There is a danger that many organisations have not embraced the true spirit of supply chain management, which is about the effective alignment of the key operational processes of ‘plan, source, make and deliver’ but have merely re-branded elements of this mix – usually the deliver (distribution) element as supply chain. Furthermore, even the more enlightened companies that try to gain alignment of these operational processes do so in isolation – without linking their supply chain strategy to what the end customer actually wants.

**Bridging the Divide**

What organisations need to consider is replacing the traditional plethora of functional strategies that cascade from business unit and corporate strategy into an overarching demand chain strategy that aligns the demand definition and creation process (traditionally the territory of sales and marketing functions) with the demand fulfilment process (the domain of supply chain management) as illustrated in Figure 1.

**One Size Does Not Fit All**

Environmentally, the biggest driver of a differentiated approach has been market polarisation. The fat middle markets of the 1990s – the primary territory for many of the aforementioned high street names have polarised, with the middle markets thinning out and consumers preferring to spend either at the ‘low’ or ‘high’ ends of the market. A once loyal customer of M&S, may now buy their commodity T-shirts and tops in Matalan whilst purchasing their suits from Savile Row. The impact on companies that used to occupy the middle market is profound. To maintain the re-distributed market share they once held they need to be able to operate as effectively in the ‘premium’ end of the market as they do in the ‘commodity’ end. This is a significant challenge as what customer’s value in terms of both product/service characteristics and price are very different at these extremes.

There are two key concepts that help to make sense of these challenges from a supply chain or demand fulfilment perspective. Firstly, the concept of demand type of which there are effectively three types:

- **base**: not subject to fads or impulses, predictable and therefore comparatively easily managed
- **wave**: fast-moving, faddish, impulse driven, not predictable, mainly seasonal, planned surges
- **surge**: fast-moving, faddish, impulse driven, not predictable, usually unplanned

And secondly the concept of standardisation vs. customisation – the degree to which a customer requires a standardised or customised product or service. These concepts are independent but inter-related in the way that they drive supply chain strategy, and more particularly the way they relate to the issue of market polarisation.

At the ‘high’ end of the market there is a high degree of product fragmentation with customers generally demanding more customised products for which they are willing to pay a price premium. This has the impact at an individual product level of creating what appears to be impulse driven, unpredictable surge demand, though at an overall capacity level of demand may be relatively stable. Hence, demands are placed on the supply chain to be very responsive or ‘agile’.

In contrast, at the ‘low’ end of the market customers generally desire a standardised product at rock bottom prices. This creates relatively predictable base demand that needs to be fulfilled at minimal cost. The challenge for the supply chain is therefore to be efficient or ‘lean’. However, the ‘low’ end of the market is very competitive and this is where there is a lot of promotional activity – often requiring retaliatory action at short notice - which in turn creates wave or surge demand requiring supply chain agility at minimal cost – a lean and agile or ‘leagile’ supply chain.

As markets fragment, products proliferate and supply chains / markets become increasing global, it is impossible to develop the optimum demand chain strategy by taking a one size fits all approach. Effective demand chain management dictates a differentiated or contingent approach.

**Figure 1: The Role of Demand Chain Strategy (Godsell, 2004)**

<table>
<thead>
<tr>
<th>Corporate Strategy</th>
<th>Business Unit Strategy</th>
<th>Demand Chain Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demand Fulfilment</strong> (Supply Chain)</td>
<td><strong>Demand Definition &amp; Creation</strong> (Marketing)</td>
<td></td>
</tr>
</tbody>
</table>

So effectively, an organisation operating at both the ‘low’ and ‘high’ ends of the market may need 3 different demand fulfilment strategies to respond to customer needs with the appropriate responsiveness and efficiency: a combination of ‘agile’, ‘lean’ and a hybrid ‘leagile’ strategy. These are summarised in Figure 2. However, it is worth bearing in mind that no two markets are the same, nor are the organisations that operate within them. Therefore it is not possible to pick a demand chain strategy off the shelf and apply it to an organisation. Demand chain strategy needs to be carefully crafted to fit the context in which it operates.

Furthermore, it needs to be dynamic and have inbuilt review mechanisms to ensure that the demand chain strategy tracks and aligns to market changes.

**A Process for Developing Demand Chain Strategy**

Due to the context specific nature of the demand chain, whilst it has not been possible to develop a universal ‘off-the-shelf’ model of demand chain strategy, it has been possible develop a 4-step process to help organisations develop a demand chain strategy (Refer to Figure 3).

