



Redesign, implementation and ongoing management of outbound distribution for PEP Stores.

Industry

Retail – apparel, textiles and related products.

Background

There are in excess of 1 000 Pep stores in Southern Africa, requiring up to 2 500 000 cartons of product to be distributed annually. Due to factors beyond the control of Pep, their distribution service provider (for 20 odd years) was unable to meet the demands of the changing logistics environment within which their client operated. The ever increasing dependence on Pep as their largest client, together with a rate structure below that found in the market, resulted in the potential for a distribution cost escalation spiral, which placed increasing pressure on Pep to respond innovatively to contain and address the problem. As the 3rd largest cost item, the impact of any decisions made regarding their distribution process was extremely sensitive, hence Pep's decision to call upon experts in supply chain management to assist them. Since July 1999 Supply Chain Solutions (SCS), a part of Barloworld Logistics, have been responsible for redesigning, implementing, managing and operating the outbound distribution component of the supply chain, for Pep Stores.



Problem

The problems faced by Pep can be summarised as:

- Uncertainty regarding the ongoing ability of their existing 3rd party service provider to render the desired distribution service (a parastatal organisation coming under increasing pressure due to its unprofitable status)
- Product in-transit time (lead time between completion of the picking process to final delivery to the stores) above the industry norm, resulting in excessive working capital tied up in the outbound leg of the supply chain
- High degree of in-transit losses experienced with the existing service provider, resulting in high insurance premiums and uncertainty of product availability at store level
- Proof of parcel deliveries was inconsistent and often not available, failing to assist Pep in verifying the availability of stock at their stores
- Administration of claims taking more than six months to be completed
- Inadequate administration of customs documentation for product delivered across the SA border, resulting in claims and assessments by the revenue authorities
- Pep were charged at a per parcel tariff, which encouraged the distribution of very large parcels (impacting on product quality and increasing damages and breakages)
- No formal control existed over the movement of IBTs (inter branch transfers), which parcels also incurred a distribution cost
- No one 3rd party service provider had the capacity or resources to handle Pep's distribution
- Pep's volumes had created a base distribution within the 3rd party service provider, for use by competitive companies to Pep.

The need was to contain or wherever possible reduce the potential cost impact of the distribution system whilst enhancing the performance standards and service levels.

Approach

To redesign and re-engineer Pep's distribution system SCS adopted a phased approach, whereby SCS initially undertook the management of Pep's existing 3rd party service provider, commencing in July 1999. By the introduction of administrative controls and the establishment of management information systems, SCS made an immediate impact on service levels. Simultaneously lead times within SA as well as losses were reduced with the existing service provider, while new service providers were introduced on the over border routes, which in turn resulted in a 50% improvement to those lead times.

In line with the phased approach, the initial one year period enabled SCS to assess and address the longer-term needs of Pep. The re-design of Pep's outbound distribution network was completed by May 2000. This strategy was presented to the Pep Board in the form of a detailed business plan which was accepted and approved in June 2000, in terms of which SCS were instructed to implement this second phase in the shortest possible time.

Solution

The proposal was based upon avoiding the reliance on any one party to fulfil Pep's requirements and for Pep to retain optimum control over its distribution processes and performance requirements. This was to be achieved by the design and establishment of a customised closed circuit distribution network, catering exclusively for the needs of Pep Stores.

Five dedicated cross-docking Hubs with their associated infrastructure (conveying equipment, computers, furnishings etc.) and processes (staff as well as various service providers covering transport, security and labour) would be introduced. The Hubs in Johannesburg, Bloemfontein and Cape Town would also serve as the consolidation points for over border traffic to the B, L, N, S countries.



In an attempt to achieve maximum flexibility, thereby engendering ongoing innovation and focus on satisfying the needs of the client, the structure made allowance for the separate award of transport contracts to:

- Shuttle operators between the Pep DC's in Cape Town and Durban and the local hubs (space limitations & long term leases currently prohibit the hubs being located in the same premises as the DC's)
- Line haul operators linking the 5 hubs
- Local and regional delivery operators from each hub to the Pep stores
- Pep would lease the 5 regional cross docking hubs on a 3-year renewable basis and purchase and install the necessary handling equipment. The dispatch functions in the DC's and the operation of the Hubs and management of the transport delivery functions would be under the control of SCS acting in terms of their management agreement with Pep
- The system design is depicted in Chart "1" on the second last page.
- The solution identified the potential for material and sustainable cost savings to be achieved at the same time as significantly enhancing speed, reliability, control and quality of information on all deliveries to and between Pep retail outlets.

