

Supply Chain 'Thought Leadership'
JOHN GATTORNA

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

A horizontal banner image at the top of the slide showing a city skyline at night. The city lights are visible, and there are prominent red and white light trails, likely from a train or car, curving through the scene.

Supply chains *are* the business

All enterprises have multiple supply chains running through them

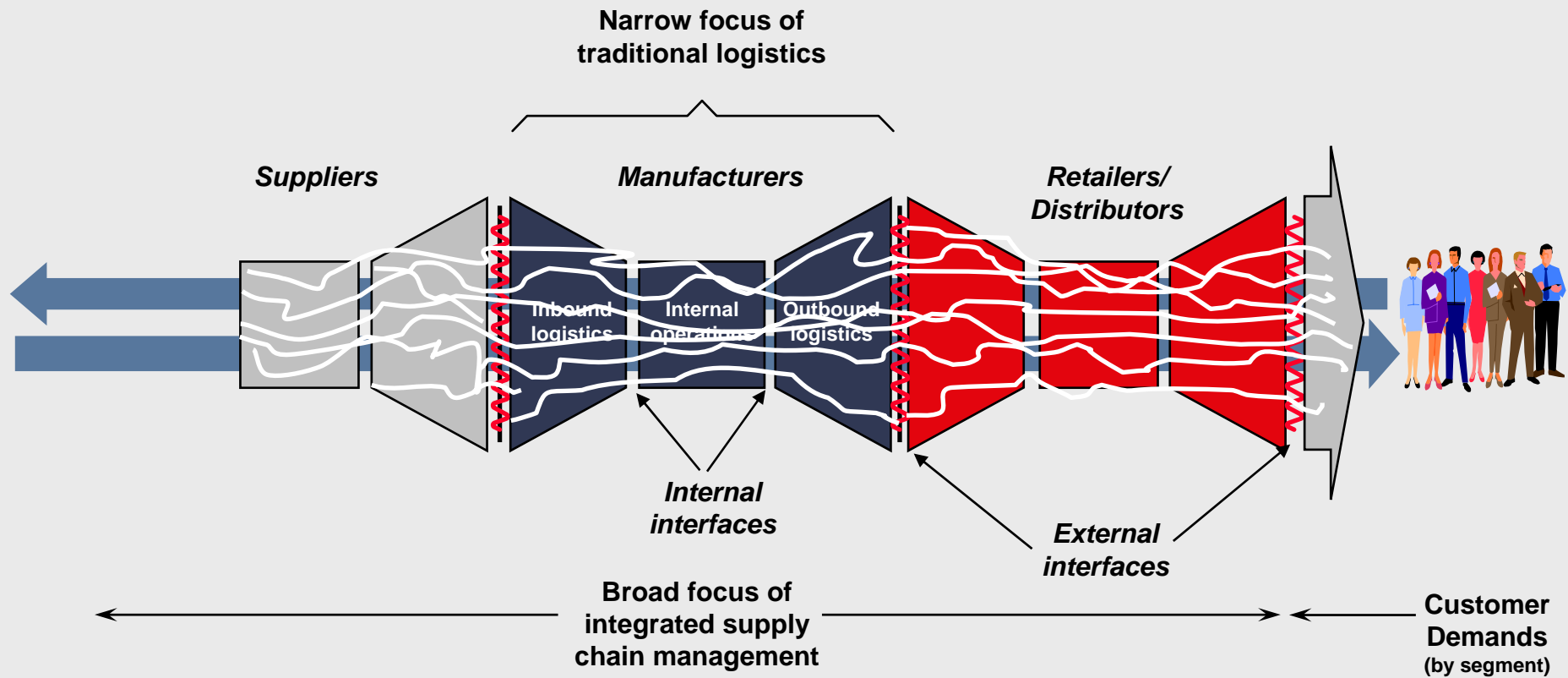
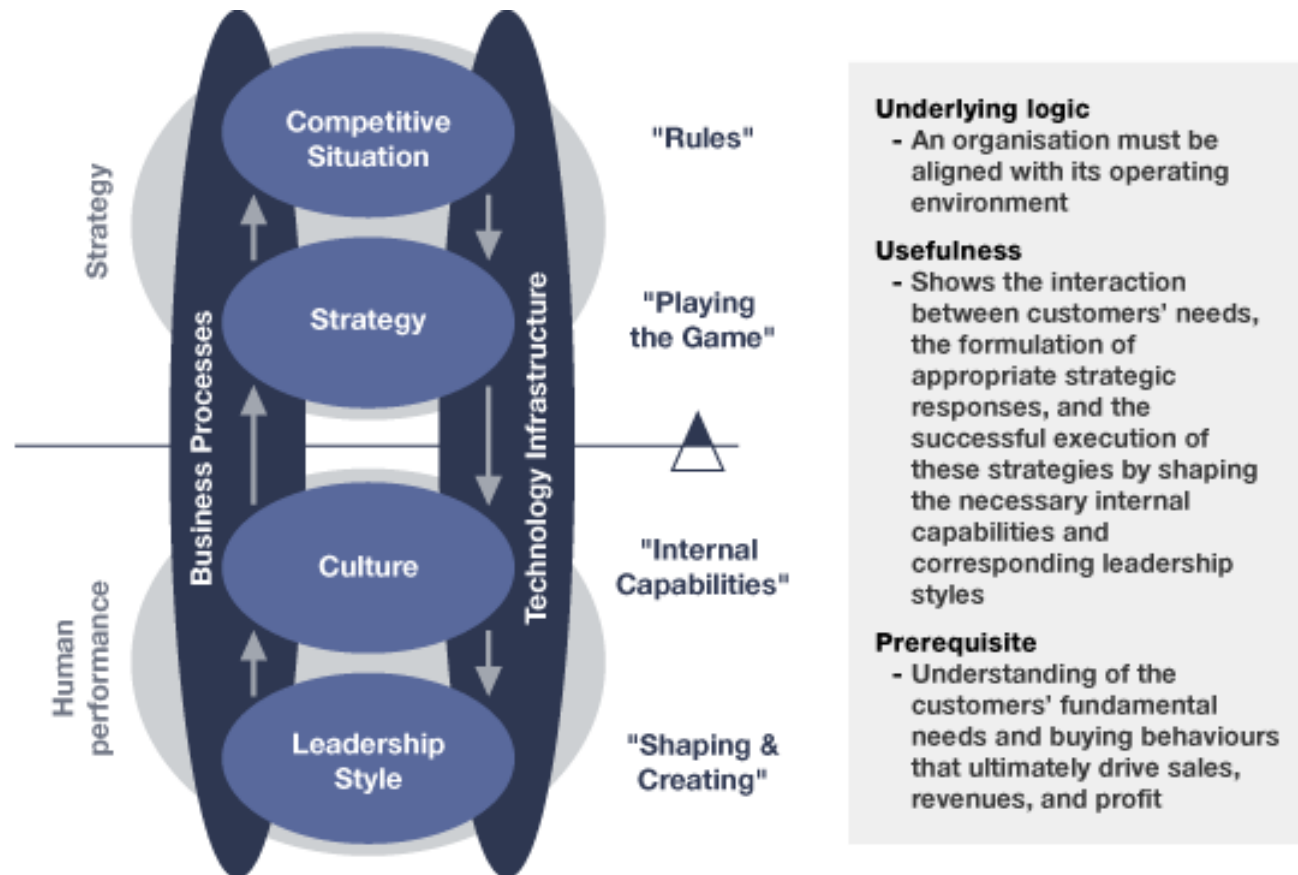


Figure 1.1: Operationalizing the concept of supply chains

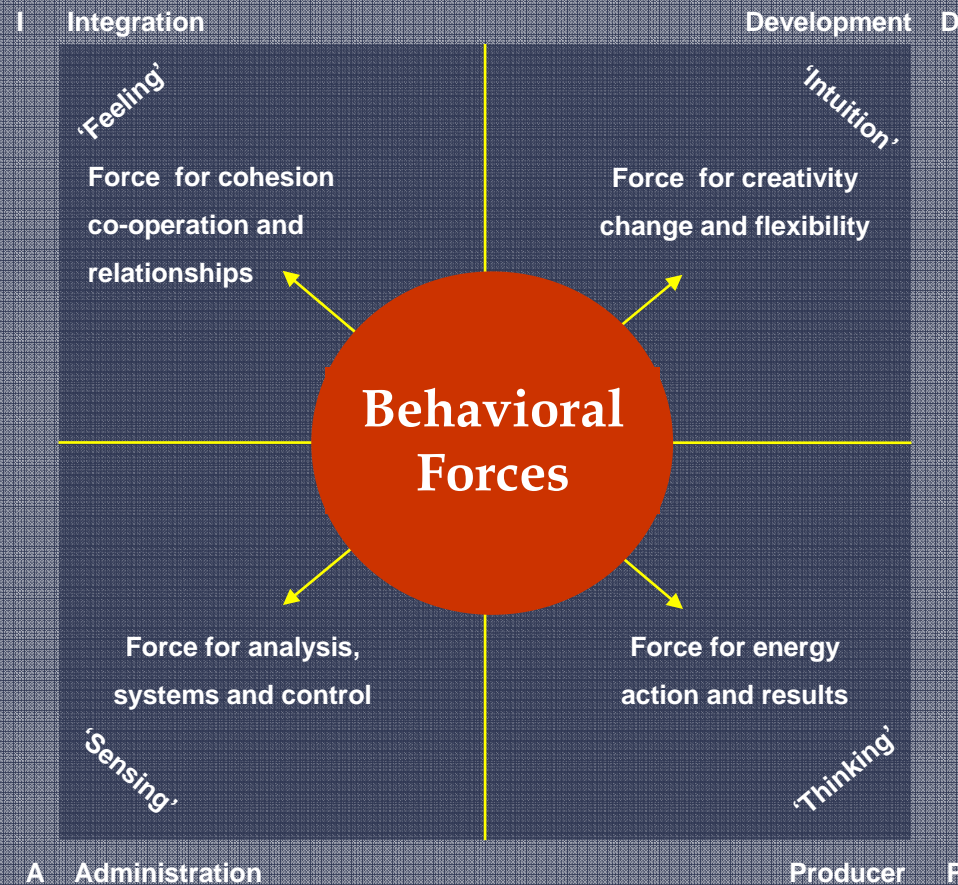
Note: All figure numbers in this presentation refer to figure numbers in Living Supply Chains (Gattorna, 2006)

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

And a common metric to use when comparing each level to assess degree of alignment / mis-alignment



Source: Adapted from Figure 29.2 in Gattorna (1998)

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

This will lead us to a new 'service-cost' paradigm based on 'alignment' – the old one is flawed

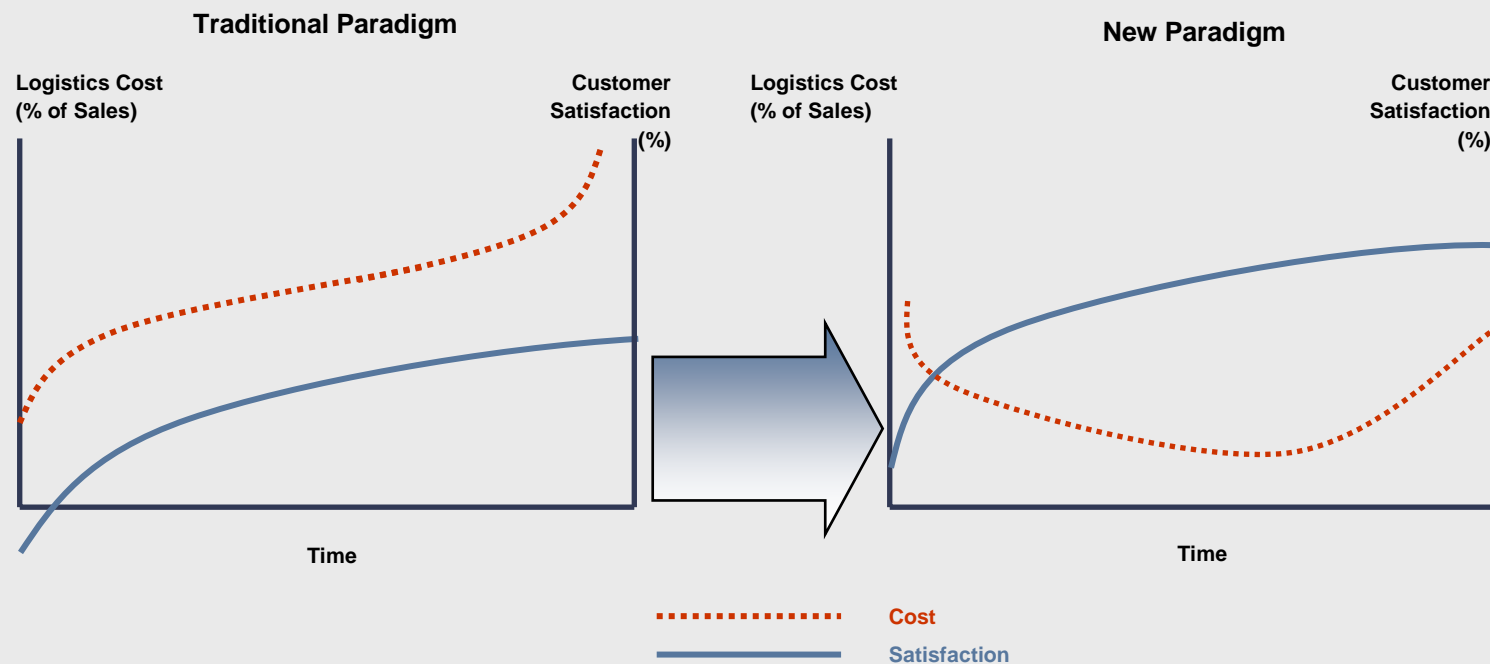


Figure 1.9: Paradigm shift to a *best-of-both-worlds* strategy

Source: Adapted from Figure 1.1.1 in Gattorna (2003)



Customer conversations

'Customer service' means different things to different customers

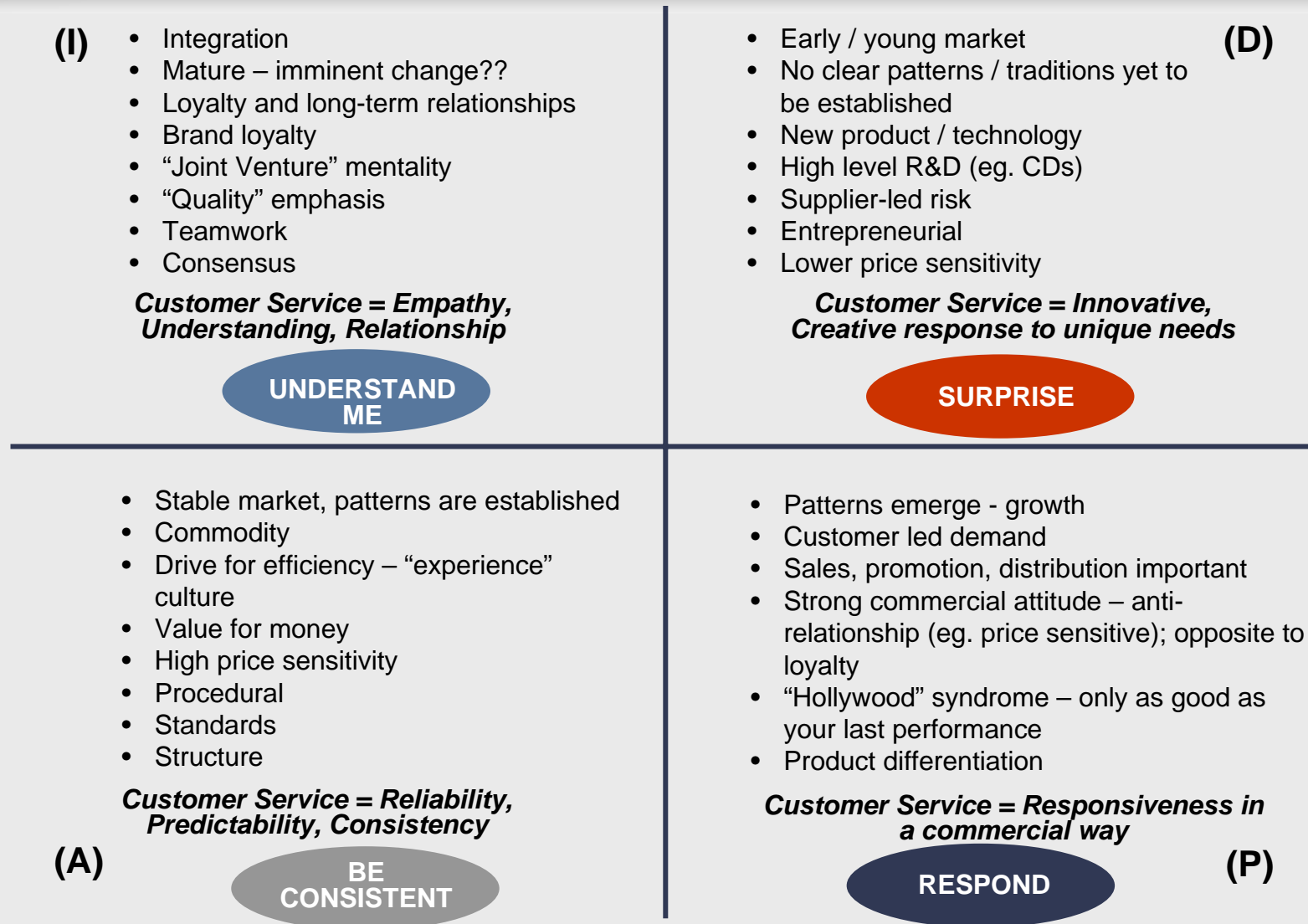


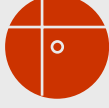



Figure 1.10: Primary customer service logics

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

<i>Collaborative</i>	<i>Efficient</i>	<i>Dynamic (QR)</i>	<i>Innovative Solutions</i>
Close working relationships for mutual gain	Consistent low cost response to largely predictable demands	Rapid response to unpredictable supply and demand conditions	Supplier-led development and delivery of new ideas
Ia 	A 	 Pa	 Dp
<ul style="list-style-type: none"> ▪ 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 	<ul style="list-style-type: none"> ▪ 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 	<ul style="list-style-type: none"> ▪ 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 	<ul style="list-style-type: none"> ▪ 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 behaviors

