

**eyeon**  
YEARS AHEAD



# INTEGRATED BUSINESS MANAGEMENT

ON HOW TO BECOME AN S&OP CHAMPION

AN EYEON WHITE PAPER

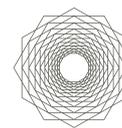
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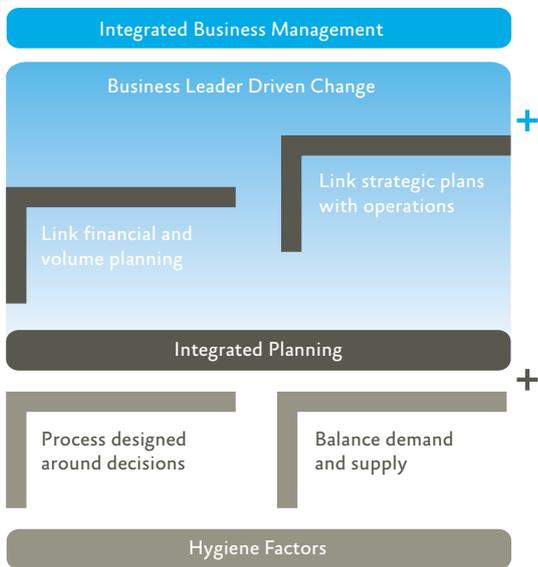
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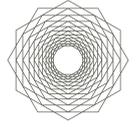
## EXECUTIVE SUMMARY

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Moving from S&OP to Integrated Business Management is a journey, not a project. In getting the basics right, there is already a lot to be won for the average organization. What good looks like for the hygiene factors of designing the process around decisions and how to balance demand and supply differs per industry and even per company. There is no textbook solution.

Then moving up to full horizontal alignment by including finance and integrating vertically by really using the process as a means to manage the business are both prerequisites of getting top-management attention in the first place and require their active involvement to succeed.





S&OP has been a well know concept for decades. Various definitions have been provided in literature over the years, but the definition by T.F. Wallace contains all the main elements of a good S&OP process in one simple sentence:

**“S&OP is a set of decision-making processes to balance demand and supply, to integrate financial planning and operational planning, and to link high level strategic plans with day-to-day operations.”**

So breaking this up, there are four key elements to an S&OP process:

- Decision making.
- Balance demand and supply.
- Integrate financial and volume planning.
- Link strategic plans with operations.

What we experienced over the years however, is that S&OP has, in many companies there is still room for improvement. The EyeOn S&OP benchmark shows that 30% of the companies get past basic S&OP, which in itself is difficult enough to excel at, and were able to make the move to Integrated Business Management. In those companies typically the process is more integrated, mainly because there is a link with financial planning and other parts of the company are involved in making the consensus plan. For example marketing is added to the monthly S&OP meetings, because they can provide valuable input on expected levels of demand. On top, in terms of vertical alignment, the S&OP process in those companies really serves as a vehicle for translating strategy into action as it is focused on the tactical horizon, rather than the immediate future. Executive management not only sponsors the S&OP concept, but is actively involved in the process, which may be both the cause and the result of having an integrated volume and value based medium term planning process.

To distinct the good from the great, we refer to the companies that do reach this higher maturity level as having an Integrated Business Management process, which is effectively Champions League level S&OP. As will be discussed below, companies able to reach that level benefit from both increased efficiency and effectiveness: better informed decisions faster.

To reach this level you must get all 4 elements of Integrated Business Management correct and add a 5<sup>th</sup> one. Designing the process around decisions on how to balance demand and supply are foundational, or hygiene factors any S&OP process should have. To step up to Integrated Business Management you need to complete the horizontal plan alignment by integrating volume and financial planning and the vertical plan alignment by linking strategy to action. Then you have a process designed to integrally manage the business. Prerequisite for this to succeed and sustain as a process after the project phase is continuous and active involvement of business leaders driving this change.

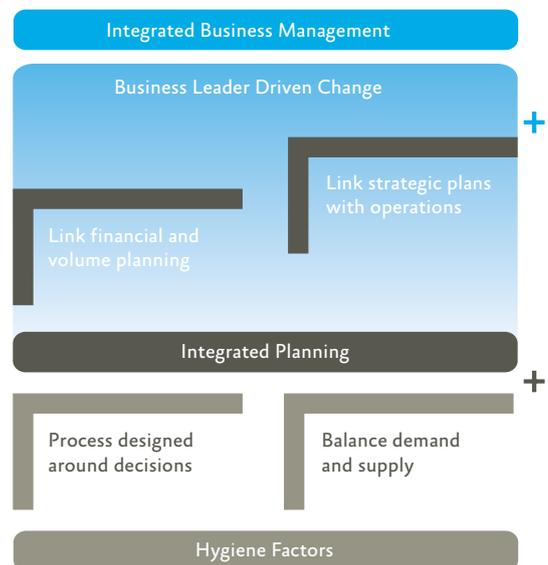


Figure 1: Integrated Business Management.

This paper focusses on all of these elements, building up towards Integrated Business Management. During spring and summer 2015 a set of interviews were held on the subject, with over 30 of large organizations out of the EyeOn network. Some of the most telling results are referred to where appropriate.

# 3

## PROCESS DESIGNED AROUND DECISIONS

S&OP is a set of decision making processes. Straightforward. In practice it often proves to be quite difficult to set up a good process though. A number of things we have observed over the years in working on planning improvement projects and benchmarking S&OP processes is the importance of:

- Discipline (prepared, agenda, participation).
- Focus on decision making.
- Adherence to a fixed calendar (no side meetings, no ad-hoc crisis meetings).
- Right people at the table (with decision power).
- No more discussions on data accuracy.

This list is not extensive, but meant just to give an idea of the kind of things that must be considered in setting up a decent process. From the 2015 EyeOn survey it showed that there is a positive correlation between the perceived quality of the S&OP process output and the perceived quality of the S&OP process design:

In general: the better the design, the better the output.

### 3.1 FAST, TRANSPARENT AND EFFICIENT

The process must be arranged in such a way that relevant information can be shared rapidly, efficiently and transparently within an organization. A good forecast is required to make timely and robust decisions on balancing supply and demand and on identifying potential gaps and risks to reach (strategic) targets.

in half is no exception. This is often made possible by better use of supporting systems, but mostly through better process design (and with that making better use of the potential of people). The shorter the duration of the process, the more recent the data is on which the decisions are based. It also reduces discussions during meetings about whether the numbers you are looking at are not outdated. Of the Integrated Business Management survey participants, half indicated their process to be fast, transparent and efficient.

### 3.2 SET UP THE PROCESS

When setting up an S&OP process, start with the question: "What are the typical decisions I want to make in this process?" And then decide what information you need (and what not) to make these decisions. This seems a no-brainer, but there are quite some companies where the credo seems to be "This is the information (or data) I have, let's see what I can do with it."

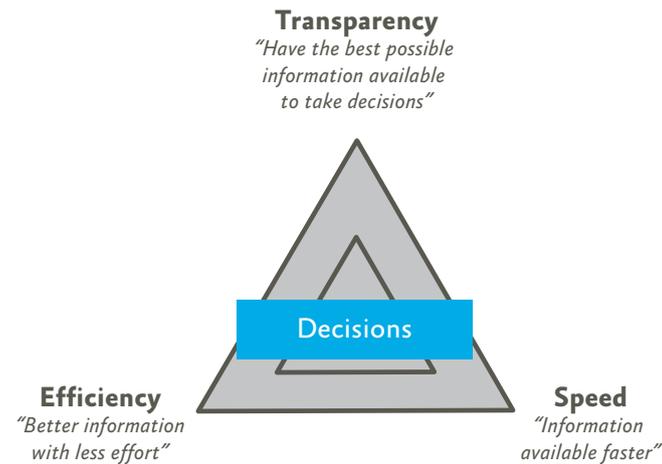


Figure 2: S&OP is about making decisions.