Implementation

Speed and timing of the implementation of the new system was critical as there were immediate economic benefits accruing to Pep, should implementation be completed before the peak volume period commenced in October 2000. Within three months of authority to proceed being given by the Pep board in June 2000 all the infrastructural, service provider and staffing requirements were in place:

- Materials handling equipment: production, implementation and testing
- Computer systems: development, installation and testing
- Service providers: tenders, evaluation and appointment
- Staff: interviews, evaluation and appointment
- The leasing of suitable cross dock facilities in all five major centres (A total of 23,000sqm), were all completed in this period.

"Production" in the five cross-docking facilities commenced on 1 October 2000, with improved service levels and standards, achieved in all regions. Implementation was completed successfully and a rapid operational learning curve was displayed by all centres.

Results & Achievements

All initial targets and objectives in terms of costs and performance standards were met and subsequent refinements have added significantly to further cost savings and service enhancements. The system allows for sustained growth and further economies to be achieved and has given Pep control over their means of distribution process. It avoids reliance on any specific service provider. The following summarises the key achievements:

- Distribution Costs – have not only been contained, but have also been reduced. (See chart "2" on next page)
- Delivery Times – Pep lead times have improved by up to 40%, with scheduled and planned deliveries thereby reducing stock in transit. (See chart "3" on next page)
- Cost Control – An environment has been created wherein distribution costs can now be better managed. Greater visibility and control over variable costs, and optimal utilisation of resources, allowing maximum benefit from the fixed cost component
- Losses – Claims and losses have been reduced by more than 50%, to less than 0,08% of volume distributed, further cutting distribution costs (in the form of insurance premiums or excesses)
- Management information regarding the status of distribution (current and historic) and various related aspects allowing for the detailed management of the process
- Full control over inter-branch transfers
- Reliability and certainty of delivery allowing for better planning
- Proof of deliveries are available within 48 hours and fully reconciled allowing for enhanced stock in store management
- SCS developed and introduced systems, which enable management of the complete outbound process, whilst giving Pep access to important information. The systems were interfaced with Pep, allowing pertinent data to be shared, and making operational information, such as proof of deliveries, immediately retrievable. This system is customised for Pep and ongoing local development ensures that enhancements, to meet additional needs, are expedited and economical.

The success of a project of this magnitude has been recognised by reference to the industry leaders, who selected this project as the "most outstanding achievement in the South African Supply Chain Industry, for the year 2000". SCS and Pep Stores SA (Pty) Ltd were awarded the "Logistics Achiever Award" for the year 2001.

