Keynote: Supply Chains – from static to dynamic capabilities

Dr John Gattorna, Global SC ‘Thought Leader’, Advisor, and Author
The Australian 4,000 metre men’s pursuit cycling team winning the Olympic gold medal in Athens

Fact, like it or not: all enterprises have multiple supply chains running through them

Figure 1.1: Operationalizing the concept of supply chains

Source: Adapted from Figure 1.1 in Gattorna (2006), p.9.
Dynamic Alignment Framework

Figure 1.2: Elements of the ‘dynamic alignment’ framework

Source: Adapted from Figure I.2 in Gattorna (2003), p. xiii; also Gattorna (1998), p. 5; and Gattorna (2006), p.16.

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
Figure 1.4: Typical spread of attributes that define customers’ buying behaviors; in this case ‘P’ is the dominant logic and ‘a’ is the secondary logic, making a composite ‘Pa’
Figure 1.9: Paradigm shift to a best-of-both-worlds strategy

Source: Developed in discussion with Deborah Ellis, Carpenter Ellis, 2009
Customer Service = Reliability, Predictability, Consistency

- Integration
- Mature – imminent change??
- Loyalty and long-term relationships
- Brand loyalty
- “Joint Venture” mentality
- “Quality” emphasis
- Teamwork
- Consensus

Customer Service = Empathy, Understanding, Relationship

- Early / young market
- No clear patterns / traditions yet to be established
- New product / technology
- High level R&D (eg. CDs)
- Supplier-led risk
- Entrepreneurial
- Lower price sensitivity

Customer Service = Innovative, Creative response to unique needs

- Stable market, patterns are established
- Commodity
- Drive for efficiency – “experience” culture
- Value for money
- High price sensitivity
- Procedural
- Standards
- Structure

Customer Service = Responsiveness in a commercial way

- Patterns emerge - growth
- Customer led demand
- Sales, promotion, distribution important
- Strong commercial attitude – anti-relationship (eg. price sensitive); opposite to loyalty
- “Hollywood” syndrome – only as good as your last performance
- Product differentiation

Figure 1.10: Primary customer service logics
Source: Adapted from Figure 2.4 in Gattorna and Walters (1996), p. 31; see also Figure 1.10 in Gattorna (2006), p.27.
The sixteen (16) possible dominant behavioral segments

- **EFFICIENT**
- **COMMERCIAL**
- **INNOVATIVE SOLUTIONS**
- **COLLABORATIVE**

**FIGURE 2.1** The sixteen (16) possible dominant behavioral segments

Copyright © 2010 John Gattorna
The identified dominant buying behaviors in the user/consumer base

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

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
<table>
<thead>
<tr>
<th>Collaborative</th>
<th>Efficient</th>
<th>Dynamic</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

**FIGURE 2.3** The four most commonly observed dominant buying behaviors

*Source:* Adapted from Table 1.3.1 in Gattorna (2003), p. 32; see also Gattorna (2006), p.41
Predictable demand, easily managed through tight collaboration with customers. **Focus on retention of customer 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 2.4** The four generic supply chain types

*Source* Adapted from Figure 2.3 in Gattorna (2006), p.43, Supplemented by idea from Mark Van der Veen, Dou Corning
Flow types

- **Cavitation**
  - "Fully flexible"
  - Unplanned and unplannable demand due to unknown customers with exceptional, sometimes emergency requests

- **Surge**
  - "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.

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

- **Base**
  - "Continuous replenishment"
  - Very predictable demand from known customers; easily managed through tight collaboration with these collaborative customers.

**Customer segments**

**Source** Adapted from Figure 2.4 in Gattorna (2006), p.46

FIGURE 2.5◆ Flow types and matching supply chain types
### Customer segments

**Service priorities**
- Stable, long term relationship
- High levels of support
- Merchandising
- Help with billing

**Segment-focused activities**
- Multi-level relationships
- Pro-active order collection with assistance
- Driver stows stock and merchandise

**Shared logistics infrastructure**
- Distribution:
  - Coordination
  - Warehousing
  - Inventory management

### ‘Mom & Pop Stores’

- ‘Collaborative’

### ‘Supermarket’

- ‘Lean’

### ‘Vendor refill machines’

- ‘Agile’

- Short lead-time
- Flexibility
- Responsive service
- Telemetry

**FIGURE 2.8** The three different supply chains at Coca-Cola, Japan
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Product mix</td>
</tr>
<tr>
<td>2.</td>
<td>Innovation emphasis</td>
</tr>
<tr>
<td>3.</td>
<td>Marketing emphasis</td>
</tr>
<tr>
<td>4.</td>
<td>Channels of distribution</td>
</tr>
<tr>
<td>5.</td>
<td>Pricing regime</td>
</tr>
<tr>
<td>6.</td>
<td>Promotional activity</td>
</tr>
<tr>
<td>7.</td>
<td>Service emphasis</td>
</tr>
<tr>
<td>8.</td>
<td>Procurement/sourcing approach</td>
</tr>
<tr>
<td>9.</td>
<td>Production</td>
</tr>
<tr>
<td>10.</td>
<td>Capacity considerations</td>
</tr>
<tr>
<td>11.</td>
<td>Fulfilment emphasis</td>
</tr>
<tr>
<td>12.</td>
<td>Relationship intensity</td>
</tr>
<tr>
<td>13.</td>
<td>Systems/IT support</td>
</tr>
<tr>
<td>14.</td>
<td>Resource allocation priorities</td>
</tr>
<tr>
<td>15.</td>
<td>Strategic risk profile</td>
</tr>
</tbody>
</table>

