

# Aggregate planning

Part Available-To-Promise

Capable-To-Promise

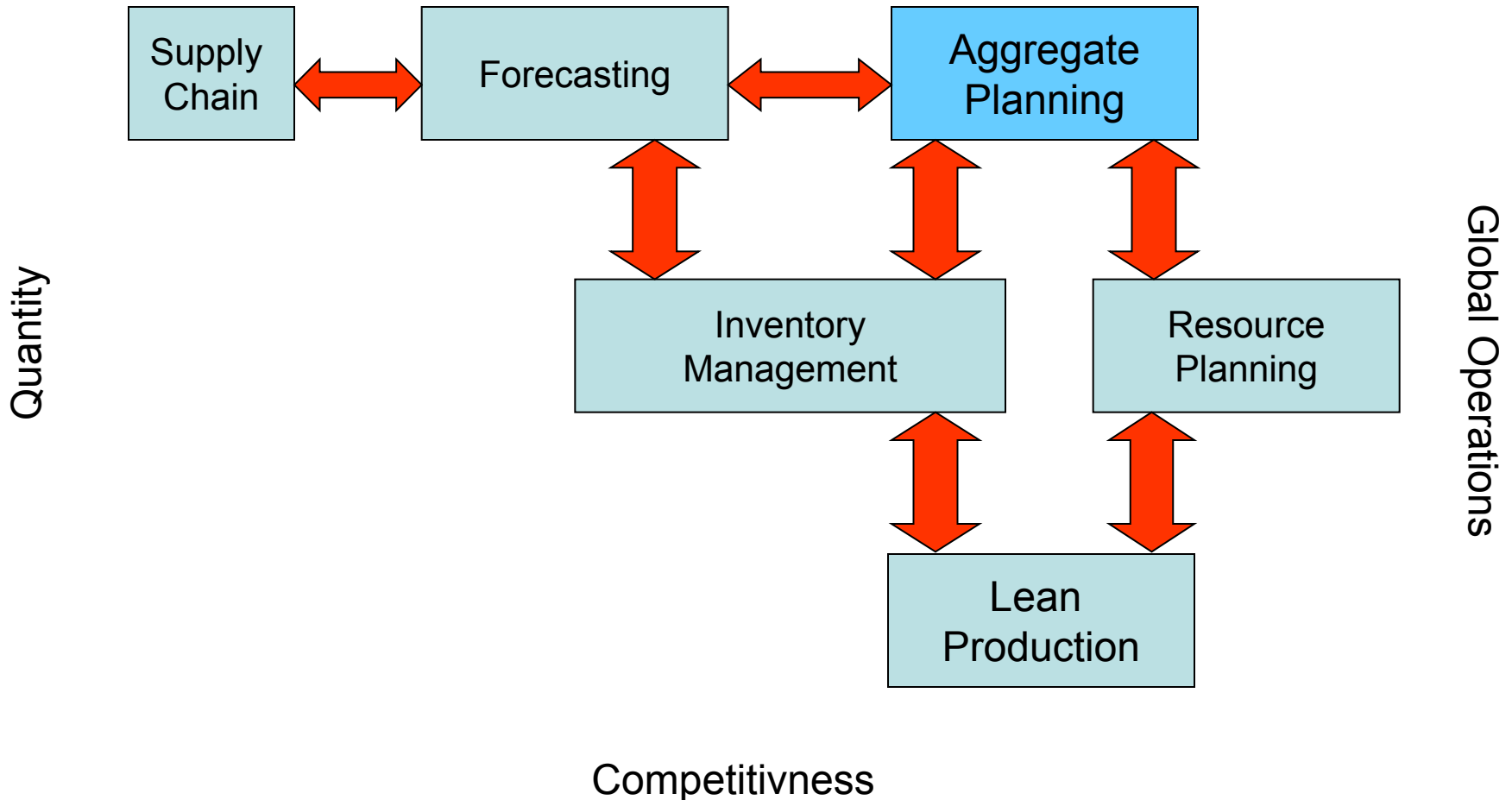
Skorkovský

<http://higheredbcs.wiley.com/legacy/college/russell/0471692093/ppt/ch13.ppt>

# Roadmap

(taken from Operation Management- Russel and Taylor)