Note that fast communication of the forecast with all necessary parties involved to support decision making is more important than to try and predict the future with perfect accuracy. 'Roughly correct' is better than 'exactly wrong'. Efficiency also means that each period an existing plan is improved. You mainly look at the deltas compared to last time. We typically see the throughput time of the whole S&OP process shrink considerably on process redesign: cutting it

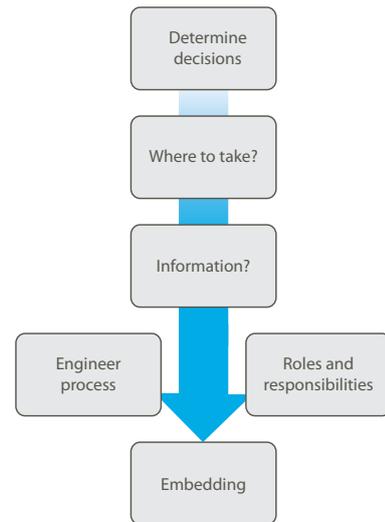
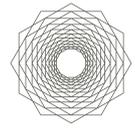


Figure 3: Implementing a forecasting and planning process.

Determine what decisions you will be taking where, in what meetings. It is often helpful to work your way back. Determine what you want to decide in the executive meeting (if present) or in a consensus meeting where you agree on the balancing of supply and demand and then determine what you need when from the other process steps. Then you are effectively already engineering the process. Determine roles and responsibilities, especially with respect to decisions and providing and maintaining the right information. Clearly communicate these to all parties. Accountability leads to increased commitment.

To achieve a high-quality decision-making process, it is important to fix the decision-making structure and incorporate it into a routine, periodic, cross-functional process that clearly indicates WHO does WHAT WHEN. To break through the buffers (silo effect)



between operations and sales, best-in-class companies set up multi-disciplinary teams to manage the cross- functional S&OP process that they have created.

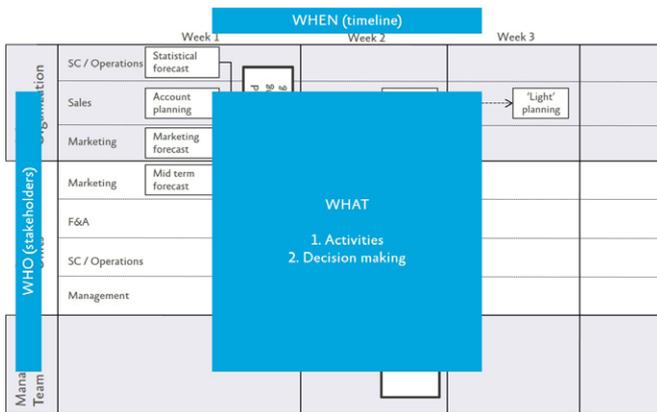


Figure 4: Fixed decision making structure.

Participants in S&OP meetings from the various different functional areas must have decision-making authority. A clear insight into the boundary conditions must be prepared in advance to avoid situations where decisions made at the meeting are merely reversed by senior management after the meeting.

An important success factor for this meeting is the participation – preferably in the role chairman – of a business manager who can enforce decisions in the event of a dispute. He/she should be able to bring a balance when discussing business and interpreting figures and trends during the meeting.

To prevent planning meetings becoming discussions about data and data validity, automate as much as possible. Make sure that data collection is final and complete when decision-making starts, which should be as close as possible to the moment of the decision-making meeting, as mentioned above.

Short planning cycles can only be established when a strict planning calendar is prepared for all activities. This calendar should be adhered to. Design meeting rules about participation, preparation, expected conduct etc., to increase discipline. Define a set of design rules and objectives for your S&OP process and meetings and check after every meeting if you adhered to these and where you can improve. This drives continuous improvement.

3.3 CLOSE THE LOOP

The essence of continuous improvement lies in active reflection on the effectiveness of actions taken in the past and identifying areas for future improvement. Any good planning process design includes this closed loop. The improvement process is essentially about

learning rather than blaming. True learning occurs when the real root causes of issues are identified, understood and managed in a step-by- step improvement process. Research by EyeOn (Aertsen et al, 2010) revealed that a well-structured continuous improvement process makes the strongest contribution to forecast accuracy improvement.

Dr. J. Edward Deming, provided a simple yet highly effective technique that serves as a practical tool to carry out continuous improvement in the workplace. This technique - PDCA (Plan, Do, Check and Act) Cycle or simply Deming Cycle - provides a conceptual and practical framework for continuous improvement.

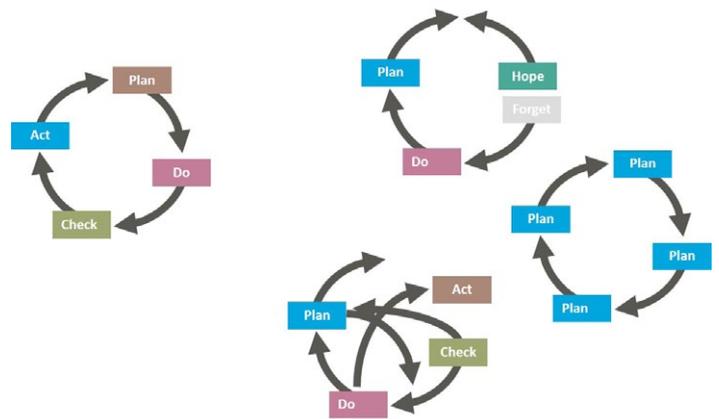


Figure 5: Deming Cycles.

On the left you see the PDCA cycle. In practice though we see other “variants”:

- Plan, plan, plan, plan: there is structure, but no decisions. Everybody is happy when the planning cycle is over, but no actions are taken.
- Plan, do, hope, forget: there is planning, actions are taken, but too little is documented so over time you do not know whether you did what you were supposed to, let alone if this was successful.
- The messy one: all elements are there, just no structure. Side meetings, one on ones and inefficient iterations prevail.

Of the Integrated Business Management survey participants, 2/3 indicated their S&OP process included a PDCA approach. The proper application of the PDCA cycle helps an organization to become agile and incorporate closed-loop management with speed.

**Process designed around decisions: a hygiene factor**  
 So S&OP is about making decisions. Designing the right process is a hygiene factor. If you have a proper S&OP design this is a good foundation to (eventually) move to Integrated Business Management. As can be seen from above, there often is plenty of room for improvement, even in the more basic S&OP processes.

# 4 BALANCE DEMAND AND SUPPLY

In its most basic shape, S&OP is about balancing demand and supply.

## 4.1 THE BALANCING ACT

Many industries currently experience increasing pressures in forecasting and planning on both the supply and demand side, on all three typical 'trade-off balloons', i.e. delivery, capacity and inventory. Below figure is an example of a number of typical pressures. While the nature and strength of the pressures differ per industry, they come from the same three angles. Where in one industry the pressure on the demand side comes from NPI effectiveness and the need for quick volume ramp-ups, another industry might be more heavily affected by the impact of trade promotions. Both put pressure on the demand side though.