**Figure 2: Supply Chain Strategic Response to Market Polarisation**

<table>
<thead>
<tr>
<th>Market Type</th>
<th>Supply Chain Type</th>
<th>Degree of Customisation/Standardisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>High End</td>
<td>Agile</td>
<td>Customised</td>
</tr>
<tr>
<td>Low End</td>
<td>Lean &amp; Agile</td>
<td>Customised for a particular promotion</td>
</tr>
</tbody>
</table>

**Figure 3: 4-Step Process for Developing Demand Chain Strategy (Godsell, 2004)**

1. **Demand Chain Objectives**
2. **Market Strategy**
3. **Supply Chain Process Strategy**

**Organisation Design**

**Performance Management**

**Systems**

**Segments**

**Value by Segment**

**Differentiated Supply Chain Strategy**

**Supply Chain Strategy Drivers**

**Demand Flows**

**Product Lifecycle Management**

**Customisation: Standardisation**
Step 1 – Demand Chain Objectives

The first step in the process is to define the demand chain objectives that align with the relevant business unit strategy. These objectives will provide all employees in the demand chain with an aligned set of objectives and measures that balance revenue generation and cost reduction holistically rather than allocating specific objectives to specific functions.

Step 2 – Market Strategy

The second step is then to develop a market strategy that identifies the relevant basis for segmentation that is meaningful not only to sales and marketing but also to the supply chain. It is possible to have more than one basis for segmentation (e.g. consumer and channel). Once the segments are identified, it is then important to understand the product, service and experiential factors that customers within those segments value from the fulfillment process.

Step 3 - Linking Market Strategy to Supply Chain Process Strategy

The third step is to use the market strategy developed in step 2 to drive an appropriate supply chain strategy. It is likely that the different basis for segmentation will have different drivers of customer value and in turn will lead to different types of supply chain strategy (e.g. lean, agile, leagile). To help with this conversion it is useful to consider for each of the segments:

1. Which supply chain activity they impact upon (e.g. the planning process, purchasing / procurement / sourcing, marketing / logistics / delivery)?
2. What types of demand pattern the segment is likely to drive (e.g. base, wave, and surge)?
3. To what degree the segment drives a strategy of standardisation: customisation?

Step 4 – Process Enablers

The final step in the process is to enable the effective implementation of the supply chain process strategy by ensuring that the demand chain strategy is supported by:

1. An organisational design that provides clear accountability for the management of the demand chain, and ensures through its boundary spanning nature that the demand chain cannot be deconstructed into its traditional functional silos.
2. A performance management system that meets the dual objectives of motivating individuals through individual targets and measures whilst balancing this against demand chain wide measures that ensures that the demand chain acts as one to meet the demand chain objectives.
3. The appropriate use of information systems to enable the process. The demand chain should not be driven by the use of IT, and in many cases simple spread sheet or paper based systems may be more effective. IS systems should not be allowed to drive the demand chain, the demand chain objectives should.

The process however is iterative, and the whole process requires regular review in order to ensure its relevance and appropriateness. The time frame for review will be dependent on the market context – but a separate process should be in place to monitor market context and alert the organisation of the need for strategic review should there be significant change.

Case Study: Demand Chain Strategy at DrinksCo

Models, frameworks and processes are all very good in theory but what do they actually mean in practice? A global manufacturer of alcoholic beverages – DrinksCo - used the framework to help devise a demand chain strategy for a significant Eastern European market in which it was a major player.

Step 1 – Demand Chain Objectives

The company drew together members from across the demand chain for a 3-day workshop with the objective of developing a demand chain strategy that would help DrinksCo to deliver their business unit vision ‘of being number 1 (in all defined business dimensions) by 2010’. DrinksCo embarked on the workshops with a clearly defined set of Demand Chain Objectives which covered 4 key areas:

- Drive consumer change (increase sales)
- Improved on shelf availability (increase sales)
- Reduced cost (reduce cost)
- Reduced working capital (reduce cost)

Each of these key areas had a number of targets (hard and soft) associated with them. These objectives were discussed to ensure that everyone attending the workshop had a common understanding of what they meant, and bought into their delivery.

Step 2 – Market Strategy

The next stage was to consider the relevant basis of segmentation for the particular Eastern European market. It was found that there were relevant bases for Euro chain:

- Consumer segmentation – which was a matrix between five lifestyle segments and four price segments
- Channel segmentation – which occurred at two levels. The primary level was the difference between city and rural channels, and then within city or rural there were four different retail formats (grocery, general retail, off-licence, convenience)

These forms of segmentation were found to provide a link between market understanding and strategy as discussed in Step 3.

