Consideration of Revenue Impacts
Integration Level & Functional Elements	• Low Internal Integration Procurement & Logistics
Basis of Competitive Advantage	• Leverage Size of Buyer Power Dynamics Between Buyer & Seller
Performance Metrics	• Low Component/Unit Cost • On Time Delivery
Innovation Metrics	• Squeeze the Vendor • Internet, Auctions
Knowledge	• e-Commerce • "Should Cost" Analysis
Supplier Relationships	• Adversarial & Transactional
Time Focus	• Reactive to Customer
Environmental	• Added Cost Factor

Figure 3: Stage 2 -- Procurement



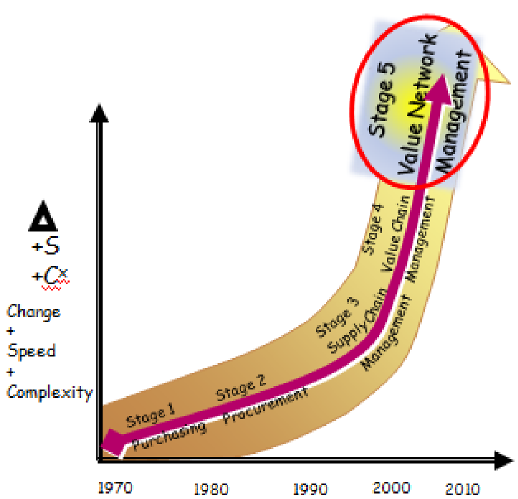
VARIABLES	STAGE 3. Supply Chain Mgmt *Process Based*
Value Driver	• Quality • Just In Time • Total Cost of Ownership
Financial Impact	• Improve Bottom Line • Some Consideration of Revenue Impacts
Integration Level & Functional Elements	• Partial Internal Integration Procurement, Logistics, Operations, Engineering
Basis of Competitive Advantage	• Through-Put • Global Impact
Performance Metrics	• Coordination & Cost • Develop Suppliers
Innovation Metrics	• Process Innovation • Develop Requirements • Near Defect Free Supply
Knowledge	• Understand Suppliers
Supplier Relationships	• Transactional & Collaborative
Time Focus	• Responsive to Customer
Environmental	• Considered As Part of TCO

Figure 4: Stage 3 -- Supply Chain Management



VARIABLES	STAGE 4. Value Chain Mgmt *Strategic*
Value Driver	• Innovation • Top & Bottom Line • Internal Integration
Financial Impact	• Revenue & Bottom Line Impacts • Increase Share Holder Value • Transform Innovation into Value
Integration Level & Functional Elements	• Moderate Integration • Internal & External Integration: Supply , R&D, Logistics, Operations, Engineering, Marketing, Customer Service
Basis of Competitive Advantage	• Coordination & Synchronicity • Interconnectedness • Relationships & Trust
Performance Metrics	• Speed, Effectiveness • Monitor Supply Environment
Innovation Metrics	• Speed & Integration, • Design Supply Base, • Integrated Supply Strategy
Knowledge	• Understand Industries, Supply Base
Supplier Relationships	• Transactional, Collaborative, & Alliance
Time Focus	• Pro-Active To Customer
Environmental	• Pro-Active as Market Differentiator for Customer

Figure 5: Stage 4 -- Value Chain Management



VARIABLES	STAGE 5. Value Network Mgmt *Systemic*
Value Driver	• Total Value Impact • Innovation • Costs • Revenue • Speed
Financial Impact	• Present & Future Revenue • Bottom Line impacts • Supplier & Stakeholder Impact
Integration Level & Functional Elements	• Full Internal & External Integration: Supply, Procurement, Logistics, Operations, Engineering, R&D, Sales, Marketing, Service, Customer's Strategy
Basis of Competitive Advantage	• Hyper-Competition • Technology Hybridization • Speed, Innovation, & Customization
Performance Metrics	• Innovation, Synchronicity • Synergy • Monitor Customer Environment
Innovation Metrics	• New Processes, Systems Solutions • Leverage Supplier Technology
Knowledge	• Customer's Future Needs • Industry Trends • Connectivity
Supplier Relationships	• Multi-Dimensional • Collaborative, Networked • Vision & Values Based
Time Focus	• Pre-Active with Customer
Environmental	• Pre-Active with Customer to Reengineer as Added Value