3 or 4 dominant buying behaviours means 3 or 4 corresponding supply chains

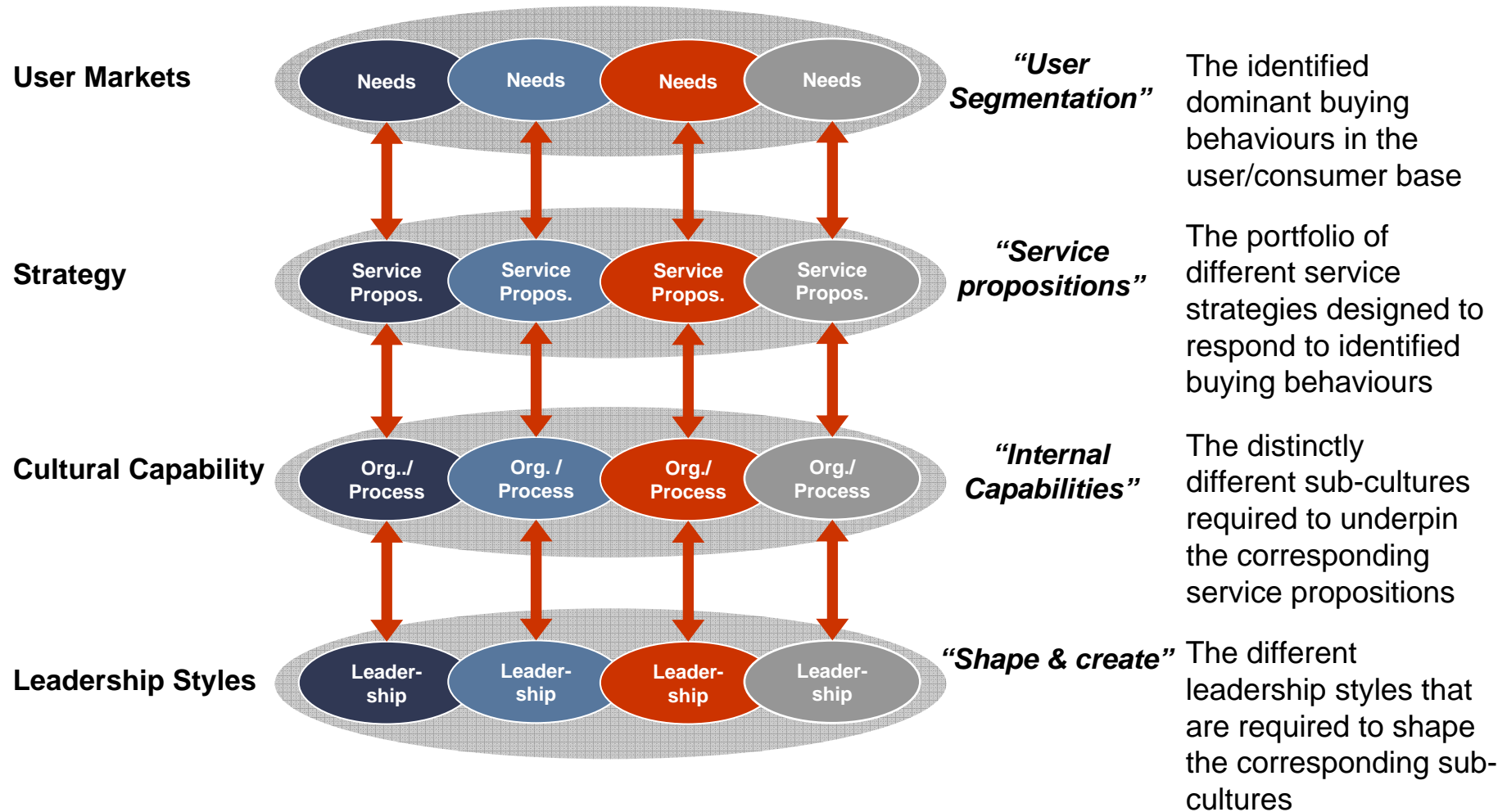


Figure 2.1: 'Multiple Supply Chain Alignment' on the customer side

These supply chains co-exist, like laminar flows in a pipeline

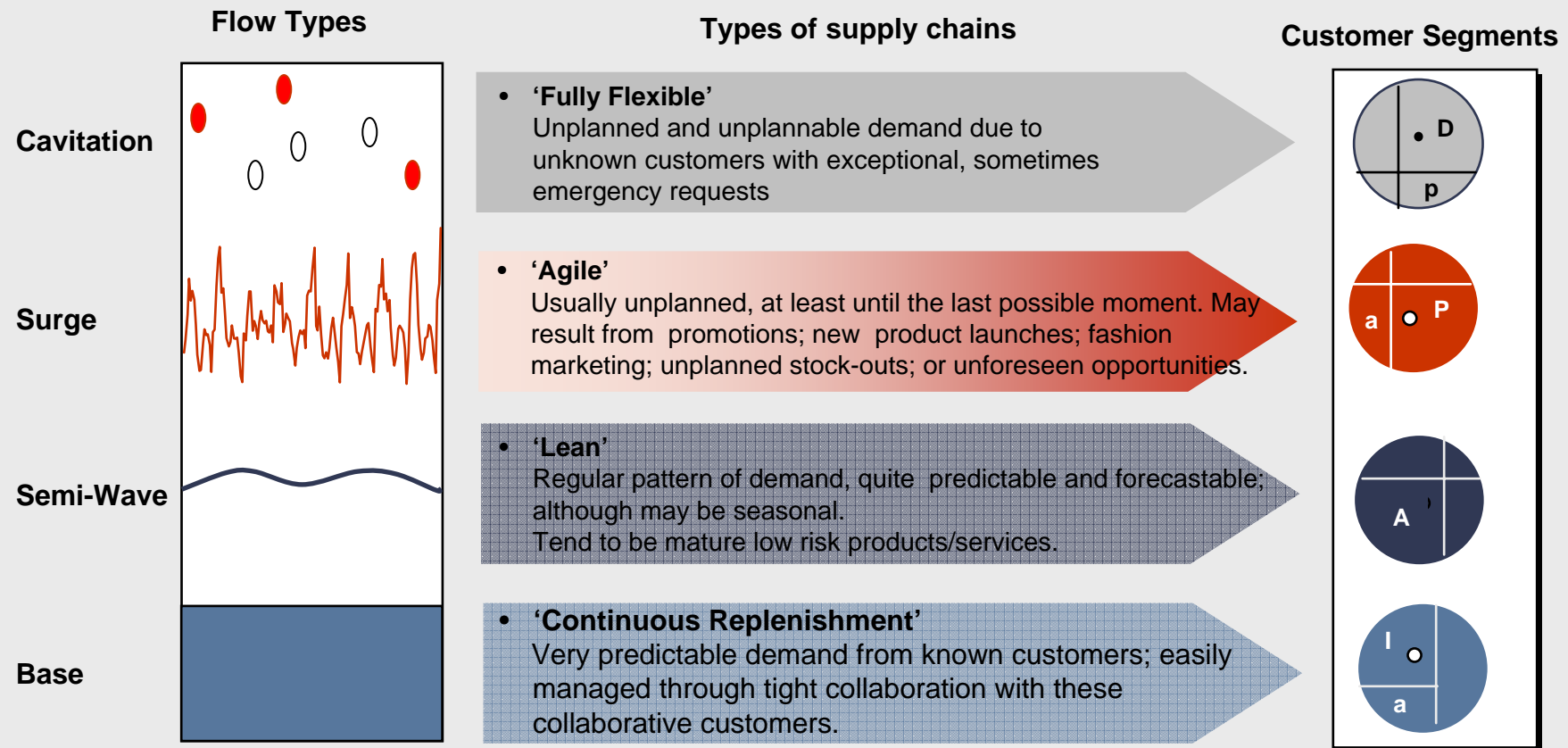


Figure 2.4: Flow types and matching supply chain types

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

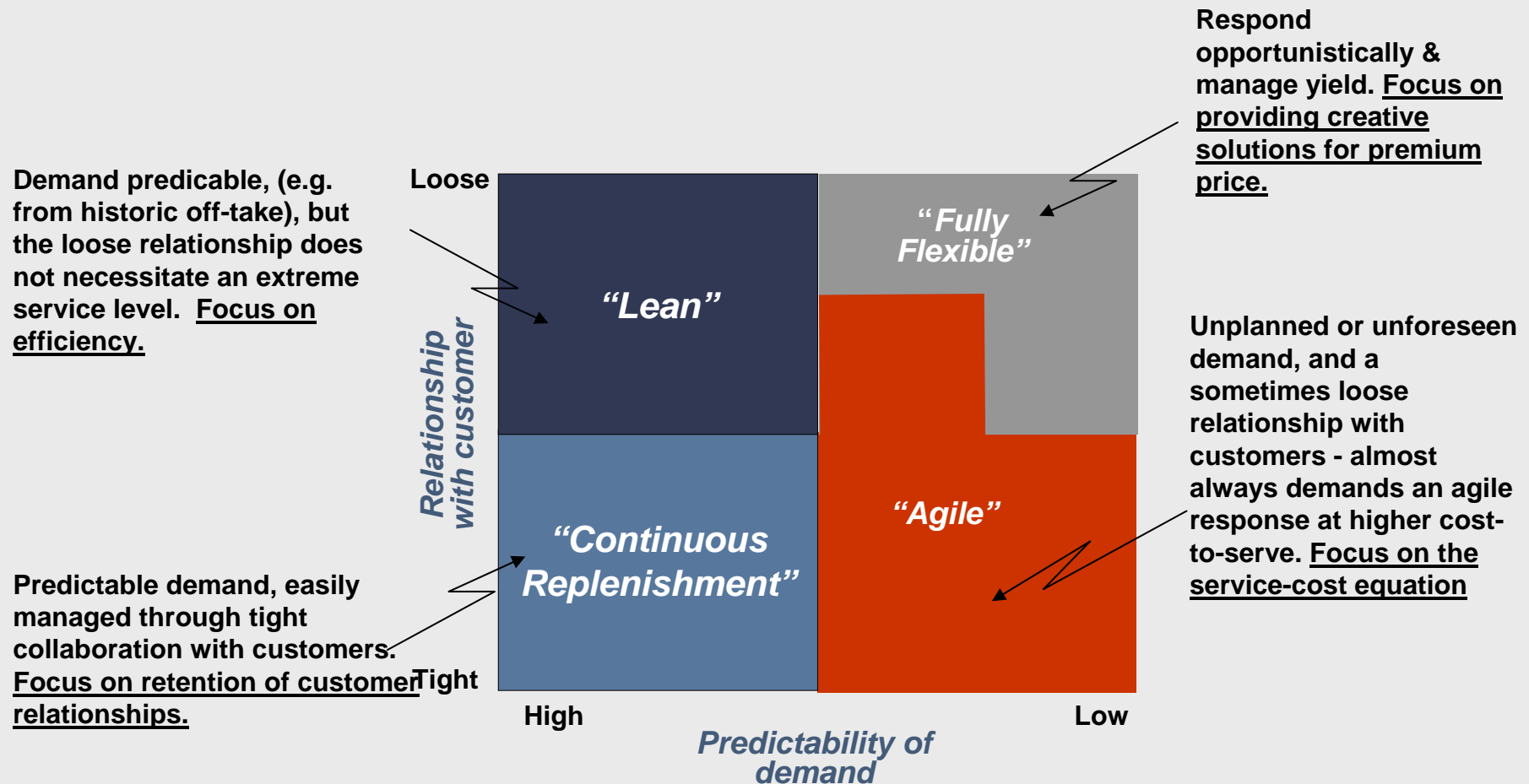


Figure 2.3: Four (4) Generic supply chain types

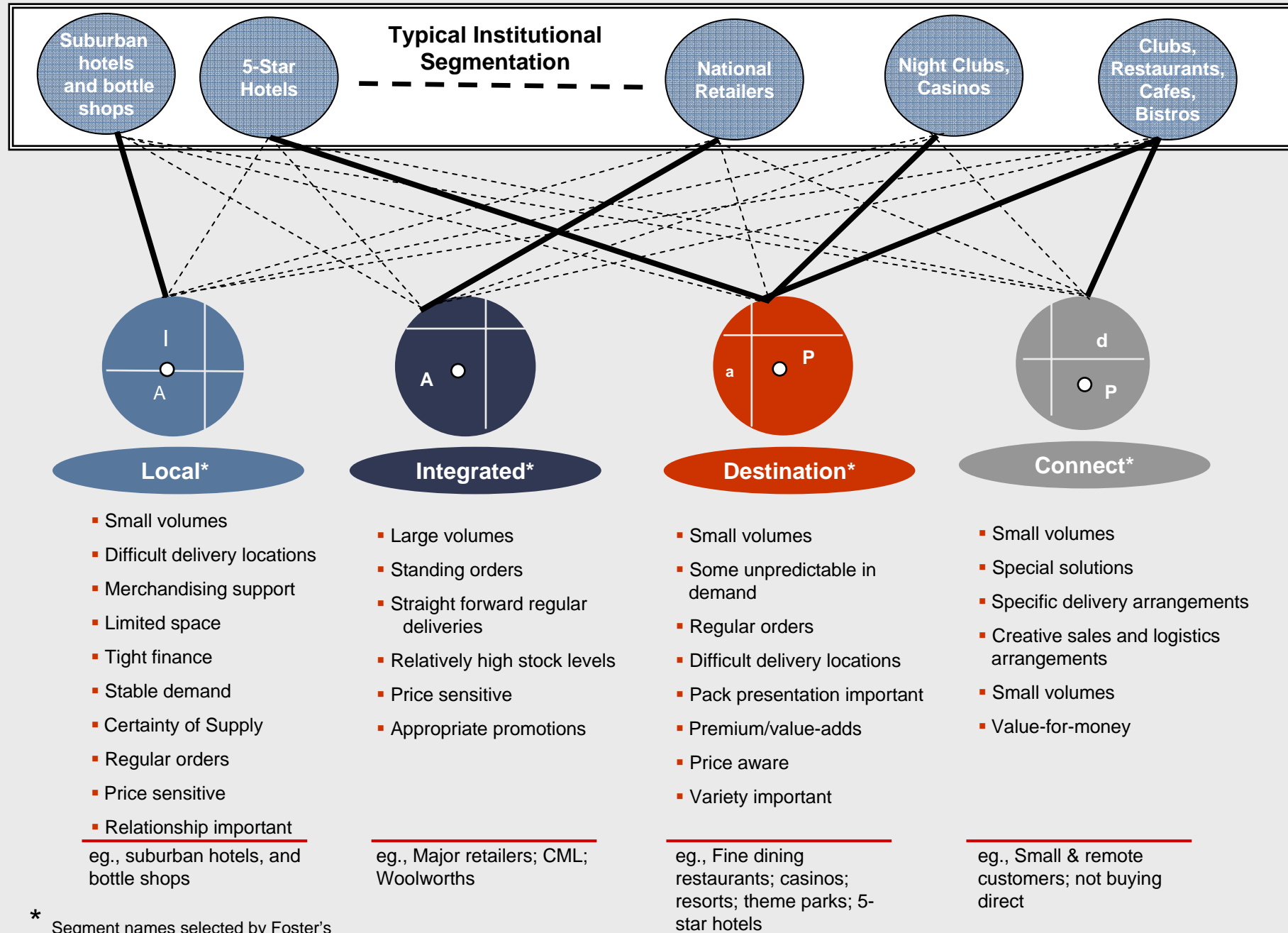


Figure 2.6: Foster's new behavioural-based segmentation in Australian beverage industry

