Effective inventory management in food service sector

Mushtaque Ahmed
Chief Operating Officer
JJ Food Service Limited
An independent food wholesaler and distributor for the catering industry with a national coverage in the UK for 25 years. JJ Food Service has driven its growth with innovation, flexibility and willingness to adapt.
Year 2013

4,500 unique products
60,000 customers
500 suppliers
1 million sales orders
55,000 purchase orders
Turnover, £ Millions

- 2007
- 2008
- 2009
- 2010
- 2011
- 2012
- 2013

Turnover, £ Millions
Available to promise

“We promise to our customers in real time if we can ship a product to the required address on the date needed”

We make this promise based on many factors, a key factor being the knowledge of our suppliers lead times and delivery schedule
Available to promise

One purchase order error
One e-mail forgotten
One missed call
One late delivery
Thousands of unhappy customers
Not so long ago...

• Inadequate forecasting capability of host ERP
• Hundreds of excel sheets
• No central repository for suppliers’ delivery rules
• Manual PO optimisation
• Special customers’ requirements (i.e. Public sector)
• No promotions or seasonality management tools
• No control over sales Vs waste for fresh produce
• Poor visibility of slow moving items
• Extremely long training period for new buyers
Not so long ago...
Why change – our shopping list

Increase automation
- Free up valuable resources
- Keep all the delivery parameters in the system
- Manage suppliers’ complex delivery rules

Better forecasting & replenishment
- Intelligent forecasting for seasonal items
- Keep track of various promotions and forecast accordingly
- Reduce wastage/shortage of short shelf life products

Manage special situations
- Holiday management
- Menu cycle management in the education sector
The RELEX approach

Phase 1:
RELEX X-Ray, process analysis

Phase 2:
Real-life piloting

Phase 3:
Production roll-out

April: Data analysis
May: Implementation kick-off
July: Start of pilot
September: Go-live
Today...

**Increase automation**

- Free up valuable resources
- Keep all the delivery parameters in the system
- Manage suppliers’ complex delivery rules

- Inventory parameters are automatically optimised and adjusted according to targets
- Orders are automatically filled to meet the restrictions – full pallets, lorries, etc.
Efficient review of orders

<table>
<thead>
<tr>
<th>Item No</th>
<th>Item Name</th>
<th>Main Supplier</th>
<th>Main Buyer</th>
<th>Repr.</th>
<th>Pro. Qty</th>
<th>Cor. Qty</th>
<th>Del. Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUN008</td>
<td>Kara 5&quot; Seeded Burger Buns-1x48</td>
<td>DN-MW</td>
<td>KUB</td>
<td>12.00</td>
<td>130.00</td>
<td>12.5000</td>
<td>09/10/2013</td>
</tr>
<tr>
<td>BAK081</td>
<td>Let'sdough 5&quot; Sandwich Floured Baps-48x86g</td>
<td>DN-MW</td>
<td>KUB</td>
<td>100.00</td>
<td>110.00</td>
<td>30.00</td>
<td>09/10/2013</td>
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<td>Kara 5&quot; Sandwich Floured Baps-48x86g</td>
<td>DN-MW</td>
<td>KUB</td>
<td>12.00</td>
<td>12.00</td>
<td>8.00</td>
<td>09/10/2013</td>
</tr>
<tr>
<td>PIZ047</td>
<td>Kara 12&quot; Large Thin Crust Doughballs-1x20</td>
<td>DN-MW</td>
<td>KUB</td>
<td>12.00</td>
<td>12.00</td>
<td>8.00</td>
<td>09/10/2013</td>
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<tr>
<td>BAK185</td>
<td>Jj Part Baked Panini-(25cm)-40x125g</td>
<td>DN-MW</td>
<td>KUB</td>
<td>00.00</td>
<td>0.00</td>
<td>0.00</td>
<td>09/10/2013</td>
</tr>
<tr>
<td>BUN008</td>
<td>Kara 4&quot; Tea Cakes-1x48</td>
<td>DN-MW</td>
<td>KUB</td>
<td>54,558.6</td>
<td>57,098.00</td>
<td>12,500.00</td>
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<td>BUN06</td>
<td>Kara 4.5&quot; Seeded Burger Buns-1x48</td>
<td>DN-MW</td>
<td>KUB</td>
<td>54,558.6</td>
<td>57,098.00</td>
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<tr>
<td>BAK119</td>
<td>Kara 5&quot; Tea Cakes (Spiced)-1x48</td>
<td>DN-MW</td>
<td>KUB</td>
<td>54,558.6</td>
<td>57,098.00</td>
<td>12,500.00</td>
<td></td>
</tr>
</tbody>
</table>

