

CASE STUDY Landis
Gyr+
manage energy better

SALES & OPERATIONS PLANNING

Any company intending to enhance its agility and flexibility, and increase its ability to respond to changes in demand has a range of options available.



SALES & OPERATIONS PLANNING

**THE ROUTE TO
BALANCING
DEMAND AND
SUPPLY**

Successful companies are agile and respond flexibly to fluctuations in demand

The conventional practice of simply updating budgets and procurement planning is no longer a viable option. Relying on the previous year's figures is an approach involving unnecessary risks. Nowadays, the needs of the demand side change so rapidly and radically that significant gaps between budgets and realities may arise. Forecasting that relies exclusively on the expectations of the sales department can also become a costly exercise. In such cases, success is more of a coincidence than the result of systematic assessment and costing. How can management best get to grips with the volatility of demand? How to avoid the inappropriate and costly allocation of resources? «Sales & Operations Planning» describes a challenging but promising approach to success.

Volatility and complexity – the challenges of our times

Two key trends are currently causing headaches for the management of innumerable companies: the already high and steadily increasing volatility of demand, plus growing complexity of the procurement side. The primary causes are the ever shorter economic cycles, the ongoing reduction in manufacturing depth and consequently, the growing importance of procurement. Overlying all these aspects is the continuing trend of globalisation in the sales and procurement markets. When such challenges become excessive, costly misallocation of resources is an inevitable consequence. Companies that succeed in identifying and maintaining the right balance between demand and supply will clearly be among the winners in the competitive environment.

Agility and flexibility – answers to the challenges

What is to be done? The majority of businesses rely on improved control of the value chain and increasing their own agility and flexibility. Potential measures are:

- Reducing throughput times
- Eliminating bottlenecks at individual value adding levels (objective: continuous flow production batch size 1)
- Closer cooperation with customers and suppliers
- Standardisation of components and materials
- Establishing (essential) resource buffers
- Extending the workbench
- Optimisation of sources of supply

Another promising approach aimed at enhanced flexibility and agility is «Sales & Operations Planning» (S&OP). This planning tool is described in the following. A case study of Landis+Gyr AG illustrates the successful implementation of the S&OP concept.

Objective – a balance between demand and supply

Using the S&OP planning method, the key demand and supply parameters along the value chain can be balanced, thereby minimising budget/effective deviations. Demand forecasts play a decisive role in the planning and management of procurement. In this context, selected data are compiled and carefully analysed to improve the reliability of the forecasts and to enhance the ability to react. Subsequently, the results are incorporated into the relevant decision processes. The aim is to create equilibrium between demand and supply – as far and as quickly as possible. When the S&OP process is rigorously implemented, there is a discernible impact on lead times, on production and on inventory levels. Ultimately, the effect on liquidity and profits is also positive. Expectations on S&OP are high. In Switzerland too, an increasing number of companies are expressing an interest in the concept. To date, however, serious application of S&OP has been limited to a small number of companies. Landis+Gyr is among the pioneers.



S&OP focuses on the essentials and the feasible

The focus – oriented towards the long-term perspective

Mastering the growing complexity of the realities is the aim of the planning concept. As a first step, however, the complexity of the concept itself has to be contained. This is achieved by using S&OP to focus on the essentials and what is feasible. Detailed scheduling of the order of days or weeks is dispensed with. A typical S&OP time frame is measured in months to years. The process is positioned between budgeting and detailed planning. S&OP is to be understood as a long-term and rolling planning concept. Updated with the latest figures on a monthly basis and optimised via rigorous performance reviews, forecasts are continuously improved. Activated procurement orders steadily approach actual realities.

To also contain sudden changes despite having taken all precautions, the results of S&OP (long-term) are refined through a second, operative planning level (mid-term) plus a monitoring one (short-term), see Fig. 1. All three instruments are complementary and generate

an information status that allows management to take decisions relevant to:

- Increasing the reliability of demand forecasts
- More rapidly and flexibly absorbing short-term demand fluctuations in procurement and in-house manufacturing
- Reducing procurement lead times
- Optimising inventory levels as well as avoiding inappropriate ordering and allocations

The process – differentiated and focused

A straightforward and effective method of simplifying the process is to assess its predictability beforehand. Specific questions have to be answered, such as: What can be readily planned? What is difficult or impossible to plan? But also: What does not need to be planned in the first place? The responses are likely to vary depending on the company involved. Viewed systematically, preliminary decisions can be taken on the basis of «Business Cases» and/or the results of the ABC/XYZ portfolio analysis. This latter materials management procedure allows



