Supply chains ARE the business

Shangri - La Hotel, Sydney
Wednesday 26 July, 2006
The situation is all too familiar......

- Over and-under servicing
- Too much data on Product Profitability; too little on Customer Account Profitability
- Global Sourcing is increasing our vulnerability
- Complexity is increasing faster than management sophistication
- We are still looking for ‘Silver Bullets’
- We are in fact our own worst enemy, eg.
  - narrow definitions downplay potential benefits available
  - a lack of True Cost/ Cost-to-Serve data to manage with
  - obsolete organization structures are killing responsiveness

......all of which adds up to a whole-of-business problem, rather than a narrow functional issue
Supply chains are the business
All enterprises have multiple supply chains running through them.

Figure 1.1: Operationalizing the concept of supply chains

Note: All figure numbers in this presentation refer to figure numbers in Living Supply Chains (Gattorna, 2006)
But we first need an over-arching organizational concept before we can resolve supply chain complexity.

Adapted from Figure 1.2: Elements of the ‘dynamic alignment’ framework

**Underlying logic**
- An organisation must be aligned with its operating environment

**Usefulness**
- Shows the interaction between customers' needs, the formulation of appropriate strategic responses, and the successful execution of these strategies by shaping the necessary internal capabilities and corresponding leadership styles

**Prerequisite**
- Understanding of the customers' fundamental needs and buying behaviours that ultimately drive sales, revenues, and profit
And a common metric to use when comparing each level to assess degree of alignment / mis-alignment.

Figure 1.3: General characteristics of the four dominant behavioral forces or logics

Source: Adapted from Figure 29.2 in Gattorna (1998)
This will lead us to a new ‘service-cost’ paradigm based on ‘alignment’ – the old one is flawed

Figure 1.9: Paradigm shift to a best-of-both-worlds strategy

Source: Adapted from Figure 1.1.1 in Gattorna (2003)
Customer conversations
‘Customer service’ means different things to different customers

<table>
<thead>
<tr>
<th>Steady State</th>
<th>Young State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integration</td>
<td>Early / young market</td>
</tr>
<tr>
<td>Mature – imminent change??</td>
<td>No clear patterns / traditions yet to be established</td>
</tr>
<tr>
<td>Loyalty and long-term relationships</td>
<td>New product / technology</td>
</tr>
<tr>
<td>Brand loyalty</td>
<td>High level R&amp;D (eg. CDs)</td>
</tr>
<tr>
<td>“Joint Venture” mentality</td>
<td>Supplier-led risk</td>
</tr>
<tr>
<td>“Quality” emphasis</td>
<td>Entrepreneurial</td>
</tr>
<tr>
<td>Teamwork</td>
<td>Lower price sensitivity</td>
</tr>
<tr>
<td>Consensus</td>
<td>Figure 1.10: Primary customer service logics</td>
</tr>
</tbody>
</table>

**Customer Service = Empathy, Understanding, Relationship**

**Customer Service = Innovative, Creative response to unique needs**

**Customer Service = Reliability, Predictability, Consistency**

**Customer Service = Responsiveness in a commercial way**

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One viable way forward is to better understand the most common dominant buying behaviours in your marketplace.

<table>
<thead>
<tr>
<th>Collaborative</th>
<th>Efficient</th>
<th>Dynamic (QR)</th>
<th>Innovative Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Close working relationships for mutual gain</td>
<td>Consistent low cost response to largely predictable demands</td>
<td>Rapid response to unpredictable supply and demand conditions</td>
<td>Supplier-led development and delivery of new ideas</td>
</tr>
</tbody>
</table>

- Mostly predictable
- Regular delivery
- Mature or augmented products
- Primary source of supply
- Trusting relationship
- Teamwork/partnership
- Information sharing
- Joint development
- Forgiving
- Price not an issue

- Predictable demand within contract
- Regular delivery
- Efficiency low cost focus
- Multiple sources of supply
- Little sharing of information
- More adversarial
- Standard processes
- Power imposed
- Transactional
- Very price sensitive

- Unpredictable demand
- Commodity relationship
- Time priority/urgency
- Opportunity focus
- Ad hoc source of supply
- Low loyalty, impersonal
- Fewer processes
- Outcome oriented
- Commercial deals based on pragmatism
- Price aware