Figure 3.1◆ Strategic dimensions for formulating supply chain strategies
<table>
<thead>
<tr>
<th>STRATEGIC DIMENSION</th>
<th>IDEAL STRATEGY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Product mix</td>
<td>Emphasis on mature, branded, and augmented products</td>
</tr>
<tr>
<td>2 Innovation emphasis</td>
<td>Big emphasis on product quality; joint product development; innovate to improve relationship</td>
</tr>
<tr>
<td>3 Marketing emphasis</td>
<td>Build brand loyalty</td>
</tr>
<tr>
<td>4 Channels of distribution</td>
<td>Either direct or via trusted outlets</td>
</tr>
<tr>
<td>5 Pricing regime</td>
<td>Price according to strength of brand; moderate price sensitivity</td>
</tr>
<tr>
<td>6 Promotional activity</td>
<td>Low promotional activity - not needed</td>
</tr>
<tr>
<td>7 Service emphasis</td>
<td>Empathy with loyal customers; consistency of service; trust</td>
</tr>
<tr>
<td>8 Procurement/sourcing approach</td>
<td>Select suppliers on basis of relationships</td>
</tr>
<tr>
<td>9 Production</td>
<td>Low volume – high value add. Collaborate to reduce costs</td>
</tr>
<tr>
<td>10 Capacity considerations</td>
<td>Maximum utilization achievable consistent with serving customers</td>
</tr>
<tr>
<td>11 Fulfilment approach</td>
<td>Reliable/scheduled delivery; shared forecasts</td>
</tr>
<tr>
<td>12 Relationship intensity</td>
<td>Mutual dependence between customer and supplier</td>
</tr>
<tr>
<td>13 Systems/ IT support</td>
<td>Emphasis on customer management, CRM essential</td>
</tr>
<tr>
<td>14 Resource allocation priorities</td>
<td>Focus on supporting the relationship to retain customer</td>
</tr>
<tr>
<td>15 Strategic risk profile</td>
<td>Low</td>
</tr>
</tbody>
</table>

FIGURE 7.1 ◆ Continuous replenishment supply chain strategy - protective
<table>
<thead>
<tr>
<th>STRATEGIC DIMENSION</th>
<th>IDEAL STRATEGY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Product mix</td>
<td>Stable product line; minimal variants</td>
</tr>
<tr>
<td>2. Innovation emphasis</td>
<td>Focus on ways to reduce cost of inputs and processes</td>
</tr>
<tr>
<td>3. Marketing emphasis</td>
<td>Lowest price; reliability</td>
</tr>
<tr>
<td>4. Channels of distribution</td>
<td>Wide distribution through multiple channels</td>
</tr>
<tr>
<td>5. Pricing regime</td>
<td>Lowest price. EDLP</td>
</tr>
<tr>
<td>6. Promotional activity</td>
<td>Low</td>
</tr>
<tr>
<td>7. Service emphasis</td>
<td>Efficiency and process engineering</td>
</tr>
<tr>
<td>8. Procurement/Sourcing approach</td>
<td>Outsource standard products to gain lowest cost production.</td>
</tr>
<tr>
<td>9. Production</td>
<td>High volume – low cost; commodity</td>
</tr>
<tr>
<td>10. Capacity considerations</td>
<td>High utilization</td>
</tr>
<tr>
<td>11. Fulfilment approach</td>
<td>High reliability; predictable service and availability</td>
</tr>
<tr>
<td>12. Relationship Intensity</td>
<td>Low</td>
</tr>
<tr>
<td>13. Systems/ IT support</td>
<td>Emphasis on transactional systems</td>
</tr>
<tr>
<td>14. Resource allocation priorities</td>
<td>Focus on cost reduction</td>
</tr>
<tr>
<td>15. Strategic risk profile</td>
<td>Low</td>
</tr>
</tbody>
</table>

**FIGURE 8.1**  *Lean supply chain strategy - incremental*
<table>
<thead>
<tr>
<th>STRATEGIC DIMENSION</th>
<th>IDEAL STRATEGY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Product mix</td>
<td>Larger range; choice important</td>
</tr>
<tr>
<td>2 Innovation emphasis</td>
<td>Seek product differentiation</td>
</tr>
<tr>
<td>3 Marketing emphasis</td>
<td>Quick response to changing customer requirements</td>
</tr>
<tr>
<td>4 Channels of distribution</td>
<td>Provide easy access to consumers; convenience</td>
</tr>
<tr>
<td>5 Pricing regime</td>
<td>Competitive; moderate price sensitivity</td>
</tr>
<tr>
<td>6 Promotional activity</td>
<td>High; fashion-style approaches</td>
</tr>
<tr>
<td>7 Service emphasis</td>
<td>Performance to specifications</td>
</tr>
<tr>
<td>8 Procurement/sourcing</td>
<td>Market knowledge and distribution</td>
</tr>
<tr>
<td>9 Production</td>
<td>Shorter runs; flexible scheduling; make-to-order</td>
</tr>
<tr>
<td>10 Capacity considerations</td>
<td>Lower utilisation because of “buffers” in the system</td>
</tr>
<tr>
<td>11 Fulfillment</td>
<td>Short lead times; use postponement</td>
</tr>
<tr>
<td>12 Relationship intensity</td>
<td>Low</td>
</tr>
<tr>
<td>13 Systems/IT support</td>
<td>Use modelling and analysis</td>
</tr>
<tr>
<td>14 Resource allocation priorities</td>
<td>Build spare capacity to cater for volatile demand</td>
</tr>
<tr>
<td>15 Strategic risk profile</td>
<td>Higher risk</td>
</tr>
</tbody>
</table>

FIGURE 9.1 ◆ Agile supply chain strategy - operational
<table>
<thead>
<tr>
<th>STRATEGIC DIMENSION</th>
<th>IDEAL STRATEGY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Product mix</td>
<td>Broad changing product line</td>
</tr>
<tr>
<td>2 Innovation emphasis</td>
<td>Extensive R &amp; D; aim to be first to market</td>
</tr>
<tr>
<td>3 Marketing emphasis</td>
<td>Creative problem solving</td>
</tr>
<tr>
<td>4 Channels of distribution</td>
<td>Limited</td>
</tr>
<tr>
<td>5 Pricing regime</td>
<td>Price appropriately for a creative solution; no price sensitivity</td>
</tr>
<tr>
<td>6 Promotional activity</td>
<td>Target early adopters</td>
</tr>
<tr>
<td>7 Service emphasis</td>
<td>Novel solutions</td>
</tr>
<tr>
<td>8 Procurement/sourcing arrangements</td>
<td>Product; technology; innovation</td>
</tr>
<tr>
<td>9 Production</td>
<td>Prototypes; customisation</td>
</tr>
<tr>
<td>10 Capacity considerations</td>
<td>Low. Hedge and deploy resources</td>
</tr>
<tr>
<td>11 Fulfillment approach</td>
<td>Speed is vital</td>
</tr>
<tr>
<td>12 Relationship intensity</td>
<td>Intense but short term while problem exists</td>
</tr>
<tr>
<td>13 Systems/IT support</td>
<td>Whatever is required to solve the problem</td>
</tr>
<tr>
<td>14 Resource allocation priorities</td>
<td>Hedge and deploy resources; sometimes ineffectively</td>
</tr>
<tr>
<td>15 Strategic risk profile</td>
<td>High</td>
</tr>
</tbody>
</table>