Fig. 1 The combination of S&OP with short- and medium-term planning tools leads to optimal response times

S&OP focuses on products that are relevant in terms of volumes and value

classification of consumption data and fluctuations for commonly used components. The analysis indicates where the implementation of S&OP is worthwhile and where, from the outset, other planning methods should be employed. The reason is obvious: whereas the complex S&OP process is not suitable for components for which there is limited demand, or are irrelevant in terms of turnover, it is all the more viable for mass-produced items that generate corresponding value and sales volumes. In the S&OP context, it also makes sense to differentiate between standard and project type business operations, as well as between the phasing-in and phasing-out of products.

The approach – structured and institutionalised

The rigorous implementation of S&OP imposes high demands on management. This applies particularly to the process that is generally broken down into five steps (Fig. 2), which are repeated month for month (rolling planning). In step one, the essential data are determined and made available. In steps two and three, demand

and supply at division level are analysed on the basis of the data generated. Any indications that suggest potential problems, e.g. bottlenecks or under-utilisation, are identified and discussed. Decisions within the scope of competence of the divisions are taken in step four already. In the fifth step, the summarised results are, as a rule, subsequently reviewed at executive board level, for example, within the framework of business planning meetings. On the one hand, that body accepts the forecast and, on the other, approves or decides at top level the measures required to implement the appropriate actions.

Whether a company achieves its objectives using S&OP depends on the data made available and – to an even greater extent – on how and when identified measures are implemented. Experience shows this to be the case.

The planning team – competent and assertive

A key criterion in any successful S&OP project is the composition of the planning team. Well-informed, assertive executives from the divisions

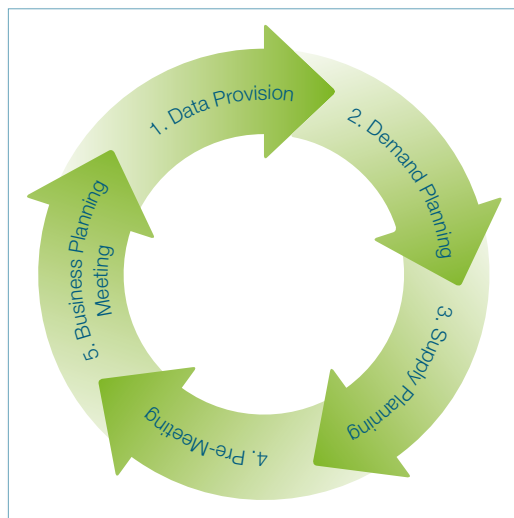


Fig. 2 The rolling forecast process is vital to successfully achieving the objectives



**Assertive team
with decision-
making compe-
tence is critical
to success**

involved with the authority to take decisions are required. It is advisable to declare S&OP as a priority task for senior management from the outset, i.e. the CEO will take a seat (at least temporarily) on the top-level decision-making team, thereby demonstrating the importance of the process. The following functions are obvious candidates for the S&OP team: the Heads of Marketing & Sales, Domestic/Export Sales, and where appropriate, the Development and Supply Chain Managers. This team is tasked with generating and analysing the necessary data, and for taking decisions on the measures being derived from them (Fig. 3).

**Networking – well prepared through
exchanging information with partners**

The more relevant the data, and the earlier they are processed for forecasting, the sooner the planning process will be able to fulfil the triggered expectations. This aspect may seem self-evident, but it does require that communication is extended well beyond one's own company to include the key players in the value chain, and to agree on a regular exchange of information – as

proactive as possible – with them. Management needs to enter into planning partnerships with its core customers and suppliers, and to integrate their forecast data into its own planning activities. If this approach appears excessive or even unrealistic, there are other shorter-term measures in conjunction with partners that can be considered, e.g.

- Concluding framework agreements on mutual support in the production planning process
- Early briefing on the next production schedule for phase-in or phase-out products
- Standardisation of components across products

**The benefits – the effort is worthwhile
month after month**

It is proven that when the S&OP process is implemented objectively and professionally, promising results can be achieved. For example, forecast accuracy and ability to deliver are both enhanced by up to 20 %, with inventory levels reduced by 30 % and procurement costs cut by



Fig. 3
Ideal characteristics of any planning team are its competence, interdisciplinary profile and readiness to take decisions

5 %. Even if these figures do reflect the experience gained across various branches, caution is advised: those improvement potentials are less dependent on the products or sectors of the individual companies, and more on the level of maturity of the planning processes in the context of the listed S&OP criteria.