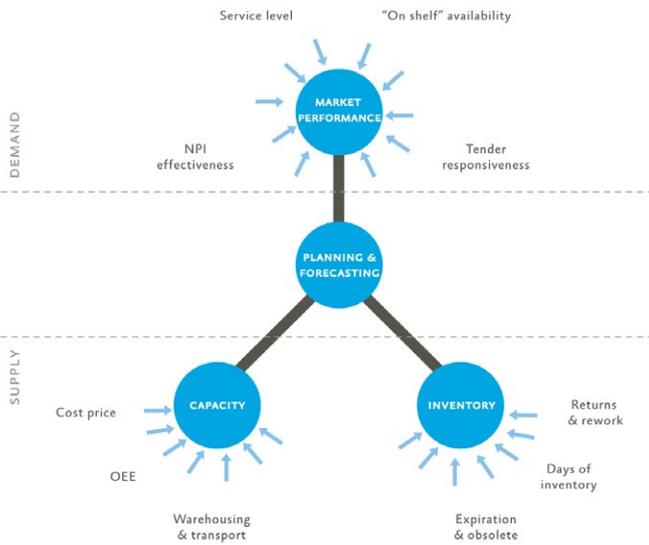


Figure 6: increased importance of forecasting and planning.

The key message is: rather than blowing up one balloon at the expense of another (e.g. increase service level at the cost of sky high inventories), the planning and forecasting process of company, when properly designed, can provide relief so one can actually optimize the supply chain while simultaneously maintaining delivery performance.

The most straightforward consequence of the shifting tradeoff between demand, capacity and stocks is that forecasting accuracy and effective decision making needs to improve. On the supply side, capacity and inventories have to be used optimally to maintain or lower the cost of capital and contribute to the margin. On the demand side, the availability to the end-user needs to be guaranteed. A better forecast that is shared with business rapidly translates directly into lower inventories. Moreover, forecast

improvements lead to less bullwhip in the chain, more reliable incoming supplies and less re-planning and rescheduling in the factories. Forecasting and planning are at the heart of S&OP.

## 4.2 E2E VISIBILITY

Balancing demand and supply goes beyond the company's own boundaries. True integration is more than matching what Production will make to what Sales is asking. Look beyond your own organization, to suppliers and to customers. The knowledge coming from outside the organization is increasingly used to make better informed decisions.

The exchange of relevant information and collaboration with partners outside the company contributes to improved planning accuracy and stability. The level of collaboration within a company on forecasting and planning can be determined using a 'collaboration index' (Simatupang, Sridharan 2005), which measures three important dimensions:

- Information sharing among supply chain partners.
- Decision synchronization among supply chain partners.
- Incentive alignment among supply chain partners.

Combining the collaboration index with the basic forms of collaboration shows the impact of intensified collaboration.

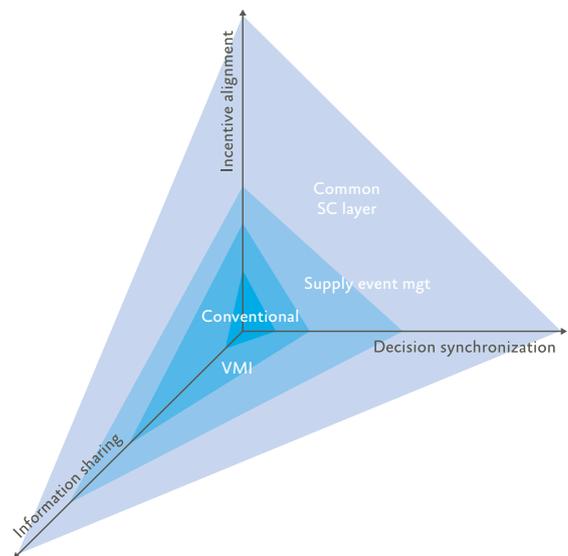
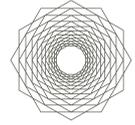


Figure 7: Combined form and index.

Research shows that data sharing between partner companies is quite common, although differences arise in the way it is shared (Van Geel 2007). Decision synchronization, or the level at which supply chain partners mutually decide on important aspects of their forecasting and planning relationship, usually touches areas such as production start-up quantities and timing, ordered-



material quantities and timing, priority settings and allocation of capacity alignment. In reality, real meetings among supply chain partners are more likely to cover burning issues and how to resolve operational problems. Despite general awareness among partners of the benefits that forecasting and planning might bring for end-to-end visibility, there are still reservations about whether it is sustainable and what pitfalls await. These primarily relate to the “trust” factor and the fact that there is almost always a power imbalance. Some companies therefore revert to a third party control tower service, taking away these road blocks.

Asking specifically whether Suppliers and/or Customers were actively involved in the organizations S&OP process, less than 20% of respondents indicated this was the case. Obviously it depends on the type of organization you ask. Determining factor is often the number of external links. It is easier to align with a few key players in the chain that it is with numerous small ones each having their own processes.

#### 4.3 FIT FOR PURPOSE

The S&OP process needs to be fit for purpose. There is absolutely no one size fits all. To illustrate that let's have a look at some main industries and some key aspects to the S&OP process of a typical company per industry. Do note that this by no means is meant to be prescriptive for companies in that industry. That is impossible as within industries there are different types of companies, with other characteristics that also define what is fit for purpose. It merely serves as an example showing that different companies look at different things when balancing demand and supply and that the industry they operate in can have a big influence on what is important to do right and thus to interweave into the S&OP process.

##### Process

The typical company in this business uses the S&OP process to shape demand in order to “sweat the assets”. The process focuses on price optimization, on managing risks with respect to contracts both on the customer and supplier side and on plans to sell excess capacity when business is slow and optimally allocating available capacity in high times. Price management is often the key driver to play with in shaping demand.

##### High-tech

The typical high-tech company uses S&OP to sense demand fluctuations. They often involve suppliers and channel partners in their process. Internally there is close alignment with finance to minimize expensive inventories and manage cash flow due to short lifecycles and high margins on product launch. NPI is often the key aspect in shaping demand.

##### FMCG

A typical FMCG company uses the S&OP process to determine effective promotion strategies, to sense consumption through, for example, use of POS data and to effectively time NPI/EOL activities per account. Trade promotion management is often the key driver in trying to shape demand. Interestingly though, we found that trade-spend is often the elephant in the board room. It accounts for a lot of money, but is often regarded as simply “the cost of doing business” and hardly ever managed correctly (no real promotion objectives, no pre/post calculations etc.): huge improvement potential in many organizations and relatively quickly realizable when properly (re-)designing the processes and applying smart tools.

##### Life science

A typical life science company may use the S&OP process to ensure product availability to the end-user, to manage working capital to free up fuel for acquisitions and R&D activities. Taxes and transfer pricing often play an important role. As more and more is being outsourced also network planning and collaboration are becoming increasingly important. There is often a strong drive for new product introductions. For pharmaceuticals especially important when existing patents are expiring. For medical devices often the key contributor to a healthy bottom line. Key drivers in shaping demand are preferred formulations and new product launches.

#### 4.4 USE STATISTICS WHERE POSSIBLE

Forecasting is an essential part of business planning. A good forecast not only drives an efficient supply chain, it improves service levels and cash flow, and ultimately profitability. Forecasts can be generated using statistics and/or human judgement. A statistical forecast bases its projection of the future on results realized in the past by identifying trends, patterns and business drivers within the historic data. Judgmental forecasts, on the other hand, rely on intuitive judgements, opinions and probability estimates. The use of a statistical baseline helps in making the forecasting process fast, transparent, efficient and objective. Statistics should therefore be used where possible. The latter refers to the following picture. To generate a high-quality forecast, the demand signal for a specific product has to be differentiated according to the phase in the product life cycle (new, mature and end-of-life) and the distinction must be made between whether the demand was normal or a result of events like promotions, tenders and projects.