FIGURE 10.3 ◆ “Business event” fully flexible supply chain strategy - Entrepreneurial
<table>
<thead>
<tr>
<th>STRATEGIC DIMENSION</th>
<th>IDEAL STRATEGY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product mix</td>
<td>New innovative approaches as required by the problems faced</td>
</tr>
<tr>
<td>Innovation emphasis</td>
<td>Solutions are developed “in situ”, very fast</td>
</tr>
<tr>
<td>Marketing emphasis</td>
<td>Some media activity seeking donors</td>
</tr>
<tr>
<td>Channels of distribution</td>
<td>As many as needed in a given situation</td>
</tr>
<tr>
<td>Pricing regime</td>
<td>Some price sensitivity; stewardship of funds important</td>
</tr>
<tr>
<td>Promotional activity</td>
<td>Low</td>
</tr>
<tr>
<td>Service emphasis</td>
<td>Welfare of the humans involved is paramount</td>
</tr>
<tr>
<td>Procurement/sourcing arrangements</td>
<td>Seek alliances with suppliers with major innovation capabilities</td>
</tr>
<tr>
<td>Production</td>
<td>The supply chain is the product itself – delivering services</td>
</tr>
<tr>
<td>Capacity considerations</td>
<td>Very high. Hedge and deploy resources</td>
</tr>
<tr>
<td>Fulfillment approach</td>
<td>Somewhat haphazard depending on conditions on the ground</td>
</tr>
<tr>
<td>Relationship intensity</td>
<td>High</td>
</tr>
<tr>
<td>Systems/ IT support</td>
<td>Use whatever is available – beg/borrow/steal</td>
</tr>
<tr>
<td>Resource allocation priorities</td>
<td>Reactive to events; somewhat inefficient</td>
</tr>
<tr>
<td>Strategic risk profile</td>
<td>High</td>
</tr>
</tbody>
</table>

FIGURE 10.4  “Emergency response/humanitarian” fully flexible supply chain strategy - Emergency response
VISIBLE PATTERNS OF BEHAVIOR

• Structure
• Strategy
• Systems

VALUES AND BELIEFS

• Goals of the enterprise
• Means used to accomplish these goals

UNDERLYING ASSUMPTIONS

• Taken for granted assumptions about the organizational reality

Source  Adapted from Figure 4.3.3 in Gattorna (2003), p. 460
FIGURE 4.2  ◆ The two sides of values, behavior, and perceptions - inside and outside the enterprise
FIGURE 4.3  ◆ The four generic enterprise subcultures

Source  Adapted from Figure 4.3.5 in Gattorna (2003), p. 461
Foster’s new behavioral-based segmentation in the Australian alcoholic beverage industry

**Local**
- 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

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

eg., Major retailers; CML; Woolworths

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

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

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

eg., Small and remote customers; not buying direct

* Segment names selected by Foster’s
## Figure 4.4: Details of each generic sub-culture

<table>
<thead>
<tr>
<th>Culture Type</th>
<th>Emphasis</th>
<th>Communication</th>
<th>Control Achieved by</th>
<th>Management Support Emphasizes</th>
<th>Individual’s Tasks Established by</th>
<th>Rewards Are Based On</th>
<th>Deviant Behavior Tolerated</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group Culture</strong></td>
<td>Emphasis on cohesion, teamwork, synergy and consensus.</td>
<td>Closed, informal communication shared through groups and teams.</td>
<td>Commitment to common Values</td>
<td>Internal climate, particularly co-operation, personal development and recognition.</td>
<td>Negotiated by consensus.</td>
<td>Informal standards and the ability to maintain internal cohesion – good team players.</td>
<td>Tolerated – provided it adheres to consensus values.</td>
</tr>
<tr>
<td><strong>Entrepreneurial Culture</strong></td>
<td>Emphasis on creativity, innovation and flexibility.</td>
<td>Open, informal communication which is shared with whoever happens to be around at the time.</td>
<td>Commitment to a common vision.</td>
<td>Leading, inspiring, flexibility and initiating behaviors.</td>
<td>Empowered to perform their roles.</td>
<td>Creativity and entrepreneurial behavior.</td>
<td>Tolerated – provided it is goal directed.</td>
</tr>
<tr>
<td><strong>Hierarchical Culture</strong></td>
<td>Emphasis on stability, order, systems and control.</td>
<td>Closed, formal communication which is shared only on a “need to know basis”.</td>
<td>Focus on processes.</td>
<td>Procedures.</td>
<td>Established by precedence.</td>
<td>Formal standards and the ability to maintain internal control – good administration.</td>
<td>No deviation from approved processes.</td>
</tr>
<tr>
<td><strong>Rational Culture</strong></td>
<td>Emphasis on results, urgency and high levels of activity.</td>
<td>Open, formal communication by way of concise, timely updates using the most appropriate media for speed.</td>
<td>Focus on results.</td>
<td>Planning.</td>
<td>Structural authority to perform their roles.</td>
<td>Formal standards and relevant results – analysis and action.</td>
<td>No deviation from plans or performance standards.</td>
</tr>
</tbody>
</table>
**Figure 4.5: Details of the ‘dark side’ of each generic sub-culture**