- Very unpredictable demand
- Higher risk
- Flexible delivery response
- Innovation focus
- Rapid change
- Individual decision making
- Solutions oriented
- Management of IP
- Incentives/ego
- No price sensitivity

Source: Adapted from fieldwork at Fonterra, 2001

Figure 2.2: Four (4) most common dominant buying behaviours
3 or 4 dominant buying behaviours means 3 or 4 corresponding supply chains

The identified dominant buying behaviours in the user/consumer base

The portfolio of different service strategies designed to respond to identified buying behaviours

The distinctly different sub-cultures required to underpin the corresponding service propositions

The different leadership styles that are required to shape the corresponding sub-cultures

Figure 2.1: ‘Multiple Supply Chain Alignment’ on the customer side
These supply chains co-exist, like laminar flows in a pipeline

Flow Types

- **Cavitation**
- **Surge**
- **Semi-Wave**
- **Base**

Customer Segments

**Types of supply chains**

- **‘Fully Flexible’**  
  Unplanned and unplannable demand due to unknown customers with exceptional, sometimes emergency requests

- **‘Agile’**  
  Usually unplanned, at least until the last possible moment. May result from promotions; new product launches; fashion marketing; unplanned stock-outs; or unforeseen opportunities.

- **‘Lean’**  
  Regular pattern of demand, quite predictable and forecastable; although may be seasonal. Tend to be mature low risk products/services.

- **‘Continuous Replenishment’**  
  Very predictable demand from known customers; easily managed through tight collaboration with these collaborative customers.

Figure 2.4: Flow types and matching supply chain types

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4 generic types of supply chain have been identified—variations of these may exist.

<table>
<thead>
<tr>
<th>Relationship with customer</th>
<th>Predictability of demand</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>“Lean”</strong></td>
<td>High</td>
</tr>
<tr>
<td><strong>“Continuous Replenishment”</strong></td>
<td>High</td>
</tr>
<tr>
<td><strong>“Agile”</strong></td>
<td>Low</td>
</tr>
<tr>
<td><strong>“Fully Flexible”</strong></td>
<td>Low</td>
</tr>
</tbody>
</table>

**Predictable demand, easily managed through tight collaboration with customers.** Focus on retention of customer-tight relationships.

**Demand predictable, (e.g. from historic off-take), but the loose relationship does not necessitate an extreme service level.** Focus on efficiency.

**Respond opportunistically & manage yield.** Focus on providing creative solutions for premium price.

**Unplanned or unforeseen demand, and a sometimes loose relationship with customers - almost always demands an agile response at higher cost-to-serve.** Focus on the service-cost equation.

Figure 2.3: Four (4) Generic supply chain types
Suburban hotels and bottle shops

5-Star Hotels

National Retailers

Night Clubs, Casinos

Clubs, Restaurants, Cafes, Bistros

Local*

Integrated*

Destination*

Connect*

- Small volumes
- Difficult delivery locations
- Merchandising support
- Limited space
- Tight finance
- Stable demand
- Certainty of Supply
- Regular orders
- Price sensitive
- Relationship important
  *eg., suburban hotels, and bottle shops

- Large volumes
- Standing orders
- Straight forward regular deliveries
- Relatively high stock levels
- Price sensitive
- Appropriate promotions

- Small volumes
- Some unpredictable in demand
- Regular orders
- Difficult delivery locations
- Pack presentation important
- Premium/value-adds
- Price aware
- Variety important

- Small volumes
- Special solutions
- Specific delivery arrangements
- Creative sales and logistics arrangements
- Small volumes
- Value-for-money

eg., Major retailers; CML; Woolworths

eg., Fine dining restaurants; casinos; resorts; theme parks; 5-star hotels

eg., Small & remote customers; not buying direct

* Segment names selected by Foster's
Delivering Coca Cola in three (3) different ways