# 4 BALANCE DEMAND AND SUPPLY

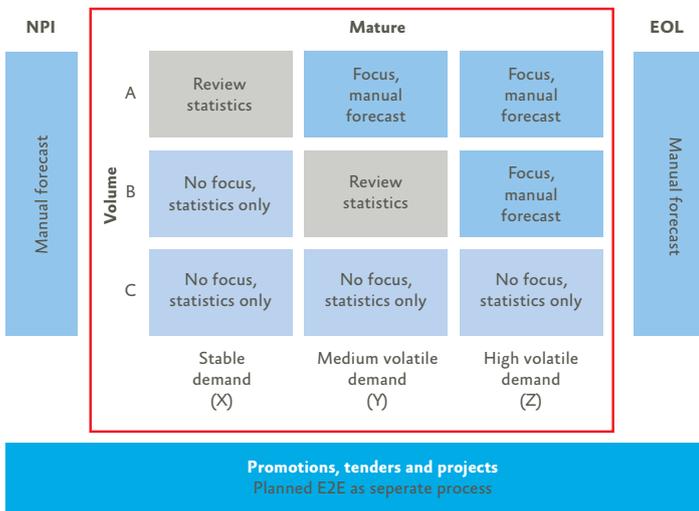


Figure 8: Demand differentiation.

Baseline forecasting for mature products is based on historical sales data and often uses trend and seasonal models. A high-quality statistical forecast allows companies to focus the enrichment by humans on those elements where this really adds value.

Also in forecasting promotions statistics can be valuable, based on historical sales and point-of-sales data, and promotion characteristics (generally using regression models). A high-quality promotion forecast increases promotional effectiveness.

New-product forecasting is based on several internal and external data sources, historical introductions, volumes and characteristics, or social-media data. A high-quality new-product forecast can be used to improve the effectiveness of new-product introductions. Statistics (often multinomial logic) regression models can be used to forecast the full life cycle quantity, the initial launch quantity and the ramp-up profile.

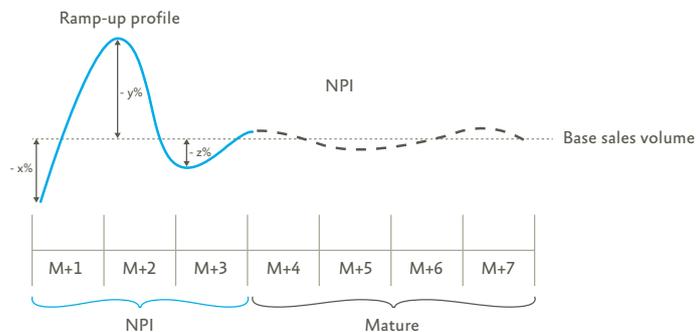


Figure 9: New product forecasting.

Over the years, we have found that statistically generated forecasts very often show performance that can match or even outperform manually generated forecasts.

Outsourcing has been on the agenda of nearly all supply-chain executives for the past decade. After all, third-party logistics and third-party manufacturing have enabled companies to focus attention on core competencies such as research, product design and marketing. Outsourcing of the forecasting function is proving to be an increasingly popular option as companies continue to seek ways of improving their forecasting accuracy. Advantages to forecast outsourcing include the availability of specialized knowledge, the assurance of fast implementation which shortens time to value, the elimination of implementation risks when done in-house, lower costs due to use of economies of scale, continuous improvement due to investment in new technologies and skills, the ability of true, collaborative forecasting using an independent information broker (the control tower) and best practice sharing.

## 4.5 USE HUMAN ENRICHMENT WHERE IT ADDS VALUE

A differentiated approach is essential to provide the right focus of humans, namely, where it adds the most value. This is the key to increasing planning efficiency and effectiveness, by spending available time and resources in the best way possible. Research (Goodwin & Wright, 2010) has revealed that in many companies, planners spend the majority of their time on small (and often irrelevant) plan adjustments.

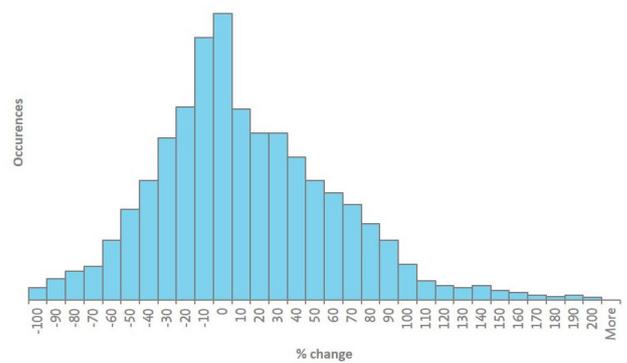
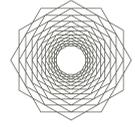


Figure 10: Many small adjustments - very few large adjustments.

Promotions, tenders and projects, because of their specific nature always require special attention for the planner. Either because these will cause specific spikes and dips in the demand (e.g. promotions) or of their binary character: either you win or you lose (e.g. a tender).

### Be aware of Bias

As the above shows, when using enrichment, know you are dealing with humans. During the enrichment process the quality of the forecasts is influenced by the impact of politics and personal agendas in each separate process step. Studies have shown that people inject significant bias into the process during preparation and interpretation of the forecast (Infante, 2002). For example,



a forecaster could be optimistic about future sales and adjust the forecasts accordingly, but at the same time ignore other perceptions of market trends. When forecasters have motivations for a particular outcome, inclusion of their judgmental forecasts is likely to add bias to the forecast. This behavior can lead to undesired outcomes (Fildes, 2009).

A variety of tactics, manipulations, and adjustments exist that can lead to adding bias to forecasts. Some of these are obvious and easily recognizable, while others are subtle and are hidden in the process. In general, all of these different factors influencing the quality of the forecasts can be characterized as intentional or unintentional attempts to influence or distort the forecast output. Unintentional bias error, for example, could result from lack of knowledge about market developments or lack of knowledge on statistical tools. Revising forecasts to reflect sales or revenues to a more favorable level, on the other hand, is a form of creating intentional bias. The recognition of this bias is important for the development and implementation of effective and efficient processes. There is a vast body of research showing that when provided with a good prediction an individual will generally adjust the forecast and reduce its accuracy (Lawrence et. al, 2006), so the opposite of enrichment.

#### *Unintentional behavior*

Unintentional behavior is related to routines and culture that affect the outcome of the forecasting process in ways of which managers might not be aware (Oliva, 2006). This creates potential sources of bias that are unconscious, but systematic, and are a result of what can be called blind spots. These are sources of error caused by ignorance of specific areas that can influence an individual's or group's forecast. Blind spots can be either informational, related to the information on which a functional area bases its forecast, or procedural, related to the algorithms and forecasting techniques used to generate forecasts. In addition to informational and procedural blind spots as a source for bias, the forecasters' individual behavior also comes into play. To some extent, the way in which forecasts are established is influenced subjectively and depends on the person responsible for making the forecasts. Consider a situation in which two forecasters have to make a forecast based on exactly the same initial data. Ideally, this should lead to exactly the same forecast. However, this is not always the case. People selectively use information and have their 'own perception of the world'. This might lead to structural over or underestimating of forecasts due to, for example, overconfidence, anchoring, wishful thinking or optimism. The forecasters' behavior should not be overlooked.

