

## ***Towards Improving the Sales & Operations Planning Process***

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### **Introduction**

A recent survey by Olhager and Selldin (2007) comprising responses from 128 manufacturing firms shows that the choice of Manufacturing Planning and Control (MPC) approaches, primarily at the Sales and Operations Planning (S&OP) and Master Scheduling levels, has a significant mediating role in improving firm performance. It is through S&OP that many firms are able to achieve sustainable growth without significant investment in new plant and equipment. Research establishes a clear and direct link between S&OP and growth, profitability and customer satisfaction. Bower (2006) describes five typical value creation opportunities enabled by S&OP while Wallace (2006) suggests that S&OP will increasingly be viewed as essential to harmonise the entire supply chain. Literature says that in many cases, the S&OP effort fails to meet their potential because firm and their executives are unsure of what the key objectives of an S&OP program really are. Further, our own practical experience in the area shows that the role and responsibilities of different stakeholders need to be defined clearly to reap the maximum benefits. All this motivated our present work wherein we try to address many of the practical issues for improving the S&OP process.

Early work in Aggregate Production Planning has today evolved into a major business process known as S&OP (Singhal and Singhal, 2007). S&OP developed in manufacturing in the late 1980s and has been around for quite sometime now (Lapide, 2004a). It is the long-term planning of production levels relative to sales within the framework of a manufacturing planning and control system (Olhager et al. 2001). Wallace (2006) defines S&OP as a process that helps companies keep demand and supply in balance, align volume mix and integrate operational and financial plans. It is a company-wide demand and supply plan that provides the next level of detail in fulfilling business plan objectives by

describing family-level sales, production and inventory targets and incorporates the planned effects of new product or promotion introductions. It has become one of the most critical business programs used to achieve best in class performance status and to consistently outperform industry competitors.

Process-wise, S&OP is a cross-functional, multi-dimensional process that includes all elements of demand, supply and financial analysis in relation to the business goals and strategy and brings together team of individuals on a routine basis to plan for where businesses are going on a tactical basis (Lapide, 2006). There is usually a monthly joint review by all departments to analyse current status against the previous plan in order to provide corrective action. The typical planning period ranges from four weeks to as long as two years. When applied correctly, S&OP has the power to enable an enterprise to achieve an immediate and significant increase in return on investment. It can have a direct impact on profitability, performance, customer satisfaction and the product portfolio. S&OP strategies help firms make "right-timed" planning decisions for the best combination of products, customers, and markets to serve.

### **The Research Problem/ Issue**

Most of the research and practices in the area of S&OP focus on methods for synchronizing supply and demand by designing processes and procedures for communicating and understanding the business environment and developing response plans to opportunities and challenges. Firms continuously focus on how to improve execution to improve revenue, decrease costs and improve customer satisfaction. They also define criteria and rules for managing and measuring the assumptions that go into developing each plan and devise key performance metrics to ensure better business performance. However, Muzumdar and Fontanella (2006) find that most firms struggle with even the basics of balancing supply and demand in their supply chains. They find uniting the key stakeholders as a critical success factor and a key challenge for improving a firm's S&OP process. Bower (2005) identifies "ownership" as one of the 12 most common threats to the S&OP process. So, the role and responsibilities of different stakeholders need to be defined clearly to reap the maximum benefits. There is a clearly felt need for institutionalizing a strong S&OP process within a firm. Lapide (2004b)

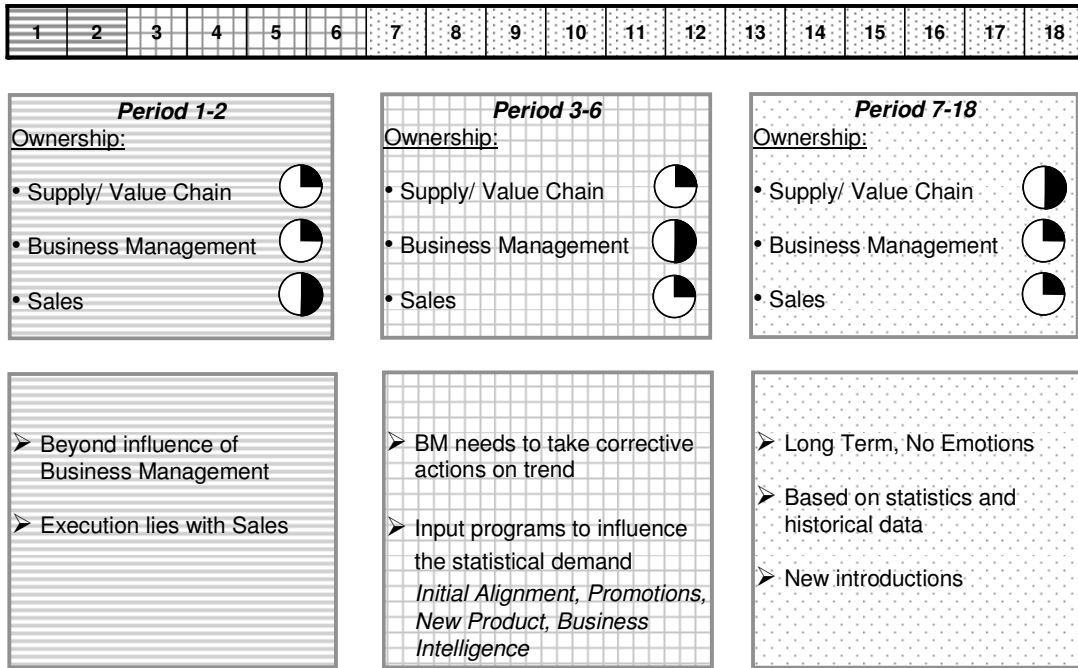
advocates using enabling technologies to address some of these concerns. However, Slone et al. (2007) opine that one should not expect technology to solve a process challenge. Hence, in this paper, we mainly focus on improving the S&OP process.