<table>
<thead>
<tr>
<th><strong>Group Culture</strong></th>
<th><strong>Entrepreneurial Culture</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emphasis on cohesion, teamwork, synergy and consensus.</strong></td>
<td><strong>Emphasis on creativity, innovation and flexibility.</strong></td>
</tr>
<tr>
<td><em>Dark side …</em></td>
<td><em>Dark side …</em></td>
</tr>
<tr>
<td>• Favoritism and very cliquey environment (e.g. ‘the boys’ club’)</td>
<td>• Initiative or exhaustion from too many projects and change</td>
</tr>
<tr>
<td>• Information is shared with those in the ‘inner circle’</td>
<td>• High level of failure with going down blind alleys, starting and not finishing activities</td>
</tr>
<tr>
<td>• ‘Corrupt’ practices are tolerated – things are kept hidden in the ‘family’</td>
<td>• Brain freeze and spin out of control from too many ideas, options</td>
</tr>
<tr>
<td>• Loyalty is rewarded rather than competence or talent</td>
<td>• Can be too ahead in timing for developing products or services</td>
</tr>
<tr>
<td>• Indecisive without consensus leading to a ‘meetings culture’</td>
<td>• Enthusiasm lacking for strategy implementation</td>
</tr>
<tr>
<td>• Internally focused, losing market focus and direction</td>
<td>• Micro-managing and obsession with details</td>
</tr>
<tr>
<td>• Focus on solving own problems without seeking external help</td>
<td>• Managers are defocused and disconnected from staff leading to employees avoiding their boss</td>
</tr>
<tr>
<td>• Managers are highly political</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Emphasis on stability, order, systems and control.</strong></th>
<th><strong>Emphasis on results, urgency and high levels of activity.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Dark side …</em></td>
<td><em>Dark side …</em></td>
</tr>
<tr>
<td>• Bureaucracy runs rife, dogmatic about going ‘by the book’</td>
<td>• Burnout from a demanding environment and difficulty with work-life balance</td>
</tr>
<tr>
<td>• Systems and procedures become cumbersome and slow</td>
<td>• High competitive behaviour amongst individuals</td>
</tr>
<tr>
<td>• Information is withheld to maintain power</td>
<td>• Poor performance is not tolerated</td>
</tr>
<tr>
<td>• High blame element and people are not trusted</td>
<td>• Analysis paralysis</td>
</tr>
<tr>
<td>• People are treated as a number or unit of production</td>
<td>• Rigid and arrogant, decisions made too quickly to get the job done</td>
</tr>
<tr>
<td>• People get ahead by not ‘rocking the boat’ or giving bad news</td>
<td>• Emotionally charged environment and impatience with drawn out solutions or involving people</td>
</tr>
<tr>
<td>• Highly resistant to change, pessimism and inability to plan</td>
<td>• Managers are highly aggressive and prone to ‘head kicking’</td>
</tr>
<tr>
<td>• High focus on cost cutting leads to ‘corporate anorexia’</td>
<td></td>
</tr>
<tr>
<td>• Managers are highly autocratic</td>
<td><strong>Rational Culture</strong></td>
</tr>
</tbody>
</table>


FIGURE 4.6  National/country cultures(1)
<table>
<thead>
<tr>
<th>Legend</th>
<th>United States</th>
<th>United Kingdom</th>
<th>Thailand</th>
<th>Ireland</th>
<th>Philippines</th>
<th>Vietnam</th>
<th>Malaysia</th>
<th>Italy</th>
<th>Greece</th>
<th>Turkey</th>
<th>Arab World</th>
<th>South Korea</th>
<th>China</th>
<th>Japan</th>
<th>Australia</th>
<th>New Zealand</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>1</td>
<td>13</td>
<td>24</td>
<td>14</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>17</td>
<td>18</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>28</td>
<td>29</td>
<td>30</td>
</tr>
<tr>
<td>Canada</td>
<td>2</td>
<td>14</td>
<td></td>
<td>16</td>
<td>26</td>
<td></td>
<td></td>
<td>25</td>
<td></td>
<td>29</td>
<td>17</td>
<td>30</td>
<td></td>
<td></td>
<td>31</td>
<td>32</td>
</tr>
<tr>
<td>Brazil</td>
<td>3</td>
<td>15</td>
<td></td>
<td>18</td>
<td>27</td>
<td></td>
<td></td>
<td>31</td>
<td></td>
<td>32</td>
<td>17</td>
<td>33</td>
<td></td>
<td></td>
<td>34</td>
<td>35</td>
</tr>
<tr>
<td>Chile</td>
<td>4</td>
<td></td>
<td></td>
<td>16</td>
<td>28</td>
<td></td>
<td></td>
<td>31</td>
<td></td>
<td>33</td>
<td>17</td>
<td>34</td>
<td></td>
<td></td>
<td>35</td>
<td>36</td>
</tr>
<tr>
<td>Colombia</td>
<td>5</td>
<td>17</td>
<td></td>
<td>18</td>
<td>29</td>
<td></td>
<td></td>
<td>31</td>
<td></td>
<td>34</td>
<td>17</td>
<td>35</td>
<td></td>
<td></td>
<td>36</td>
<td>37</td>
</tr>
<tr>
<td>Argentina</td>
<td>6</td>
<td></td>
<td></td>
<td>19</td>
<td>30</td>
<td></td>
<td></td>
<td>31</td>
<td></td>
<td>35</td>
<td>17</td>
<td>36</td>
<td></td>
<td></td>
<td>37</td>
<td>38</td>
</tr>
<tr>
<td>Mexico</td>
<td>7</td>
<td></td>
<td></td>
<td>19</td>
<td>31</td>
<td></td>
<td></td>
<td>31</td>
<td></td>
<td>36</td>
<td>17</td>
<td>37</td>
<td></td>
<td></td>
<td>38</td>
<td>39</td>
</tr>
<tr>
<td>Sweden</td>
<td>8</td>
<td></td>
<td></td>
<td>20</td>
<td>32</td>
<td></td>
<td></td>
<td>31</td>
<td></td>
<td>37</td>
<td>17</td>
<td>38</td>
<td></td>
<td></td>
<td>39</td>
<td>40</td>
</tr>
<tr>
<td>Denmark</td>
<td>9</td>
<td></td>
<td></td>
<td>21</td>
<td>33</td>
<td></td>
<td></td>
<td>31</td>
<td></td>
<td>39</td>
<td>17</td>
<td>40</td>
<td></td>
<td></td>
<td>41</td>
<td>42</td>
</tr>
<tr>
<td>Norway</td>
<td>10</td>
<td></td>
<td></td>
<td>22</td>
<td>34</td>
<td></td>
<td></td>
<td>31</td>
<td></td>
<td>41</td>
<td>17</td>
<td>42</td>
<td></td>
<td></td>
<td>43</td>
<td>44</td>
</tr>
<tr>
<td>Finland</td>
<td>11</td>
<td></td>
<td></td>
<td>23</td>
<td>35</td>
<td></td>
<td></td>
<td>31</td>
<td></td>
<td>42</td>
<td>17</td>
<td>43</td>
<td></td>
<td></td>
<td>44</td>
<td>45</td>
</tr>
<tr>
<td>Russia</td>
<td>12</td>
<td></td>
<td></td>
<td>24</td>
<td>36</td>
<td></td>
<td></td>
<td>31</td>
<td></td>
<td>43</td>
<td>17</td>
<td>44</td>
<td></td>
<td></td>
<td>45</td>
<td>46</td>
</tr>
</tbody>
</table>


**FIGURE 4.7** National/country cultures (2)
**FIGURE 4.8**  ◆ National/country cultures (3)

### Emphasis on Cohesion, Teamwork, Synergy and Consensus

- Define ‘What we stand for’ statement
- Emphasise teamwork
- Consensus decision-making
- Define common values
- Joint-peer job design
- Informal standards for performance assessment of teams based on cohesion
- Reward team effort, loyalty and commitment
- Cash based rewards for team (gain-sharing)
- Training emphasises personal interaction and team building
- Recruit ‘I’ people