Delivering Coca Cola in three (3) different ways

ILLUSTRATIVE

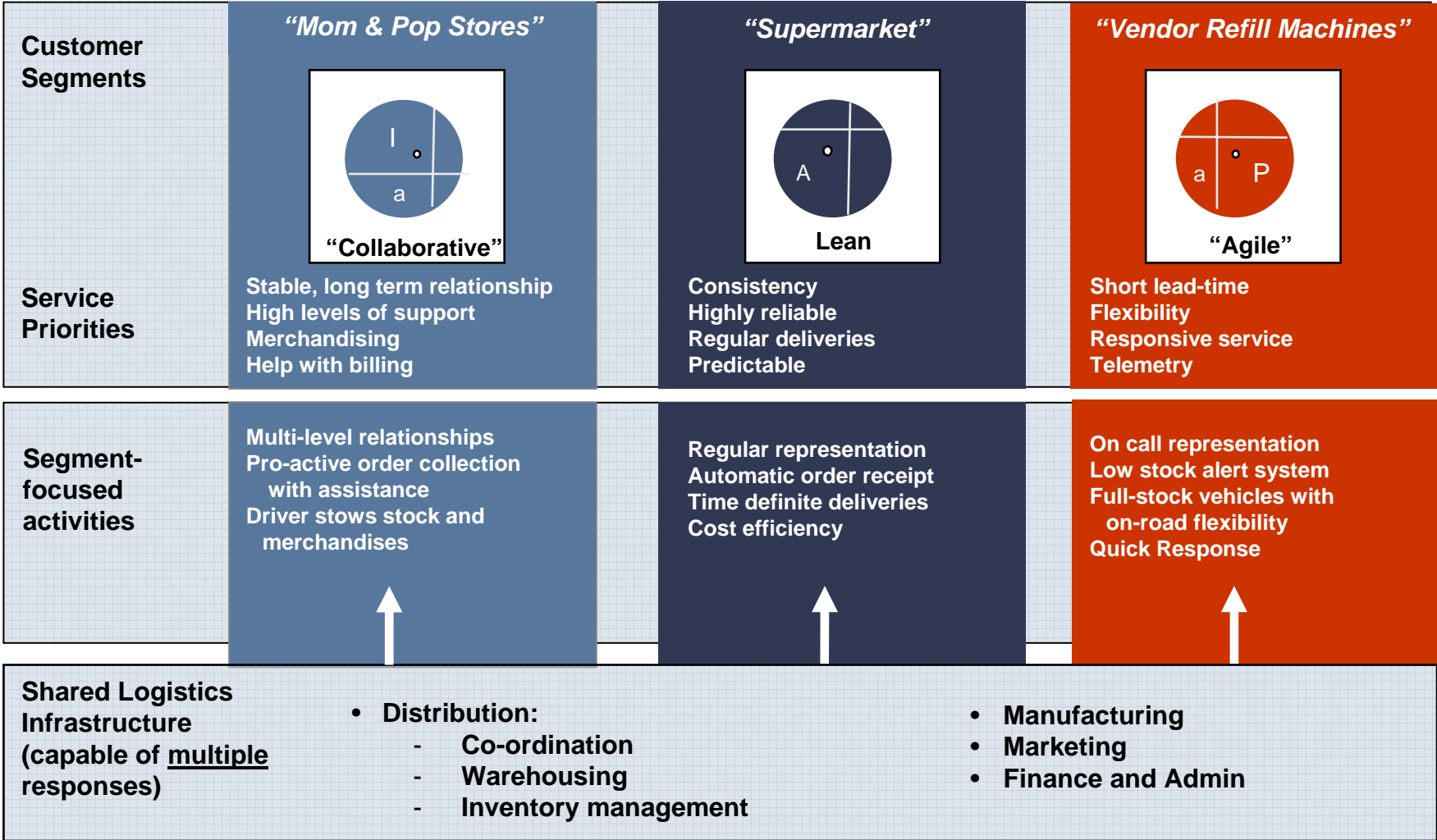
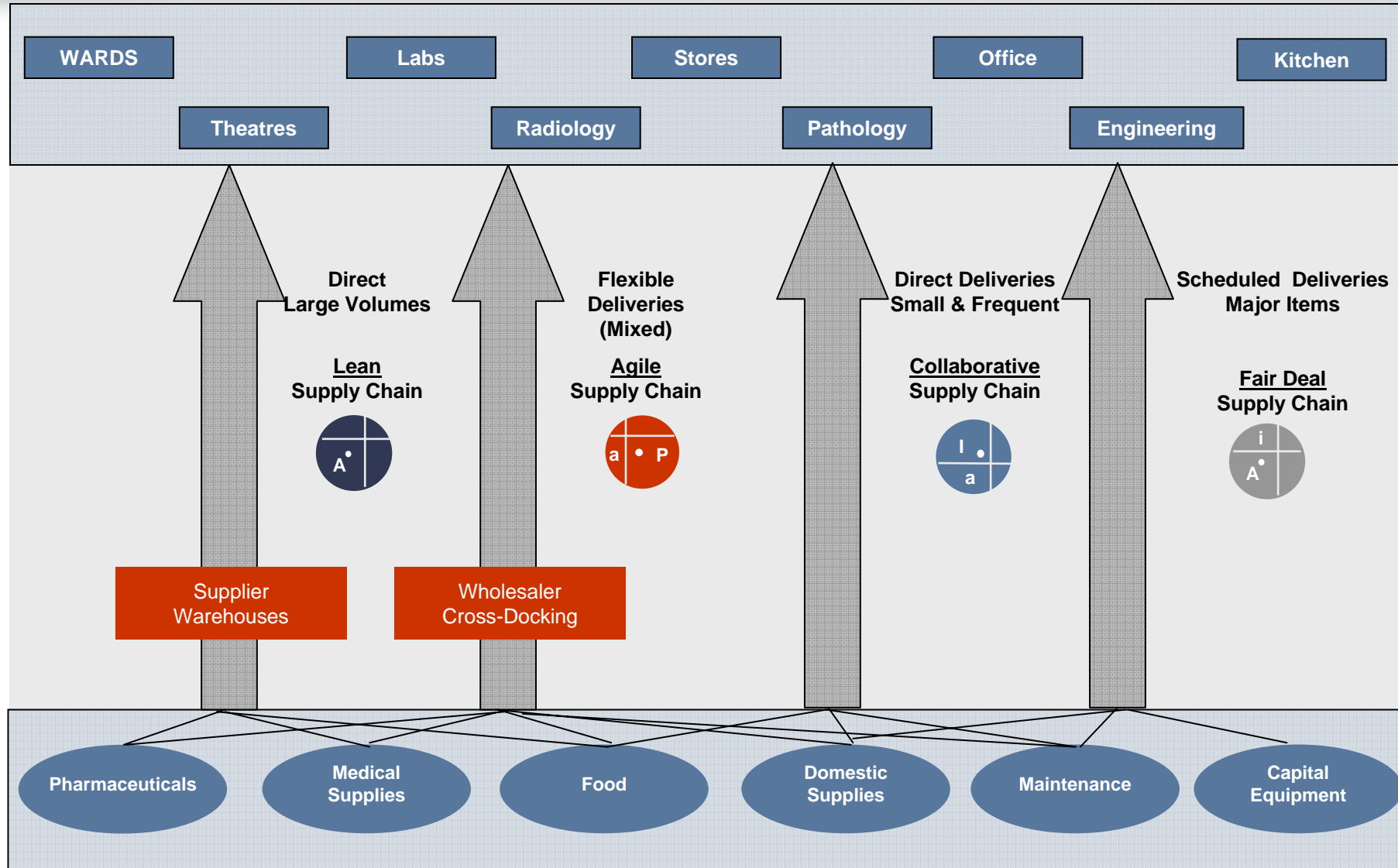


Figure 2.7: The three (3) different supply chains at Coca-Cola Japan

Reducing complexity in the Healthcare Industry

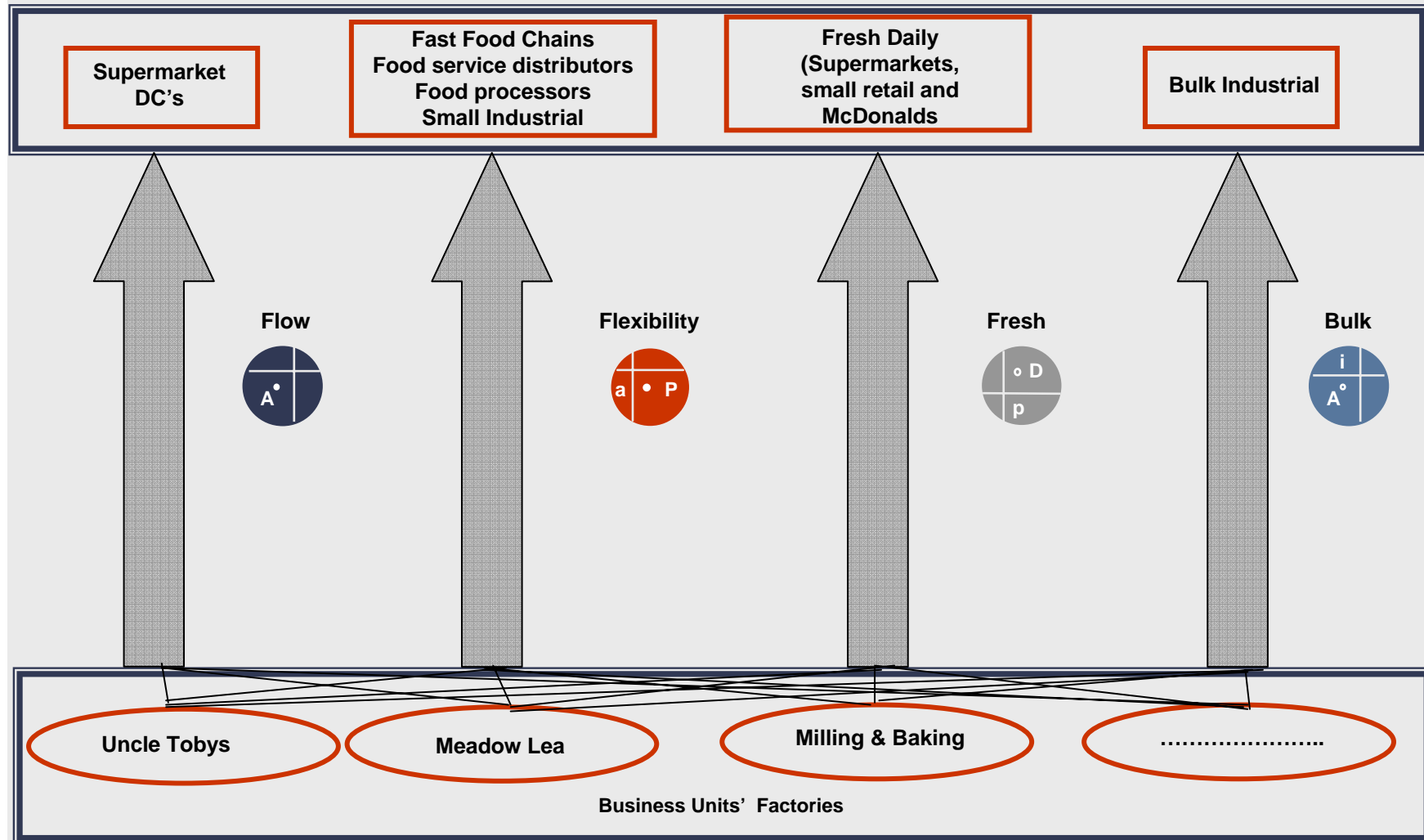


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Appendix 2B: Multiple Supply Chains in the Healthcare Industry

Reducing complexity in a fmcg conglomerate

ILLUSTRATIVE



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

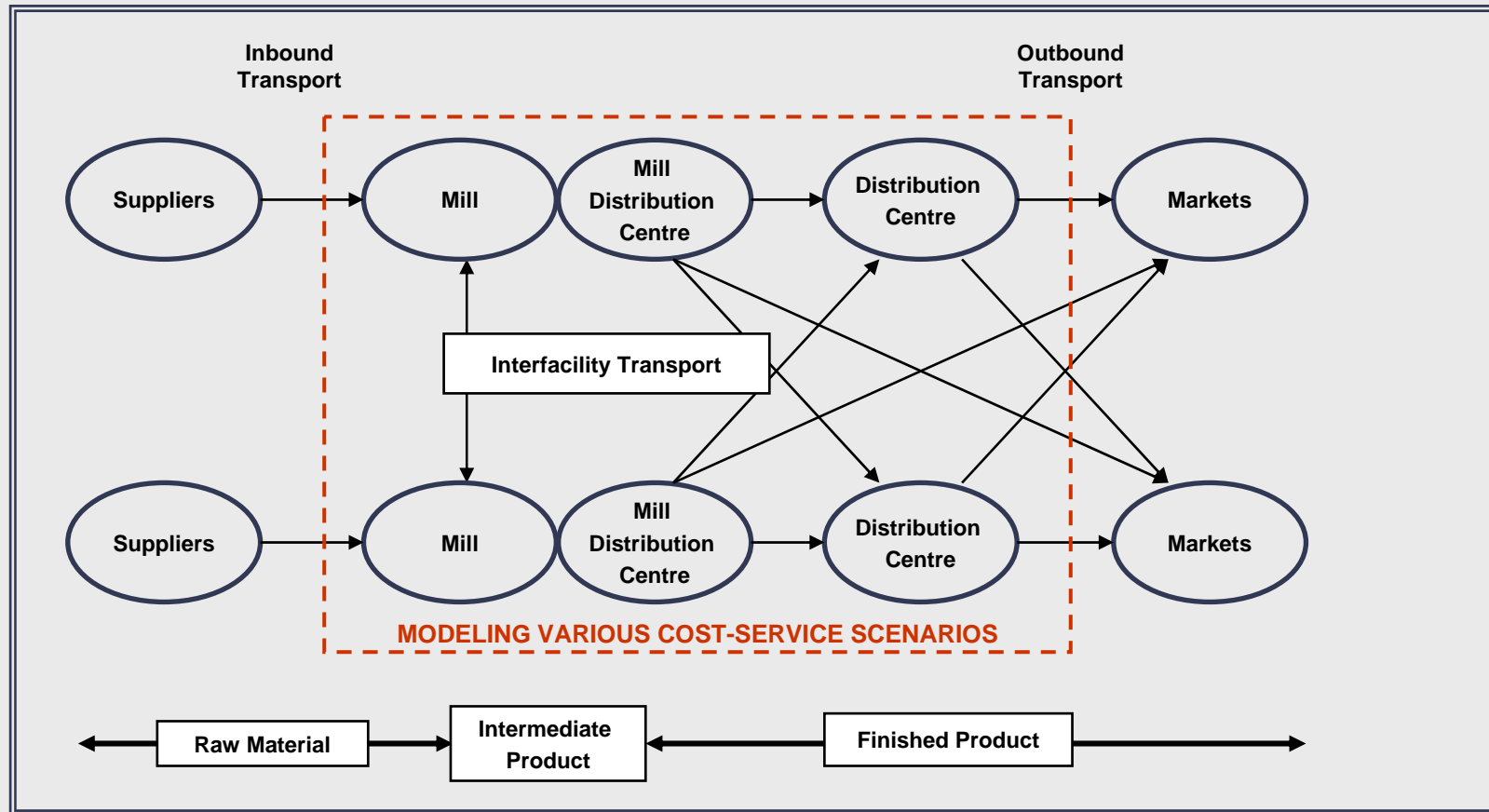


Figure 2.10: Logistics network optimization at major New Zealand Pulp & Paper Manufacturer