### **Key Methodology**

We carry out related literature review to gain an insight of the concept, the process, the thrust areas and advances made as well as to identify areas which need attention. We utilise these and our own experiential insights to improve the S&OP process. We first define the key objectives of the S&OP process and thereafter define clearly the role of various stakeholders such as the demand planner. We suggest what should be discussed in S&OP meetings and provide a framework for ownership of business forecast over an 18-period time horizon in context of FMCG sector. We also suggest a platform to align the plans on a continuous basis and avoid surprises.

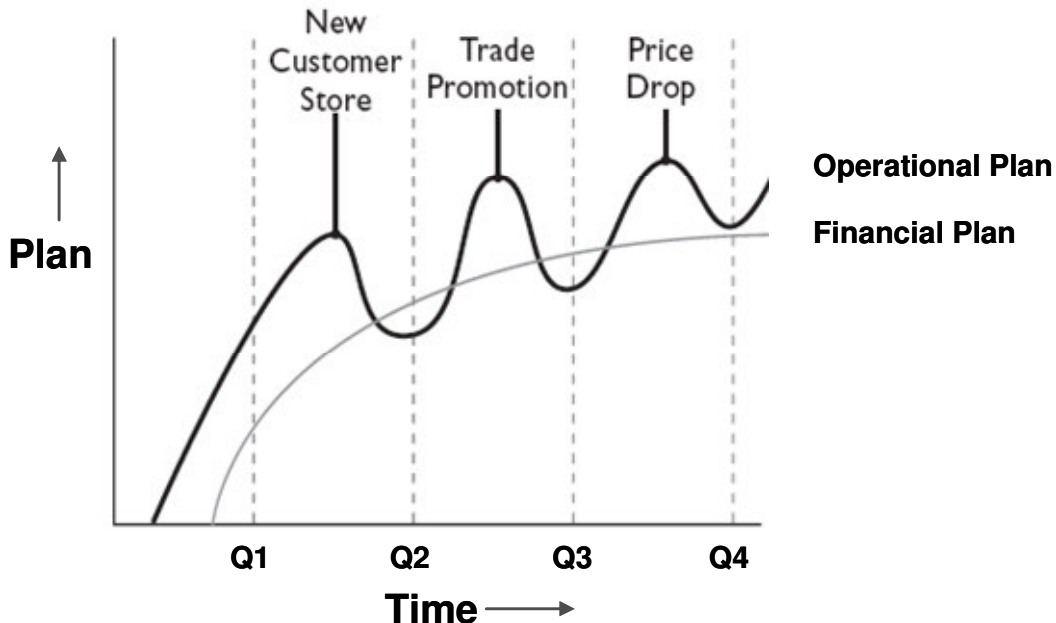
### **A Brief Description of Results**

A successful S&OP Strategy includes the five components of people, process, technology, strategy, and performance. Here, we primarily focus on the process part and advice firms to develop a globally consistent process with common reports and performance metrics. By bringing sales, marketing, operations and finance together, it is possible to break down organizational silos and develop an effective and comprehensive execution plan. Firms should implement a rigorous program of documented plan/execute/monitor to continuously challenge base assumptions, processes, and technologies; this should include benchmarking their performance against the best. Effective S&OP involves more than just holding formal regular meetings. They should support common Key Performance Indicators (KPIs) across business units, including: customer service, forecast accuracy, inventory (days/turns/Rs), schedule adherence, and deployment adherence. Fig. 1 provides a framework for ownership of business forecast over an 18-period time horizon. This provides clear and shared dynamic ownership as per changing roles of different stakeholders over the planning time horizon. It has been highly effective in FMCG context and may be suitably adapted in other sectors.



**Figure 1: Suggested Ownership of Business Forecast over an 18-period Time Horizon**

At all times, the focus should be on aligning S&OP to financials. Further, as there are too many uncertainties at both the demand and the supply side, it would be prudent to align the plans on a continuous basis to avoid surprise. Fig 2 shows a platform to achieve the same. Finally, we state the limitations of the present work and suggest scope for future work.



**Figure 2: Platform to align the plans on a continuous basis and avoid surprises**

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