Figure 6: Stage 5 -- Value Network Management

A Framework of Behaviors and a Focus on the Future

Aspects of Organizational Behavior:

There are many advantages to the collaborative model of supply system management. (Table 1). However, a consideration of the Supply Evolution Model in a context of both organizational and individual behaviors adds even further power. If we view each of the Model's five stages as a continuum, various kinds of both organizational and individual behaviors are associated with each stage. Figure 8 characterizes typical response to time and the organizational behaviors are associated with mindsets found in each stage.

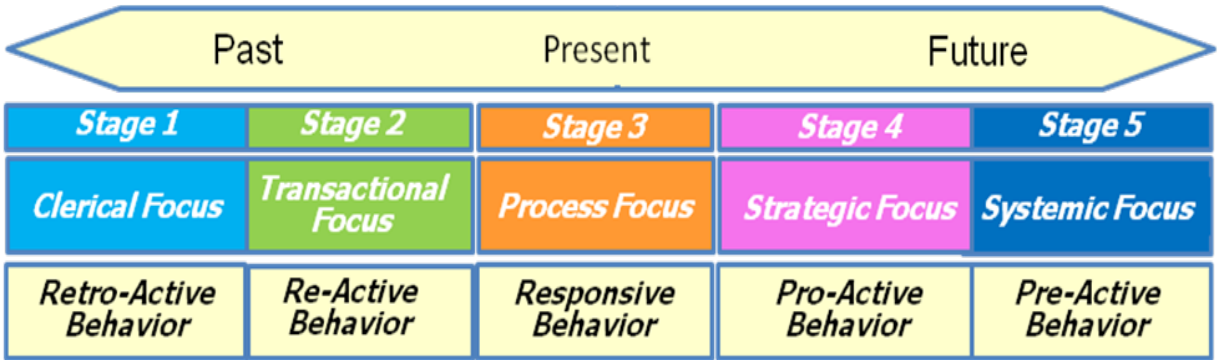


Figure 7: Time Orientation & Personal Behaviors

Behaviors of Clerical and Transactional Supply Organizations

Clerically and Transactionally-focused organizations typically exhibit reactive, tactical behaviors, failing to consider the strategic nature of many business challenges. Moreover, this type of organization relies heavily upon past actions and thinking to solve problems, seeking stability and predictability in all things, often enforcing rigidity of thought and response to new developments.

Because of their highly competitive beliefs, functional silos inside the organization often compete for power and budgetary dominance over limited resources; and frequent reorganization often substitutes for true process improvement. Instead of seeking of elegant simplicity and harmony of operational processes, the result is nothing more than "optimization of complexity." Generally, performance metrics are derived from archaic standards from the early industrial age (such as lowest component cost, supplier optimization, equipment utilization, Purchase Price Variance (PPV) and labor efficiency). When coupled with a rigid, bureaucratic, hierarchic control structure and poor upward and lateral communications, these organizations demonstrate a "garrison mentality" that views internal functions, suppliers, and customers with distrust or arrogance, and sometimes outright hostility.

Response to Strategic Conditions

In contrast with the adversarial, reactive business cultures encountered in Stages 1 and 2, the organizational mindsets that characterize Stages 4 and 5 are at once proactive and future-oriented. (Ideally Stage 3 companies are proactive too, but in reality, most are not). Stage 4 and 5 organizations, by their nature, examine their day-to-day operational decisions in light of the central question of competitive advantage, such as strategic impacts, value created, and innovation flows. They seek process integration and harmonious relationships as partners with suppliers and customers.

