

6. INTERPRETATION OF FINDINGS

The findings presented in the previous section were interpreted for all four research cases simultaneously in order to identify similarities or dissimilarities within- and across-cases under the categories of general findings, the typology of the various supply chains, the issues within the various supply chains and the steps that supply chain managers were taking to deal with these issues.

6.1 General findings

Title and roles: The difference in the titles and roles of personnel was established between the packaged food and personal care segments. Personal care segment cases had more similar roles compared to the packaged food segment cases. Also, the roles among the South African cases were more similar compared to the Indian cases. The different maturity level of supply chains was identified as the reason behind the dissimilarity of these roles/titles (Deloitte, 2008, APICS, 2009). The personal care segment had been in existence for longer than the packaged food segment, and its adoption of the latest technology and trends enabled it to align its organisational structure and roles with best practices.

Figure 6-1 shows the supply chain functions for the cases in terms of the value chain model (Porter, 1998).

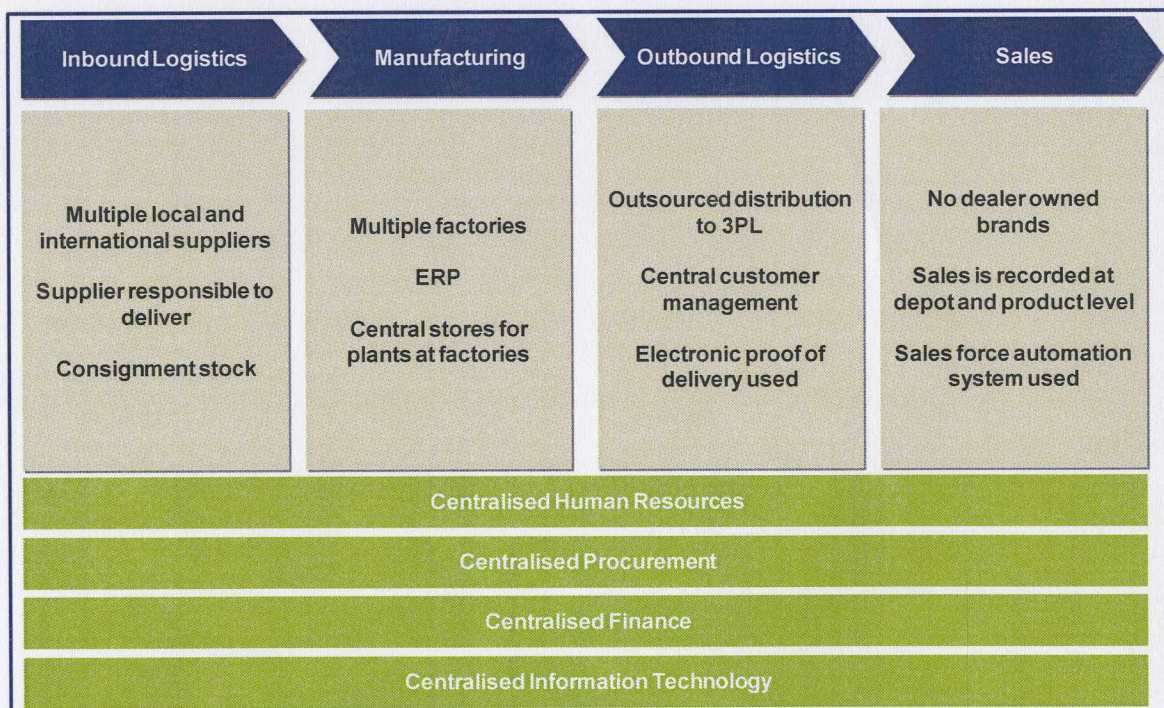


Figure 6-1: Value chain model of the cases

Support functions¹⁰⁴ were well defined and similar among all the cases. However, core functions¹⁰⁵ and titles were not similar, for two reasons. Firstly, supply chain functions were not aligned to a standard common definition of the term “supply chain”. Secondly, the organisational structures of these cases had evolved differently and were not equally matured, resulting in different interpretations of the roles of those involved in the various supply chains. This confirmed that people with different roles were carrying out the various supply chain functions (Ayers, 2006).

Involvement with supply chain activities: Mentzer (2006) stated that all the support functions except procurement had limited involvement with the various supply chain functions. A similar trend was identified with all four cases, except for a few exceptions at Surya. This may be due to the fact that at Surya the supply chain function was not fully seen as a core business activity and the focus of the organisation was on the production process. The procurement function, although a support function, was actively involved with the supply chain activities. Hence, the supply chain could be classified as a “core element” of an organisation (as it involved more core functions and fewer support functions) and also a “front office function”.¹⁰⁶

¹⁰⁴ Support roles were defined as per the value chain model. The support roles identified were HR, IT, procurement and finance (Porter, 1998).

¹⁰⁵ As per the value chain model, the core processes were inbound logistics, manufacturing, outbound logistics and sales (Porter, 1998). However, the SCOR model did not consider sales as a core supply chain process.