### Emphasis on Stability, Order, Systems, Control

- Define ‘how we do things’ statement
- Centralise decision-making, especially for cost control measures
- Change guidelines to rules
- Define jobs by method
- Formulate policy and procedure manuals
- Set efficiency/productivity objectives
- Measure and reward conformance to systems and procedures
- Provide cash rewards based on productivity, “sticking to the rules”
- Establish a formal, regular, structured, systematic communication process on “need to know only” basis
- Training programs which emphasise planning, measuring, controlling and “use of systems”
- Recruit ‘A’ people

### Emphasis on Creativity, Innovation and Flexibility

- Define ‘our future potential’
- Allow people to work on their own to fulfil their potential
- Make individuals accountable for their decisions
- Formulate vision
- Job design to increase autonomy
- Informal standards of performance assessment for individuals based on creativity, flexibility
- Reward creativity of solutions, ideas, experimentation, lateral thinking
- Incentives for individuals, e.g. learning experience
- Open, informal communication for whoever is around at the time
- Training in creative thinking; creative problem solving
- Recruit ‘D’ people

### Emphasis on Results, Urgency, High Levels of Activity

- Define ‘what we are fighting for’ statement
- Decentralise decision-making; encourage staff to solve problems
- Specify clear guidelines, not rules
- Job design based on results, outputs
- Formalise position descriptions; individual performance objectives
- Measure performance against objectives
- Provide regular feedback on performance
- Reward achievement of objectives; speed of response
- Provide incentives/merit-pay, based on results for individuals
- Establish a timely and speedy communication process
- Training programs which emphasise optimum use of time and resources
- Monitor competitor information and market conditions
- Recruit ‘P’ people

*Source* Adapted from Figure 3.9 in Gattorna (2006), p.87

**Figure 4.9:** The embedded emphasis of the four (4) generic sub-cultures
1. Evolutionary

2. Revolutionary

Source  Adapted from Figure 4.3.6 in Gattorna (2003), p. 463

Figure 4.10  ◆ Change pathways
Note 1: Account teams/clusters configured with a “relationship” mindset bias
Note 2: Individual team members return to their respective functions for specialist training

Source: Adapted from Figure 9.2 in Gattorna (2009), p.140.
Figure 6.4 Continuous replenishment supply chain clusters
### Continuous Replenishment supply chains: demand-side

**MARKET SEGMENT**

**FULFILMENT STRATEGY**

**INTERNAL CULTURAL CAPABILITY**

**LEADERSHIP**

**COLLABORATIVE**

**VALUE PROPOSITION**

**CULTURAL LEVERS**

1. Org design
2. People positioning
3. Processes
4. IT/systems
5. S&OP
6. KPIs
7. Incentives
8. Job design
9. Internal comms.
10. Training & devel.
11. Role modelling
12. Recruitment

**CLOSE WORKING RELATIONSHIPS SOUGHT WITH SELECTED SUPPLIERS**

**STRATEGIES**

- Share information
- Seek strategic partnerships
- Seek long-term stability
- Build mutual trust

**GROUP SUBCULTURE**

- Relationship cluster
- Ensure bias in cluster is towards personnel with “F” in their MBTI profile
- Standard processes, eg. Customer Account Management
- CRM; VMI; ECR; CDP; CPFR
- S&OP processes relatively simple in this collaborative environment
- Emphasis on loyalty and retention
- Encourage participative schemes
- Authority/autonomy negotiated by consensus
- Consultative; face-to-face
- Team building
- Managers with ESFP/MBTI profile are ideal
- Recruit team players

**COACH**

- Conscientious
- Lead by teaching
- Concerned for others
- Loyal, committed, politically astute
- Seeks agreement by consensus

**FIGURE 7.2** *Continuous replenishment supply chain configuration - demand-side*

*Source* Adapted from Figure 1.1 in Gattorna (2009), p. 48
Using the Oracle Suite as an example

FIGURE 7.3 ◆ Requisite technology for continuous replenishment supply chains

Source: Adapted from Figure 1.5 in Gattorna (2009), p.55

Copyright © 2010 John Gattorna
**Fig. 8.2 | Lean supply chains – demand-side**

**Market Segment**

**Fulfilment Strategy**

**Value Proposition**

**Internal Cultural Capability**

**Cultural Levers**
1. Orgnl design
2. People positioning
3. Processes
4. IT/Systems
5. S&OP
6. KPIs
7. Incentives
8. Job Design
9. Internal comms
10. T & D
11. Role modelling
12. Recruitment

**Leadership**

**13. Leadership Style**

**Require relentless focus on cost and efficiency**

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

**Hierarchical Subculture**
- Organize clusters around core processes
- Ensure bias towards personnel with “S” in their MBTI profile
- Standard processes; emphasis on cost
- Replace legacy systems with ERP system
- Effective decision framework in a relatively predictable operating environment
- DIFOTEF; forecast accuracy; productivity ratios
- Conformance to policies
- Centralized control – rules and regulations apply
- Regular; structured on ‘need to know’ basis
- Emphasis on analysis and measurement
- Managers with ISTJ (A) MBTI profile are ideal
- Recruit players with deep analytical skills

**Traditional**
- Leads by procedure; precedent
- Implements only proven business practices
- Cost controller; efficiency focus
- Uses information to control
- Seeks stability
- Is risk averse

**Source** Adapted from Figure 1.2 in Gattorna (2009), p.49

Copyright © 2010 John Gattorna
- Using the Oracle Suite as an example

**Customer buyer behavior segments**

- "Collaborative"
- "Efficiency"
- "Demanding/unpredictable"
- "Innovative solutions"

**Different combinations of IT applications**

- **Continuous replenishment supply chain**
  - ASCP/CBO
  - SIEBEL CRM
  - DEMANTRA PTP
  - OTM (G-LOG)

- **Lean supply chain**
  - ASCP/CBO
  - DEMANTRA PTP
  - SNO (NUMETRIX)
  - OTM (G-LOG)

- **Agile supply chain**
  - OTM (G-LOG)

- **Fully flexible supply chain**

**ERP transaction system and data base**

- (or can be SAP or legacy systems)

**Source** Adapted from Figure 1.5 in Gattorna (2009), p.55

**FIGURE 8.3** Requisite technology for lean supply chains
Figure 6.5: Lean supply chain clusters

Source Adapted from Figure 9.3 in Gattorna (2009), p.140.