Chart 1: Overall Closed Circuit System Design

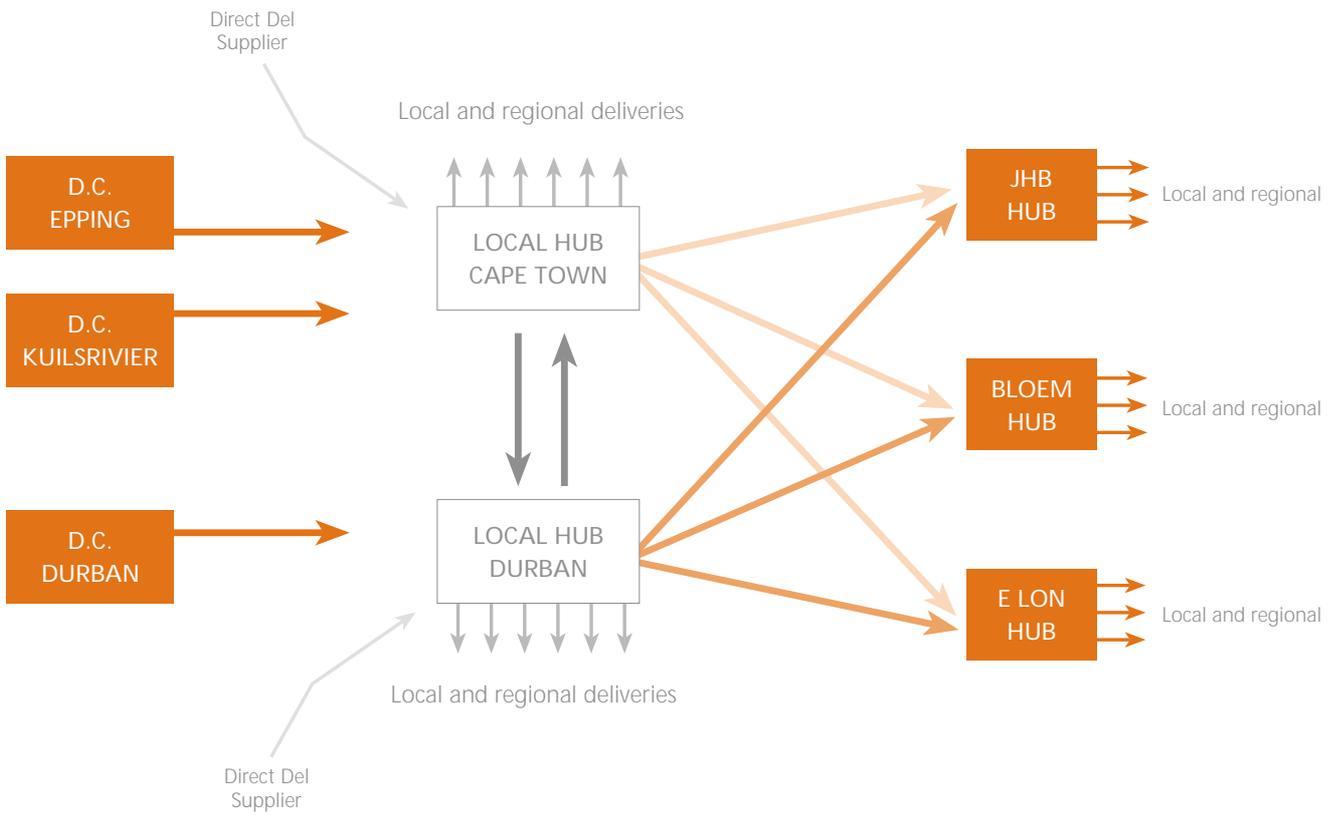


Chart 2: Comparison of New and old Systems – Impact on Distribution Costs

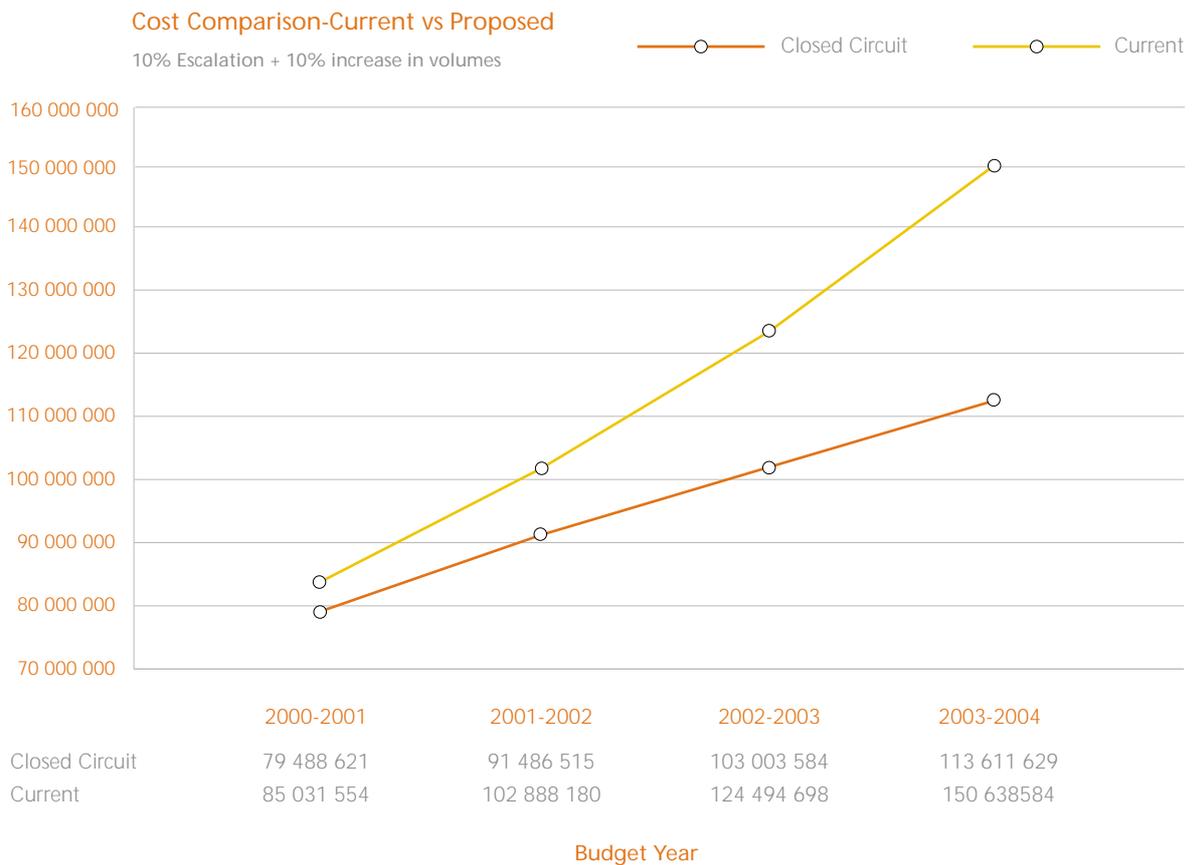