¹⁰⁶ As identified by several firms in terms of front (core) and back (support) office functions (Meakem, 2003).

Supply chain setup: In terms of the transnational setup, all the cases (except Dabur) were identified as national firms with overseas suppliers, manufacturing plants, DCs and customers (Deloitte, 2008). The number of SKUs and supply chain employees was similar for all four cases (except Surya), which reflected the conclusions drawn about the product range in section 2.2.1, which defined the FMCG industry (CII, 2005, Desai, 2008).

6.2 Typology

A common supply chain typology for all four cases was derived from the findings presented in the previous section. Figure 6-2 represents this common typology.

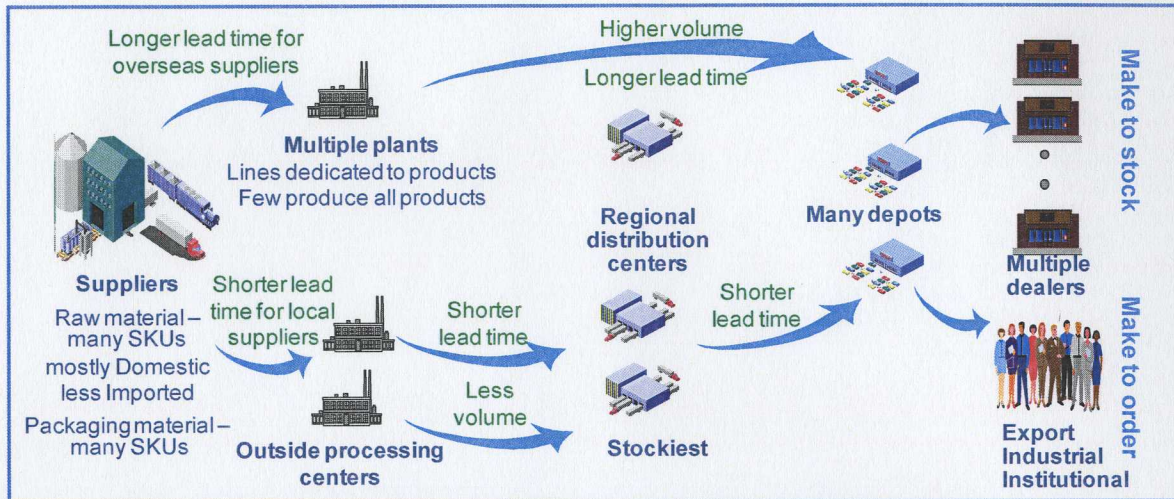


Figure 6-2: Common typology of supply chains of all four cases

This common typology was then analysed in terms of its functional and structural attributes.

6.2.1 Functional attributes

Products' life cycles: For the cases in both segments, the life cycles of their products was long (up to many years), while the shelf life differed between these segments. The shelf life was short to medium term (one to six months) for the packaged food cases and medium to long term (12 to 24 months) for the personal care cases. The beverages section of the packaged food cases had a shorter shelf life (one to three months). Hence, stricter quality control was required for these products and ignoring this resulted in higher returns. On the other hand, the personal care cases did not receive any queries related to shelf life.

This finding was aligned with the findings obtained during the literature survey (Stadtler & Kilger (eds.), 2007). The short- to long-term shelf life of the industry's products resulted in the quick replacement of products on the shelf. Retailers (such as Shoprite, PicknPay and Checkers) had also started playing a key role in defining the availability of the products, hence the related service levels. Figure 6-3 represents the life cycle of a product with its classification and its relationship to its availability in the market, as adopted from the SCOR model based on best practices.