Tomasz Mlynarczyk, Partner, Inova Management AG

S&OP success criteria at a glance

Planning the entire supply chain with upstream and downstream partners is a complex issue. Experience shows that it is only successful when:

- The entire process is institutionalised
- Planning is focused on the essentials
- The planning team is made up of assertive executives with decision-making authority
- Responsibilities are clearly defined
- The team is cross-functional and interdisciplinary
- Key partners from third-party companies are integrated into the process
- Tools and templates used by the company and its subsidiaries are standardised
- Forecast deviations are continuously identified and analysed, allowing new perceptions to be incorporated into future planning



CASE STUDY

SALES & OPERATIONS PLANNING

AGILE STRUCTURING OF COMPLEX PLANNING PROCESSES

**Recognising
planning as a
competitive
factor**

Landis+Gyr AG (L+G), a renowned, export-oriented industrial group domiciled in Switzerland's Zug, has already gained two years of experience with supply planning. The cost of planning pays for itself through more accurate forecasting and hence, more reliable procurement processes. The planning process, however, is by no means a self-runner. It requires an ongoing, structured and focused approach, plus the disciplined efforts of all team members.

The challenge – procurement lead times far exceed delivery deadlines

The market for advanced metering – the main business arena of Landis+Gyr – is also characterised by growing demand volatility, shorter product life cycles and complex supply processes. Some two years ago, in order to face that challenge and continue improving its own competitive edge, L+G undertook an in-depth analysis of its planning and procurement process, with scope for improvement to be identified. The following key problems were pinpointed:

- Significant discrepancies between delivery deadlines expected by customers and own procurement lead times
- Limited response potential to unforeseen increases in demand because of capacity bottlenecks
- Costly and time-consuming cross-border data consolidation

Management decided to implement an S&OP planning process aimed at eliminating these problems rapidly, efficiently and sustainably. The process was required to cater for the needs and demands of all stakeholder groups, take into account the new framework conditions, but also to exploit the existing flexibility in the supply chain. The S&OP concept was expected to satisfy all those requirements.

The main perception – 80 % of the sales volume can be satisfactorily forecast

Prior to introducing the planning process, the core products of the group were subjected to an ABC/XYZ portfolio analysis. Within those core products, it was the printed circuit boards (PCBs) in the meters that were defined as the key com-

ponents. It was also established that, among the PCBs, a few standard versions were responsible for generating high ordering volumes. On the other hand, there were also a number of specific versions that frequently led to long lead times, marking them out as highly critical items. With this insight, and taking those critical components into consideration, different product families were concentrated into forecast groups. Around 80 % of the sales volume can be forecast, and it is here where the planning process is rigorously applied. In the case of the exotic PCBs that generate low sales and infrequent orders, the focus is on supplier management and inventories held by the suppliers.

Best practice – focus on critical components and differentiated planning processes

In its S&OP process, L+G not only concentrates on critical forecast groups, but differentiates between three business cases with distinct responsibilities (Fig. 4):

1. Planning of standard product business is the responsibility of the sales organisations in the country operations
2. The newly established Opportunity Management Team focuses on projects and assesses the probability of success of calls for tender
3. Planning of product phase-in and phase-out is undertaken by the Product Management department

Planning results converge at the central logistics desk, where they are consolidated, validated and issued to the production companies or suppliers. A vital element in planning is the provision of data. This involves on the one hand quantitative param-

**Only plan
what is
worthwhile
planning**



Landis+Gyr AG, Zug, Switzerland

THE PIONEER IN THE SMART METERING INDUSTRY

Landis+Gyr is the world's leading provider of meters, systems and services for energy measurement in industry, commerce and households. The globally active group has 45 subsidiaries located in over 30 nations. With over 5000 employees, the group generated net sales of USD 1.36 billion in 2009. The Group is organised into four regional companies and maintains a network of centres of excellence. Logistics and supply chain management (SCM) are centralised. Manufacturing is based at various locations that are also responsible for operational supplier management. Strategic supplier management is the task of central procurement and SCM. The Group offers a complete portfolio of energy meters and intends to position itself as the pioneer in the smart metering and smart grid industries.