Customer Segments

<table>
<thead>
<tr>
<th>“Mom &amp; Pop Stores”</th>
<th>“Supermarket”</th>
<th>“Vendor Refill Machines”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stable, long term relationship</td>
<td>Consistency</td>
<td>Short lead-time</td>
</tr>
<tr>
<td>High levels of support</td>
<td>Highly reliable</td>
<td>Flexibility</td>
</tr>
<tr>
<td>Merchandising</td>
<td>Regular deliveries</td>
<td>Responsive service</td>
</tr>
<tr>
<td>Help with billing</td>
<td>Predictable</td>
<td>Telemetry</td>
</tr>
</tbody>
</table>

Service Priorities

- Consistency
- Highly reliable
- Regular deliveries
- Predictable

Segment-focused activities

- Multi-level relationships
- Pro-active order collection with assistance
- Driver stows stock and merchandises

- Regular representation
- Automatic order receipt
- Time definite deliveries
- Cost efficiency

- On call representation
- Low stock alert system
- Full-stock vehicles with on-road flexibility
- Quick Response

Shared Logistics Infrastructure (capable of multiple responses)

- Distribution:
  - Co-ordination
  - Warehousing
  - Inventory management

- Manufacturing
- Marketing
- Finance and Admin

Figure 2.7: The three (3) different supply chains at Coca-Cola Japan
Reducing complexity in the Healthcare Industry

Appendix 2B: Multiple Supply Chains in the Healthcare Industry
Reducing complexity in a FMCG conglomerate

Appendix 2B: Multiple supply chains in processed food manufacturer Goodman Fielder
The ultimate solution is a logistics network optimization model aligned to major customer segments.

Figure 2.10: Logistics network optimization at major New Zealand Pulp & Paper Manufacturer
Supply-side and demand-side alignments are the mirror-image of each other

Figure 2.11: Supply side alignment, the mirror image of the customer side

Source: Adapted from Figure 3.5.2 Gattorna (2003)

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Multiple supply-side supply chain alignment looks like this

- **Leadership Styles**
  - Style 1
  - Style 2
  - Style 3
  - Style 4

- **Cultural Capability**
  - Org./Process 1
  - Org./Process 2
  - Org./Process 3
  - Org./Process 4

- **Strategy**
  - Procurement Strategy 1
  - Procurement Strategy 2
  - Procurement Strategy 3
  - Procurement Strategy 4

- **Source Markets**
  - Supplier Behaviour 1
  - Supplier Behaviour 2
  - Supplier Behaviour 3
  - Supplier Behaviour 4

**“Shape & create”**
- The distinct leadership styles that are required to shape the corresponding subcultures

**“Internal Capabilities”**
- The distinctly different cultures required to drive the corresponding procurement strategies

**“Buying Propositions”**
- The portfolio of different procurement strategies used in the supply marketplace

**“Supplier Segmentation”**
- The identified dominant selling behaviours in the supply base

*Figure 2.12: Reverse ( procurement side ) multiple supply chain alignment*
4 generic types of supply-side chains have been identified on the in-bound side.

- **Transitional**
  - Loose relationship with supplier
  - High reliability
  - Work closely with collaborative suppliers
  - Streamline processes for low cost and high reliability

- **Volatile**
  - Loose relationship with supplier
  - Low reliability
  - Focus on risk-value equation. Expedite

- **JITR**
  - Tight relationship with supplier
  - High reliability
  - Strategic sourcing analysis. Plan

- **Scenario**
  - Tight relationship with supplier
  - Low reliability

Figure 2.13: Four (4) generic supply chains (procurement side)
Implementing a *multiple* supply chain alignment strategy
Understanding the power of unseen cultural forces

- **Visible Patterns of Behaviour**
  - Structure
  - Strategy
  - Systems

- **Values and Beliefs**
  - Goals of the enterprise
  - Means used to accomplish these goals

- **Underlying Assumptions**
  - Taken for granted assumptions about the organisational reality

Figure 3.1: The ‘performance’ iceberg

Source: Adapted from Figure 4.3.3 in Gattorna (2003)
4 basic types of sub-culture exist, and various combinations of these are possible

**Group**
- **Means:** Synergy, teamwork, co-operation
- **Ends:** Cohesion

**Entrepreneurial**
- **Means:** Innovation, flexibility, readiness
- **Ends:** Growth

**Hierarchical**
- **Means:** Systems, measurements, controls
- **Ends:** Order

**Rational**
- **Means:** Action, objectives, energy
- **Ends:** Results

**Figure 3.2: The four (4) generic enterprise sub-cultures**

Source: Adapted from Figure 4.3.5 in Gattorna (2003)
The degree of ‘mis-alignment’ between the existing culture and major customer segments