Supply-side and demand-side alignments are the mirror-image of each other

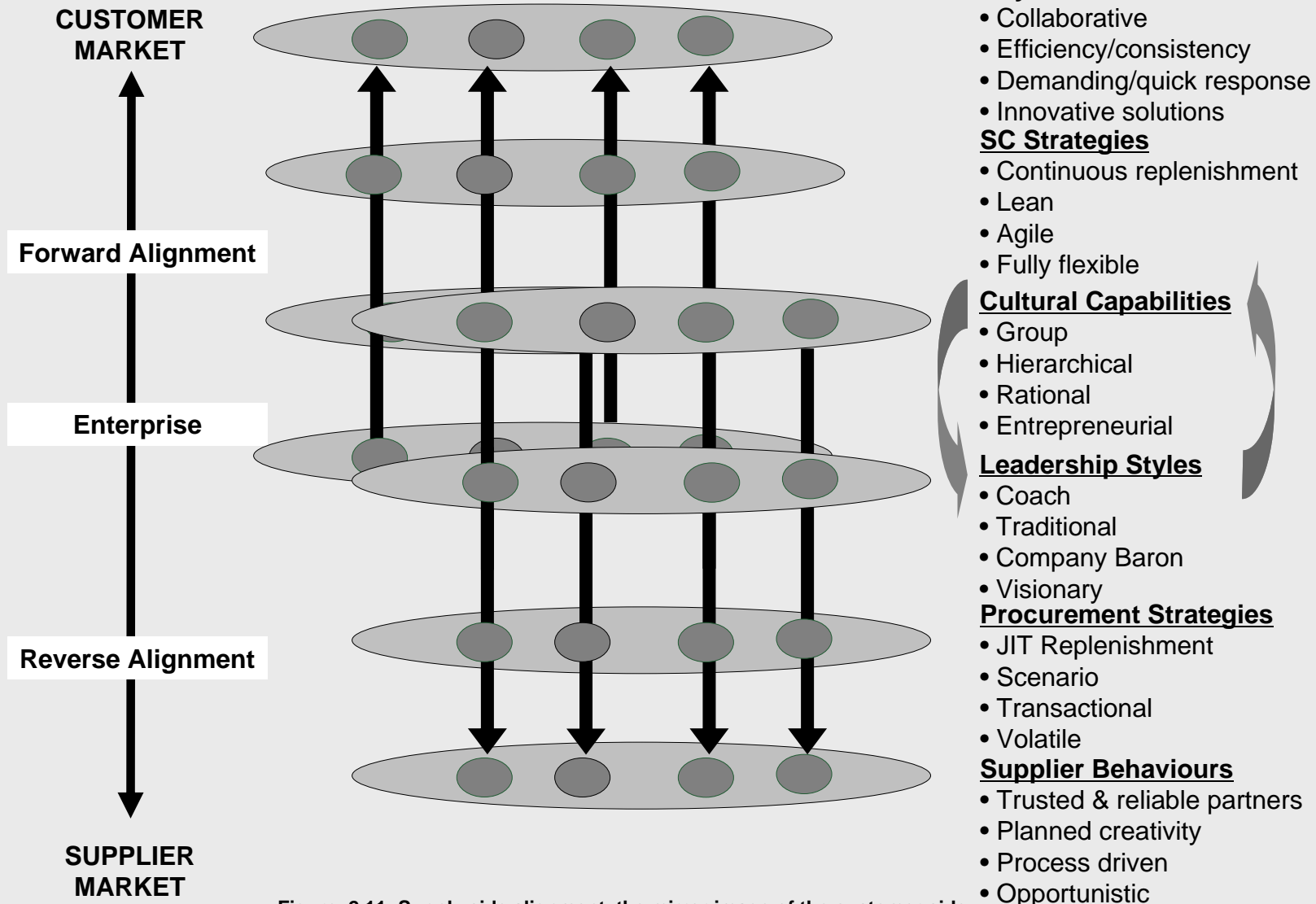


Figure 2.11: Supply side alignment, the mirror image of the customer side

Multiple supply-side supply chain alignment looks like this

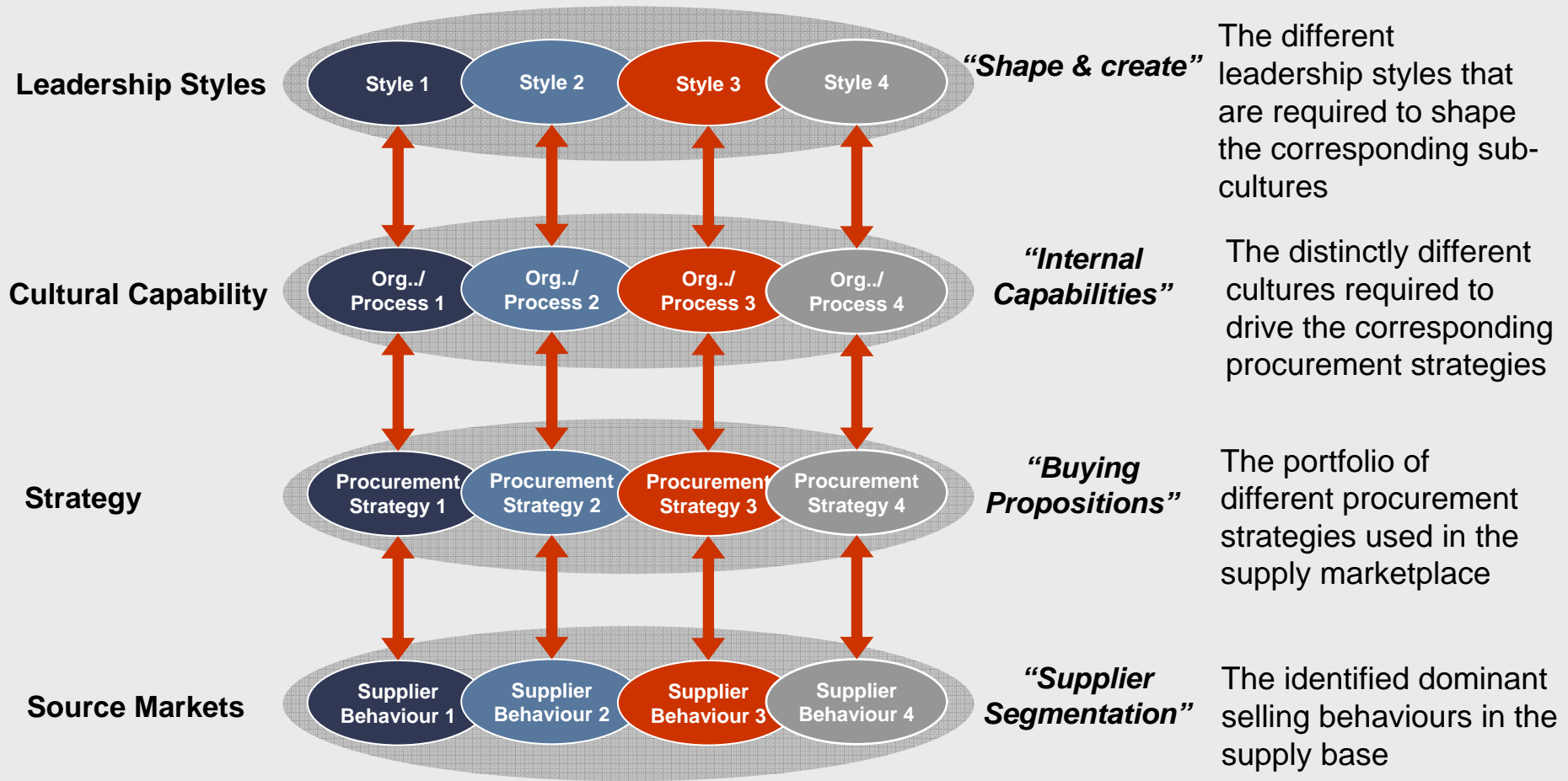


Figure 2.12: Reverse (procurement side) multiple supply chain alignment

4 generic types of supply-side chains have been identified on the in-bound side

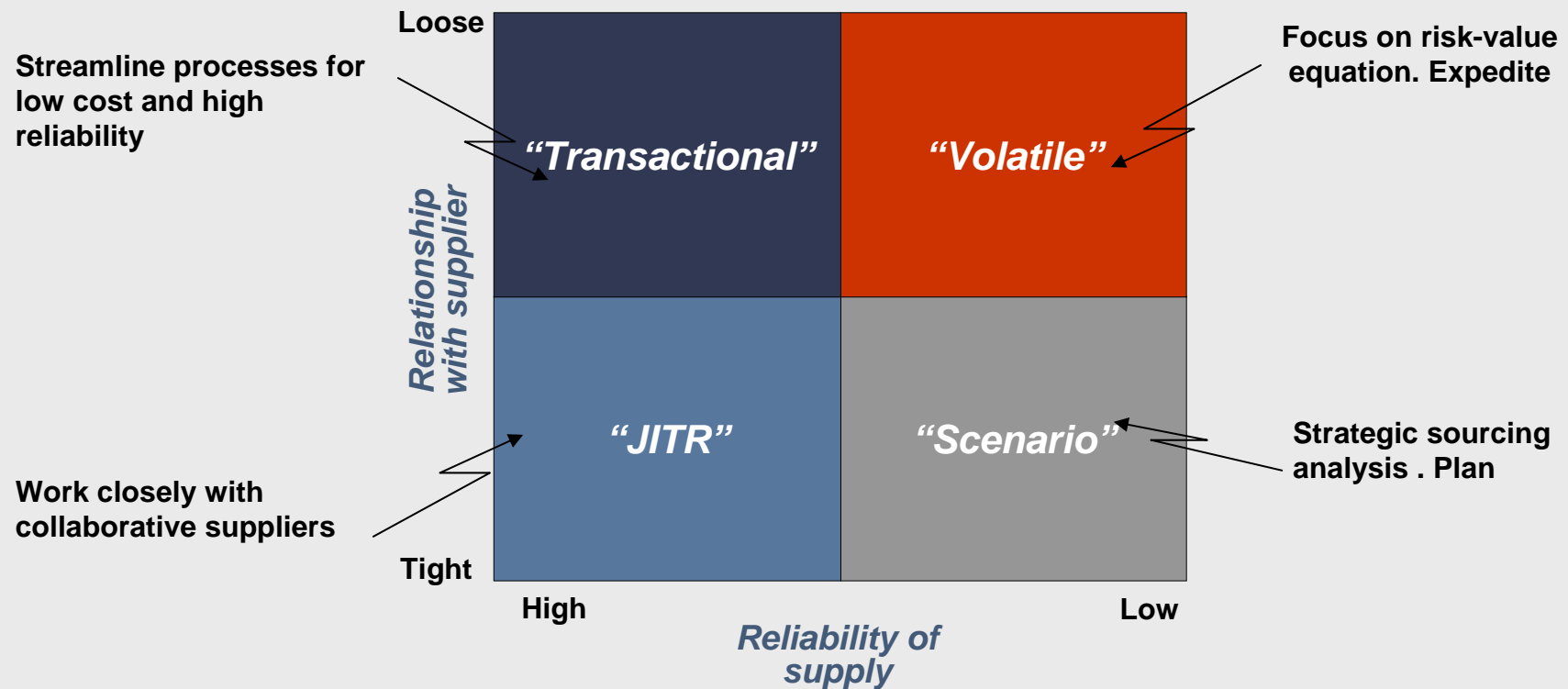
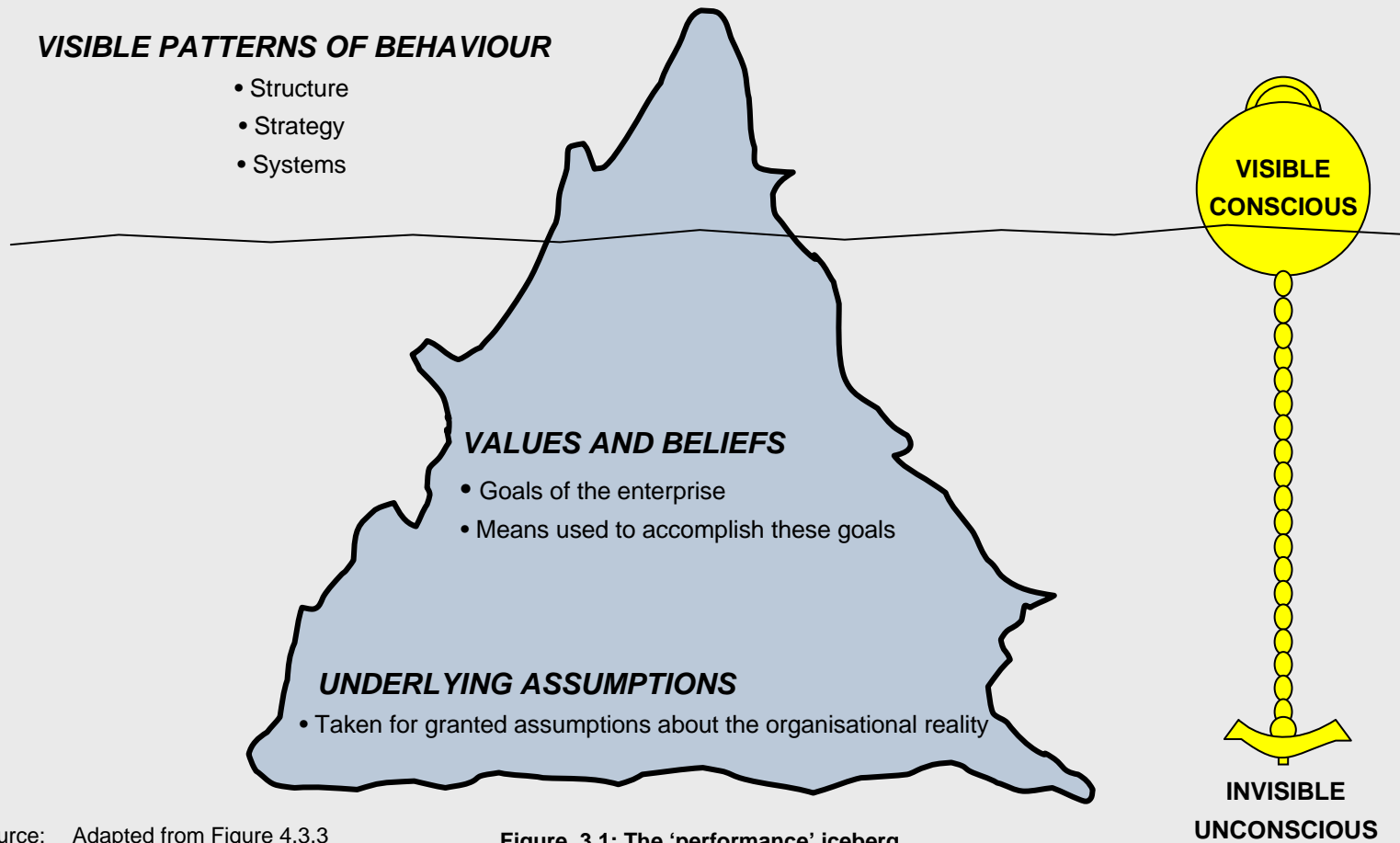


Figure 2.13: Four (4) generic supply chains (procurement side)



Implementing a *multiple* supply chain alignment strategy

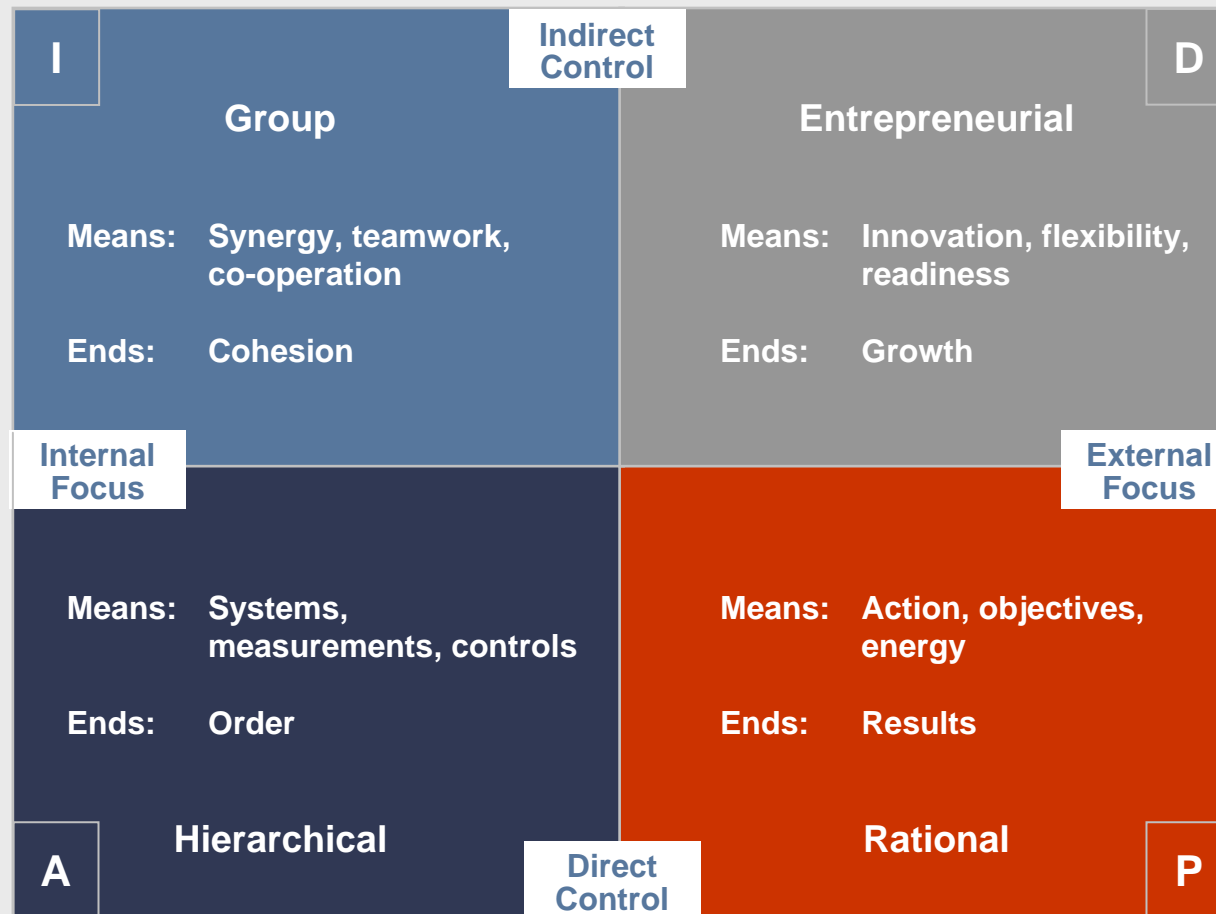
Understanding the power of unseen cultural forces



