

Reverse Supply Chain in Context

Companies spend more time and money in fine-tuning their forward supply chains while sometimes ignoring their backward supply chains. However, in today's competitive business environment when there is both external and internal pressure, companies can no longer ignore reverse supply chains..

The Context

Efficient reverse supply chains bring many benefits to the companies. However, reverse supply chains are different from forward supply chains and most of the existing forward supply chains are not designed to handle reverse supply chains.

In today's highly competitive business environment, the success of any business depends to a large extent on the efficiency of the total supply chain.

The Council of Logistics Management defined reverse supply chain as "the process of planning, implementing and controlling the efficient, cost effective flow of raw materials, in-process inventory, finished goods and related information from the point of consumption to the point of origin for the purpose of recapturing value or proper disposal."

Necessity of Reverse Supply Chain

The foremost reason behind companies giving importance to reverse supply chain is that it reduces operating costs by reusing products or components. For example, previously, Estee Lauder Companies Inc., used to dump nearly \$60 mn worth of its products into landfills every year. However, after setting up reverse supply chain it has been able to reduce the volume of destroyed products by half.

Regulatory Pressure

In some cases companies are forced to set up reverse supply chains because of environmental regulations. Many countries and states have instituted regulatory requirements regarding recycling and product disposition that requires increased record keeping and tracking. For example, in 2003, European Union introduced legislation that will require tire manufacturers operating in Europe to arrange for the recycling of one used tire for every new tire they sell. That is why increasingly companies are using reverse supply chains as an integral part of new businesses.

The Starting Point

Though companies have been successful in fine-tuning their traditional supply chains, they need to make change in their existing supply chain management systems to implement reverse supply chain management systems. Most enterprises do not have supply management systems which handle the reverse supply chain or, if they do, the existing applications are disconnected. Companies need to make a major paradigm change. No longer can companies accumulate returns in the back of the warehouse or stores and ignore the issue of returns.

The first step in any successful reverse supply chain management system is to define the rules of reverse supply chain system. The first and most important activity is to actually

understand where the reverse supply chain will contribute profits. The initial focus should be on the desired business outcome of the reverse supply chain process and then the policies and procedures that are in place to support that outcome.

Many companies accept all types of returns while others do not, depending on the type of product. The return policy of the companies should clearly mention the type of return. Customers return products for repair or replacement. Channel partners return goods because of excess inventory or products exceeding their shelf-life. Original equipment manufacturers also initiate recalls. Ford recalled its Explorer model because of faulty tyres. Companies also need to educate the customers and establish new points of contact with them.

Reverse Supply Chain Activities

The different activities in the reverse supply chain process are:

Gate-keeping

In gate-keeping, it is decided which products to be allowed in the reverse supply chain, otherwise companies might be flooded with products which cannot be recycled, remanufactured or disposed. Good gate-keeping is the first critical factor in making the entire reverse flow manageable and profitable.

Collection

Next, is the process of collection of the chosen items. A major issue in collection is the high uncertainty regarding locations from where used produced products need to be collected, their quantity and timing. Once collected, the items need to be transported to locations for inspection and sorting.

Inspection and sorting

The inspection and sorting is necessary to decide what to do with each item.

Reconditioning

Companies might capture value from returned products by reconditioning damaged packaging for reuse or by completely remanufacturing the products for resale.

Disposition

Disposition is the activity which decides where the items will finally go. Disposition of items is based on quality or product configuration.

Redistribution

In redistribution, the company plans to sell the recycled product. While doing so the company first needs to determine whether there is demand for the recycled product or whether a new market must be created.

Disposal

Finally, having reduced the remaining quantities down considerably, disposal is the last available outlet.

Reverse supply Chain Design Issues

In designing a successful reverse supply chain, it is important to know what type of product will be returned at which point in time at which place and in which condition. Hence, importance of data is immense.

Tightly integrated automatic data capture, system directed disposition support, unique receipt handling, credit processing, capturing specific data on reprocessing possibilities, presenting cost implications, comprehensive and flexible reporting are some of the important functional capabilities in reverse supply chain.

In addition, we need to set defaults, or leave variability to be managed by product experts and enable people to make good decisions.

However, the legacy systems or the standard enterprise resource planning systems used by companies are not normally effective to support these functional capabilities.

Barriers to Reverse Supply Chain

Successfully implementing reverse supply chain is still a problem for companies, as they face a number of obstacles. Often the reverse supply chain is still treated more like a necessary evil of the back end process of a logistics process.