...will dictate the kind of change program required

**IN THE PAST**
- change programs failed because little was understood about current culture (the starting point)
- .......and the cultural implications of vision and strategy (the end point)
- this led to a lot of agitated staff and little or no benefit (the “Canary” syndrome)

**NOW AND IN THE FUTURE**
- We can now map the resident cultures in an organization (the starting point)......
- ......and interpret the vision and strategy in cultural terms (the end point)
- So the initiatives required to move between the two can be readily defined with consequent less risk of failure for the organization
There are at least 8 possible combinations of change agenda—choosing the right one is key.

Figure 3.10: Change Pathways

1. Evolutionary

2. Revolutionary
Leading from the front
In successful organizations, executive leadership is always in close touch with customers.

**COACH**
- Continue to:
  - Lead by teaching
  - Make decisions by consensus
  - Get the best from people
- **Watch out for:**
  - Slow response to sudden environmental change
  - Market-related performance

**VISIONARY**
- Continue to:
  - Lead by inspiration
  - Respond to turbulence
  - Use information to create change
- **Watch out for:**
  - Tangential interests
  - Short on the detail
  - People policies
  - Inefficient response to opportunities

**TRADITIONALIST**
- Continue to:
  - Lead by procedure
  - Use information to maintain control
  - Implement proven business tactics
- **Watch out for:**
  - Inability to respond to environmental change
  - Efficiency at the expense of effectiveness

**COMPANY BARON**
- Continue to:
  - Lead by objectives
  - Focus on what’s important
  - Plan for future profitability
- **Watch out for:**
  - Paralysis by analysis
  - Political in-fighting
  - Effectiveness before efficiency

**Figure 4.2: Leadership styles**
The *four* generic supply chain types
Continuous replenishment supply chains
Continuous Replenishment supply chains

…..where relationships matter most

**Focus**

**Value Proposition**

**Cultural Capability**
- O.D
- Process
- IT
- KPIs
- Incentives
- Job Design
- Internl Comms.
- T & D
- Recruitment

**Leadership Style**

**Relationship Development**
- Share information
- Strategic partnerships
- Long term stability

**Group sub-culture**
- Functional or matrix
- Standard, eg. CAM
- CDP; VMI; ECR; CPFR
- Emphasis on loyalty and retention
- Encourage participative schemes
- Authority/autonomy negotiated by consensus
- Consultative; face-to-face
- Team building
- Recruit team players

**Coach**
- Conscientious
- Leads by teaching
- Concerned for others
- Loyal; committed; politically astute
- Seeks agreement by consensus
Functional and Matrix organization designs

- Emphasis on both function and self-contained
- High communication and collaboration.
- Best for medium-size companies.
- Dual authority and reporting.

Figure 5.1: ‘Functional’ and ‘Matrix’ organization design
Lean supply chains
Lean supply chains

.....focusing on efficiency and lowest cost-to-serve

<table>
<thead>
<tr>
<th>Focus</th>
<th>High volume; Low variety; Low costs; MTF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value Proposition</td>
<td>• Seek economies of scale</td>
</tr>
<tr>
<td></td>
<td>• Low cost production &amp; distribution</td>
</tr>
<tr>
<td></td>
<td>• Forecast demand; mature products;</td>
</tr>
<tr>
<td></td>
<td>predictable lead-times</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cultural Capability</th>
<th>Hierarchical sub-culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>• O.D</td>
<td>• Organization around core processes</td>
</tr>
<tr>
<td>• Process</td>
<td>• Standard processes; emphasis on cost</td>
</tr>
<tr>
<td>• IT</td>
<td>• L-T capital investment in ERP &amp; other systems</td>
</tr>
<tr>
<td>• KPIs</td>
<td>• DIFOTEF; forecast accuracy</td>
</tr>
<tr>
<td>• Incentives</td>
<td>• Conform to set policies</td>
</tr>
<tr>
<td>• Job Design</td>
<td>• Centralized control – rules and regulations</td>
</tr>
<tr>
<td>• Internl Comms.</td>
<td>• Regular; structured; ‘need to know’ basis</td>
</tr>
<tr>
<td>• T &amp; D</td>
<td>• Emphasis on analysis and measurements</td>
</tr>
<tr>
<td>• Recruitment</td>
<td>• Recruit players with analytical skills</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Leadership Style</th>
<th>Traditional</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Leads by procedure and precedent</td>
</tr>
<tr>
<td></td>
<td>• Implements proven business practices</td>
</tr>
<tr>
<td></td>
<td>• Cost controller; efficiency focus</td>
</tr>
<tr>
<td></td>
<td>• Uses information to control</td>
</tr>
<tr>
<td></td>
<td>• Seeks stability</td>
</tr>
</tbody>
</table>
Figure 6.1: Process organization design
### Implications of good versus poor systems integration