Step 3 – Linking Market Strategy to Supply Chain Process Strategy

After much debate and discussion it was found that there was a link between consumer segmentation and the manufacturing strategy (make) element of the supply chain process strategy. In fact when the customer value drivers for the consumer segmentation matrix were considered, three different manufacturing strategies were identified as illustrated in Figure 4.

It was found that for the high value, prestigious grouping of segments (i.e. the ‘high end’ of the market) where there was a high degree of demand variability (wave / surge demand) driven by a wider range of low volume, high value products potentially requiring a relatively higher degree of customisation an ‘agile’ response was required from the manufacturing element of the supply chain. Conversely, it was found that for the more traditional, lower value grouping of segments (i.e. the ‘low end’ of the market) where demand was relatively stable (base demand), driven by a limited range of relatively standardised products a ‘lean’ response was most appropriate. For the middle ground, it was considered that a hybrid leagile response may be most appropriate as this was the segment most prone to promotional activity.

Furthermore, this was then considered to drive the supplier strategy or source element of the supply chain process strategy. Two primary modes of operation were identified from the supply base. Firstly, the use of continual replenishment (CR) to deal with ‘base’ demand for standard components in large predictable volumes, spanning the pure lean and lean element of the leagile manufacturing strategy. Secondly, a responsive mode to deal with ‘surge’ or ‘wave’ demand for more customised components in much smaller, more unpredictable volumes, in response to the pure agile and agile element of the leagile manufacturing strategy.

A second link was made between the channel strategy and distribution strategy (deliver). It was felt that areas of significant population density (cities) presented the opportunity for a different approach to physical distribution than in rural locations. Further, refinement of distribution strategy would then take place depending on retail outlet type. The links between market and supply chain process strategy are summarised in Figure 5.

Step 4 – Process Enablers

DrinksCo then considered how each of the three process enablers (organisational design, performance management and information systems) could be developed to enable the demand chain strategy. This resulted in recommendations:

- For an organisational re-design structured around the supply chain process strategy, elements of plan, source, make and deliver and sell.
- For a new approach to performance measurement that included the introduction of a new set of measures and a reward system based upon driving collaborative working across the demand chain.
- As to how the current extensive array of IS could be used to enable the demand chain. DrinksCo left the workshop with a collective understanding from all the key demand chain stake holders as to what the future demand chain strategy would look like, and a lot of work to do in terms of further design and implementation.

The Missing Link?

Whilst organisations and the stock market continue to cite the supply chain as a reason for corporate success or failure, the enlightened few will start to quote the demand chain. Demand chain strategy is the crucial missing link between business unit, market and supply chain strategy – that creates alignment around a common set of demand chain objectives to ensure that the demand chain meets the needs of customers and shareholders alike in the most efficient and effective way.

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**Figure 4: Linking Consumer Segments to Manufacturing Strategy**

<table>
<thead>
<tr>
<th>Lifestyle</th>
<th>Premium Male</th>
<th>Prestigious Female</th>
<th>Social High</th>
<th>New Affordable</th>
<th>Traditional</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Quality</td>
<td>High Status</td>
<td>High Quality</td>
<td>Innovation</td>
<td>Cost Availability</td>
<td>Cost Availability</td>
</tr>
<tr>
<td>VFM</td>
<td>Innovation</td>
<td>Cost Availability</td>
<td>Modern image</td>
<td>Consistent</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>Innovation</td>
<td>Cost Availability</td>
<td>Consistent</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure 5: The Link between Market and Supply Chain Process Strategy at DrinksCo**

- **Quick Response**
- **Slow Response**
- **Leagile**
- **Lean**
- **Low Cost**
- **High Quality**
- **Premium**
- **Medium**
- **Low**

**Table 4.4: Linking Consumer Segments to Manufacturing Strategy**

<table>
<thead>
<tr>
<th>Price Segment</th>
<th>Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Quality</td>
<td>Agile</td>
</tr>
<tr>
<td>High Status</td>
<td>Lean</td>
</tr>
<tr>
<td>Innovation</td>
<td>Leagile</td>
</tr>
<tr>
<td>Cost</td>
<td>Cost Availability</td>
</tr>
<tr>
<td>Availability</td>
<td>Consistent</td>
</tr>
</tbody>
</table>

**Table 5.5: The Link between Market and Supply Chain Process Strategy**

- **Quick Response**
- **Slow Response**
- **Leagile**
- **Lean**
- **Low Cost**
- **High Quality**
- **Premium**
- **Medium**
- **Low**

**Table 5.6: Consumer Segmentation**

- **Aqua**
- **City**
- **Rural**
- **Leagile**
- **Lean**
- **High Quality**
- **Social High**
- **New Affordable**
- **Traditional**