Another barrier is that there is lack of commitment on the part of senior management. Senior management should show commitment in the form of dedicating a team of individuals, software and conveyor systems for reverse supply chain.

There are two types of barriers, internal and external barriers. Internal barriers include preparedness in terms of processes, systems and infrastructure of the company to handle returns, while external barriers include amenability of the customer.

This is a list of internal barriers that need to be considered when implementing a reverse supply chain solution:

- Importance of reverse logistics relative to other issues

- Company policies
- Lack of systems
- Competitive issues
- Management's inattention
- Financial resources
- Personnel resources
- Legal issues

Conclusion

The Reverse Supply Chain is an increasing business imperative for the reasons cited above. For a good process to be implemented, several barriers must be overcome. We are sure that we can address the technical solution and process barriers with Alchemy.

Alchemy has been designed to support the complex and specific needs of the Process Manufacturing Enterprise. Specifically it is designed for an environment where a product is not defined as simply a collection of components, but one where it is a complex mix of substances with potentially many intermediate stages. These are products that can be deemed of bad quality at various intermediate stages of the production cycles as well as at the end of the process as a finished product.

Alchemy works across your Reverse Supply Chain process, from Customer Services, to Quality Management, Product Stewardship, Production Planning and the Manufacturing departments within your organisation.

Alchemy will work across these workstreams and enable people to make better decisions in order to drive more value out of your activities, increasing revenues and reducing inventories, and to provide more data for ongoing process improvement.

strategy people performance

Penumbra is a strategic business consultancy. We bring clarity by using research to drive understanding and direction. We deliver success by balancing experience and innovative thinking.

Whatever your aspiration, we'll provide the tools, information and analysis to turn your strategy into operational reality, in a way that motivates your people to outperform the market.

Overview

Our expertise lies in helping our clients to execute robust strategies and deliver results.

We achieve this by combining a robust management planning system with a focus on people which drives alignment and commitment

We work in partnership with talented and committed leadership teams to help organisations build corporate value with a wide range of customised, cross-functional advisory programmes and services delivered from four complementary service groups:

Strategy

(Development, formulation, implementation and alignment)

Our innovative **Penumbra Balance** approach creates dynamism, drives and sustains momentum and makes strategy real for stakeholders

Organisational Development

(Behavioural issues)

We call our holistic approach **Balanced Motivation** which encompasses activities that improve performance both for the organisation and the individual

Research and Insight

Our stimulating **Clarity** approach draws on our business consulting skills to deliver a mix of business analysis and market research which provides compelling insights for winning decisions.

Operations

The Operations group brings all of our hands-on practical experience to bear on execution and delivery of results.

Our technology enabling approach called **Totality** facilitates business focussed services and solutions, aligned to business needs, for people, processes and tools.

Why Us?

Organisations turn to us when they:

- Want to find a new strategic direction
- Have created a strategy and now need to execute it
- Need to drive more value from existing initiatives
- Have a big issue to resolve, usually dependent on lasting employee buy-in
- Need to explore new ways to drive value
- Need a breakthrough result
- Are seeking measurable results

Our Experience

We have real world experience spanning 20 years with our clients. This includes working with:

BP, Citibank, Morgan Chase, WestLB, RBS, UBS, Bankers Trust, Kleinwort Benson, Coutts, Natwest, Intel, Nokia, Adobe, Kall-Kwik, Glaxo Smith Kline, Dupont, Pfizer, Savills, British Council, Clifford Chance, British Airways, Gillette, Unilever, Shell, Volvo,

Vauxhall, British Gas, TradeStation, MWB Business Exchange, Investors in People, University of Cambridge

On projects such as:

Strategic Planning, Strategy development and implementation, Culture change, Post-Merger Integration, Vision, Purpose and Values, Current State Analysis, Organisation Re-design, Transformational Change, Client Focus Strategies, Perception Studies, Client and Staff Engagement surveys, Global Rebranding, Know your Customer, Market Forecasting, Consumer Insight, Market Segmentation, Process optimisation, Lean/Six Sigma, Project Management, ERP Systems Roll-out, Market Research, Financial Modelling, Franchise Start-up Evaluation models, Cost Benefit Analysis, Implementation Alignment, Strategic Alignment, Complex Database development, Custom Application development, Supply Chain Optimisation

Covering diverse sectors such as:

Financial Services, Pharmaceuticals, Manufacturing, Energy, Mobile Telecoms, Travel and Tourism, Aviation, Property, Hi-tech and Business Services