<table>
<thead>
<tr>
<th>Benefit Category</th>
<th>“System Replacement”</th>
<th>“Re-engineered”</th>
<th>“Transformed”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue Uplift</td>
<td>0</td>
<td>1% - 3%</td>
<td>5% - 10%</td>
</tr>
<tr>
<td>COGS Reduction</td>
<td>0 - 1%</td>
<td>1% - 2%</td>
<td>3% - 8%</td>
</tr>
<tr>
<td>Overhead Reduction</td>
<td>0 - 1%</td>
<td>1% - 2%</td>
<td>3% - 5%</td>
</tr>
<tr>
<td>Inventory Reduction</td>
<td>(30%) - 5%</td>
<td>5% - 20%</td>
<td>25% - 50%</td>
</tr>
</tbody>
</table>

Source: Accenture; adapted from Table 1.1.3 in Gattorna (2003)

*Figure 6.3: Benefits flowing from different degrees of process re-engineering*
Agile supply chains
Agile supply chains

.....where quick response is paramount

<table>
<thead>
<tr>
<th>Focus</th>
<th>Manage enterprise for responsiveness; MTO</th>
</tr>
</thead>
</table>

| Value Proposition | • Fast decision making  
|                   | • Fast delivery  
|                   | • Respond rapidly in unpredictable conditions |

**Cultural Capability**
- O.D  
- Process  
- IT  
- KPIs  
- Incentives  
- Job Design  
- Intern Comms.  
- T & D  
- Recruitment

**Rational** sub-culture
- Modular; network-based and virtual  
- Process short-cuts; fast response  
- Applications: Postponement; SCP; APS;  
- Absolute speed of response  
- Achievement of targets; cash bonuses  
- Authority / Autonomy established by clear limits  
- Formal; regular; action-oriented  
- Problem-solving; resource management  
- Recruit personnel who are results-driven

**Leadership Style**
- Company Baron  
- Leads by objectives  
- Embraces change  
- Goes for growth  
- Focuses on what’s important  
- Analytical; fact-based solutions
The new modular organization design

Figure 7.1: Modular Organization Design
Fully flexible supply chains


**Fully Flexible supply chains**

**…..where nothing is impossible**

<table>
<thead>
<tr>
<th>Focus</th>
<th>Hedge and deploy resources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Value Proposition</strong></td>
<td></td>
</tr>
<tr>
<td>• Meet unplanned/unplannable demand</td>
<td></td>
</tr>
<tr>
<td>• Innovative solutions, delivered fast, customer-centric</td>
<td></td>
</tr>
<tr>
<td><strong>Entrepreneurial</strong></td>
<td></td>
</tr>
<tr>
<td>• Cluster; small multi-disciplinary teams</td>
<td></td>
</tr>
<tr>
<td>• No standard processes; local initiative</td>
<td></td>
</tr>
<tr>
<td>• Low systems requirements</td>
<td></td>
</tr>
<tr>
<td>• Emphasis on finding creative solutions</td>
<td></td>
</tr>
<tr>
<td>• Reward individualism &amp; risk-taking behaviour</td>
<td></td>
</tr>
<tr>
<td>• Autonomy through empowerment</td>
<td></td>
</tr>
<tr>
<td>• Spontaneous and informal</td>
<td></td>
</tr>
<tr>
<td>• Lateral thinking; brainstorming</td>
<td></td>
</tr>
<tr>
<td>• Recruit enterprising, resourceful personnel</td>
<td></td>
</tr>
<tr>
<td><strong>Leadership Style</strong></td>
<td></td>
</tr>
<tr>
<td>• Leads by inspiration</td>
<td></td>
</tr>
<tr>
<td>• Informal</td>
<td></td>
</tr>
<tr>
<td>• Decisive</td>
<td></td>
</tr>
<tr>
<td>• Cares about ideas</td>
<td></td>
</tr>
<tr>
<td>• Values innovation</td>
<td></td>
</tr>
</tbody>
</table>
Multi-disciplinary cluster organization design for maximum flexibility
The ‘Business event’ variant of *Fully Flexible* supply chains