Order proposals:
- Sales quantity: 120.00
- Forecast: 40.74
- Today: 49.74
- Open purchase orders: 160.00
- Average sales: 49.74
- Supplier name: FLETCHERS BAKERIES LTD

Balance and order information:
- End balance: 240.00
- Open orders: 160.00
- Average sales: 49.74
- Supplier name: FLETCHERS BAKERIES LTD

Order parameters:
- Order parameter: 151.44
- Order parameter unit: 60.00
- Order batch size: 60.00
- Min. delivery: 60.00
- Pallet size: 60.00
Today...

Better forecasting & replenishment
- Intelligent forecasting for seasonal items
- Keep track of various promotions and forecast accordingly
- Reduce wastage/shortage of short shelf life products

- Seasonal patterns are automatically tracked from sales history
- Promotions are forecasted automatically based on previous promotions
- Fresh items are managed carefully taking into account shelf lives and category characteristics
Automatic campaign forecasting
Managing fresh items

- Replenishment for fresh items takes into account product shelf lives and product group characteristics.
Today...

- Bank holidays are automatically taken care of in forecasting and ordering
- Menu cycle information and estimated quantities are entered into the system and replenishment orders are calculated automatically

Manage special situations
- Holiday management
- Menu cycle management in the education sector
### School Menu Items

#### Week Commencing - 5th April, 8th May, 3rd June, 24th June, 15th July 2013

<table>
<thead>
<tr>
<th>Day</th>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thur</th>
<th>Fri</th>
</tr>
</thead>
<tbody>
<tr>
<td>5th April</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
</tr>
<tr>
<td>8th May</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
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<tr>
<td>3rd June</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
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<td>Fish &amp; Chips</td>
</tr>
<tr>
<td>24th June</td>
<td>Fish &amp; Chips</td>
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<tr>
<td>15th July</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
</tr>
</tbody>
</table>

#### Week Commencing - 30th April, 15th May, 1st June, 15th July 2013

<table>
<thead>
<tr>
<th>Day</th>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thur</th>
<th>Fri</th>
</tr>
</thead>
<tbody>
<tr>
<td>30th April</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
</tr>
<tr>
<td>15th May</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
</tr>
<tr>
<td>1st June</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
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<tr>
<td>15th July</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
</tr>
</tbody>
</table>

#### Week Commencing - 29th May, 17th June, 15th July 2013

<table>
<thead>
<tr>
<th>Day</th>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thur</th>
<th>Fri</th>
</tr>
</thead>
<tbody>
<tr>
<td>29th May</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
</tr>
<tr>
<td>17th June</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
</tr>
<tr>
<td>15th July</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
<td>Fish &amp; Chips</td>
</tr>
</tbody>
</table>
Key technical advantages

- Extremely powerful database engine
- Software as a service
- Simple data interchange mechanism between host ERP/WMS and RELEX systems
- Web-based interface
- User specific data access
- Extremely short learning curve
Achievements so far..

50% reduction in order processing time

10pp average increase in availability in slow moving items range

15% reduction in overall inventory range for non-performing items

15% reduction in on hand inventory level

10pp Increase in availability for fresh items, without any inventory increase
Future plans

• Taking the next step: Not only optimising replenishment according to given rules, but assessing the rules and changing them together with suppliers

• Towards real-time: Updating data within the day, not only overnight, and running several replenishment runs during the day

• RELEX on mobile devices
www.jjjfoodservice.com