#### *Intentional behavior*

Intentional behavior results from motives, opportunities and means. Given sufficient motive, sufficient opportunity, and the means to influence the dynamics of forecasting and modeling, distortion and deception are likely outcomes (Galbraith and Merrill, 1996). Intentional biased errors, also called motivational biased errors, result from the use of politically adjusted or misleading data. A manager may request staff to adjust revenue projections to a more favorable level, or predetermine an 'appropriate' future financial position, then request staff to generate pro-forma to support the decision.

It is important to monitor the added value of judgmental adjustments and only use human knowledge where really required. The FVA (Forecast Value Added) measurement can help. It indicates the value add of each enrichment step.

#### **Balance demand and supply: another hygiene factor**

S&OP is about balancing demand and supply. This too is a hygiene factor. It is the foundation to (eventually) move to Integrated Business Management. As can be seen from above, setting up a good demand and supply balancing process is a challenge on its own. Plenty of things to consider and certainly not a one size fits all exercise.

# 5 LINK VOLUME PLANNING TO FINANCIAL PLANNING

Making relevant information available to all supply chain stakeholders brings transparency and therefore clarity to any process, but this is especially valid and indeed crucial in forecasting and planning. Companies often plan exclusively in volumes without translating forecasts into value: around half of the organizations in the 2015 EyeOn Integrated Business Management survey indicated they did not translate volume plans to value. Over 20% indicated the volume plan and value plan were completely disjointed. Many are somewhere in the middle where there are gaps between volume and value plans and they focus on trying to explain the gaps. This is a step up. The more mature the link between volume planning and value planning, the better one is able to use the process for gap closing. Around 60% of respondents indicates they were using the S&OP process for gap-closing between budget (often a one year slice of the strategic ambitions) and the latest financial estimate.

Connecting to financial impact is seen as the success factor to get senior management not only involved, but also owning Integrated Business Management, making it the business process for steering mid-term decision making. One participant of a recent network event on Integrated Business Management described it plain and simple: “There is only 1 decision process and that’s Integrated Business Management, it’s the mechanism for business leaders to steer the company.”

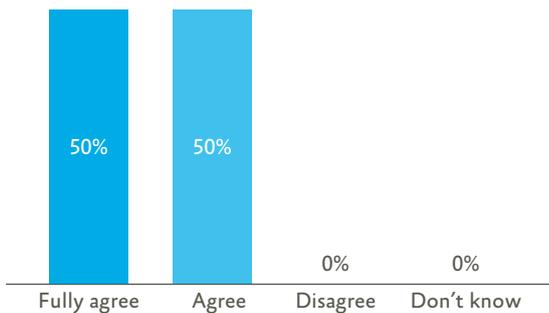


Figure 11: Integration with finance is required to reach the next level in S&OP / IBM maturity.

Managers are often confronted – not to mention confused – by differences between the forecasts of sales people, the estimates (for the future) of logistics people, and the annual forecasts of the finance department. If we want to reach the level of Integrated Business Management the volume planning and value planning should be linked.

In an organization with a mature S&OP process the logistics planning and financial planning are connected in some way. Around

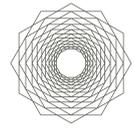
40% of survey respondents to the EyeOn IBM survey indicated the latest financial estimate was derived from the S&OP. This is logical because the volume planning contains a lot of information that could be used directly for the financial plan, like volumes, mix, and timing. A number of important line items are directly affected. Why make your own estimate on the basis of some arbitrary rule of thumb when you can use the information already prepared by others? In a truly integrated process the volume plan and the financial plan are based on the same underlying numbers and assumptions. The volume plan itself is made financial to be able to compare alternatives, to understand where one stands in relation to the budget and also to present plans in a language that all functional departments understand: money.

40% of respondents indicated their IT landscape is supportive of this integrated approach, but as we will see in the next section: even with relatively simple modeling focusing on the key business drivers a lot of additional insights can be gained, without super sophisticated tooling.

## 5.1 DRIVER BASED FINANCIAL PLANNING

So how to link volume planning and financial planning? First of all: involve the finance/control department in your S&OP process, from the start. They can help monetize the plans and have a helicopter view of the organization. Next make use of the different operational plans that are being created in your organization already, because they have links to your financial plans. As an example see below breakdown of a simplified P&L and the operational plans you can use to feed this P&L.

# 5 LINK VOLUME PLANNING TO FINANCIAL PLANNING



P&L item	Drivers	Operational plans	Responsible
Net sales	<ul style="list-style-type: none"> <li>Market growth / share</li> <li>Price positioning</li> <li>Order book, installed base, sales volume (un) constrained</li> </ul>	<ul style="list-style-type: none"> <li>Marketing (mix) plan</li> <li>Demand plan</li> <li>Supply plan</li> </ul>	<ul style="list-style-type: none"> <li>Sales</li> <li>Logistics</li> <li>Marketing</li> </ul>
Cost of goods sold	<ul style="list-style-type: none"> <li>Factory cost price</li> <li>Manufacturing efficiency</li> <li>Freight and handling</li> </ul>	<ul style="list-style-type: none"> <li>Factory plan</li> <li>Logistic plan</li> </ul>	<ul style="list-style-type: none"> <li>Factory</li> <li>Physical distribution</li> </ul>
Integral gross margin	Calculated		
Variable SellEx	<ul style="list-style-type: none"> <li>Promotions</li> <li>Marcom</li> </ul>	<ul style="list-style-type: none"> <li>Marcom plan</li> </ul>	<ul style="list-style-type: none"> <li>Marcom</li> <li>Sales</li> </ul>
Integral variable margin	Calculated		
Fixed SellEx	Sales force	Financial budget	Sales management
Integral sales margin	Calculated		
R&D	<ul style="list-style-type: none"> <li>R&amp;D projects</li> <li>New product introductions</li> </ul>	<ul style="list-style-type: none"> <li>R&amp;D plan</li> <li>PIP plan</li> </ul>	R&D function
SG&A	Overhead	<ul style="list-style-type: none"> <li>Financial budget</li> <li>Cost reduction program</li> </ul>	General management
Integral EBIT	Calculated		

Figure 12: How operational plans drive your P&L projection.

The key is to design a process where you periodically take a snapshot of your operational systems which, using a set of predefined business rules, function as a starting point for creating the financial forecast.

Next consider the following model.

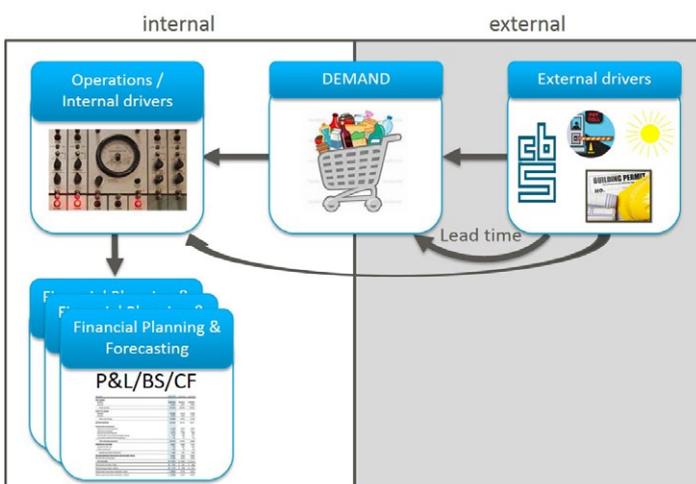


Figure 13: Creating financial plans and scenarios with external and internal drivers.