![Diagram showing collaborative customers, low cost driven customers, demanding customers, and innovative solutions-seeking customers, aligned with a fully flexible supply chain.](image)

Figure 8.1: ‘Business Event’ *Fully Flexible* supply chain and its innovation-seeking customers
The Emergency response/humanitarian variant of **Fully Flexible** supply chains

Collaborative Customers  
Low cost driven customers  
Demanding customers  
Innovation solutions with a human face sought

Figure 8.2: ‘Emergency response/humanitarian’ **Fully Flexible** supply chain and its innovation solutions-seeking customers (with a human face)
Hybrid Supply Chain Combinations in Practice
Classic combinations of Lean and Agile supply chains

Most likely Supply Chain strategies for Fashion Products

**Examples**

- **Hunter Valley Coal Chain**
  - Lean, mine to port
  - Agile, port to ship
- **Electronic Products (US)**
  - Level schedules upstream of de-coupling point
  - Customisation downstream of de-coupling point
- **Korean shipbuilder, Daewoo**
  - Producing one (1) super-tanker every 36 hours
- **Fantastic Furniture (Aust)**
  - A new sofa every 3 ½ minutes
- **National Bicycles (Japan)**
  - Winter – lean production
  - Summer – mass customisation

**Separate Processes**

- **Lean & Agile Supply Chains Running in Parallel**
  - to different customer segments

**De-Coupling Strategies**

- **‘Leagile’ combinations of Lean (Push) and Agile (Pull) Supply Chains**

**Different Processes**

**Same**

- Not Viable
  - **Lean and Agile Supply Chains separated by different seasons**

**Different**

- **Time**
  - **Same (or simultaneous)**
  - **Different**

Source: Adapted from Towill & Christopher (2002)

Figure 7.2: Different combinations of Lean and Agile Supply Chains...In a Time / Space Matrix

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Multiple supply chain alignment in the Australian construction materials market

Focused service offer and tailored Operations to achieve alignment

Figure 6.4 Resultant Metropolitan Distribution Network

Source: Carpenter Ellis
Multiple combinations of supply and demand-side elements of enterprise supply chains

<table>
<thead>
<tr>
<th>Supplier Selling Logics</th>
<th>Supply-side</th>
<th>Decoupling Point at Enterprise</th>
<th>Customer-side</th>
<th>Customer Buying Logics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VOLATILE</td>
<td></td>
<td>FULLY FLEXIBLE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SCENARIO</td>
<td></td>
<td>AGILE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TRANSACTIONAL</td>
<td></td>
<td>LEAN</td>
<td></td>
</tr>
<tr>
<td></td>
<td>JUST-IN-TIME REPLENISHMENT (JITR)</td>
<td></td>
<td>CONTINUOUS REPLENISHMENT</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>EXAMPLES</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>GENERAL PARTS</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>EGGED BUS COMPANY</td>
<td></td>
</tr>
</tbody>
</table>

Figure 8.4: Mixed Supply Chain Logics
New business models for new supply chains
Moving from ‘dynamic alignment’ to ‘embedded alignment’

Figure 9.1: Performance/Capability continuum

Key *

4PL®: Fourth Party Logistics
MSCO: Managed Supply Chain Operations
JSC: Joint Services Co.
VNC: Virtual Network Consortia
High - performance supply chains lead to higher share prices

* CFROI = \( \text{(Cash Flow from Operations/Capital Employed)} - \text{Capital Charge} \)

Source: CSFB Holt

Figure 9.2: CFROI and traditional accounting metrics
Key Characteristics of new Business Models:

- Hybrid Organization - formed from a number of different entities
- Typically established as a JV - separate legal entity owned and operated by at least two primary client(s) and their partner(s).
- Alignment of goals of partners and clients through profit sharing.
- Responsible for management and operation of entire supply chain
- Continual flow of information between partners and 4PL® organization

External service providers

- Assets
- Working Capital
- Operational Expertise
- Operational Staff

Primary Client(s)

4PL® Organisation

Complementary Partner(s)

- Logistics strategy
- Reengineering skill
- Best practice benchmarks
- IT systems develop.