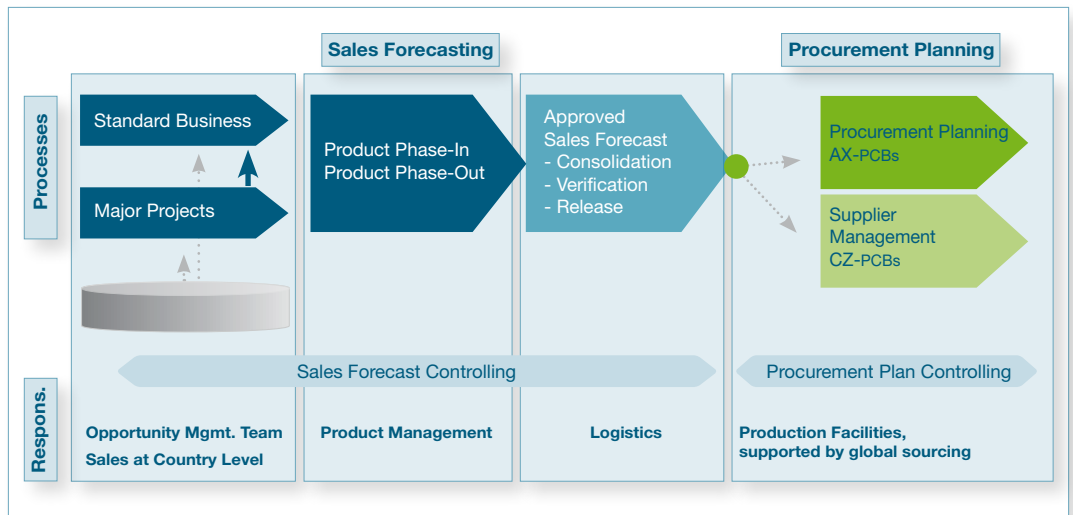


Fig. 4 Differentiated Planning Process

ters such as consumption figures, quotation levels and orders in hand, but also qualitative statements, e.g. ABC/XYZ classification, life cycle phase and logistics status (for example, if a forecast group contains long lead-time components that are not on stock). Groupwide tools have to be provided, both for generating information and for compiling planning data. In addition to improving data transparency and standardised handling, such tools also allow dedicated controlling of the planning process. Periodic accuracy reports, highlighting deviations from the forecast/effective figures, are generated and disseminated to the responsible teams, thereby closing the loop for continuous improvement of planning quality.

Positive experience

The cost of implementing the S&OP process has paid off for L+G. Planning has become far more effective, but also more efficient. The key benefits at a glance:

- Improved quality of forecasting and procurement data
- Time required for generating forecasts has been halved
- Established planning process with increased transparency
- Increased awareness of the significance of the planning process
- Better availability of supporting information: last forecast, consumption etc.
- Improved communication with suppliers thanks to better data situation
- Synergies between materials planning and financial budget forecasting

- Rigorous process improvement thanks to accuracy reports with forecast/effective deviations
- Increased motivation of the teams working for the country operations

A number of permanent challenges, which must be given adequate attention, remain:

- Constant feedback to management and their involvement
- Consistent discipline of the planning teams
- Higher demands on the updating and administration of master data
- End-to-end data integration, coupled with higher IT outlay

Process is not a self-runner

S&OP at L+G illustrates how a company can gain the desired level of vitality in three steps. It first exploits the dynamics of the supply chain, next it clarifies its own specific forecasting requirements, and then sets up the corresponding planning process and associated organisation.

Despite all improvements, the learning process is never completed, nor has the process revealed itself to be a self-runner.

Dr. Markus Schürch,

VP Supply Chain Management, Landis+Gyr AG

Enhancing forecasting quality through institutionalised feedback

CASE STUDY

SALES & OPERATIONS PLANNING

Inova Management AG

Verenastrasse 37
CH-8832 Wollerau
Switzerland
Phone: +41 (0)44 786 33 11
Fax: +41 (0)44 786 33 80
E-Mail: info@inova-ch.com
www.inova-group.com



Tomasz Mlynarczyk
Partner
Inova Management AG



Dr. Markus Schürch
Vice President
Supply Chain Management
Landis+Gyr AG
CH-6301 Zug
Switzerland

Inova Management AG, with its legal domicile in Switzerland and maintaining subsidiaries in Germany and the United Kingdom, is an independent, medium-sized management consultancy. Established in 1992, the company has gained a reputation for providing professional services in the sectors of management consultancy, supply chain management, logistics and IT.

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