Demand fluctuations are the driving force behind revenue projections and projections on variable costs. Some items will be less variable or even fixed (although depending on your planning horizon eventually almost everything becomes variable). Again you can design a tool (from simple excel based, to more sophisticated cloud based applications) where you can create business rules that help you relate fluctuations in demand to effects on P&L, Balance Sheet and Cash flow items (in condensed form preferably). You

will need to identify more (internal and external) drivers and create more business rules to complete the picture, but the idea stays the same. Demand is chosen here as an example because it often is a big influencer on multiple line items. The beauty is that once you created the model, you can run it multiple times playing with the drivers so you can compare different scenarios easily. Next, for some companies it is possible to find relations between external drivers and the impact on their own demand. When the lead-time of the external driver is long enough for the organization to actually use in their planning processes, this is valuable input. Consider a producer of insulation material where it was found that the number of building permits granted was correlated to their order book with a lead-time of 5 quarters out. Valuable information when you're creating your budget in September for the next year. It helps you predict the fourth quarter more accurately. Another example is the relation between the development of tollbooth payments for trucks on German highways and the correlation with a truck builder's order book. Note that correlation and proper lead-time are enough, causality is not needed.

### Link volume planning to financial planning: step up to Integrated Business Management

S&OP is about linking volume planning to financial planning. The 30% of organizations that reach the level of Integrated Business Management have managed to do this. One note of warning is in place here: as we have seen above political games are abundant in organizations. This is even truer when we're talking about money. Be careful not to drag political behavior into your S&OP process. A forecast, the basis of your S&OP process, is a health-check towards your strategic ambitions, of which your budget is (typically) a one-year slice and often the target. Do not mix these and do not allow budgeting shenanigans to infect your S&OP planning.

# 6 LINK STRATEGIC PLANS AND OPERATIONS

## 6.1 TACTICAL PLANNING REALIZING STRATEGY

Integrated business management is about much more than checking whether you can meet the expected market demand. You partly determine the future yourself. You make strategic choices, such as whether or not to further develop certain market segments. You consistently act on these decisions and regularly check if you are still on track.

Many S&OP processes are initially designed to look further ahead, but in practice focus primarily on the short term. Half or more of the meeting is spend on looking back at the past month and looking forward to the next three months or so (even up to 90% was found in the EyeOn 2015 Integrated Business Management survey), whilst the process is intended to support decisions on the tactical horizon.

In setting up an Integrated Business Management process this often brought to the attention again: what decisions must support the process and what is the lead-time of these decisions? Looking further ahead brings longer lead-time decisions (for example on expected capacity bottlenecks) earlier on the radar so there is more time to act. It enables you to see if you are still on track compared to the strategic ambitions.

The position of tactical planning in the common business classification of planning, i.e., strategic, tactical and operational planning (Gupta and Marana, 2003) is crucial. Decisions on the tactical horizon are related to the question of whether or not the company is still on track to follow its strategy and whether or not corrective (operational) actions are required. This is related to market and price trends, potential business scenarios, customer plans and resource / capacity adaptations. Tactical planning is the link between operational planning and strategic direction.

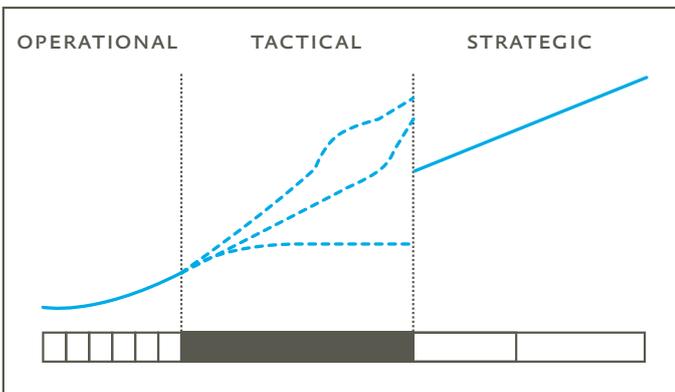


Figure 14: Tactical planning as a link between operational planning and strategic direction.

Although critical to success, this planning process is also the most challenging to implement for many companies. In the research EyeOn conducted in the 2015 Integrated Business Management survey, many companies indicated that they struggle with the right attention for the midterm and many companies feel that over time, their once installed tactical S&OP is getting more and more operational driven.

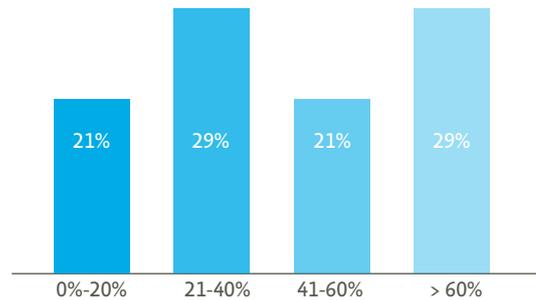


Figure 15: Time spent on 0-3 month horizon during S&OP / IBM meeting.

The struggle for keeping both the outputs and the quality of the process at the right level is perceived as one of the biggest challenges.

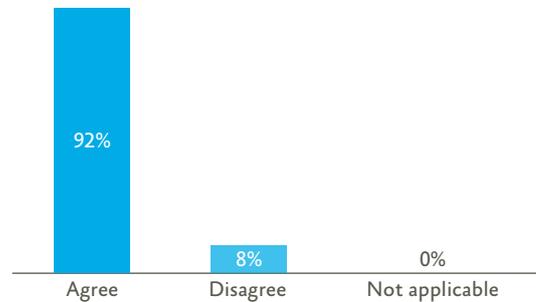
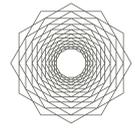


Figure 16: Most struggle to maintain the quality of the S&OP / IBM process.

Vertical plan alignment was the strongest correlating factor for how survey participants rated the quality of their S&OP process design and the number two with respect to quality of the S&OP process output.

# 6 LINK STRATEGIC PLANS AND OPERATIONS



## 6.2 AGGREGATED PROACTIVE PLANNING USING SCENARIOS

For mid-to-long-term decisions, not as much detailed information is required as for the short term, so it is important to aggregate the planning where possible. This is possible within most organizations when the mid-to-long-term decisions are not related:

- Improved long-term forecastability.
- Better alignment with business processes.
- Reduced effort and increased focus.
- Less data to manage.

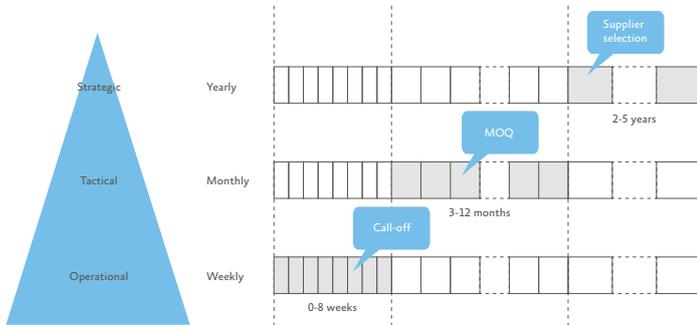


Figure 17: Different horizons, different decisions.

Because of its integral perspective and the associated need for looking further ahead, the degree of pro-activities of the organization increases. Controllers become partners in business no longer only explaining what happened but helping the organization to anticipate on what is likely going to happen (see figure 18). The organization continuously estimate the expected developments and their effect on the likeliness of achieving the strategic objectives. When needed, actions are defined in a much earlier stage to stay the course. The future is not something that just happens.