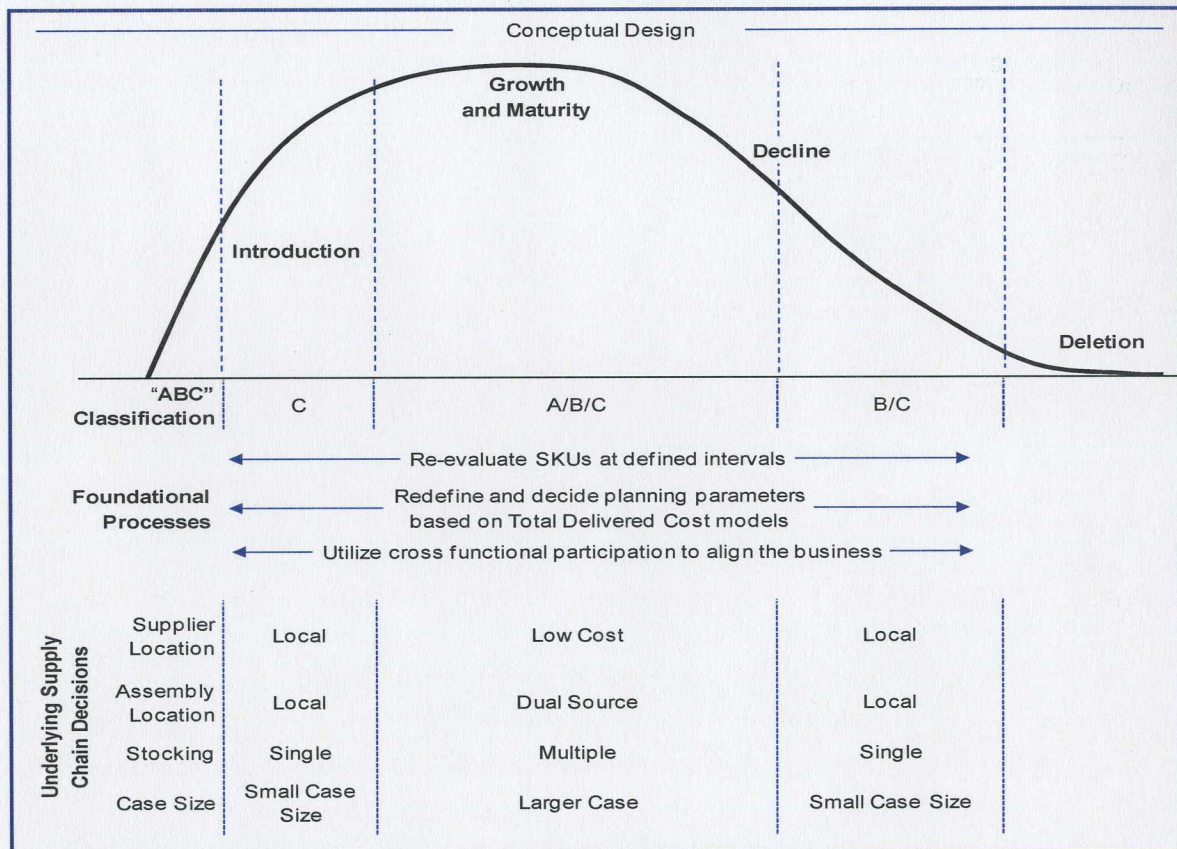


Figure 6-3: Life cycle of products and item classification

In all four cases, the majority of products fell into the category "growth and maturity", and the critical supply chain decisions related to the supplier location (low cost), manufacturing location (dual source), stocking policy (multiple) and delivery units (larger case) matched with the findings from the cases.

Distribution structure: All the cases used a similar distribution structure for finished goods consisting of three to four stages for local deliveries. They also used a push-pull philosophy, with the factory pushing the products to the DC and the retailers/customers pulling the products further down the supply chain. When compared with the findings of the literature review, the push-pull combination was a norm in MTS scenarios (identified for local orders), while for MTO scenarios, the products were always pulled from the factory, as was the case for overseas orders. This matched with the findings for the functional attributes that emerged from the literature review (Stadtler & Kilger (eds.), 2007).

However, the outbound distribution setup was different in the Indian and South African cases. The Indian cases used agents (CFAs) to handle their finished goods (Mishra, 2008), while the South African cases used 3PL service providers. This was due to different selling structures, maximum retail prices¹⁰⁷ in India, and margins in South Africa. This had a dual effect on the distribution structure. Firstly, it became simpler, because some of the complicated activities were not executed by the organisation, but handled by experts. Secondly, however, it also became complex from a risk perspective, as another element had become involved in the supply chain, making it more vulnerable (Kumar & Bala, 2009).

Products sold: All the cases sold standard products in cases units. FMCG organisations normally sold products in cases, as opposed to the hi-tech industry (which sold products by eaches). This also related to the higher lot size units sold as per the life cycle curve.

¹⁰⁷ It governed the maximum retail price an item. Retailers could not sell an item for more than its maximum retail price (stated by the FMCG manufacturer), although they could provide discounts.

In addition, all the cases handled SKUs in the range of 300 to 600. Personal care organisations (such as Revlon) handled up to 5,000 SKUs (David, Buckler, Mussomeli & Kinzler, 2005). Despite this, the large set of SKUs always created planning and execution challenges for the various supply chains, as this resulted in fewer products in the “A” category and a trail (large numbers) of “B” or “C” category products.¹⁰⁸ This resulted in reducing the amount of management time spent on higher category products. Appendix D7 presents a generic approach for SKU rationalisation.

Sourcing type: Most of the raw and packaging materials used by the cases were single sourced. In some scenarios, multiple sourcing was used for critical raw materials, such as potatoes, in order to ensure a regular supply. The personal care cases had more options to use multiple sources for raw materials; however, the packaged food cases used mostly single sourcing due to their quality assurance requirements.

It could be interpreted that sourcing type was very dependent on the type of product involved and the criticality of raw materials. Since packaging materials were non-critical, they were single sourced locally, and only a few of the raw materials were imported from single sources for all four cases. This finding matched the concept of the localisation of suppliers in order to reduce lead times (Morgenstern, 2006).

¹⁰⁸ A/B/C categories were defined as per the Pareto's analysis. The supply chain decisions for them are shown on the product life cycle curve.

