Integrated Business Planning plus
Your journey towards digital end-to-end planning
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Several market trends are challenging companies to improve their supply chains

Today’s reality in many companies on business planning...

**Planning silos**

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<tr>
<th>Strategic Business Plan</th>
<th>Financial Business Plan</th>
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<tr>
<td>• Positioning in market</td>
<td>• Marketing plan</td>
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<tr>
<td>• Development scenarios</td>
<td>• Department budget</td>
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<tr>
<td>• Scenario analysis</td>
<td>• Human resource plan</td>
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<td>• Decision-making and</td>
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<td>target-setting</td>
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<table>
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<tr>
<th>Supply Chain Plan</th>
<th>Current Business Plan</th>
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<td>• Inventory management</td>
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<td>• Material plan</td>
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<td>• Collaborative plan</td>
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**Unaligned planning**

- Lack of collaboration between different areas within the company
- Process visibility is very limited and not up-to-date / real-time
- Strategic and financial requirements are not sufficiently taken into account
- No improvement within the planning process
- It takes time for information to be distributed, resulting in long response times
- Decisions are based on only some of the influencing factors

Must companies are still using inadequate silo solutions for planning, for example Excel spreadsheets
...does not enable adequate reactions to external changes

### Market Ambiguity
- Due to strong connections between companies worldwide, international political uncertainties, like the Brexit, influence most companies
- Traditional business models are challenged by disruptive ideas like 3D printing

### Digitalization
- High complexity and dynamics in the market environment generate vast quantities of data
- Digital business models, like E-commerce, are necessary to keep pace with the rise of big data and analytics

### Customer Centricity
- Increased service offerings from companies like Amazon have raised customer expectations, for example same-day delivery at a low price
- As customers gain more power, they demand customization

### Product Life Cycle
- Customers expect new products or models in a regular, short cycle
- Simultaneous engineering and collaboration needed to ensure fast developments

### Margin Compression
- Global competition and customer requirements lead to decreased margins for most companies
- At the same time, western markets tend to be saturated and in general offer only small additional profit via volume growth

### Globalization
- Longer supply chains with specific requirements due to local features
- Connection and communication around the globe are necessary to stay competitive
From beginner to pioneer –
Where is your company positioned in the planning context?

Evaluate your current S&OP* status...

<table>
<thead>
<tr>
<th>People**</th>
<th>Planning**</th>
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</table>
| • Limited experience  
  • No prior meeting preparation  
  • Department view  
  • No collaboration | • Unaligned silo planning with no frozen horizon  
  • Focus on next month |
| • Some experience and preparation  
  • Department view  
  • Minimal data sharing | • Silo planning with no frozen horizon  
  • Focus on next month, consensus on ~3 months |
| • Experienced  
  • Moderate collaboration and data sharing within functional areas | • Daily planning, frozen horizon is one week  
  • Focus on 2-4 months, limited consensus on next ~15 months |
| • Experienced, proactive in prepared meetings  
  • Full collaboration and data sharing | • Frozen horizon is 1-2 weeks  
  • Focus on next 2-4 months, consensus on next ~15 months |
| • Process robotics  
  • Collaboration with digital possibilities  
  • Data sharing in real-time | • Use of tools for integrated business planning  
  • Focus on next 2-4 months, consensus on next ~15 months |

* Sales and operations planning (S&OP)
**Performance**

1. **Basic**
   - Limited visibility of demand and new products
   - Performance metrics not discussed

2. **Developing**
   - Impact of promotional activity discussed
   - Ability to track KPIs

3. **Performing**
   - Allocations and supply scenarios are developed/discussed
   - Ability to track key metrics

4. **Leading**
   - Discussion of performance and causes/impacts
   - Use of real-time dashboards

5. **Cutting Edge**
   - Demand sensing
   - Predictive analytics in combination with big data

**Selected dimensions from the Maturity Matrix**
...to find your starting point for improvement

1. **Respond**
   Preventing supply shortages and maximizing revenue

2. **Forecast**
   Volume-based operational plan using sales planning and supply capability

3. **Combine**
   Balancing supply and demand volume across the end-to-end supply chain

4. **Collaborate**
   Demand-driven, profitable supply response across the extended supply chain

5. **Digitalize**
   Strategy drives the business, cascading down across finance and operations

*Path towards end-to-end planning using digital possibilities*
A stable S&OP process is needed as a basis for further improvement

How setting up structured S&OP...