## Supply Chain Management



# MS Dynamics NAV example ATP

The screenshot shows the 'X0 Hydraulika - Item Card' window. The 'General' tab is active. The 'No.' field contains 'X0' and the 'Search Description' field contains 'HYDRAULIKA'. The 'Description' field contains 'Hydraulika'. The 'Base Unit of Measure' is 'KS'. The 'Inventory' field is highlighted with a red box and contains the value '10'. The 'Qty. on Prod. Order' field is also highlighted with a red box and contains the value '288'. Other fields include 'Shelf No.' (F10), 'Automatic Ext. Texts' (unchecked), 'Created From Nonstock' (unchecked), 'Item Category Code', 'Product Group Code', 'Qty. on Purch. Order' (0), 'Qty. on Component Lines' (0), 'Qty. on Sales Order' (0), 'Qty. on Service Order' (0), 'Service Item Group', 'Blocked' (unchecked), and 'Last Date Modified' (13.11.09). At the bottom, there are buttons for 'Item', 'Sales', 'Purchases', 'Functions', and 'Help'.

It was produced before

The screenshot shows the 'Prod. Order Line List' window. The table below lists production orders for the item 'X0 Hydraulika'. The 'Quantity' column is highlighted with a dotted border. A red text overlay at the bottom of the table states: 'Total = 288 pc on firm planned production orders'.

Status	Prod. Order No.	Item No.	Description	Quantity	Finished Quantity	Remaining Quantity	Due Date	Starting Date	Ending Date	Prc BOI
Firm Planned	101011	X0	Hydraulika	45	0	45	16.11.09	16.11.09	16.11.09	X0
Firm Planned	101012	X0	Hydraulika	99	0	99	18.11.09	16.11.09	18.11.09	X0
Firm Planned	101013	X0	Hydraulika	42	0	42	14.12.09	14.12.09	14.12.09	X0
Firm Planned	101014	X0	Hydraulika	32	0	32	16.12.09	16.12.09	16.12.09	X0
Firm Planned	101015	X0	Hydraulika	70	0	70	20.12.09	17.12.09	18.12.09	X0

**Total = 288 pc on firm planned production orders**

# MS Dynamics NAV example ATP

The screenshot shows the 'Production Forecast' window in MS Dynamics NAV. The 'General' tab is active, displaying 'Production Forecast Name: 2009' and 'Forecast Type: Sales Item'. Below the filters is a table with columns for dates from 16.11.09 to 20.11.09. A red box highlights the ATP values for item X0 (Hydraulika) across these dates: 22, 33, 44, and 55.

No.	Description	Item	16.11.09	17.11.09	18.11.09	19.11.09	20.11.09
LS-81	Reproduktor, ořech, 80W						
SPK-100	Hřeb pro LS-100						
X0	Hydraulika		22	33	44	55	
X1	Motor						
X2	Pumpa						

# MS Dynamics NAV example ATP

CRONUS CZ s.r.o. - Microsoft Business Solutions-Navision - [1020 J & V v.o.s. - Sales Order]

File Edit View Tools Window Help

General Invoicing Shipping Foreign Trade E - Commerce Advance

No. . . . . 1020 ...  
 Sell-to Customer No. . . . . 20000  
 Sell-to Contact No. . . . . KT000002  
 Sell-to Customer Name . . . . . J & V v.o.s.  
 Sell-to Address . . . . . Komenského 12  
 Sell-to Address 2 . . . . .  
 Sell-to Post Code/City . . . . . 696 42 Vracov  
 Sell-to Contact . . . . . Pan Roland Wacker  
 No. of Archived Versions . . . . . 0

Posting Date . . . . . 31.12.09  
 Order Date . . . . . 31.12.09  
 Document Date . . . . . 31.12.09  
 Requested Delivery Date . . . . .  
 Promised Delivery Date . . . . .  
 External Document No. . . . .  
 Salesperson Code . . . . . PK  
 Campaign No. . . . .  
 Responsibility Center . . . . .  
 Status . . . . . Open