Note 1: Process teams configured with a cost improvement bias, led by a process manager
Note 2: Individual team members return to their respective functions for training and other specialist matters
where quick response is paramount

<table>
<thead>
<tr>
<th>Market Segment</th>
<th>“Demanding”</th>
<th>Response Required to Unplanned or Unforeseen Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fulfillment Strategy</strong></td>
<td><strong>Value Proposition</strong></td>
<td><strong>Strategies</strong></td>
</tr>
<tr>
<td><strong>Internal Cultural Capability</strong></td>
<td><strong>Cultural Levers</strong></td>
<td><strong>Rational Subculture</strong></td>
</tr>
<tr>
<td><strong>Leadership</strong></td>
<td><strong>Leadership Style</strong></td>
<td><strong>Company Baron</strong></td>
</tr>
</tbody>
</table>

- Orgnl design
- People positioning
- Processes
- IT/systems
- S&OP
- KPIs
- Incentives
- Job design
- Internal comms
- Training & dev
- Role modelling
- Recruitment

- Fast decision making
- Fast delivery
- Rapid response in unpredictable conditions

- Clusters designed for speed and focused on specific sub-segments
- Ensure bias towards personnel with “N” in their MBTI profile
- Process short-cuts: fast response; postponement techniques
- Software applications: SCP; APS; Network Models
- Keep S&OP at aggregate capacity planning level
- Absolute speed of response
- Achieve targets; cash and in-kind bonuses
- Authority/autonomy established by clear and published limits
- Formal; regular; action-orientated
- Problem solving; resource allocation and management
- Managers with ENTJ MBTI profile (or P code) are ideal
- Recruit personnel who are results-driven

- Leads by objectives (MBO)
- Embraces change
- Goes for growth
- Focuses on what’s important
- Analytical; fact-based negotiations

**Source** Adapted from Figure 1.3 in Gattorna (2009), p.50

**FIGURE 9.2** ◆ *Agile supply chains - demand-side*
Figure 6.6 Agile supply chain clusters

Note 1: Clusters are focused on different parts of the same segment but possibly different product categories
Note 2: Individual team members return to their respective functions for training and other specialist matters

Source Adapted from Figure 9.4 in Gattorna (2009), p.141.
- Using the Oracle Suite as an example

Customer buyer behavior segments

"Collaborative"

"Efficiency"

"Demanding/unpredictable"

"Innovative solutions"

Different combinations of IT applications

Continuous replenishment supply chain

Lean supply chain

Agile supply chain

Fully flexible supply chain

ERP transaction system and data base
(or can be SAP or legacy systems)

• J.D.Edwards
• Peoplesoft (HR)
• e-Business suite (EBS)

Source: Adapted from Figure 1.5 in Gattorna (2009), p.55

FIGURE 9.3 ◆ Requisite technology for agile supply chains
MARKET SEGMENT

FULFILLMENT STRATEGY

INTERNAL CULTURAL CAPABILITY

LEADERSHIP

“INNOVATIVE SOLUTIONS”

CREATIVE SOLUTIONS REQUIRED, VERY FAST

VALUE PROPOSITION

ENTREPRENEURIAL

CULTURAL LEVERS

VISIONARY

13. LEADERSHIP STYLES

- Small multi-disciplinary cluster, usually on standby, but can be full-time
- Ensure bias towards personnel with P in their MBTI profile [CHECK – MBTI?]
- No standard processes; use local initiative at the time
- Low systems requirements; event management applications
- Focus on aggregate capacity planning in the short-term
- Emphasis on finding creative solutions, very fast
- Reward individualism and risk-taking behaviour
- Autonomy through empowerment
- Spontaneous and informal
- Lateral thinking; brainstorming
- Managers with ENFP (MBTI profile) and D (P-A-D-I logic) are ideal
- Recruit enterprising, resourceful personnel

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

- 1. Orgnl design
- 2. People positioning
- 3. Processes
- 4. IT/systems
- 5. S & OP
- 6. KPIs
- 7. Incentives
- 8. Job design
- 9. Internal comms
- 10. Training & dev
- 11. Role modelling
- 12. Recruitment

- Leads by inspiration; is authentic
- Informal
- Decisive
- Cares about ideas
- Values innovation

FIGURE 10.5 ◆ **Fully flexible supply chains - demand-side**

.....where nothing is impossible
Note 1: This “innovation” cluster may be composed of part-time members who only convene in an emergency.

Note 2: Individual team members return to their respective functions for training and other specialist matters.

Source: Adapted from Figure 9.5 in Gattorna (2009), p.141

Figure 6.7 Fully flexible supply chain cluster
- Using the Oracle Suite as an example

Customer buyer behavior segments

“Collaborative”

“Efficiency”

“Demanding/unpredictable”

“Innovative solutions”

Continuous replenishment supply chain

Lean supply chain

Agile supply chain

Fully flexible supply chain

Different combinations of IT applications

ASCP/CBO
SIEBEL CRM
DEMANTRA PTP
OTM (G-LOG)

J.D.Edwards
Peoplesoft (HR)
e-Business suite (EBS)

ERP transaction system and data base
(or can be SAP or legacy systems)

Source  Adapted from Figure 1.5 in Gattorna (2009), p.55

FIGURE 10.6 ◆ Requisite technology for the fully flexible supply chain configuration
FIGURE 10.1 “Business event” fully flexible supply chain and its innovation solutions-seeking customers

Source: Taken from Figure 8.1 in Gattorna (2006)
<table>
<thead>
<tr>
<th>Phases and activities</th>
<th>Supply Chain types</th>
<th>Customer segments</th>
<th>Flow types</th>
<th>Organizational designs</th>
<th>Population (and primary requirements)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prequel - Before Events (Hedge &amp; Deploy)</td>
<td>Lean and Continuous Replenishment (predominant)</td>
<td>“stockpile goods and build resources in strategic locations”</td>
<td>Base + Semi-wave</td>
<td>Cluster</td>
<td>“business and community activities”</td>
</tr>
<tr>
<td>Phase 1 - Survival Response</td>
<td>Fully Flexible</td>
<td>“Creative and extremely quick response”</td>
<td>Cavitation</td>
<td>Cluster</td>
<td>“survivor” rescue, medical, food, water, shelter</td>
</tr>
<tr>
<td>Phase 2 - Emergency Response</td>
<td>Agile</td>
<td>“execute quick response”</td>
<td>Surge</td>
<td>Cluster</td>
<td>“Beneficiary” medical, food, water, shelter, reunite families, identify needs, distribution</td>
</tr>
<tr>
<td>Phase 3 - Rebuilding and Restoration</td>
<td>Continuous Replenishment + Lean + Agile</td>
<td>“developing more systematic activities and gradual return of marketplace: increasing variety of supply chains”</td>
<td>Base + Semi-wave + Surge</td>
<td>Clusters</td>
<td>“participant” goods &amp; services as required with development &amp; participation of community to re-establish daily life</td>
</tr>
</tbody>
</table>