External clients (limited in number)

Figure 9.4: Classic 4PL new business model

Source: adapted from Figure 27.4 in Gattorna (1998)
Higher shareholder value from successful 4PL® designs

4PL®'s yield significantly more shareholder/stakeholder value than traditional 3PLs. The market rewards growth and profitability (ROCE) rather than size for size sake.

“A Fourth Party Logistics™ provider is a supply chain integrator that assembles & manages the resources, capabilities, & technology of its own organisation with those of complementary service providers to deliver a comprehensive supply chain solution.”

EV/EBITDA – Multiples 3-5 times higher than those at the bottom of the pyramid

“3PL

“A 3PL is provider of third-party logistics execution & improvement of specific supply chain functions (supply chain management). Manage a logistics function (warehousing, freight forwarding, transport) using own assets for someone else.”

EV/EBITDA – Multiples 3-5 times lower than those at the top

Source: adapted from Lehman Brothers Report, Dr Jochen Vogel, March 2001

Figure 9.6: Relative profitability of different Logistics Service Provider (LSP) models

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Moving from 4PL® to more sustainable new business models

OPTION 1

JOINT SERVICES COMPANY (JSC)
- Co-owned, co-managed service company
- Pre-determined incentives and rewards based on performance
- Infusion of innovation ‘culture’ in organization design
- Financial engineering to fund set-up and operations

OPTION 2

VIRTUAL NETWORK CONSORTIUM (VNC)
- Rather than strict equity arrangements, stakeholders in the loose alliance can join and leave the consortium as appropriate (more of a plug and play arrangement)
- In most other respects, similar to a JSC
- Both models focus on acquiring the capabilities needed at a particular point in time

Figure 9.9: Execution models that deliver change at speed and scale
To be successful, all parties in the JSC must make money and bring unique capabilities to the venture.

Figure 9.8: How each member of JSC earns a ROI

* One may be given minor equity position
The evidence is clear – the JSC design out-performs conventional outsourcing designs

<table>
<thead>
<tr>
<th>Feature</th>
<th>Client Hosted Solution</th>
<th>Outsourcing Solution</th>
<th>Strategic Transformation &amp; Joint Service Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership &amp; risk</td>
<td>Borne 100% in-house</td>
<td>Contracted out</td>
<td>Jointly owned</td>
</tr>
<tr>
<td>People</td>
<td>Bought-in resources</td>
<td>Transferred</td>
<td>Enhanced career path</td>
</tr>
<tr>
<td>Objective</td>
<td>Process improvement</td>
<td>Cost reduction</td>
<td>Share price growth</td>
</tr>
<tr>
<td>Motivation Incentives</td>
<td>Policy &amp; compliance</td>
<td>Cost reduction</td>
<td>Mutual shared goals</td>
</tr>
<tr>
<td>Funding</td>
<td>Milestones</td>
<td>Cost based service rewards</td>
<td>Fusion of all partners’ share prices</td>
</tr>
<tr>
<td>Focus</td>
<td>100% in-house</td>
<td>Outsourcing provider</td>
<td>Own, other 3\textsuperscript{rd} Parties</td>
</tr>
<tr>
<td>Control</td>
<td>Template roll-out</td>
<td>Cost reduction</td>
<td>Capability @ speed</td>
</tr>
<tr>
<td>Future Option</td>
<td>Programme m’gt</td>
<td>By contract only</td>
<td>Improved &amp; flexible</td>
</tr>
<tr>
<td>Strategy</td>
<td>Sustain non-core activity</td>
<td>Return difficult</td>
<td>ROI easier to get</td>
</tr>
<tr>
<td></td>
<td>Better IT</td>
<td>Cost reduction</td>
<td>Market leadership</td>
</tr>
</tbody>
</table>

Why should a company embark on such a pivotal change programme and either (a) take all the risk and the upfront costs whilst waiting for the benefits [traditional consulting] or (b) lose control of business functions in pursuit of short term cost reductions [traditional outsourcing] when there is a co-owned execution model able to build capability to drive shareholder value with immediate results?

