Driving Supply Chain Stability and Efficiency

David Lewandowski
Senior Supply Chain Planner - Amway
Agenda

• About Amway
• Supply Chain Planning at Amway
• Key Changes to Forecasting
• Master Scheduling Changes
• Scenario Planning
• Q&A
Who is Amway?

Global reach, Michigan roots

- Largest direct-selling company in the world
- Annual sales of more than $10.8 billion for Alticor Inc.
- Over 450 products in more than 100 countries and territories supported by more than 21,000 employees
- We’ve helped more than 3 million distributors become entrepreneurs
- We hold 1,000 patents (with 900 pending!)
Product Portfolio

A diverse range of products

Historical business line focus
- Home Care
- Personal Care
- Home Tech

Current focus
- Nutrition (Nutrilite)
- Beauty (Artistry)
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Amway’s Supply Chain

Manufacturing

- Trout Lake
- Buena Park
- Mexico
- Brazil
- India
- China
- Vietnam
- Malaysia

- Ada

- Belgium

Manufacturing Plant
Agribusiness Operation
Significant 3rd Party Manufacturing Plant
Amway’s Supply Chain

Distribution

**Malaysia**: (13) RDC’s & (3) 3rd party warehouses

**Philippines**: (7) ADC, (17) APC & (2) RDC’s and (1) warehouse

**Thailand**: (43) Shops/Bulk’s & (1) warehouse

**Vietnam**: (3) Warehouses

**Japan**: (7) AP’s & (4) warehouse

**China**: (236) Stores, (28) EEC warehouses & (1) Central Warehouse

**Taiwan**: (6) EC’s & (1) warehouse

**Hong Kong**: (4) PSC’s & (1) warehouse (3PL)

**Indonesia**: (5) ADC, (17) AP’s & (2) RDC’s and (1) warehouse

**Russia**: (9) PSC & (4) Dist/Warehouse

**Latin America**: (12) Stores, (11) Warehouse and (1) 3rd party Warehouse

**Australia**: (XX) & (xx) warehouse

**South Africa**: (XX) & (xx) warehouse

**Java**: (XX) & (XX) warehouse

**Europe**: (12) PSC & EEC’s & (6) Service Ctrs, Warehouses (ABG/Aff)

**North America**: (6) Service Ctrs, (3) Warehouses (2 ABG/1 Aff) and (1) 3rd party Warehouse

**Hawaii**

**KEY**:

ADC – Amway Dist Ctr
AP – Amway Plaza
APC – Amway Pick-up Ctr
EC – Experience Centers
PSC – Product Select Ctr
PU – Pick-up Ctr
RDC – Regional Dist Ctr

- Amway (ABG) Service Centers/Warehouse Locations
- Affiliate Warehouse (& Regional Distribution Ctrs) Location
- 3rd Party - Warehouse Location
Supply Chain Planning

Core process flow

- Make to stock
- All planning functions in one department
- Mix of software
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**Key Changes - Features and Benefits**

### Weekly Forecast Updates (Daily to Weekly):

- **What:** Change the frequency of forecast updates from daily to weekly
- **Why:** Reduces “noise” that causes supply chain churn.

<table>
<thead>
<tr>
<th>Features</th>
<th>Benefits</th>
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<tbody>
<tr>
<td>Master Schedulers also follow a weekly process cadence to increase stability throughout the week</td>
<td>Planners will react to real forecast changes</td>
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<td>Planners receive notification of significant mid-week increases</td>
<td>Eliminating noise improves quality and stability of the plan</td>
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<td>Mid-week meetings allow planners to collaborate on exception resolution</td>
<td>Suppliers will receive a stable plan and fewer changes to purchase orders</td>
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<tr>
<td>Service</td>
<td>Previous</td>
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<tr>
<td><strong>Forecast refresh</strong></td>
<td>Daily</td>
</tr>
<tr>
<td><strong>Distribution net requirement calculation</strong></td>
<td>Daily based on: Planning forecast, Inventory, Shipment, Production and purchase orders</td>
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<tr>
<td><strong>Master Scheduling</strong></td>
<td>Daily recalculation of orders including distribution changes</td>
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<tr>
<td><strong>Production Scheduling</strong></td>
<td>Receives work orders from master scheduling daily</td>
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<tr>
<td><strong>Material Planning</strong></td>
<td>Receives master scheduling output daily</td>
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- **Master Scheduling Changes**
- Scenario Planning
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### Updates to Master Scheduling Process

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<th>Current</th>
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<td><strong>Capacity Constraints</strong></td>
<td>- Only soft constraints without exception messages</td>
<td>- Ability for master schedulers to decide hard vs soft constraints with exceptions generated for either option</td>
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| **Visibility to Raw Materials and Components** | - Material planning function only – no master scheduler visibility to material availability | - Critical Raw Materials and Components visible to master scheduler  
- System will incorporate material constraints into planned orders  
- Leads to increased collaboration between roles |
| **Dependent Demand**    | - Material planning function only – limited capacity validations          | - Capacity constrained  
- Visibility to shortages on finished good work orders  
- Links established across manufacturing sites |
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Introduction of Scenario Planning

- **What:** Production-like environment allows planners to manipulate data and parameters to simulate potential solutions to complex problems.
- **Why:** Provides planners more efficient way to test options for getting best results without having to change production (and change back). Provides ability to compare options.

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<td>Requires calculations in Excel to make decisions</td>
<td>Allows users to make informed, quick decisions</td>
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<td>Changes are tested in production environment impacting other users</td>
<td>Enables a user to understand the effects of a plan change without affecting the live environment</td>
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<td>Encourages trial / error method of planning</td>
<td>Allows users to high level questions from management with data support</td>
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<tr>
<td>Limits the restrictions and parameters a user can use to calculate a plan</td>
<td>Wide open security around parameters to simulate multiple options</td>
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Thank you for attending!

Questions?

You can contact me at: Dave.Lewandowski@amway.com