**-101=-111+10**

Customer Information  
 Sell-to Customer  
 • Ship-to Addresses (2)  
 • Contacts (1)  
 • Sales History  
 Bill-to Customer  
 • Avail. Credit 0

Type	No.	Description	Quan...	Unit of Measure Code	Unit Price Excl. VAT	Line Amount Excl. VAT	Qty. to Ship	Quantity Shipped	Qty. to Invoice	Reserved Quantity	Quantity Invoiced
Item	X0	Hydraulika	111	KS	100,00	9 990,00	111		111		

Item Information  
 • Item Card  
 • Availability (-101)  
 • Substitutions (0)

Qty. to Assign	Qty. Assigned	Requested Delivery Date	Promised Delivery Date	Planned Delivery Date	Planned Shipment Date	Shipment Date

Continuation of the sales line

# MS Dynamics NAV example ATP

CRONUS CZ s.r.o. - Microsoft Business Solutions-Navision - [1020 J & V v.o.s. - Sales Order]

File Edit View Tools Window Help

General Invoicing Shipping Foreign Trade E - Commerce Advance

No. . . . . 1020  
 Posting Date . . . . . 31.12.09  
 Sell-to Customer No. . . . . 20000  
 Order Date . . . . . 31.12.09  
 Sell-to Contact No. . . . . KT000002  
 Document Date . . . . . 31.12.09  
 Sell-to Customer Name . . . . . J & V v.o.s.  
 Requested Delivery Date . . . . .  
 Sell-to Address . . . . . Komenského 12  
 Promised Delivery Date . . . . .  
 Sell-to Address 2 . . . . .  
 External Document No. . . . .  
 Sell-to Post Code/City . . . . . 696 42 Vracov  
 Salesperson Code . . . . . PK  
 Campaign No. . . . .  
 Sell-to Contact . . . . . Pan Roland Wacker  
 Responsibility Center . . . . .  
 No. of Archived Versions . . . . . 0  
 Status . . . . . Open

Customer Information

- Sell-to Customer
- Ship-to Addresses (2)
- Contacts (1)
- Sales History
- Bill-to Customer
- Avail. Credit 0

Type	No.	Description	Unit of Measure Code	Unit Price Excl. VAT	Line Amount Excl. VAT	Qty. to Ship	Quantity Shipped	Qty. to Invoice	Reserved Quantity	Quantity Invoiced
Item	X0	Hydraulika	KS	100,00	9 990,00	111		111		

Item Information

- Item Card
- Availability (-101)
- Substitutions (0)

Order Line Functions Posting Print Help

Order promising

Item No.	Description	Requested Delivery Date	Requested Shipment Date	Planned Delivery Date	Original Shipment Date	Earliest Shipment Date	Quantity	Unavailable Quantity	Unit of Measure Code
X0	Hydraulika						111	111	KS

Calculate->ATP

# MS Dynamics NAV example ATP

Item No.	Description	Requested Delivery Date	Requested Shipment Date	Planned Delivery Date	Original Shipment Date	Earliest Shipment Date	Quantity	Unavailable Quantity	Unit of Measure Code
X0	Hydraulika			18.11.09		18.11.09	111	111	KS

Accept

Instead of 31.12.2009

End of the sales line

Planned Delivery Date	Planned Shipment Date	Shipment Date
18.11.09	18.11.09	18.11.09

Item Information

- Item Card (43)
- Availability (0)
- Substitutions (0)
- Sales Prices (0)
- Sales Line Dis... (1)

F6

# MS Dynamics NAV example ATP

CRONUS CZ s.r.o. - Microsoft Business Solutions-Navision - [X0 Hydraulika - Item Availability by Periods]

File Edit View Tools Window Help

Options

Location Filter . . . . . " " Variant Filter . . . . . " "