Source: Adapted from Figure 4.3.3 in Gattorna (2003)

Figure 3.1: The 'performance' iceberg

4 basic types of sub-culture exist, and various combinations of these are possible



Source: Adapted from Figure 4.3.5 in Gattorna (2003)

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

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

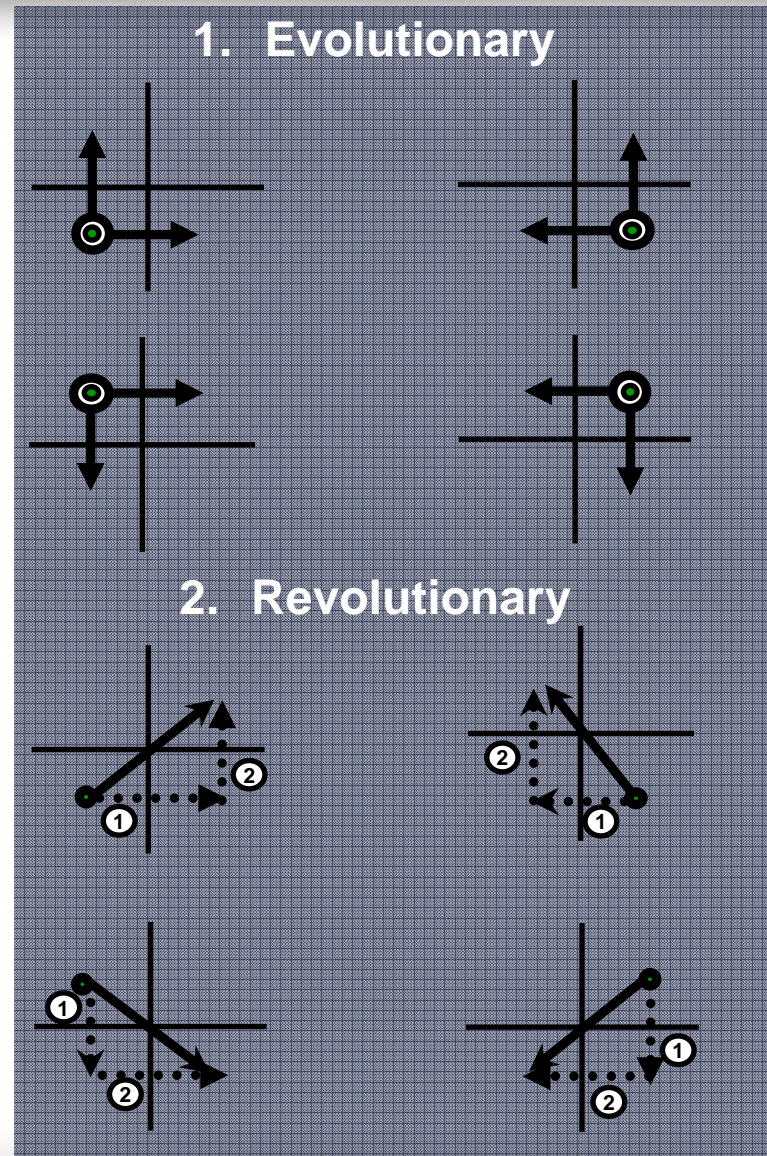


Figure 3.10: Change Pathways



Leading from the front

In successful organizations, executive leadership is always in close touch with customers

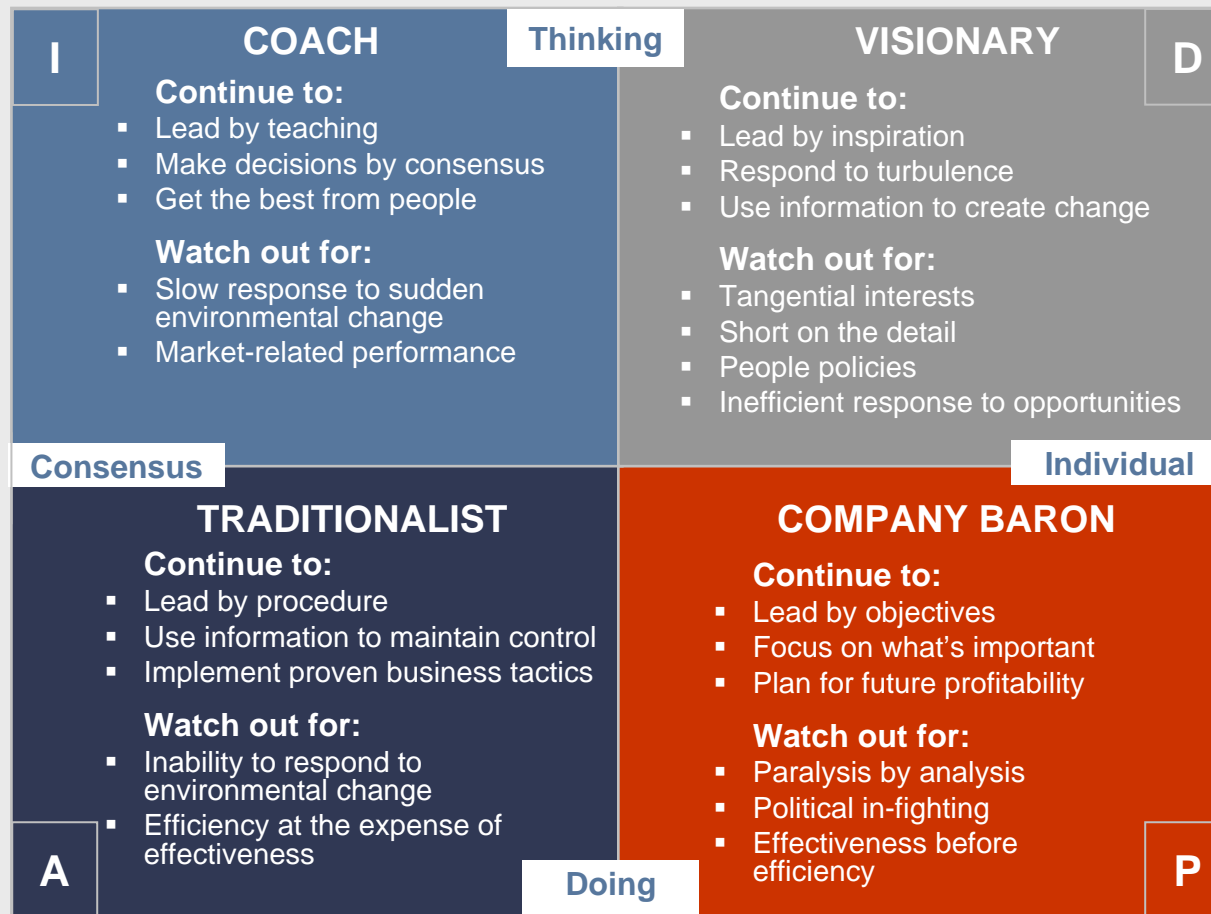


Figure 4.2: Leadership styles




The *four* generic supply chain types



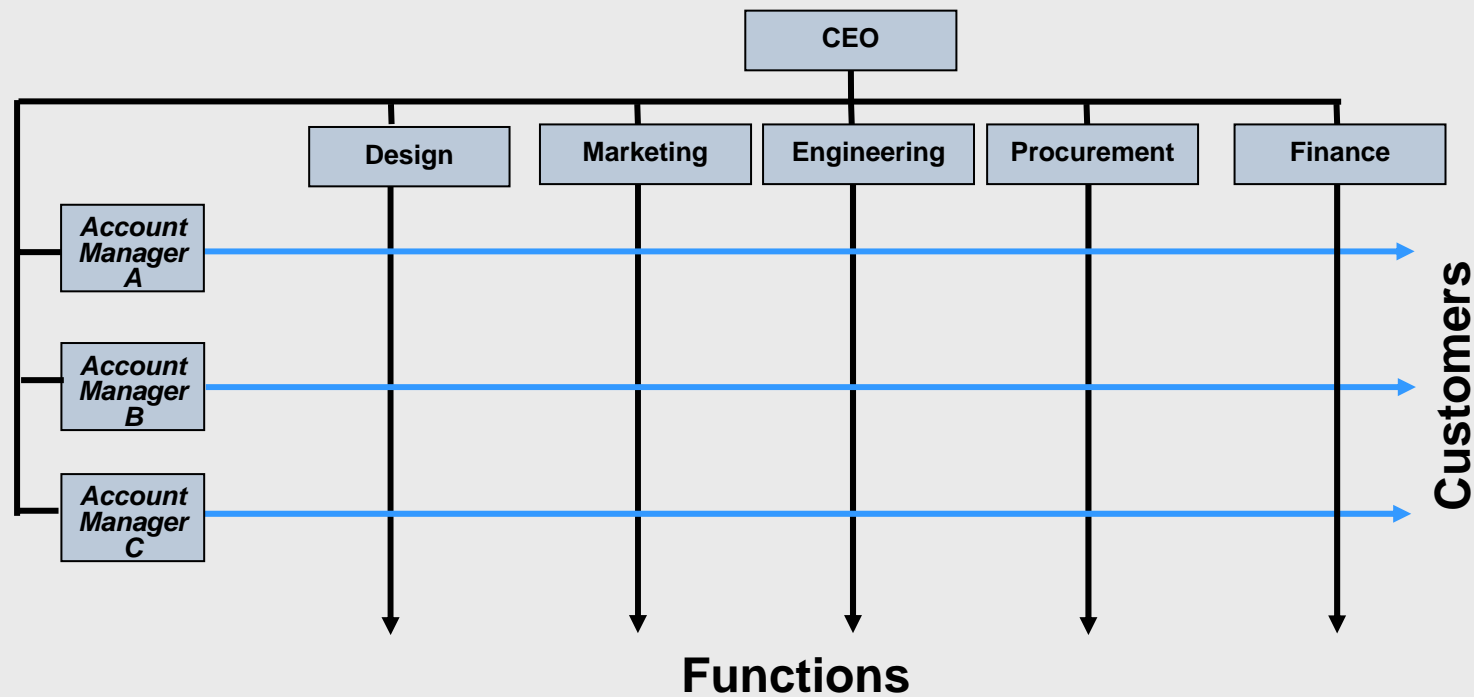
Continuous replenishment supply chains

Continuous Replenishment supply chains

.....where relationships matter most

<u>Focus</u>	Relationship Development
<u>Value Proposition</u>	<ul style="list-style-type: none">• Share information• Strategic partnerships• Long term stability 
<u>Cultural Capability</u> <ul style="list-style-type: none">• O.D• Process• IT• KPIs• Incentives• Job Design• Internl Comms.• T & D• Recruitment	<u>Group sub-culture</u> <ul style="list-style-type: none">• 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
<u>Leadership Style</u>	<u>Coach</u> <ul style="list-style-type: none">• 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

Focus

High volume; Low variety; Low costs; MTF

Value Proposition

- Seek economies of scale
- Low cost production & distribution
- Forecast demand; mature products; predictable lead-times

Cultural Capability

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

Hierarchical sub-culture

- Organization around core processes
- Standard processes; emphasis on cost
- L-T capital investment in ERP & other systems
- DIFOTEF; forecast accuracy
- Conform to set policies
- Centralized control – rules and regulations
- Regular; structured; ‘need to know’ basis
- Emphasis on analysis and measurements
- Recruit players with analytical skills

Leadership Style

Traditional

- Leads by procedure and precedent
- Implements proven business practices
- Cost controller; efficiency focus
- Uses information to control
- Seeks stability

Process organization design

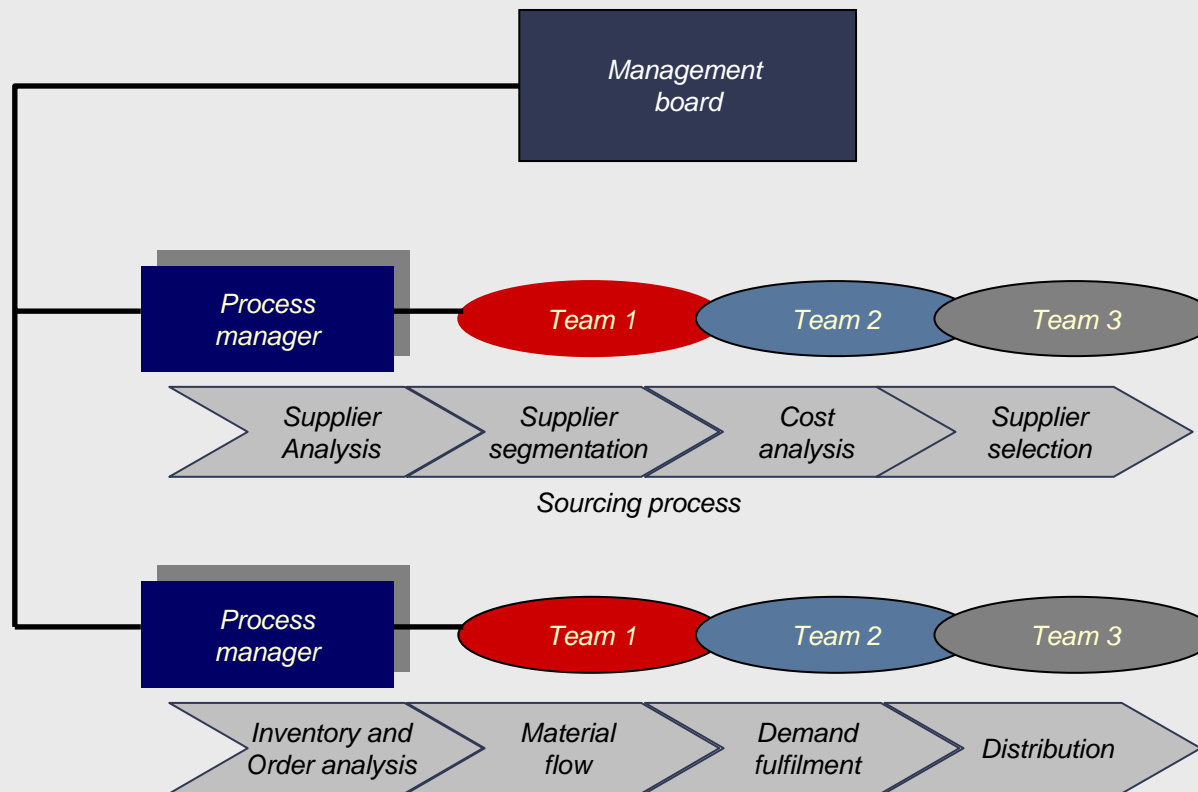


Figure 6.1: Process organization design

Implications of good versus poor systems integration

	“System Replacement”	“Re-engineered”	“Transformed”
Benefit Category	No fundamental business changes	Key processes re-engineered	Processes and organisation aligned with strategy
Revenue Uplift	0	1% - 3%	5% - 10%
COGS Reduction	0 - 1%	1% - 2%	3% - 8%
Overhead Reduction	0 - 1%	1% - 2%	3% - 5%
Inventory Reduction	(30%) - 5%	5% - 20%	25% - 50%