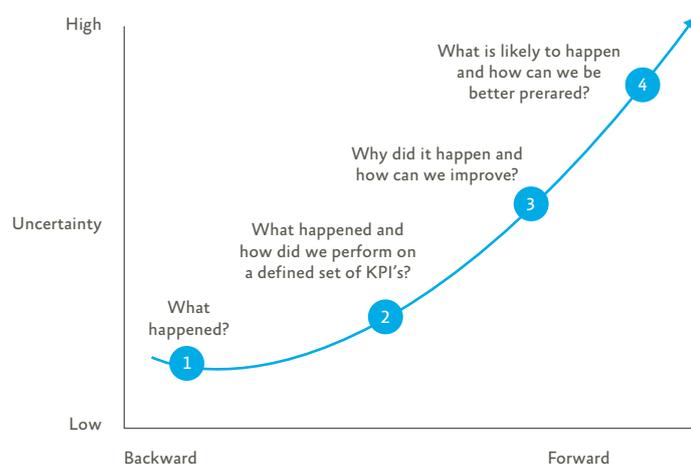


Figure 18: Increasing need for anticipation.

The EyeOn survey on Integrated Business Management revealed that 30% of the participating organizations use volume and value based scenario planning. Those organizations that have a proper Integrated Business Management process in place typically create several scenarios where they play with the drivers that determine the success of the organization. They play with volume, price, quality and mix of the raw materials used and products sold and, for example, the allocation of quantities to different factories. This results in gradually getting more feeling for what is really important, where the risks and opportunities are. Should a scenario unfold, they already thought about it so they can immediately set out the right actions. Continuous integrated demand and supply alignment, supported by dedicated scenario planning, is an effective way to evaluate risks in a structured way and determine mitigating actions.

## 6.3 QUANTITATIVE AND QUALITATIVE ANALYSIS

From the EyeOn 2015 Integrated Business Management survey it was found almost half of the organizations document and share underlying assumptions of plans. In an organization with an Integrated Business Management process, quantified plans are always accompanied by their underlying assumptions, which are often of qualitative nature. In reaching consensus, it is important to discuss especially the underlying assumptions: it is hard to agree or disagree on a number without knowing what is behind it, leading to discussions fed by gut-feeling. This is useful for updating the plans. Assumptions can change over time, or as a result of additional insight from a different angle (functional), and are the basis of the figures created and adjustments made to previous plans. This leads to better insights and more meaningful meetings.

**Link strategic plans and operations: another step to Integrated Business Management**  
 S&OP is about linking volume planning to financial planning (horizontal plan alignment) and about linking strategic planning to operational planning. The 30% of organizations reaching the level of Integrated Business Management are capable of doing so. And to be really successful there is one more aspect that drives success, as the next chapter will show.

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# 7

## BUSINESS LEADER DRIVEN CHANGE

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To migrate successfully into Integrated Business Management, sponsorship and active involvement of executive level management is needed. Not having this is mentioned by most companies as the number one road block to reaching the level of true Integrated Business Management. Not surprisingly the link to financial planning and the link to strategy are prerequisites for reaching this level. Top management is not interested in an operational volume based plan. They are interested in where the company is heading financially and whether this is in line with strategy. But they need to do something themselves too. It starts with simply realizing that the Integrated Business Management process is the process to manage their business and follow through by taking up that gauntlet and leading the transformation process themselves. This is how.

Integrated Business Management is not just about making a plan, but about managing the company. The Integrated Business Management process is the process to steer the business. No one-on-one side discussions, no ad-hoc crisis meetings, but a fixed set of meetings with a fixed cadence (usually monthly). A process that focuses on where the business seems to be going and if that is where we want it to go, and if not, on how we are going to adjust. Upper-management is actively involved.

Each step in the Integrated Business Management process (typically demand, supply, consensus and executive meeting, but there might be also a preceding marketing/portfolio meeting, depending on the type of company) is the responsibility of a manager from the organization's higher echelons in each of these areas. It is no longer a (operational) supply chain party. Upper-management uses it as a platform to jointly make decisions on how to realize the strategy. During the 2015 Integrated Business Management survey it was found as much as 80% had an S&OP process sponsored by top management and 70% indicated they were actively involved in the S&OP process. This involvement was also the strongest correlating factor with the perceived quality of the process output. We did not specify "actively involved", so the participants may have given their own interpretation. Actively involved, to us, is not limited to attending an S&OP meeting or providing input. It means driving the process, driving change. That is what in practice we often do not see. So how to get there?

### 7.1 IF YOU ARE NOT A BUSINESS LEADER

What if you are not the business leader, but want to sell the idea to executive management?

1. Don't go in alone
2. Convince your functional leader
3. Find a board member sponsor
- (4. Be persistent)

### **Do not pitch the story yourself to the board**

Do not ask for an hour on the board meeting where you pitch the Integrated Business Management concept. While explaining it you will touch the fact that it can be the process for them to manage the business and realize strategy. They are already doing that and no matter how you will phrase it, you basically say there is another way they should consider. It depends on the company culture, but this is most likely a far too direct approach. These business leaders have a proven track record and are where they are for a reason. You might be perceived as a backseat chess player.

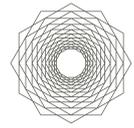
### **Convince your functional leader**

Instead try to first convince your own functional leader, for example the Supply Chain Director, whom you feel is receptive about your idea for implementing Integrated Business Management. Schedule an hour with this person and make your pitch. But do not make it a one way broadcasting exercise. Listen carefully to what this person says and asks. Bring some material you can leave behind and where you refer to in your pitch. Not a whole bible, they will not have time to go through it. Just some documentation explaining the concept and what it can bring. There is plenty of material around, from research focused organizations to academic material and experienced consultancy agencies like EyeOn. Again, summarize and provide some key figures on, for example forecast accuracy and inventory reduction. Provide some cases of other companies in your industry for reference. Make a beer-coaster size business case for what this may mean for your company and be conservative. Let it sink in. Repeat after a while if needed, maybe your timing was wrong and the person was pre-occupied with some other important issues.

### **Find a sponsor on the board**

Once you convinced this person ask him/her to present the idea to the board member they report to, for example the Chief Operating Officer. Help your functional leader to be even more concise here. Talk efficiency and effectiveness, but talk money above all. Try to get this board member to become a sponsor of the Integrated Business Management concept, armed with a solid story and business case to be brought to the board. It may take a while for it to land, for example because there are already 30 other initiatives running, but if you did your homework your sponsor is convinced of the concept and the huge potential it brings to the organization so he/she will be as persistent as you were from the start. Once you get the approval, the journey can begin.

# 7 BUSINESS LEADER DRIVEN CHANGE



## 7.2 IF YOU ARE A BUSINESS LEADER

If you are a business leader and decided to take up the gauntlet: great, this concept needs sponsors like you! Take the following steps:

1. Seek common ground but take into account functional differences.
2. Turn your functional champions into entrepreneurs.
3. Create the right culture.
4. Pick your battles.

### Seek common ground but take into account functional differences

Although in some organizations executive management really does not have a clue about Integrated Business Management, more often you will find they do understand the concept. That does not automatically mean they are motivated to sponsor the idea, let alone be actively involved in leading the process.

The supply chain and manufacturing parts of the organization have a clear interest in a solid Integrated Business Management process. Without knowing what's coming at them it is impossible to optimize their own processes. If they do not have an Integrated Business Management process they are driving in the mist and navigating through the rearview mirror. So they are motivated.