Source: Adapted from Figure 5.1 in Gattorna (2009)

FIGURE 10.2 The phases - and corresponding types of supply chain configurations - in humanitarian disasters
## Characteristics of the Four (4) generic Supply Chain Configurations

<table>
<thead>
<tr>
<th>OPERATIONAL</th>
<th>Supply Chain Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parameter</td>
<td>Continuous Replenishment</td>
</tr>
<tr>
<td>Segmentation</td>
<td>Behavioural</td>
</tr>
<tr>
<td>Process</td>
<td>Customer Account Management</td>
</tr>
<tr>
<td>Technology</td>
<td>CRM vital. Also use VMI and CPFR</td>
</tr>
<tr>
<td>S + OP</td>
<td>Standard S + OP process. Shared forecasts with customers</td>
</tr>
<tr>
<td>Org. Design</td>
<td>‘Relationship’ cluster</td>
</tr>
<tr>
<td>KPIs</td>
<td>Emphasis on loyalty &amp; retention</td>
</tr>
<tr>
<td>Production</td>
<td>Lower volumes; collaborate to reducing costs</td>
</tr>
<tr>
<td>Capacity Considerations</td>
<td>High utilization of current capacity</td>
</tr>
<tr>
<td>Fulfilment</td>
<td>Reliable/scheduled delivery</td>
</tr>
<tr>
<td>Procurement Approach</td>
<td>Select suppliers for partnerships relationship</td>
</tr>
</tbody>
</table>
FIGURE 5.1  ◆  MBTI® overlay on P-A-D-I framework

Source  Adapted from Figure 29.6 in Gattorna (1998), p. 480
FIGURE 5.2 ◆ Leadership styles

Source: Adapted from Figure 4.2 in Gattorna (2006), p. 99

**Coach**
- Continue to:
  - Lead by teaching
  - Make decisions by consensus
  - Get the best from people

- **Thinking**
  - Slow response to sudden environmental change
  - Market-related performance

**Visionary**
- Continue to:
  - Lead by inspiration
  - Respond to turbulence
  - Use information to create change

- **Doing**
  - 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

- **Consensus**
  - 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

- **Individual**
  - Paralysis by analysis
  - Political in-fighting
  - Effectiveness before efficiency
LEADERS
PRODUCE USEFUL CHANGE

- Make the change occur
- Set the direction for constructive change
- Relate to what the events and decisions mean to the people involved
- Focus on aligning people
  - communicate the direction
  - achieve common understanding of the vision
  - commitment to achieving the vision
- Influence people to achieve goals and objectives
- Motivate, inspire and energize
  - keep people moving in the right direction, despite obstacles to change

MANAGERS
CONTROL COMPLEXITY

- Bring order and consistency – work within the current system
- Manage by planning and budgeting
- Relate to how things get done
- Develop capacity to achieve through organizing and staffing
- Responsible for performance and productivity
- Ensure plans are accomplished by controlling and problem-solving
  - rely on systems and structures

FIGURE 5.3 ♦ Leading versus managing
Supply-side and demand-side alignments are the mirror image of each other

**Supplier behaviors**
- Trusted and reliable partners
- Planned creativity
- Process driven
- Opportunistic

**Demand-side strategies**
- Continuous replenishment
- Lean
- Agile
- Fully flexible

**Cultural capabilities**
- Group
- Hierarchical
- Rational
- Entrepreneurial

**Leadership styles**
- Coach
- Traditional
- Company baron
- Visionary

**Procurement strategies**
- Continuous replenishment
- Lean
- Agile
- Fully flexible

**Supplier behaviors**
- Trusted and reliable partners
- Planned creativity
- Process driven
- Opportunistic

**Buyer behaviors**
- Collaborative
- Efficiency/consistency
- Demanding/quick response
- Innovative solutions

**Source** Adapted from Figure 3.5.2 in Gattorna (2003), p.346

Figure 6.1: Supply-side alignment - the mirror image of the demand-side
Continuous Replenishment supply chain

Lean supply chain

Agile supply chain

Fully Flexible supply chain

Leadership styles
“Shape & create”

Cultural capability
“Internal capabilities”

Strategy
“buying propositions”

Source markets
“supplier segmentation”

Looking upstream to source markets

The different leadership styles that are required to shape the corresponding subcultures

The distinctly different cultures required to drive the corresponding procurement strategies

The portfolio of different procurement strategies used in the supply marketplace

The identified dominant selling behaviors in the supply base

Source: Adapted from Figure 2.12 in Living Supply Chains (2006), p.62

FIGURE 12.4◆ Supply-side (reverse) multiple supply chain alignment
Primary ‘buying behavior’ of RAN/DMO customer (*Pragmatic*)

Primary ‘selling behavior’ of engine supplier (*Trusted & Reliable Partners*)

**Figure 12.5** Alignment diagnostic between the Royal Australian Navy and the Defence Materiel Organization and a major supplier of diesel main engines for the RAN surface fleet

*Source:* Primary research by Gattorna Alignment Pty Ltd (2005); unpublished report.
### Cattle supplier (ranchers) segmentation in Brazil

<table>
<thead>
<tr>
<th>Segment</th>
<th>Characteristics</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Talkative</strong></td>
<td>Partnership, intense relationship, and friendship</td>
<td>37%</td>
</tr>
<tr>
<td><strong>Traditionalist</strong></td>
<td>Interested in yield, and price is a pre-requisite to negotiate</td>
<td>35%</td>
</tr>
<tr>
<td><strong>Suspicious</strong></td>
<td>Opportunistic. Sell to who pays the best</td>
<td>19%</td>
</tr>
<tr>
<td><strong>e-Ranchers</strong></td>
<td>Interested in technology mixed with personal contact</td>
<td>9%</td>
</tr>
</tbody>
</table>

- **Talkative**
  - Partnerships
  - Long term contracts
  - Special treatment
  - Transparency
  - Closeness
  - Reliable

- **Traditionalist**
  - Focus on yield
  - Require assistance in reducing costs
  - Require assistance to increase yield from animals

- **Suspicious**
  - Capable of fast response
  - Will seek out best opportunity at a point in time
  - Only interested if a premium price

- **e-Ranchers**
  - Interested in any new technologies
  - Electronic communications
  - Computer savvy
  - Seek market information

*Source: Adapted from information supplied by Axia Consulting, Brazil (2008)*

**FIGURE 12.6** Cattle supplier (ranchers) segmentation in Brazil
Predictable demand, easily managed through tight collaboration with customers. Focus on retention of customer relationships.