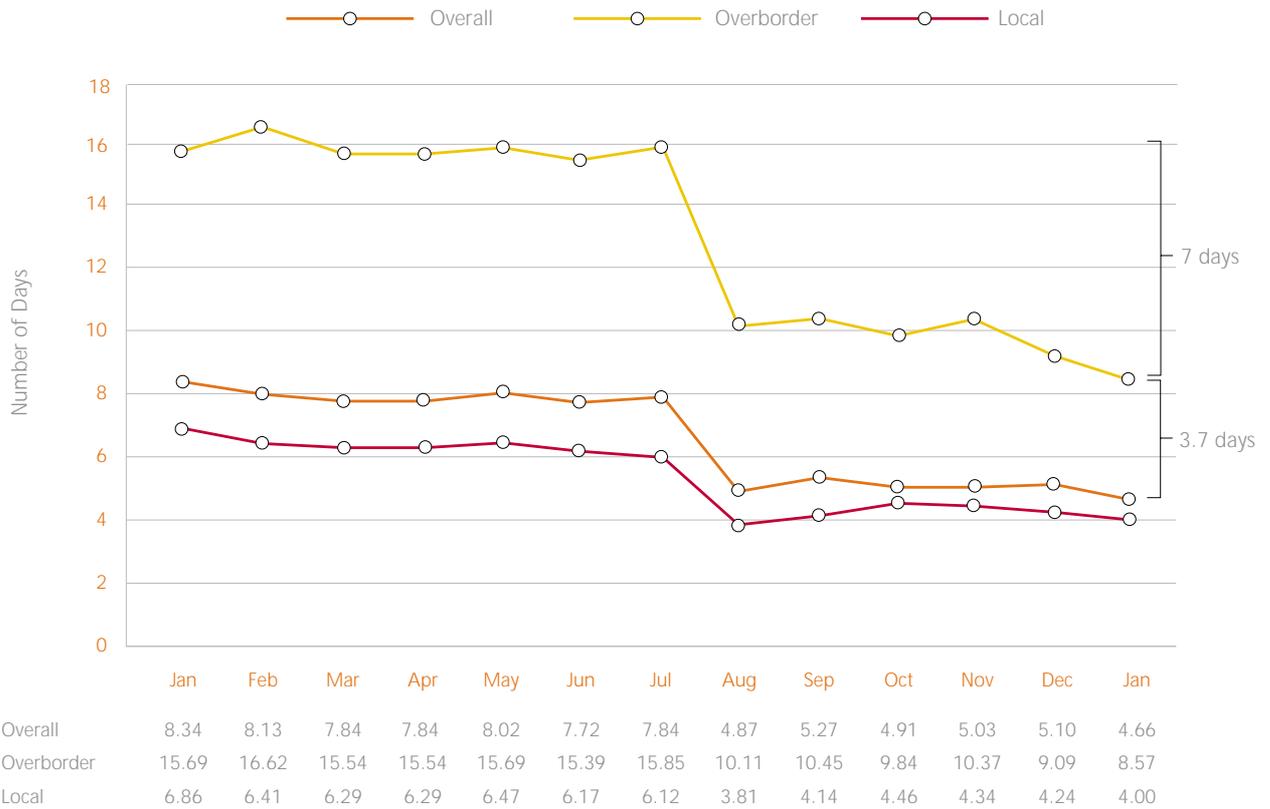


Chart 3: Representation of the Impact on Lead Times after SCS began managing the process



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