**Definition**

**S&OP is...**
- Cross-functional
- Performance driven
- Elevating decisions
- Periodic supply/demand matching
- Alignment of operational plans
- Making decisions and taking actions
- Managed with clear metrics
- A continuously improving process
- Owned by senior leadership

**S&OP is not...**
- A one-time event
- Driven by daily execution
- Just about consensus demand process

**Monthly S&OP Cycle**

1. **Innovation Input**
   - Product development and innovations lead to portfolio changes

2. **Marketing & Sales Input**
   - Past sales experience in combination with future marketing activities influence future estimations

3. **Demand Review**
   - Review current demand considering market and sales events to develop one single unconstrained demand plan

4. **Supply Review**
   - Develop scenarios on how supply can best meet market demand (e.g. through inventory, make or buy strategies)

5. **Pre-S&OP**
   - Review draft S&OP plan while ensuring that the operational plan achieves the financial target for the business

6. **Execute S&OP**
   - Define solutions for escalated strategic risks or issues, decide and sign-off final S&OP plan
...leads to significant business impact

**Advantages of proper S&OP**

1. More and better information lead to higher inventory accuracy, allowing a reduction in inventory and safety stock.

2. Shorter reaction time, improved forecasts and informed decision-making.

3. Important market information is distributed within the whole supply chain in a regular and holistic way.

4. Exception-based planning and lower manual effort in planning process.

5. Harmonized, consensus-based, and collaborative planning.

**Shareholder value increase**

- **Higher Operating Margin**
  Improved forecast accuracy combined with enhanced transportation and distribution processes result in higher percentage margins than the industry norm.

- **Increased Asset Efficiency**
  Due to improved inventory management, inventory can be reduced.

- **Revenue Growth**
  A better customer order fulfilment experience leads to overall EBITDA growth.

**Selected Project Examples**

- **Forecast accuracy**
  +20%

- **On-time delivery**
  +10%

- **Inventory**
  -25%

- **EBITDA growth**
  +6%
Integrated Business Planning is the next step for valuable insights

How holistic integration...

Extended planning scope of IBP

Integrated Business Planning combines the three areas of Operations, Finance and Business Strategy to enable a holistic planning process that takes all relevant data into account for better planning results, especially in the long term.
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One overall plan

Integrated Business Plan

- One demand plan
- One supply plan
- One inventory plan

Financial forecast

Budget

One single business plan for every function within the company

- BU
- Sales Type
- Brand
- Product

- Location
- Machine
- Product Group
- SKU

- Region
- Country
- Product Group
- Customer
...enables a better overview within the whole company

**Governance**
Clear roles, decision rights, policies and incentives that promote behavior to drive the organization to achieve its mission

**Talent**
The competencies, skills, talent infrastructure, and workforce planning that enable an optimal talent base to execute the capability

**Analytics**
The capabilities needed to drive scenario planning and real-time, insight-driven decision-making

**Mission**
IBP should be “how” you run the business, and it should deliver competitive advantage to your organization

**Process**
A cross-functional set of processes and activities designed to align the organization to one desired outcome

**Technology**
The technologies (software and hardware) and tools required to support the capability
Take IBP to the next level by using digital possibilities

How digital opportunities ... 

**Financial Planning**
Integrate financial planning data with sales and operations planning to match financial planning against demand and supply planning (top-down) and provide financial budget and forecast figures to financial planning based on the current operations (demand and supply) planning (bottom-up).

**Point of Sale Data enables Demand Sensing**
Integrate real-time point of sale data into demand planning, which enables you to react even more precisely in the short term.

**Predictive Analytics**
Integrate market/customer-specific data points and generate value out of these.

**Sensor and Demand-Driven Supply Planning**
Sensor data predict at which point in time products will become available and change the current way of planning. Multi-echelon stock level optimization stabilizes demand disruption within the supply chain. Both enable you to move from a reactive, post-event driven supply chain to pro-active planning.

**Real-Time integration with Operations (ERP)**
Demand and supply planning results are integrated with execution, providing close to real-time information for S&OP planning cycles.

**Integration with Operations**

**Sales Planning**

**Integrated Business Planning**

**Supply Planning**

**Demand Planning**
... facilitate your company to stand out from competitors

Demand-driven Planning with Predictive S&OP

- Increasing number of disruptions causes bullwhip effects
- Dynamic adjustments of Make-to-Stock and alerts help to align supply and demand
- Leverage latest analytics technology (e.g. machine learning and artificial intelligence)
- Disruptor prediction enables more precise demand prediction, reducing the risk of lost sales and over-stock

MtS: Make-to-Stock  MtO: Make-to-Order  ⚡: Disruptions  ☀️: Alerts  ⚫: De-coupling
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Benefit of Digital Supply Chain Management

