Inventory and Production Dashboard – Alerts!

Executive Dashboard

- **Global Revenue Forecast achievement**: 89%
- **Revenue Comparison YTD**:
  - North America: $702.3M
  - EMEA: $290.7M
  - APAC: $590.4M
- **COGS Comparison YTD**:
  - North America: $456.3M
  - EMEA: $223.8M
  - APAC: $324.7M
- **Margin Comparison YTD**:
  - North America: 30%
  - EMEA: 23%
  - APAC: 40%

Performance to Plan

- **Per Unit Cost to Pick**: 92%
- **Perfect Order**: 69%
- **Inventory Turns**: 90%
- **On-time Shipments by Region**:
  - North America: 80%
  - EMEA: 67%
  - APAC: 91%

- **Returns MTD**: 0.75%
- **Inventory**:
  - Actual: 178.1M
  - Obsolete: 2.1M
- **Inventory Turns Annual**: 5.6
- **Labor Expenses**:
  - Contract: 71%
  - Overtime: 56%
Finite capacity planning - PP/DS in S/4HANA:
Increased production throughput and reduced production costs leveraging finite capacity planning embedded in S/4HANA. One MRP plans everything: create finite production plan according to the available capacity situation and schedule available resources and generate production plan to the precision of seconds.

- Access SAP Fiori App for Production Scheduling Board as web based graphical scheduling tool
- Customize the web-based graphical scheduling tool for production planning and detailed scheduling according to various industry needs

Monitor Capacity Utilization: Capacity utilization of resources can be monitored using this app. Production Planners can add the area of responsibility to plants in which they want to monitor the capacity.

- Optimize and plan the resource schedule and the order dates and times in detail by taking the resource and component availability into account
- Plan critical products, such as products with long replenishment lead times or products that are produced with bottleneck resources
- Evaluation profile and horizon based on the customization with Utilization Chart based on daily buckets

Create Optimal Orders for Suppliers: Optimize the results of your Material Requirements Planning (MRP) by creating collective orders for material shortages.

- Use S/4HANA to optimize PO's for your schedule in seconds!
- Considers capacities on supplier side to harmonize own requirements against supplier constraints
- Identify the best vendor and optimize a collective PO against your schedules and supplier capacities

CONSTRAINED PRODUCTION PLANNING & PRODUCTION SCHEDULING*
<table>
<thead>
<tr>
<th>Material Code</th>
<th>Description</th>
<th>Date</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>BG-BSP001</td>
<td>Junior Mints</td>
<td>11.10.2016</td>
<td>390 CAR</td>
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<tr>
<td>LB-AP-P</td>
<td>Apple Pie</td>
<td>02.11.2016</td>
<td>20 PC</td>
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<td>LB-APPLE</td>
<td>Granny Smith Pie Apple</td>
<td>07.11.2016</td>
<td>200 PC</td>
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<td>LB-CRUST</td>
<td>Pie Crust</td>
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<td>LVB-EAGLE 20S BL</td>
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<td>10.11.2016</td>
<td>1.015 EA</td>
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<td>Pirate’s Booty Aged White Cheddar</td>
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<td>BG-85011196A</td>
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</table>
Planning for Manufacturing

Material Requirement Planning
Identify most urgent and important issues - Time to action - Order values and priorities

Solution Proposals
User Definable and pre-set evaluated solution proposals

MRP – Material Coverage
Monitor - Receive Alerts on material shortages – Resolve issues with late purchase orders
### Material Details

#### EAGLE 20'S BL

**LVB-EAGLE 20S BL**  
-1.015 EA

LVB-EAGLE 20S BL (Plant 3000)  
6 days overdue

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#### Stock/Requirements List (1 Shortage)

The system cannot propose solutions for materials produced in-house.

<table>
<thead>
<tr>
<th>Date</th>
<th>Stock Element</th>
<th>Quantity</th>
<th>Available</th>
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<tbody>
<tr>
<td>10.11.2016</td>
<td>Safety Stock 20 EA</td>
<td>5 EA</td>
<td>-15 EA</td>
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<td>15.11.2016</td>
<td>Order 23573-10</td>
<td>200,000 EA</td>
<td>-201,015 EA</td>
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<td></td>
<td>Order 23534-20</td>
<td>1000 EA</td>
<td>-1,015 EA</td>
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<tr>
<td></td>
<td>MCLANE EXPRESS, INC</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Customer Tax Exempt</td>
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<td>PchOrd 4500025704-10</td>
<td></td>
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</tbody>
</table>
Material Details - Graph