Figure 9.10: Comparing the three (3) outsourcing options
Delivering *living supply chains*
It all boils down to the ultimate challenge of managing different organizational types, co-incidentally.

### Functional Matrix
- Emphasis on both function and self-contained i.e. function and product; function and division; …
- High communication and collaboration.
- Best for medium-size companies.
- Dual authority and reporting.

### Cluster
- Consists primarily of small teams or individuals.
- Permanent or temporary teams or individuals
- Emphasis on innovation.
- Loose structure with no hierarchy.
- Power balance, highly cooperative and contributive culture

### Process
- Employees organized around core processes.
- Team-work is promoted for faster and better services.
- Using cross-functional teams and processes.
- Sharing responsibilities and decisions by promoting team-work.

### Modular
- Suitable for rapid response.
- Focus on core competences in the hub.
- Decentralized units.
- Small companies can use each others’ capabilities and resources.
- Virtually integrated.
- Highly collaborative and teamwork culture.

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**Figure 10.3: Multiple organization formats within an enterprise**
Dr. John Gattorna

Dr John Gattorna established and led Accenture's supply chain practice in ANZ/Southern Asia for several years, and was one of the Firm's most respected thought leaders. Previously, he operated his own consulting company, specializing in marketing, logistics, and channels strategy, servicing an international clientele. Indeed, John is generally regarded as a global 'thought leader' in supply chain management, and continues to be much sought after as a speaker on the international conference circuit.

John has authored/co-authored 10 books and numerous articles on marketing, marketing planning, pricing, customer service, channels strategy, logistics, and supply chain management. His latest book, *Living Supply Chains: how to mobilize the enterprise around delivering what your customers want*, was published by FT Prentice Hall in May 2006, and is written specifically for C-level executives in major global enterprises.

The *Gower Handbook of Supply Chain Management* (5th edn), published in 2003, is the definitive work on supply chain management theory and practice; rights to Chinese and Russian language editions have already been granted, and the former was published in March 2004. His previous book co-authored with Andrew Berger, *Supply Chain Cybermastery*, was published at the height of the e-commerce boom in 2001, and has since been translated into Chinese. An earlier book, *Strategic Supply Chain Alignment*, published in 1998, was the first publication to bring a behavioural dimension to the task of building high-performance supply chains. This book has since been translated into Japanese and Chinese. Although John originally came from industry he has a strong academic pedigree having taught undergraduate, post-graduate, and executive programs at the University of New South Wales and Macquarie University in Sydney; Oxford and Cranfield universities in the UK; and Normandy Business School, Le Havre, France. He is currently Visiting Professor of Supply Chain Management, Cranfield; Professorial Fellow in Supply Chain Management at the University of Wollongong (UoW); and Co-Director, Centre for Supply Chain Research, UoW. John is also an adjunct faculty member at Macquarie Graduate School of Management (MGSM) in Sydney where he teaches on the MBA Program.

In the early 1990s, John was one of the original co-developers of the “Alignment” concept, and since then has continued to research, develop, and apply this powerful framework to the design and management of enterprise supply chains. This work has led directly to the development of ½-, 1- and 2-day ‘Alignment’ Conferences, a rapid interactive workshop format designed specifically for in-house use with top management teams.

Going forward, John intends to continue his research, teaching and writing in supply chain management, and act as an independent adviser, mentor, coach, educator, thought leader, and point-of-view provider to C-level executives and Boards around the world.

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Books authored and co-authored

- Gattorna, John, *Living Supply Chains: how to mobilize the enterprise around delivering what your customers want*
  - Chinese language edition currently under preparation and due for publication early 2007

  - Chinese language edition published by Century-Wave Co./PHEI, Beijing in March 2004; Russian language edition to be released soon

  - Chinese language edition published in 2002 by Century-Wave Co./PHEI, Beijing