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

<u>Focus</u>	Manage enterprise for responsiveness ; MTO
<u>Value Proposition</u>	<ul style="list-style-type: none">• Fast decision making• Fast delivery• Respond rapidly in unpredictable conditions
<u>Cultural Capability</u> <ul style="list-style-type: none">• O.D• Process• IT• KPIs• Incentives• Job Desion• Intern Comms.• T & D• Recruitment	<u>Rational</u> sub-culture <ul style="list-style-type: none">• Modular; network-based and virtual• Process short-cuts; fast response• <u>Applications</u>: 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
<u>Leadership Style</u>	<u>Company Baron</u> <ul style="list-style-type: none">• Leads by objectives• Embraces change• Goes for growth• Focuses on what's important• Analytical; fact-based solutions

The new modular organization design

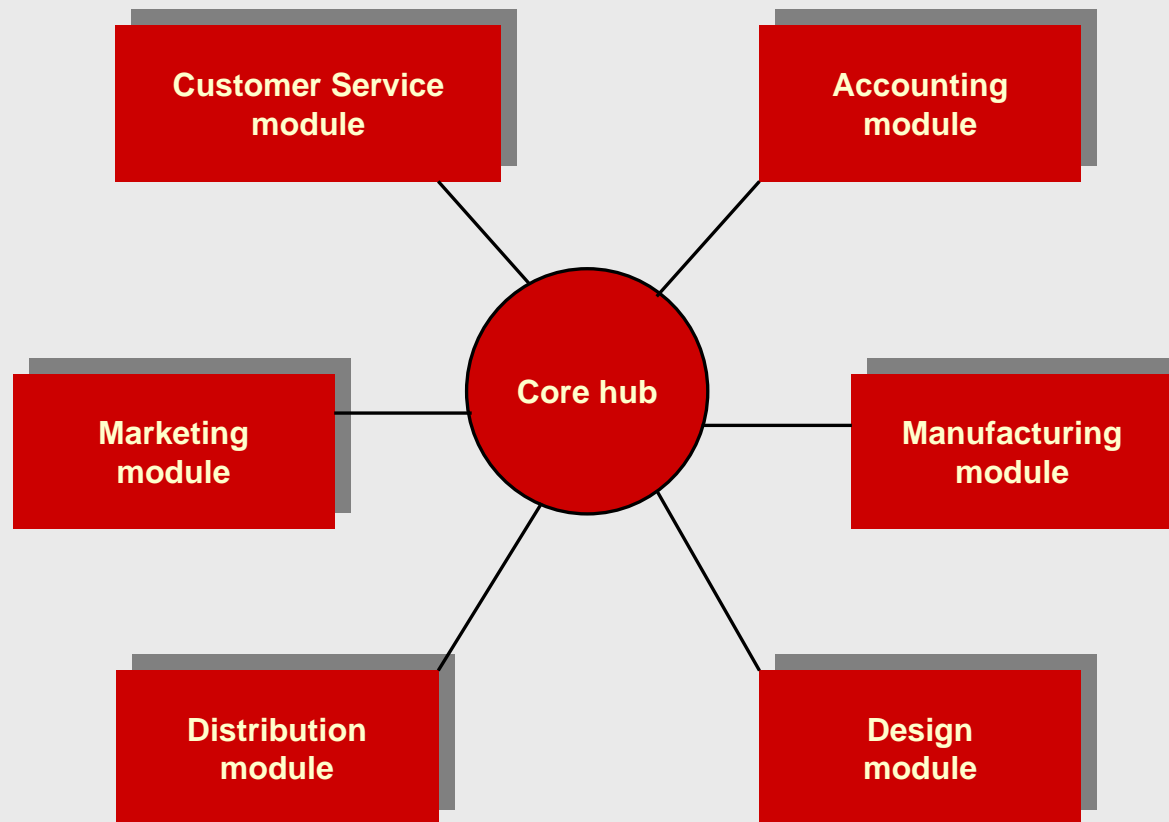


Figure 7.1: Modular Organization Design



Fully flexible supply chains

Fully Flexible supply chains

.....where nothing is impossible

Focus

Hedge and deploy resources

Value Proposition

- Meet unplanned/unplannable demand
- Innovative solutions, delivered fast, customer-centric

Cultural Capability

- O.D
- Process
- IT
- KPIs
- Incentives
- Job Desion
- Intern Comms.
- T & D
- Recruitment

Entrepreneurial

- Cluster; small multi-disciplinary teams
- No standard processes; local initiative
- Low systems requirements
- Emphasis on finding creative solutions
- Reward individualism & risk-taking behaviour
- Autonomy through empowerment
- Spontaneous and informal
- Lateral thinking; brainstorming
- Recruit enterprising, resourceful personnel

Leadership Style

Visionary

- Leads by inspiration
- Informal
- Decisive
- Cares about ideas
- Values innovation

Multi-disciplinary cluster organization design for maximum flexibility

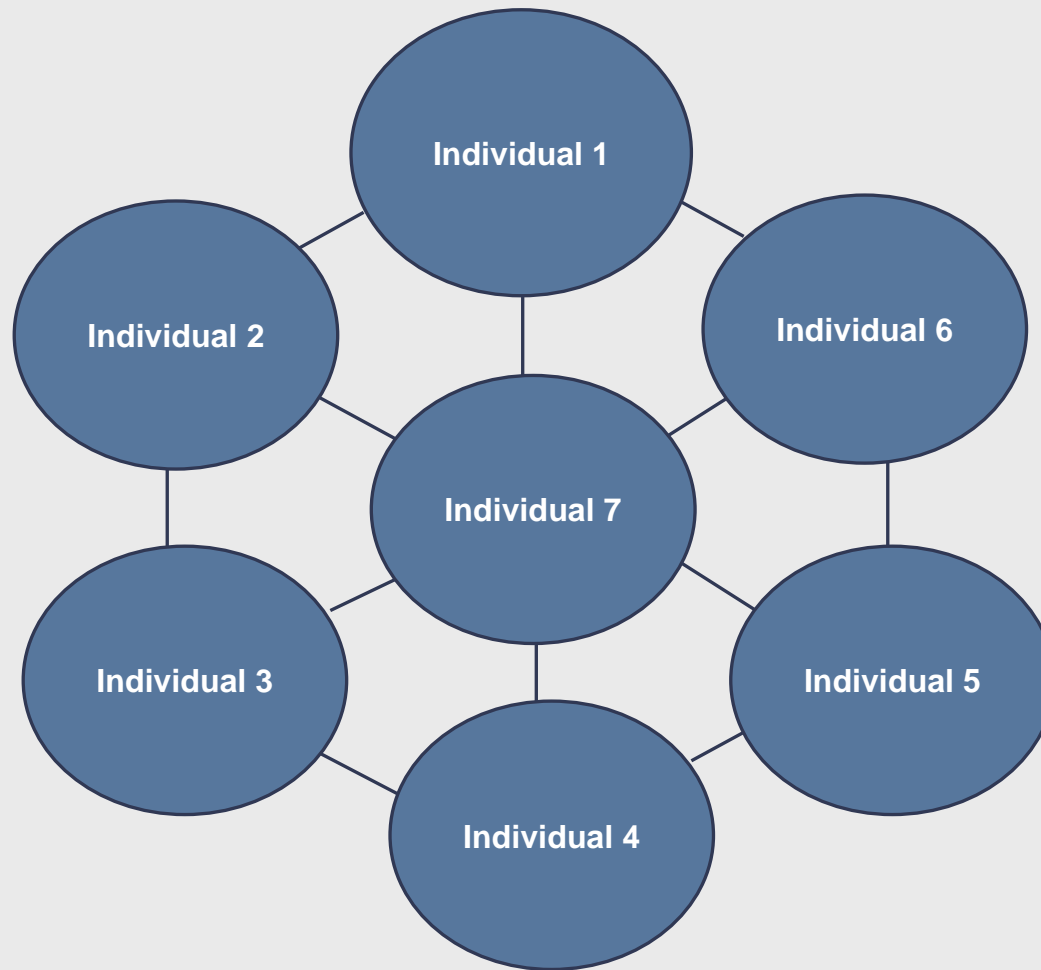


Figure 8.3: Cluster Organization Design

The 'Business event' variant of *Fully Flexible* supply chains

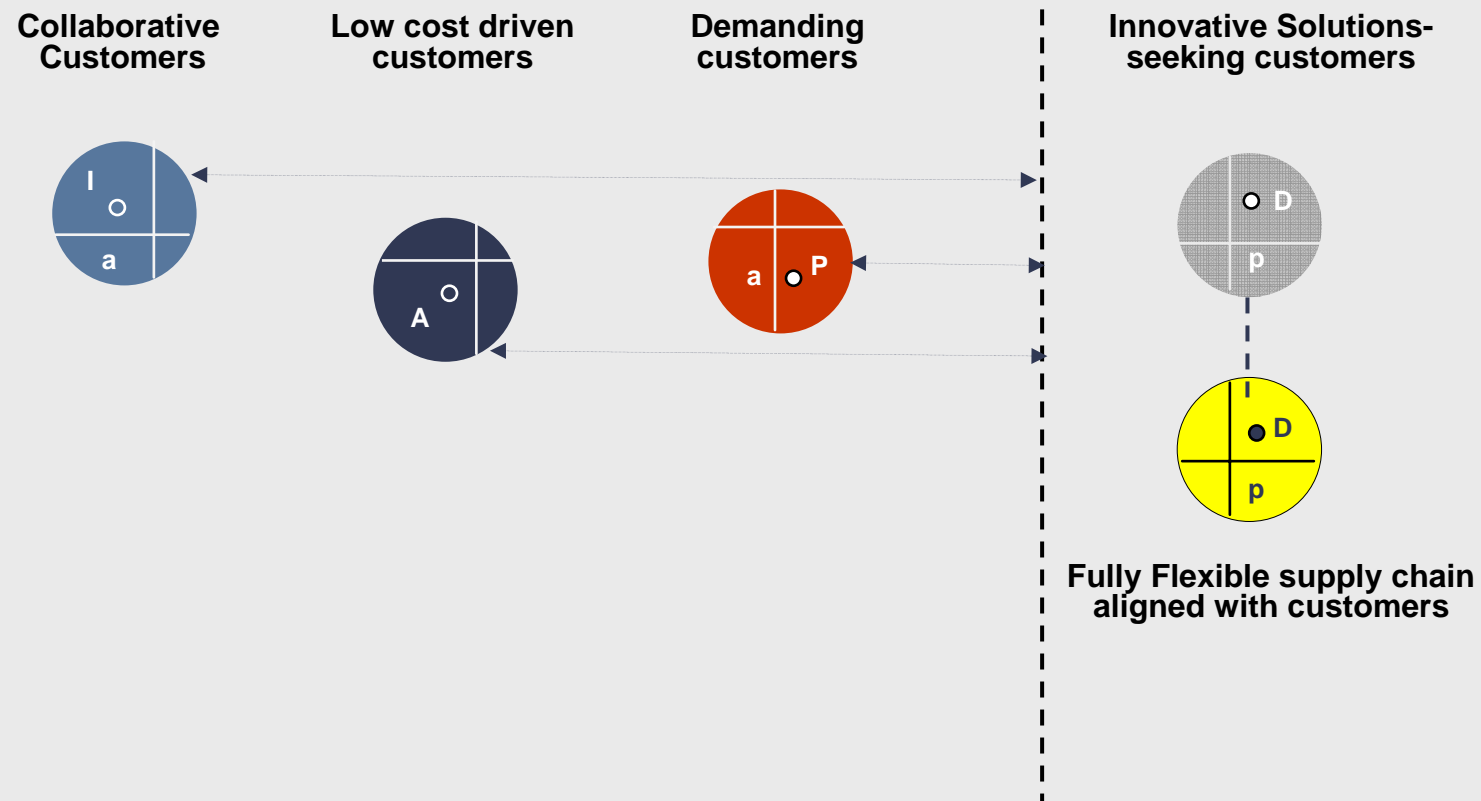


Figure 8.1: 'Business Event' *Fully Flexible* supply chain and its innovation-seeking customers

The Emergency response/humanitarian variant of *Fully Flexible* supply chains

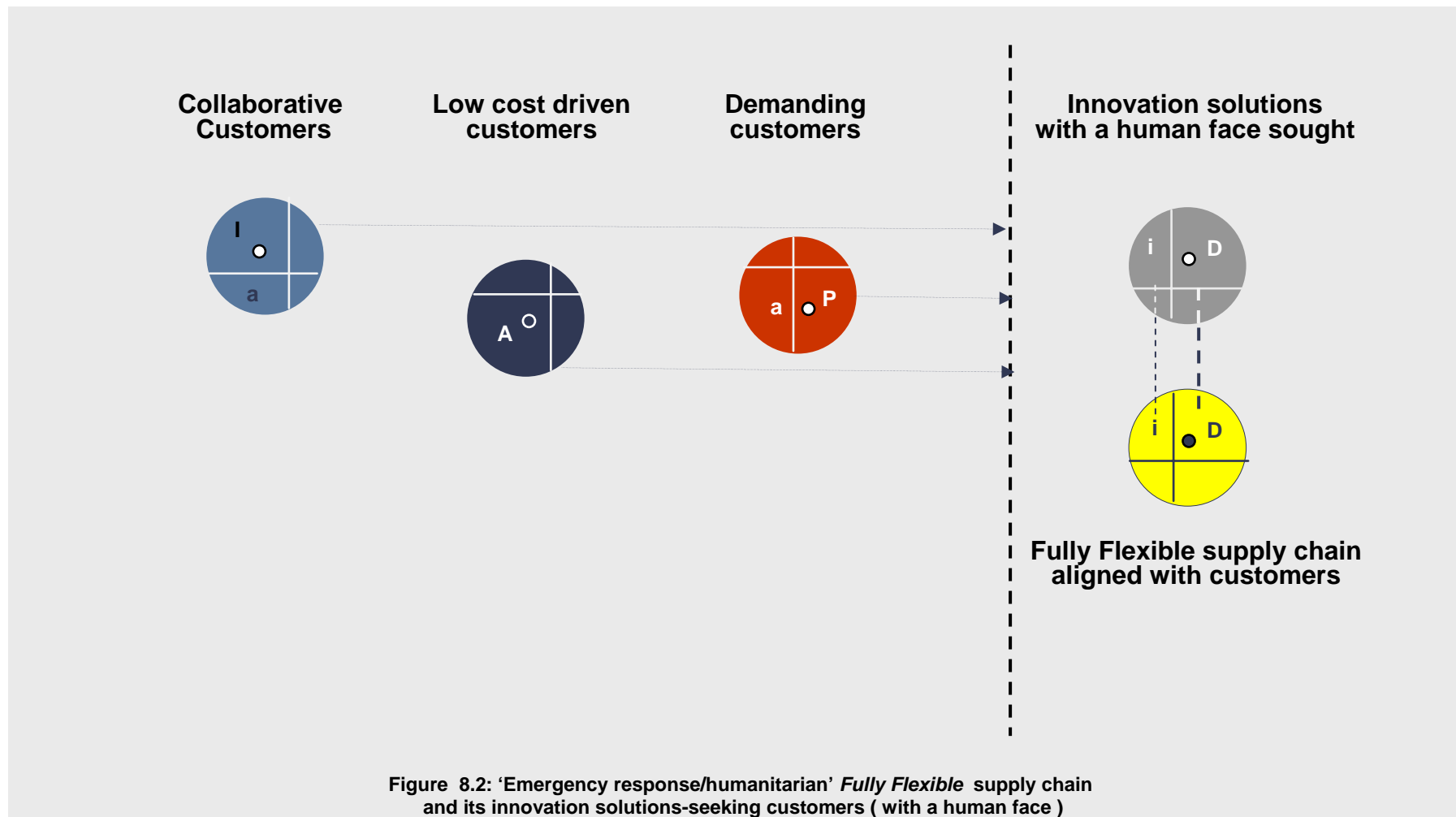
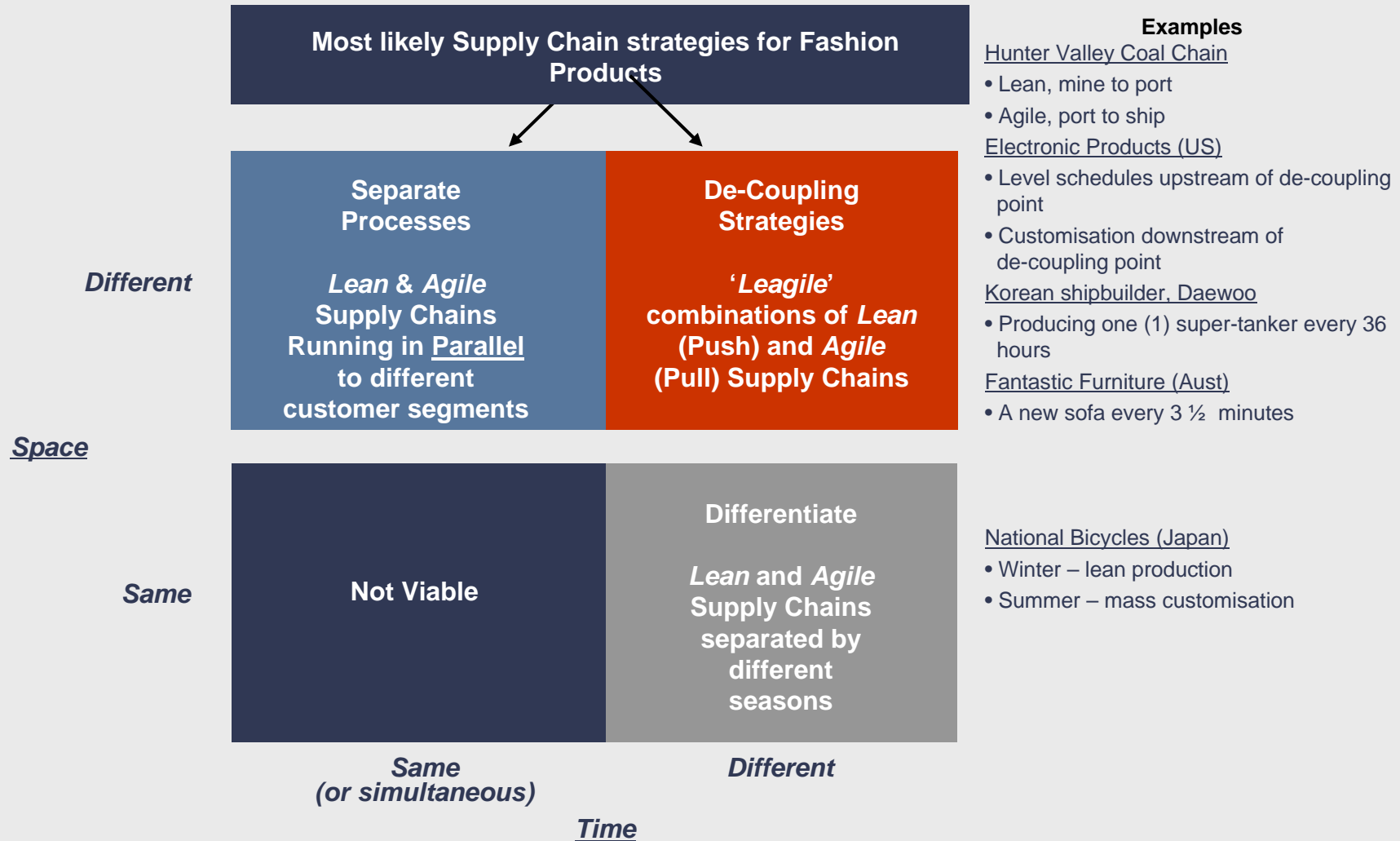