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

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 6.2 The four generic supply chain types

Source: Adapted from Figure 2.3 in Gattorna (2006), p.43, Supplemented by idea from Mark Van der Veen, Dou Corning

Copyright © 2010 John Gattorna
### FIGURE 12.1 Supplier segmentation based on a combination of product and supplier characteristics

<table>
<thead>
<tr>
<th>COMMODITY</th>
<th>STRATEGIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>• High Spend</td>
<td>• High Spend</td>
</tr>
<tr>
<td>• Low Switching Costs</td>
<td>• High Switching Costs</td>
</tr>
<tr>
<td>• Multiple Sources of Supply</td>
<td>• Few Sources of Supply</td>
</tr>
<tr>
<td>• Short-Lead Times</td>
<td>• Typically Long Lead-Times</td>
</tr>
<tr>
<td>• Low Complexity / Items on Shelf</td>
<td>• Critical Performance Characteristics</td>
</tr>
<tr>
<td>• Low Item Costs</td>
<td>• High Item Costs</td>
</tr>
<tr>
<td>• High Volume</td>
<td>• Variable Volumes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STANDARD</th>
<th>KEY</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Low Spend</td>
<td>• Low/Medium Spend</td>
</tr>
<tr>
<td>• Low Switching Costs</td>
<td>• High Switching Costs</td>
</tr>
<tr>
<td>• Multiple Sources of Supply</td>
<td>• Few Sources of Supply</td>
</tr>
<tr>
<td>• Short Lead-Times</td>
<td>• Typically Long-Lead times</td>
</tr>
<tr>
<td>• Standard, on Shelf Items</td>
<td>• Critical Performance Characteristics</td>
</tr>
<tr>
<td>• Low Item Costs</td>
<td>• High Item Costs</td>
</tr>
<tr>
<td>• Volumes Vary</td>
<td>• Variable Volumes</td>
</tr>
</tbody>
</table>

*Source: Adapted from Diane Bueler (May 2006)*
The 16 possible ‘selling behaviours’ in source markets

- "PROCESS DRIVEN"
- "COMMERCIAL"
- "FAIR DEAL"
- "RELATIONSHIP AT A PRICE"
- "VISIONARIES"
- "INNOVATION WITH A HUMAN FACE"
- "OPPORTUNISTIC"
- "VISION TO REALITY"
- "PARTNERS"
- "TRUST & RELIABLE PARTNERS"
- "LET'S GO PLACES TOGETHER"
- "SHARING THE VISION"
- "DEMANDING"
- "PLANNED CREATIVITY"
- "SOLUTIONS AT SPEED"
- "PRAGMATIC"
<table>
<thead>
<tr>
<th>TRUSTED &amp; RELIABLE PARTNERS</th>
<th>PROCESS DRIVEN</th>
<th>PLANNED CREATIVITY</th>
<th>OPPORTUNISTIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Close working relationships for mutual gain</td>
<td>Consistent low cost response to largely predictable demands</td>
<td>Capability to provide rapid response in irregular demand situations</td>
<td>Capability to create innovative solutions, very fast</td>
</tr>
</tbody>
</table>

- Like predictability
- Prefer regular orders
- Prefer producing nature products
- Like to be treated as an exclusive source
- Seek trusting long-term relationship
- Enjoy partnership/teamwork
- Prepared to share information
- Engage in joint development
- Expect fair margin

- Prefer tight contracts
- Regular order/delivery schedule
- Offer lowest cost-to-serve
- Don't wish to share information
- Can be adversarial at times
- Adopt standard processes
- Impose power where possible
- Very transactional mindset
- Sensitive to low price demands

- Have capacity to meet volatile demand
- Prefer not to enter close relationships
- Can respond to urgent demands
- Use as few processes as possible
- Outcome oriented
- Very commercial
- Require price premium

- Have the capacity to cope with unexpected situations
- Can provide creative solutions as required
- Innovation mindset embedded
- Very solutions oriented
- Prefer to charge a significant premium

FIGURE 12.3 ◆ Supply-side behavioral segmentation characteristics
Continuous replenishment supply chain
Lean supply chain
Agile supply chain
Fully flexible supply chain

Agility is just one type of supply chain configuration

Adaptability is the ability to flex in the extreme when unplanned disruptions occur in the supply chain (fully flexible type)

Dynamic Alignment is the ability to engage different supply chain configurations as customers change their buying behavior - that’s “flexibility” in operation

FIGURE 11.2 ◆ Revised definitions for Agility, Adaptability and Dynamic Alignment
Continuous replenishment supply chain

Leadership styles (shape & create)

Lean supply chain

Cultural capability (internal capabilities)

Agile supply chain

Strategy (buying propositions)

Fully flexible supply chain

Looking upstream to source markets

The different leadership styles required to shape the corresponding subcultures

The distinctly different cultures required to drive the corresponding procurement strategies

The portfolio of different procurement strategies used in the supply marketplace

The identified dominant selling behaviours in the supply base

Source: Adapted from Figure 2.12 in Gattorna (2006) Living Supply Chains, p. 62

FIGURE 11.3 ◆ Supply-side (reverse) multiple supply chain alignment
Multiple combinations of supply-side and demand-side elements of enterprise supply chains

**Supplier “Selling” logics**
- Opportunistic
- Planned Creative
- Process Driven
- Trusted & Reliable Partners

**Supply-side**
- Procurement strategy
  - Fully Flexible
- Agile
- Lean
- Continuous Replenishment

**Organizational clusters**
- Culture-Leadership

**Demand-side**
- Sales/distribution strategy
  - Fully Flexible
- Agile
- Lean
- Continuous Replenishment

**Solutions to Innovative**
- Innovative
- Demanding
- Efficiency
- Collaborative

Key:
- P = Procurement
- MF = Manufacturing
- L = Logistics
- S = Sales
- MK = Marketing
- F = Finance
- HR = Human Resources
- I = IT

FIGURE 12.12 ◆ A new dynamic business model for supply chains of the future
FIGURE 13.2 ◆ The 16 possible combinations of hybrid supply chains – including the four main generic types

* See text for descriptions of each combination
Published 2010

UK:  August 2010
FT Prentice Hall, London
www.pearson-books.com/dynamicsupplychains
35% discount online

USA: October 2010
FT Press, New Jersey
www.ftpress.com/dynamicsupplychains
35% discount online

website:  www.johngattorna.com
email:  john@johngattorna.com