For other functions, that is less obvious and they may experience Integrated Business Management as a monthly burden of data gathering, creating reports, having meetings and updating plans. A sales person wants to be outside, talking to customers. That's good, you pay them for that. They take pride in making great deals. Less so in being good at forecasting. Marketing wants to excel at really understanding customers, in building brands and categories, not at creating the best ever monthly report on NPI developments and expectations. Just two examples. So there is a little bit more to do with respect to these functions. It is no rocket science. If sales does a lousy job forecasting they may not get the products they want to sell in time (or at all) and if marketing does not share any information on what is in the pipeline, they may be confronted with capacity problems when they need it. Create this awareness that Integrated Business Management is about improving cross-functional information sharing and collaboration so the organization as a whole can be more successful.

Make it easy for them to share the information the other parts of the business need. Ask only what you need (so no details if you do not need them) and only where they know, where their input adds value. If a sales person has no view beyond six months, do not ask him/her for a forecast for the full 18 month (or so)

Integrated Business Management horizon. That is both frustrating to the sales person and useless or even dangerous to the people using that input.

### Turn your functional champions into entrepreneurs

In many organizations, there are plenty of people with very good knowledge of their own functional area. But that is often where it stops. There is little insight in the links between their own part of the organization and the other parts. For example, considering stock. Too much stock is not good because there is too much money stuck in working capital. Too little is also not good because that can lead to lost sales. Generalizing the following could occur. Sales would rather have too much than too little, Finance as little as possible. Purchasing, driven by purchase budgets, goes for the lowest purchase price and therefore no longer has the integral costs in view. With Integrated Business Management you want to stop this and have people act, within the boundaries of the strategy and business principles, as entrepreneurs taking the threats and opportunities of the total business in perspective when making decisions.

Use a balanced set of KPI's (Key Performance Indicator) in line with what you want as a company as a whole. Adhere to the K in KPI. You can measure a lot, but there are only few KPIs that really tell how the company is doing. Make these a joint responsibility of your business leaders, so they as a group are motivated to act like entrepreneurs. Avoid setting conflicting KPI targets to the different functions. A good capacity utilization of machinery alone is not enough if it results in excess stock, for example.

Pay special attention to the role of the (demand) planner. An EyeOn benchmark shows the relevant skills of planners that contribute most to improving plan accuracy (see figure). Note the importance of challenging the numbers.

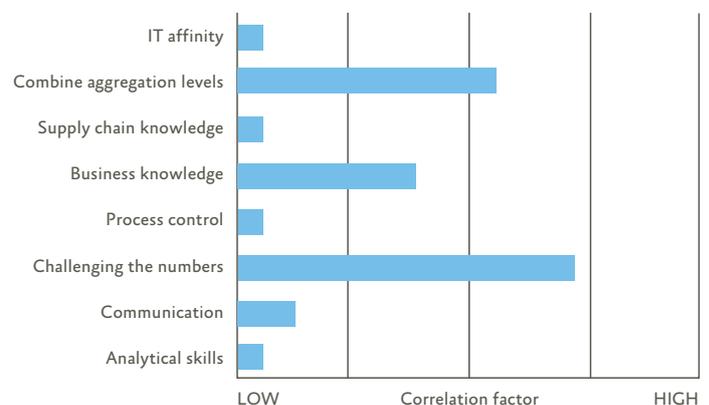


Figure 19: The importance of planning skills.

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# 7

## BUSINESS LEADER DRIVEN CHANGE

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Planning calls for an analytical mind, for mathematical and statistical skills. One could call these the hygiene factors. A planner supporting the Integrated Business Management process must have the characteristics similar to those you expect of the process itself: be able to communicate well across all levels and functional silos of an organization and dare to challenge the inputs they get from other people. This requires a real understanding of the business as a whole and of the specific interests of manufacturing, logistics, marketing, sales and finance. They are also able to reach outside a company's walls to suppliers and customers. This calls for leadership qualities, the ability to influence people and to lead by collaboration.

### **Create the right culture**

Creating the awareness that Integrated Business Management is about improving cross-functional information sharing and collaboration so the organization as a whole can be more successful is an important step to take, but will only actually lead to a successful Integrated Business Management process when the company culture matches this drive for openness and collaboration. This is where business leaders play an important role as they drive company culture and are the ones that can lead the change management process during and after the implementation project. And this is needed, as collaboration, openness and crossing functional silos are, to many people, not things that come naturally. Integrated Business Management requires the functional silos pro-actively working together to address the business' challenges. It requires transparently sharing your gaps versus targets with the other parts of the business and understanding the challenges of your peers in other functional silos and working together, even when you may face different pressures, as we have seen from the balloon model. And when a company culture itself is characterized as command and control, when trust levels are low and functions are fighting instead of collaborating this is a tough nut to crack.

### **Pick your battles**

People react differently to cross-functional initiatives, each requiring different tactics. Depending on whom you are dealing with, these tactics can be one of the following three:

1. Ignore antagonist, focus on the rest.
2. Provide the right training to the willing: behavior or concept focus.
3. Help the Integrated Business Management leaders sustain the process and culture.

*Ignore the antagonists, focus on the rest*

As a business leader really leading the Integrated Business Management initiative know where your fellow executives

stand on Integrated Business Management. Some will not be on board. This can have many different reasons. They may have other priorities or feel threatened, especially when they are the command and control types who want to keep information to themselves and play political games. If there are many of these types of leaders implementing Integrated Business Management will be difficult. If there are a few, do not spend too much time on them, it is a waste of time. Spend your efforts on creating critical mass in the rest of the organization.

*Find the right balance in training between behavioral and conceptual aspects*

Second, there are those that understand it and support it conceptually, but do not really act on it. Often resulting from a lack of trust towards other silos or towards not fully opening up to top-management. Here's work to do. Focus on creating a culture of openness and trust. And walk the talk!

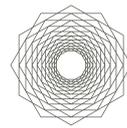
Then there are businesses where there is a culture of openness and trust, with leaders advocating empowering employees to do their job and to cross functional boundaries, but where business leaders have not yet really grasped the concept of Integrated Business Management. This is where with education and training you can take the organization to the next level: the foundation is already there.

*Keep helping the Integrated Business Management leaders in sustaining the process and culture*

Finally there are the true Integrated Business Management leaders. They fully understand the concept and do everything to make it a success. Their challenges lie in getting other senior executives on board, in aligning the approach towards Integrated Business Management with the company's vision, in getting the right people in the right positions to make it work (get HR involved) and in continuously walking the talk. And more so in sustaining the Integrated Business Management process and culture: over time fellow senior leaders will come and go. Keep preaching and proving the benefits of Integrated Business Management. Celebrate success and prevent slipping back to old habits.

### **Business leader driven change**

When the foundation is made, further success depends on people cross-functionally working together as entrepreneurs on realizing the company strategy. The organization aiming for champions-league level S&OP or Integrated Business Management needs good business leaders to drive that change.



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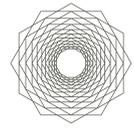




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## ABOUT INDUSTRY PLANNING AND FORECASTING KNOWLEDGE NETWORKS

EyeOn has many years of experience in setting up and improving S&OP / Integrated Business Management processes at large multinational organizations in different industries. We actively share this knowledge. EyeOn has specific knowledge networks in High-Tech, FMCG, Process and Life Science. The networks allow you to share experiences and best practices concerning Planning and Forecasting with peer companies in your industry. Next to network events and benchmarking, EyeOn also organizes expert sessions and master classes in various specific domains of supply chain and financial planning

## ABOUT EYEON

In striving for success, large companies have to continuously struggle against growing internal complexity. We help our clients manage this complexity by designing, implementing and executing excellent planning processes as a discriminating factor for this success. In order to achieve this, we develop and share knowledge about top level planning and forecasting, with constantly demonstrable return on investment for our clients.

For more information: [www.eyeon.nl](http://www.eyeon.nl).

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