Figure 8.2: 'Emergency response/humanitarian' *Fully Flexible* supply chain and its innovation solutions-seeking customers (with a human face)



Hybrid Supply Chain Combinations in Practice

Classic combinations of *Lean* and *Agile* supply chains

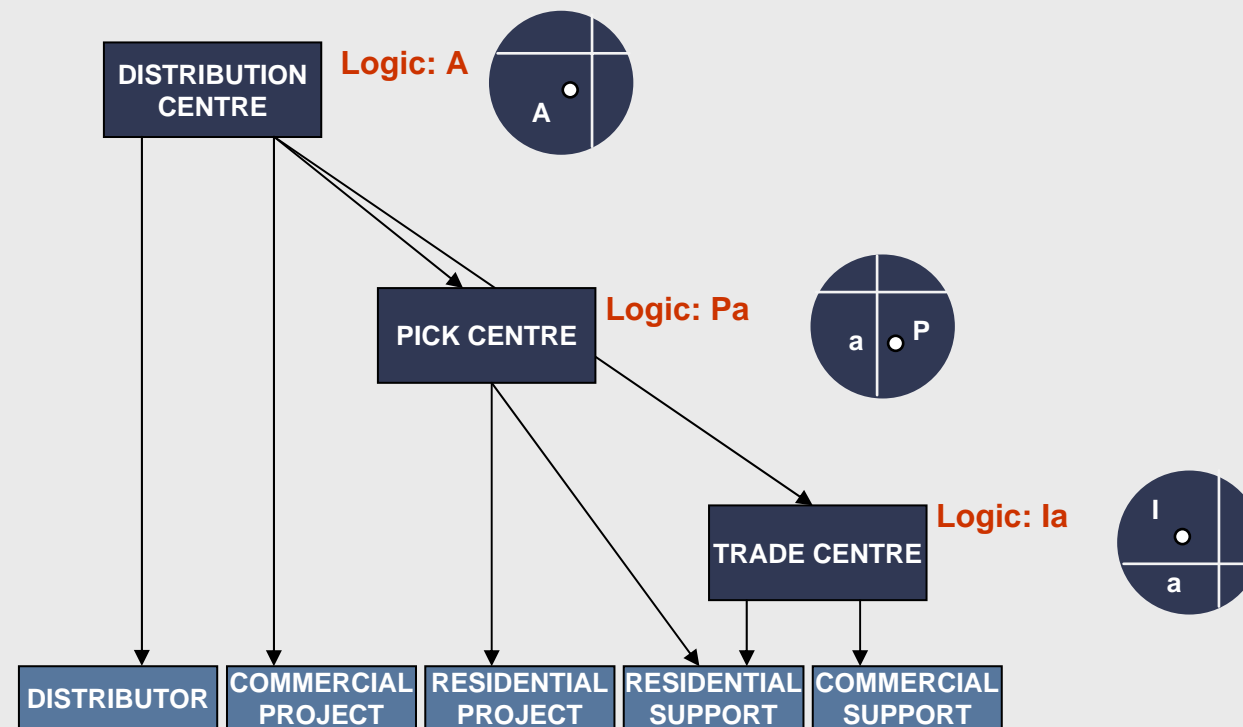


Source: Adapted from Towill & Christopher (2002)

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

Multiple supply chain alignment in the Australian construction materials market

Focused service offer and tailored Operations to achieve alignment



Source: Carpenter Ellis

Figure 6.4 Resultant Metropolitan Distribution Network

Multiple combinations of supply and demand-side elements of enterprise supply chains

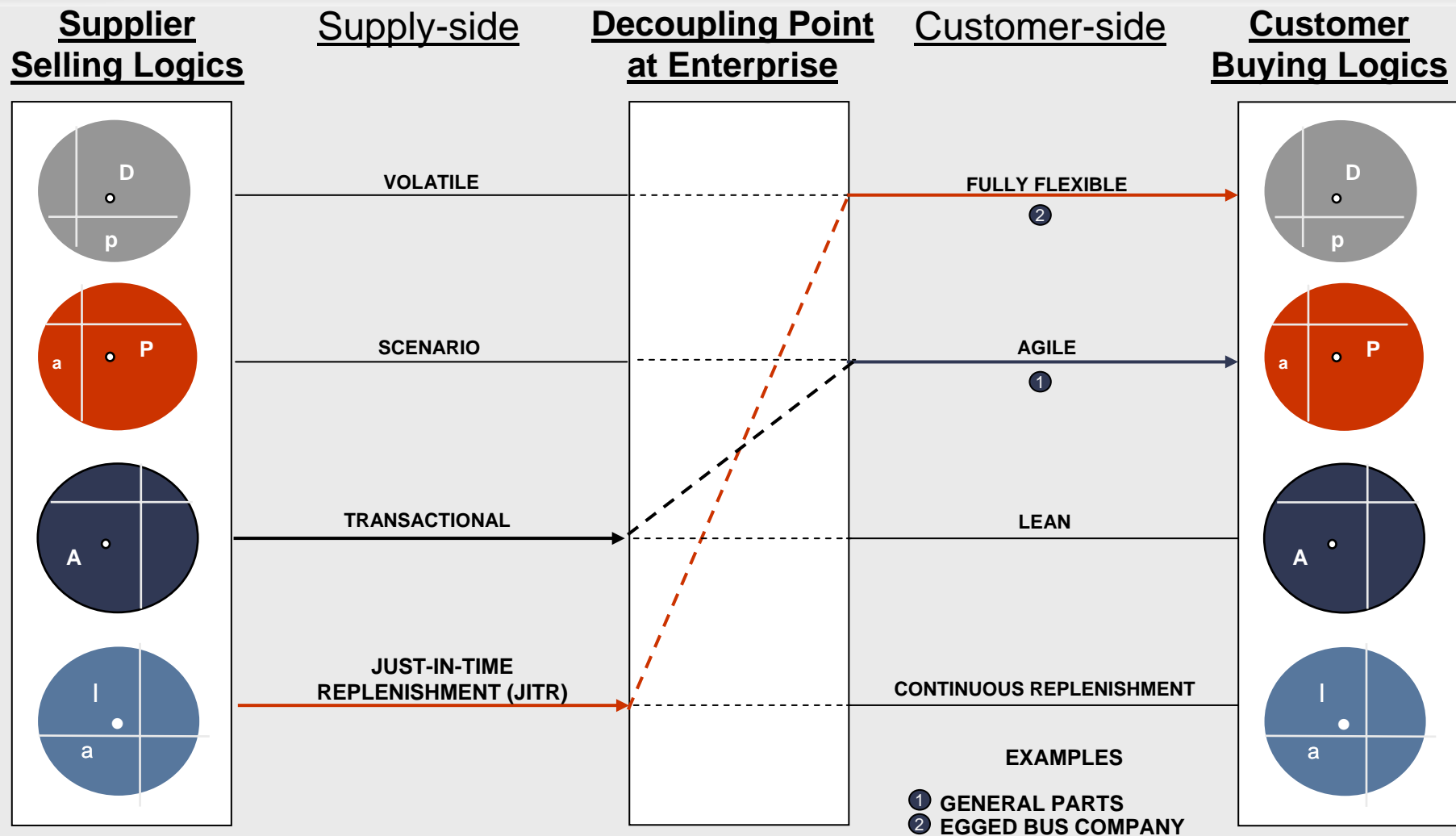


Figure 8.4: Mixed Supply Chain Logics



New business models for new supply chains

Moving from 'dynamic alignment' to 'embedded alignment'

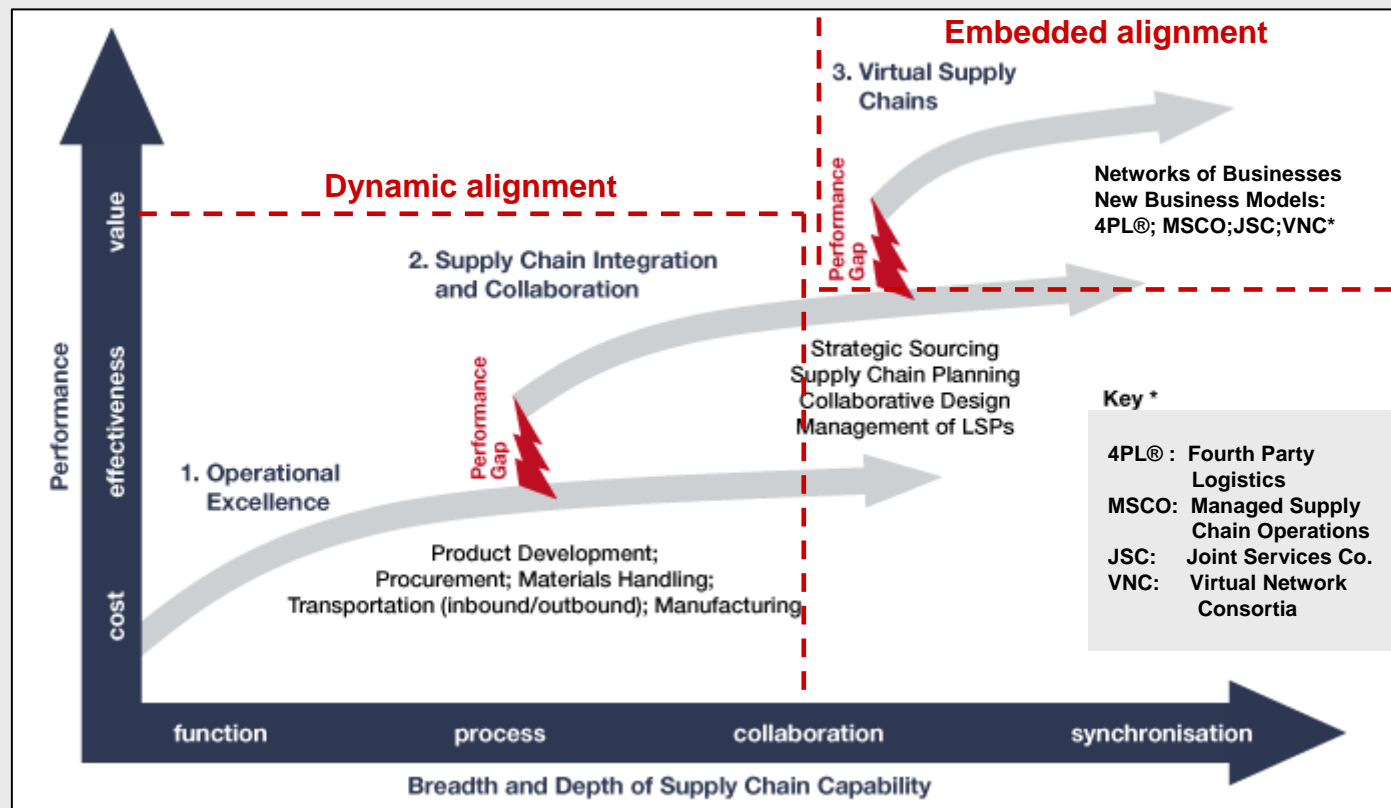
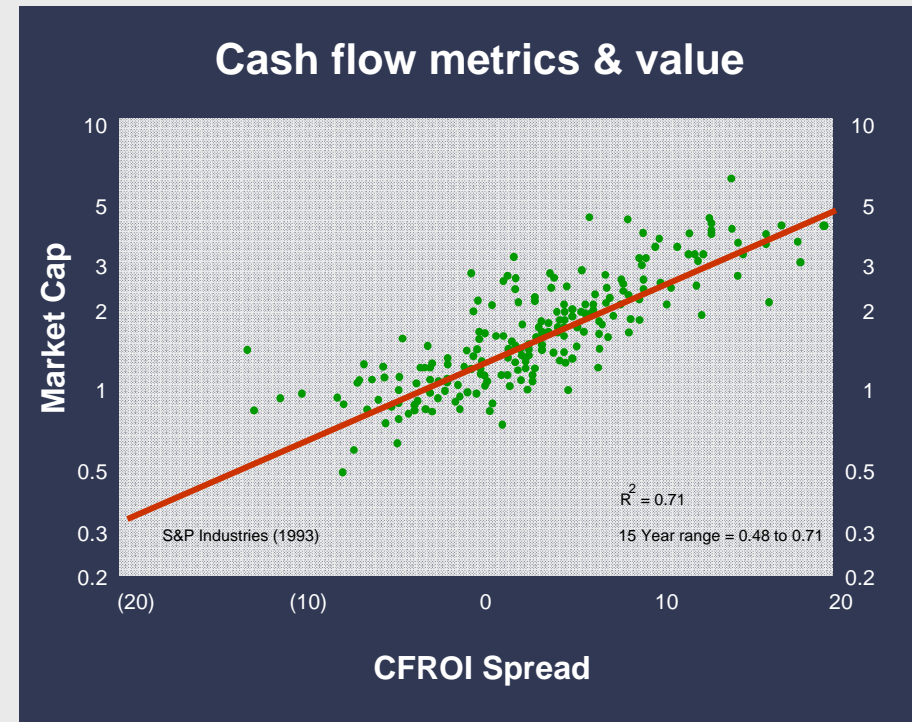
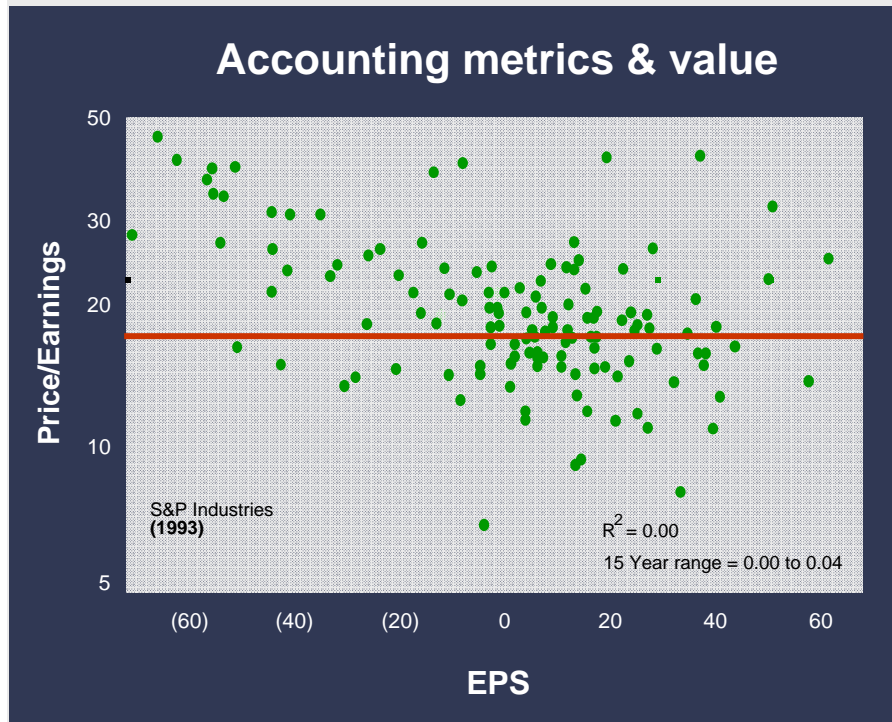


