ERPsim Activity Three--Procurement

What’s next?
To produce more muesli you need to buy raw materials.
Understanding the procurement process

Creating purchase requisitions—ME51N
Convert requisitions into purchase orders—ME59N

Tracking P.O.—ZME2N
Goods receipt after 3 to 6 days
Payment to vendors after 30 days

Processing procurement
Overview of entire process

Seeking integration
The procurement process and the production process are not integrated
Let change the paradigm: procurement and production should be tied to sales forecast
Planning process

Four steps
1. Forecast sales
2. Calculate requirements

Calculate requirements—MD01

MRP Run

Planning key: NECH
Create purchase req: 1
Scheduling: 1
Planning data: 21.03.2009

Process control parameters:
- Parallel processing
- Display material list

User exit: selected materials for planners
3. Convert purchase requisitions into POs

Wait until the raw material is available
4. Release production orders

Planning VS execution

<table>
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<tr>
<th>Planning data</th>
<th>Execution data</th>
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<tr>
<td>Purchase requisitions</td>
<td>Purchase order</td>
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<tr>
<td>Planned order</td>
<td>Production order</td>
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Understanding Material Requirements Planning (MRP)

Suppose we have 20,000 boxes of blueberry and expect to sell 70,000
Creation of an independent requirement

**Independent requirement**

**Dependent requirement**

Purchase Requisition

Planned Order

Stock

Z01S-02 Blueberry Muesli boxes

Z01S-lgbox Large Boxes

Creation of a planned order

**Independent requirement**

**Dependent requirement**

Purchase Requisition

Planned Order

Stock

Z01S-02 Blueberry Muesli boxes

Z01S-lgbox Large Boxes
Creation of a dependent requirement

Independent requirement

Dependent requirement

Purchase Requisition

Planned Order

Stock

Z01$-02 Blueberry Muesli boxes

70,000

50,000

20,000

50,000

Z01$gbox Large Boxes

Automatic creation of purchase requisition

Independent requirement

Dependent requirement

Purchase Requisition

Planned Order

Stock

Z01$-02 Blueberry Muesli boxes

70,000

50,000

20,000

50,000

50,000

Z01$gbox Large Boxes

50,000
After goods reception

- Independent requirement
- Dependent requirement
- Purchase Requisition
- Planned Order
- Stock

- Z01$-02 Blueberry Muesli boxes
- 70,000
- 50,000
- 20,000

- Z01$lgbox Large Boxes
- 50,000
- 50,000

After production confirmation

- Independent requirement
- Dependent requirement
- Purchase Requisition
- Planned Order
- Stock

- Z01$-02 Blueberry Muesli boxes
- 70,000
- 70,000

- Z01$lgbox Large Boxes
- 50,000

After sale of 30,000 boxes

Independent requirement  
Dependent requirement  

Purchase Requisition  
Planned Order  
Stock  

70,000  
40,000  

Z01S-02 Blueberry Muesli boxes  
Z01$lgbox Large Boxes  

Suggested strategy

Plan out your product need for the next x days based on production capability.

Develop a sales forecast with that in mind. (Make x units of muesli y, then z units of muesli q.)

Run MRP. Independent requirements are created.

Generate POs.

Wait for raw materials to arrive.

Release Planned Orders to production.
Important Considerations

If you do an MRP run for 50,000 Blueberry Muesli and then only release 25,000 to production, you will have raw materials "leftover" in inventory. The above "leftovers" will be factored into the next MRP run. Raw materials can be bought independent of MRP runs—but will be factored into on hand materials when dependent requirements are evaluated.