Instead of individual corporate efficiency, they seek systemic effectiveness for the entire value network, recognizing that, in the final analysis, the race goes to the value network composed of the most integrated and innovative clusters of companies -- the organizations that value agility and rapid response to ever-changing landscapes.

Metrics reflect collaborative initiatives between various internal functional areas, as well as those shared with both customers and suppliers. Much of this collaborative work is performed in both cross-functional and cross-enterprise teams. A premium is placed upon building long-term strategic alliances in the supply and value networks, and the sharing and multiplying of collaborative innovation. There is a strong bias toward "imagineering the future" to get out in front of the numerous emerging challenges and opportunities the future will be bringing. Organizations that exist in the world of Stage 4 and 5 are capable of turning ambiguity into possibility, and making sense of the uncertainties that befuddle Stage 1 & 2 companies.

Personal Behaviors

The Supply Evolution Model also serves as a valuable set of measures with which to gauge personal behaviors and traits.

In Stages 1 and 2, reactive organizations focus on past solutions to deal with problems; individuals are risk averse, exhibiting very linear thinking. They take solace in routinized, repetitive actions, and seek solutions in policies and procedures grounded in historical precedent. The myopia derived from the prevalence of narrowly focused functional specialists drives the organization to seek short-term results, often blind to long-term impacts. Relationships with internal peers are mostly arms-length, and adversarial with external suppliers. Daily routines may be characterized by expediting activities, and situational "fire-fighting."

In contrast, proactive Supply Management professionals in Stages 3, 4, and 5, focus on the future, evidencing a long-term perspective by building collaborative relationships. They are excited and motivated by taking risks. They are lateral thinkers, embracing complexity and ambiguity; they follow *guidelines* and *principles,* as opposed to rigid rules, and are often self-directed in their actions and interactions. They are superb team players as well as leaders, and they are biased toward seeking breakthrough solutions to problems. They have a strategic vision that drives systems and processes, versus a bias to operate through functional specialties (silos). Such professionals will spend time seeking external collaborators (with both suppliers and customers) to accelerate the generation of innovations. As problem-solvers, they place a premium upon root-cause analysis, and a bias toward prevention.

Making the Shift

While it may seem alluring to make the breakthrough shift toward value chains and value networks, and the results can be extremely rewarding, it also carries some difficulties, because it is a break with past thinking and action. The mind-sets, system-sets, skill-sets, and tool-sets are difficult. It is innovative, and all innovation changes the ways people think and act; which is disruptive and causes internal conflicts. Unless senior executives give detailed consideration to the implications, forces of reaction can overwhelm any initiative; resistance to a change of the magnitude we are advocating is often the norm.

The Board Room Challenge

Whereas Finance and Marketing have protégés on Executive Committees and Boards of Directors, supply chain management is grossly underrepresented. Few, if any, executives who might champion an investment in the resources required to staff a world class value network management initiative exist. Implementing such

a strategic and structural shift requires senior level support to ensure the success. Why? Because there will be a number of leaders in the organization who will be extremely uncomfort-
From our experience over the last fifteen years, without strong senior executive sponsorship (namely air-cover) along with highly committed internal champions in the field ensuring effective implementation, the chances of success are minimal. As Tom Stallkamp advises:

> "A break from the past and the introduction of a different management approach is required. The catalyst must come from senior management. It will not come up from the lower levels or the rank and file because the 'system' of adversarial behavior discourages creativity and challenge from within."[11]