Figure 9.1: Performance/Capability continuum

High - performance supply chains lead to higher share prices



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

Source: CSFB Holt

Figure 9.2: CFROI and traditional accounting metrics

The original 4PL[®] organization design

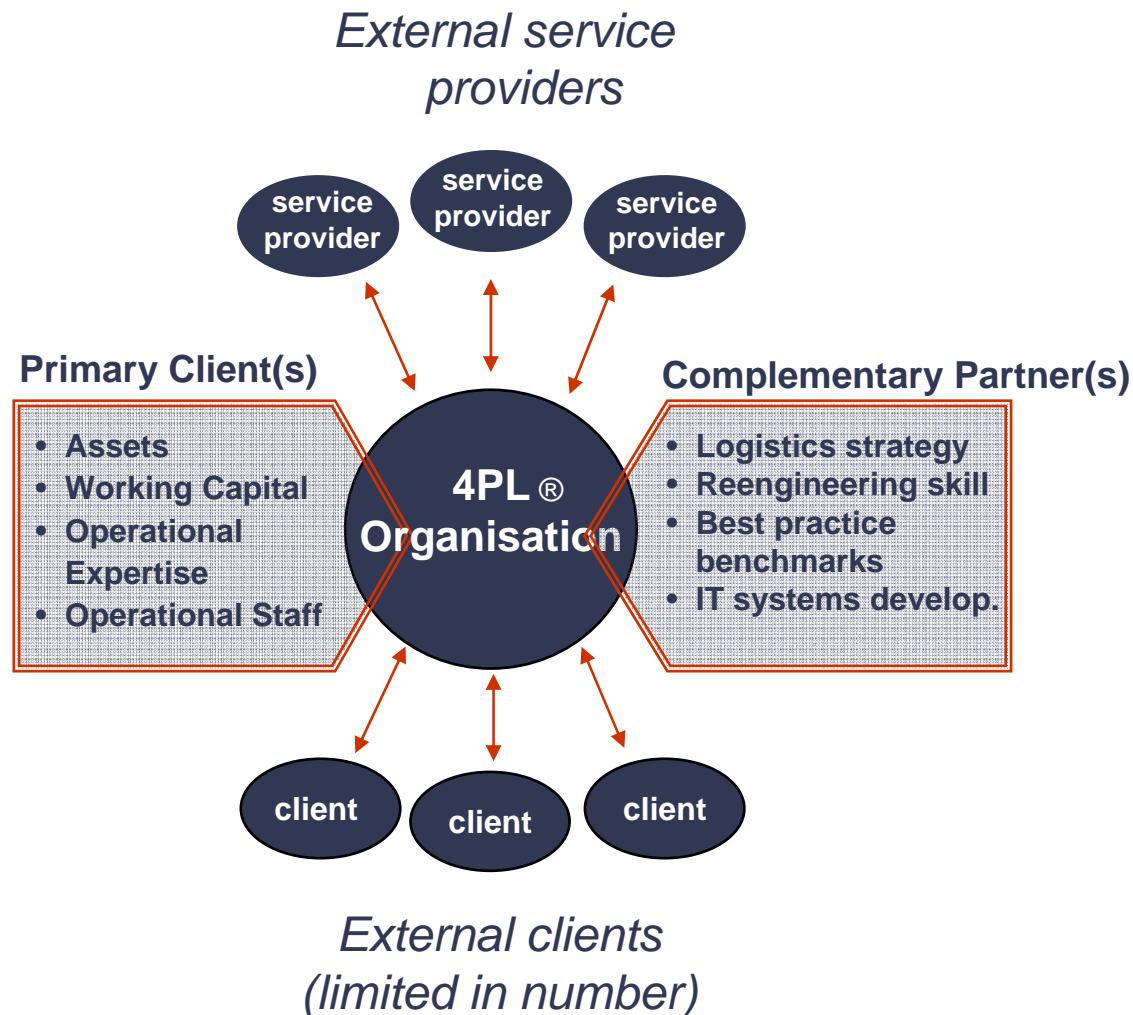


Figure 9.4: Classic 4PL new business model

Key Characteristics of new Business Models:

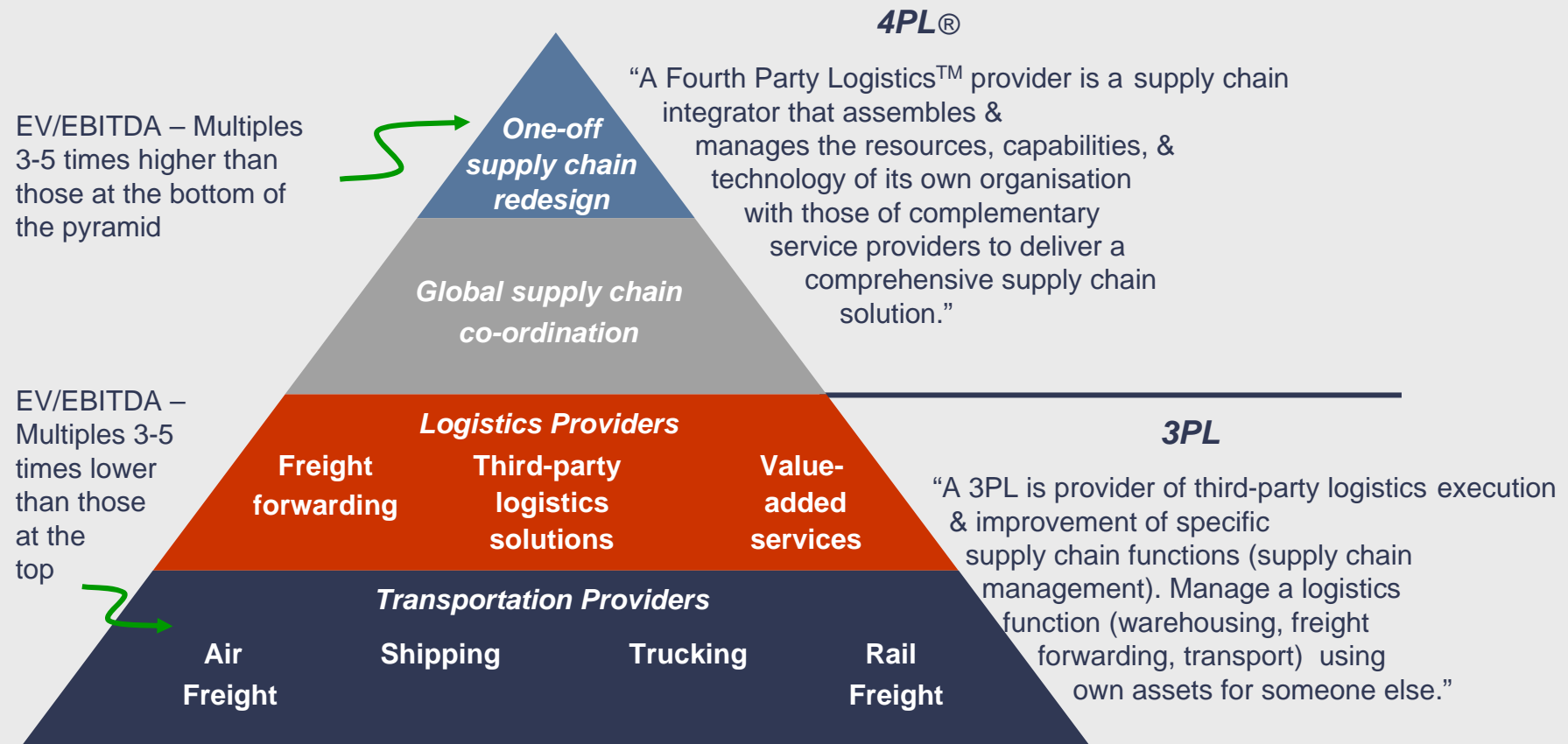
- Hybrid Organization - formed from a number of different entities
- Typically established as a JV - separate legal entity owned and operated by at least two primary client(s) and their partner(s).
- Alignment of goals of partners and clients through profit sharing.
- Responsible for management and operation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

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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.



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

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

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

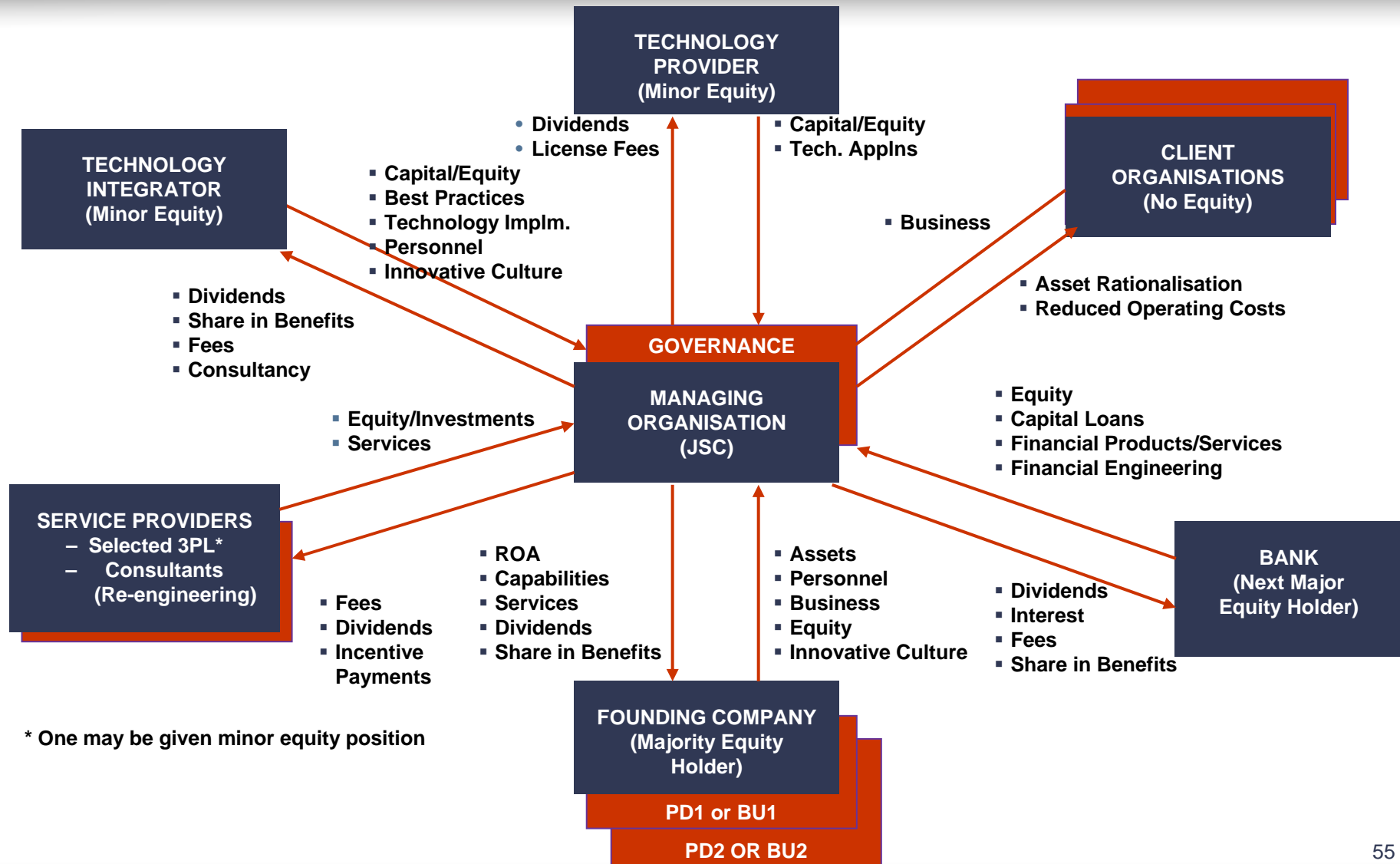


Figure 9.8: How each member of JSC earns a ROI

The evidence is clear – the JSC design out-performs conventional outsourcing designs

The structure, motivation and funding options that define strategic transformation programmes place clear daylight between the value of this approach compared to either traditional contract-style outsourcing or 1990's style consulting services

<u>Feature</u>	<u>Client Hosted Solution</u>	<u>Outsourcing Solution</u>	<u>Strategic Transformation & Joint Service Company</u>
<ul style="list-style-type: none"> • Ownership & risk • People • Objective • Motivation • Incentives 	<ul style="list-style-type: none"> • Borne 100% in-house • Bought-in resources • Process improvement • Policy & compliance • Milestones 	<ul style="list-style-type: none"> • Contracted out • Transferred • Cost reduction • Cost reduction • Cost based service rewards 	<ul style="list-style-type: none"> • Jointly owned • Enhanced career path • Share price growth • Mutual shared goals • Fusion of all partners' share prices
<ul style="list-style-type: none"> • Funding • Focus • Control • Future Option • Strategy 	<ul style="list-style-type: none"> • 100% in-house • Template roll-out • Programme m'gt • Sustain non-core activity • Better IT 	<ul style="list-style-type: none"> • Outsourcing provider • Cost reduction • By contract only • Return difficult • Cost reduction 	<ul style="list-style-type: none"> • Own, other 3rd Parties • Capability @ speed • Improved & flexible • ROI easier to get • Market leadership

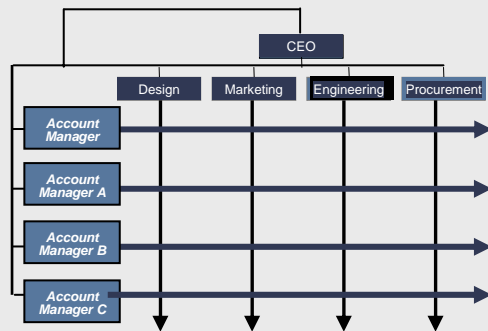
Why should a company embark on such a pivotal change programme and either (a) take all the risk and the upfront costs whilst waiting for the benefits [traditional consulting] or (b) lose control of business functions in pursuit of short term cost reductions [traditional outsourcing] when there is a co-owned 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

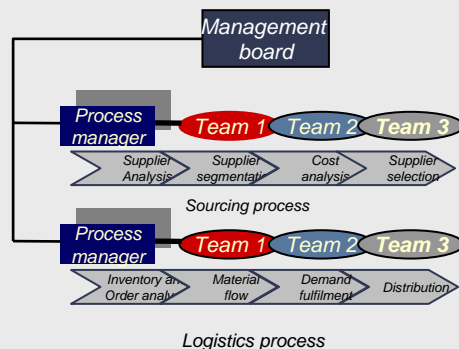
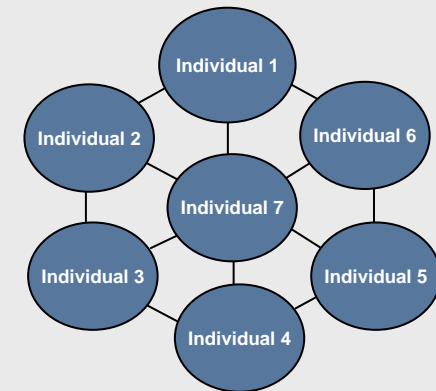


Functional Matrix

- 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.

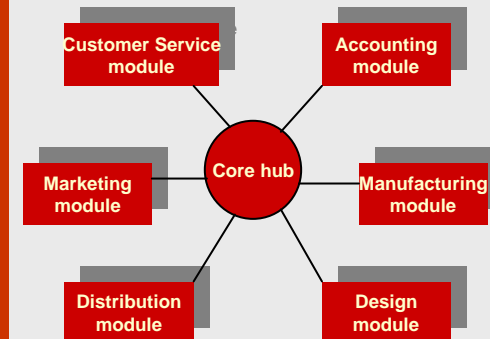


Figure 10.3: Multiple organization formats within an enterprise

Dr. John Gattorna

BE, Melb., MBA, Monash, PhD., Cranfield

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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- Chinese language edition currently under preparation and due for publication early 2007
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