EAGLE 20'S BL

LVB-EAGLE 20S BL

Stock/Requirements List (1 Shortage)

Shortage Definition: Ordered Requirements

Graph showing stock/requirements for November 2016.
Material Details – Issue Resolution

Pie Crust

Material Shortage

<table>
<thead>
<tr>
<th>Date</th>
<th>MRP Element</th>
<th>Quantity</th>
<th>Available</th>
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</thead>
<tbody>
<tr>
<td>07.11.2016</td>
<td>OrdRes 99097-2</td>
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<tr>
<td>19.11.2016</td>
<td>PurRqs 10114082-10</td>
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</table>

Additional Information:
- LB-CRUST (Plant 3000)
- 9 days overdue
- No Safety Stock

Accept/Change options available.
Responsive User Experience Design
After SAP S/4HANA: Faster MRP run and new cockpit with predication and decision support

- SIMPLE Requires less process steps
- REAL-TIME Takes minutes instead of hours
- INTELLIGENT Simulation and decision support

Supply Chain becomes more agile and profitable requiring lower safety stock levels

MRP Run
- Build to Order
- Assemble to Order
- Build to Store

Inventory
Sales Orders
Purchase Orders
Work Orders

Transfer Request
Purchase Request
Production Request

Prediction & Simulation
Decision Support
MRP on SAP S/4 HANA:
https://www.youtube.com/watch?v=jrkDyi1-9tg#t=85.8819828
Streamlined Material Requirements Planning

NEW MRP RUN: MD01N
~10X faster
~5 x reduced storage*

MRP RUN
Creates and schedules orders for requirement date

- Purchase Order / Requisition
- Stock Transfer Reservations
- Production Order
- Planned Order
- Schedule Lines

External Requirements
(Sales Orders, Forecast)

Internal Requirements
(Independent & Dep. Requirements, Subcontracting)

New mode for procurement and in-house production, delivery schedules and configurable materials
Classic mode for subcontracting, capacity planning and discontinuation
Leveraging HANA capabilities for parallelization

MRP Analysis for External & Internal Requirements
Detect disruptions in material availability & flow
Exception & KPI driven process
Shorter time-to-action
Customize own worklists

Manage Internal or External Requirements
Find issues
Simulate their impact in real-time
Use Change Requests to track resolution flow

* Improvements depending on scenario
The Value of S/4HANA Manufacturing
Transforming Manufacturing in the Digital Economy

**Live MRP and advanced ATP**
- **Live MRP** with more frequent, faster MRP runs – multiple times a day and 10 times faster
- **New MRP cockpit** supporting exception-based working model
- **Advanced ATP check** for all items of multiple order at one time
- Easy-to-use and high-volume back-order processing

- **Lot Size of “one”**
  - Visual manufacturing planning for leveraging 3D computer-aided design (CAD) information
  - "Lot size of one" production**
  - End-to-end process integration with the SAP Manufacturing Execution and SAP Manufacturing Integration and Intelligence (SAP MII) applications**
  - Real-time insights into all shop floor operations and profitability metrics**
  - Global and local deployment options**
  - Manufacturing insights offered as a cloud-based service **

- **Live Inventory Management**
  - Live inventory management through redesigned data model
  - Easy-to-use and intuitive SAP Fiori* apps for inventory managers and warehouse clerks
  - Material ledger available as a default option
  - Faster reporting for actual costing, multiple currency, and multiple valuation methods
  - SAP Extended Warehouse Management (SAP EWM) and SAP Transportation Management (SAP TM) applications integrated with SAP S/4HANA**

- **5–25x increased material posting throughput***

- **5–10% reduction in manufacturing cycle time***

- **5–10% reduction in total manufacturing costs***

- **Quality Comes First**
  - Core quality management processes for user roles of quality engineering, quality inspection, and quality improvement
  - Point-of-detection recording via SAP Fiori apps**
  - History and quality data of each serialized component to be exchanged via the SAP Asset Intelligence Network**

- **Up to 25% reduction in scrap value***

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* Benefits are based on early adopters of SAP S/4HANA or conservative outside-in benefits due to moving from a traditional ERP to enhanced SAP S/4HANA + LoB/cloud capabilities. As each enterprise is at a different level of maturity, our recommendation is to work with them to determine the value proposition for the enterprise.