Period Start	Period Name	Gross Requirem...	Scheduled Receipt	Planned Order Receipt	Projected Available Balance	Planned Order Releases
09.11.09	46	0	0	0	10	0
16.11.09	47	111	144	0	43	0
23.11.09	48	111	144	0	43	0
30.11.09	49	111	144	0	43	0
07.12.09	50	111	144	0	43	0
14.12.09	51	111	288	0	187	0
21.12.09	52	111	288	0	187	0
28.12.09	53	111	288	0	187	0

F6

Name	Quantity
Firm planned Prod. Order Line	144
Item Ledger Entry	10
Sales Line	-111

144=45+99

Status	Prod. Order No.	Item No.	Description	Quantity	Finished Quantity	Remaining Quantity	Due Date	Starting Date	Ending Date	Production BOM No.	Unit Cost
Firm Planned	101011	X0	Hydraulika	45	0	45	16.11.09	16.11.09	16.11.09	X0	66,00
Firm Planned	101012	X0	Hydraulika	99	0	99	18.11.09	16.11.09	18.11.09	X0	66,00



# MS Dynamics NAV example CTP

General						
Production Forecast Name.	2009	Forecast Type . . . . .	Sales It			
Location Filter . . . . .		Date Filter . . . . .				
No.	Description	Item Cate...	14.11.09	15.11.09	16.11.09	
LS-75	Reproduktor, třešeň, 75W					
LS-81	Reproduktor, ořech, 80W					
SPK-100	Hřeb pro LS-100					
▶ X0	Hydraulika		22	11	22	

No production orders created so far, part of the sales order header and sales line looks like :

Posting Date . . . . .	30.11.09
Order Date . . . . .	30.11.09
Document Date . . . . .	30.11.09
Requested Delivery Date .	
Promised Delivery Date . .	

Type	No.	Description	Quantity	Unit of Measure Code	Unit Price Excl. VAT	Line Amount Excl. VAT	Qty. to Ship	Quantity Shipped	Qty. to Invoice	Reserved Quantity	
▶ Item	X0	Hydraulika	89	KS	100,00	8 010,00	89		89		

**Item Information**

- Item Card
- Availability (-102) →
- Substitutions (0)
- Sales Prices (0)

# MS Dynamics NAV example CTP

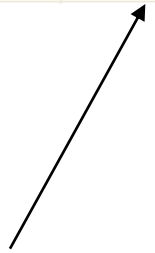
Options

Location Filter . . . . . "  ↑

Variant Filter . . . . . "  ↑

	Period Start	Period Name	Gross Requirem...	Scheduled Receipt	Planned Order Receipt	Projected Available Balance	Planned Order Releases
	09.11.09	46	0	0	0	10	23
	16.11.09	47	0	0	0	10	23
	23.11.09	48	0	0	0	10	23
	30.11.09	49	89	0	0	-79	23
▶	07.12.09	50	89	0	0	-79	23 ↓

From forecats



# MS Dynamics NAV example CTP

Order->Order Promising->Calculate->Capable-To-Promise-> Accept

Item No.	Description	Requested Delivery Date	Requested Shipment Date	Planned Delivery Date	Original Shipment Date	Earliest Shipment Date	Quantity	Unavailable Quantity	Unit of Measure Code
X0	Hydraulika		30.11.09	30.11.09	30.11.09	30.11.09	89	89	KS

Type	No.	Description	Quantity	Unit of Measure Code	Unit Price Excl. VAT	Line Amount Excl. VAT	Qty. to Ship	Quantity Shipped	Qty. to Invoice	Reserved Quantity	Quantity Invoiced	Qty. t Assign
Item	X0	Hydraulika	89	KS	100,00	8 010,00	89		89	89		

Item Information

- Item Card
- Availability (-102)
- Substitutions (0)

Planning line was created



Worksheet Template Name	Journal Batch Name	Type	No.	Description	Location Code	Quantity	Reserved Quantity	Unit of Measure Code	Vendor No.	Due Date
PLÁNOVÁNÍ	VÝCHOZÍ	Item	X0	Hydraulika		89	89	KS		15.10.09