- Combine demand-driven approaches with latest digital technology
- Align supply chain efforts with factory development and PPDS evolution
- Identify disruptors and apply predictive analytics to understand underlying drivers
Deloitte's point of view

The supply chain organization of the future will be a CIO type of organization with strong IT capabilities and significantly less resources.
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- **Non-SCM Functions**
  - IT, HR, Service

- **Departments**
  - Digital Services
  - Service Platform
  - Chief Supply Chain Officer
  - Logistics Service Delivery

- **Non-SCM Functions**
  - Supplier-to-customer Network
  - MES AI Digital Agents
  - IT Cloud
  - S/4 Hana Realisation

- **SCM (sample)**
  - Forecast to Goods Receipt
  - PPDS to Finished Goods
  - Connectivity as product contribution

- **Customer Order to Deliver**
  - On-time delivery

- **Integrated Business Planning**
  - Blockchain

- **Project example**
  - Steering & control as product contribution

- **Scenarios**
  - * Design & Governance
    - GPO Design
    - Content Design
    - Robotics Design
    - AI Design
    - Cloud Planning
    - Analytics Preparation

  - **Control & Executive**
    - GPO Management
    - Content Management
    - Robotics Management
    - AI Management
    - Provider & Cloud Management
    - Analytics Management

- **Scenarios**
  - 1 Scenario-based simulation
  - 2 Demand sensing
  - 3 Preponed delivery control
  - 4 Yard & contractor management
  - 5 Integrated Business Planning
  - 6 Performance sensors
Next steps for our customers

1. Analyze your current status
   Analyze your existing capabilities across the maturity matrix to identify your company’s current level within the planning process

   - Value Chain Mapping
     • Overall process transparency
     • Defining the starting point for improvement
     • Current state vs target set-up

   - Process Understanding
     • Statistical analysis of relevant points
     • Visualizing historical data for improved process understanding
     • Predictive analytics

2. Identify opportunities
   Develop business cases to find the best way of improving your planning capabilities while balancing costs and expected profit

   - Performance Review
     • Inventory days benchmarking based on ERP excerpt
     • Walk the route analysis
     • Day in the life analysis

   - Best Practice Interviews
     • Collection of experience knowledge
     • Identification of pain points
     • Recognition of biggest opportunities for quick wins
3. Build your roadmap
Determine tactical, actionable activities that will enable your business to achieve the desired future state and roll them out in a series of waves.

Future State Models
- Relevant processes and interfaces
- Visualization of target picture
- Key facilitator for communication
- Process framework

Process Robotics
- Programs imitating human interaction with applications
- Increased quality without human error
Voices from our experts

**Dr. Goetz Wehberg**  
Partner  
Strategy & Operations

**Tim Berger**  
Senior Manager  
Strategy & Operations

**A holistic planning process allows your company to show its whole potential**  
Integrating all relevant parties into the planning process is not only important from an operational point of view. Although it does improve daily work, e.g. inventory reduction due to better forecasting, what is more important is the strategic aspect: Different areas like marketing and finance work together on a regular basis, share essential knowledge and learn from each other. In addition, a demand-driven supply chain process enables more precise forecasting. In the long term, the effect of true holistic planning is not only the improved plan itself, but the collaboration within the company that influences and enhances long-term value creation.

**Correct and meaningful data input is essential for improving the planning process**  
To unlock the full potential of the planning cycle, the applied standard methods need to be enhanced. True holistic planning requires active collaboration between operations, finance and strategy, using leading optimization software. Correct and meaningful data enables the right analysis and leads to constructive results. Already established technology may work for current processes, but only new technology enables new insights and planning possibilities.
Sensor data enable real-time planning adjustments
Effective Sales and Operations Planning has been enabled by today’s cloud-based planning suites. Clients are further improving their planning processes by a vertical integration of data into the planning process, allowing them to make their short-term planning even more accurate and automated, e.g. by feeding almost real-time Point of Sale data into the system, triggering the demand sensing process.

Digital opportunities must to be tailored to the company’s needs
As the process of IBP is enhancing, even for companies with an IBP process in place there are additional methods for improvement. However, it is important to not just implement something new with good-looking graphs, but to focus on possible value and competitive impact. The first step is always to assess the current process status to find advancements that fit the specific company’s situation and requirements.

Constantin Hellweg
Senior Manager
Technology

Sebastian Luttkus
Manager
Strategy & Operations
Your contacts

Dr Goetz Wehberg
Partner
Strategy & Operations
Tel: +49 (0)211 8772 4878
gwehberg@deloitte.de

Tim Berger
Senior Manager
Strategy & Operations
Tel: +49 (0)211 8772 4513
tberger@deloitte.de