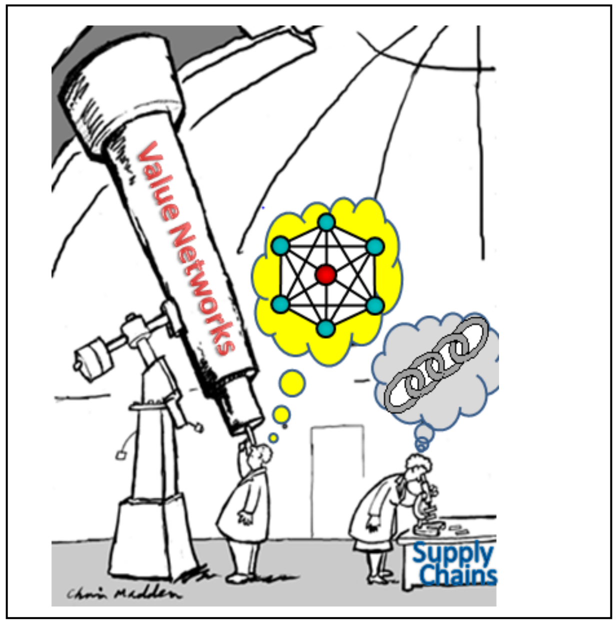
In companies like Eli Lilly and Procter & Gamble, much of their success can be attributed to the high-level commitment made at both the Board of Directors and Executive Committee levels. In companies considering this shift, senior executives should start asking questions that challenge contemporary thinking; they should expect better results than we are seeing in most companies.

Further, a closer integration between Supply Chain, R&D and Marketing is essential. Finance must develop a fluency in Total Cost of Ownership as the monetary metric across value networks. A capacity to form powerful strategic alliance is also necessary.

able with having to change what has seemingly worked for them in the past (even though the results were only marginal).

Training, Development & Personnel Selection

Business schools are not teaching the mindsets required for this new model; and because of the lack of demand for the collaborative shift to the management of value networks, professional associations are not providing the necessary training.



A different type of person is required to make this shift. At P&G, the supply function was divided: one segment focused on supply management that needed to be strategic, high value, innovative, and integrated, requiring systemic thinking and personal relationships; another segment aimed at commodities where the purpose was simply low-cost suppliers managed transactionally. The psychological makeup of those who were good at the former was entirely different from the latter.

Conclusion

Buying Our Way to Prosperity

No matter what the name -- supply management, purchasing, procurement, acquisition, or value network management -- regardless of the title, all are different ways of describing the buying of goods and services to satisfy an organization's needs. Unfortunately, this process has NOT evolved to its potential role in restoring our global competitiveness. It is time for a breakthrough in both our thinking and practice.
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[1] The only difference among these 90% was the point of inflection where the curve changes direction radically. For those in very rapid change industries, such as high tech, the point was generally between 1986 and 1990. For those in slower changing businesses, such as petro-chemicals the point tended toward 1995-7. The primary reasons for the shift cited by executives were: computers, faxes, globalization, cell phones, then the internet, each compounding upon the other.

[2] Author's Note: The implications of this phenomenon, from a predictable, slow-time world to an integrated, complex, discontinuous, fast-time world are massive. It affects every aspect of management, including supply systems.

[3] Lynch, Robert Porter, The Fastime Networked Enterprise Presentations, Health Care Summit, 1996

[4] Wall Street Journal Article, August 1997 (check source)

[5] Analysis by Robert Chalice, Author of *Improving Healthcare Using Toyota Lean Production Methods*

[6] Stallkamp, Thomas; *SCORE! Moving from Conflict to Collaboration*, Wharton School Publishing, 2005 p20

[7] Ibid, p 48

[8] Ibid, p 195

[9] (Note: there will be a small number of strategic suppliers with whom you don't spend a lot of money, and conversely a few tactical suppliers with whom you have a high-dollar set of transactions. The smaller strategic suppliers should not be overlooked in any analysis)

[10] These core differences in human motivational drivers are best explained in *Driven to Lead*, by Paul R. Lawrence (Jossey-Bass, 2010), or *Trusted to Lead* by Paul R. Lawrence & Robert Porter Lynch (to be published)

[11] Stallkamp, Ibid, p 170