Master Planning: The Present and Future

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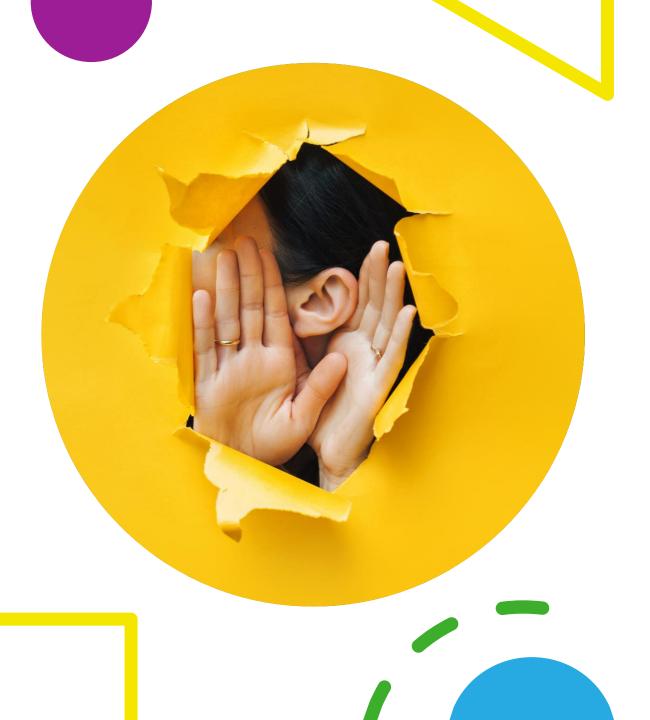


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Joke

What happened to my plans to fix the hole in the floor?



What is the purpose of master planning?

Supply

Demand

Supply and demand types

Supply

- Purchase order
- Production/batch order header
- Kanban header
- Co-product
- Transfer order receipt

Demand

- Sales order
- Forecast
- Production/batch order line
- Kanban line
- Transfer order shipment
- Safety stock

Matching supply to demand

Supply

Purchase order

Production / batch order header

Kanban header

Co-product

Transfer order receipt

On-hand inventory

dates

Lead times

Vendor

pricing

Requirement

Sourcing strategy

On-order

inventory

Working times

Scheduling rules

Planning priority

Planning horizon

Order min / max / multiple

Production capacity

Substitutions

Demand

Sales order

Forecast

Production / batch order line

Kanban line

Transfer order shipment

Safety stock

What it is and what it isn't

What it is

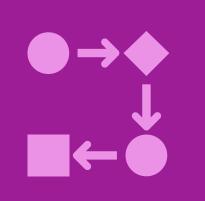
Calculation-based order generation functionality that automates manual planning processes

What it isn't

A magic tool that knows everything about your business and the current supply chain environment

"If you lie to Master planning, it will lie to you"

What should you be thinking about?



Process

Planning frequency
Planning horizon
Forecasting



Strategy

Stocking strategy
Sourcing strategy
Location strategy



Data

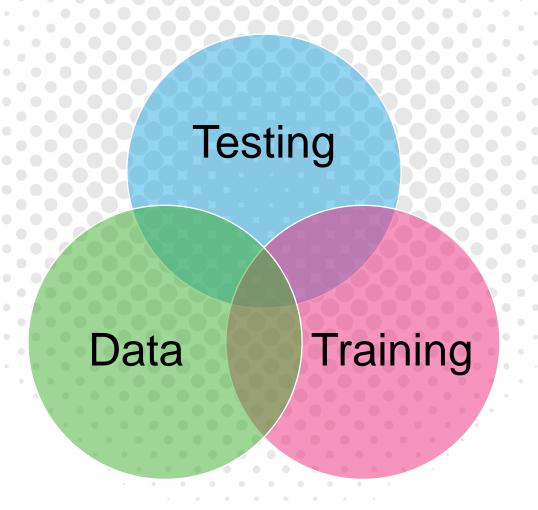
BOMs / Formulas /
Routes
Lead times
Default vendors



Capacity

Warehouse capacity
Production capacity
Vendor capacity

Common pitfalls in implementations







Key configurations



Master planning parameters



Master plans



Coverage groups



Item coverage

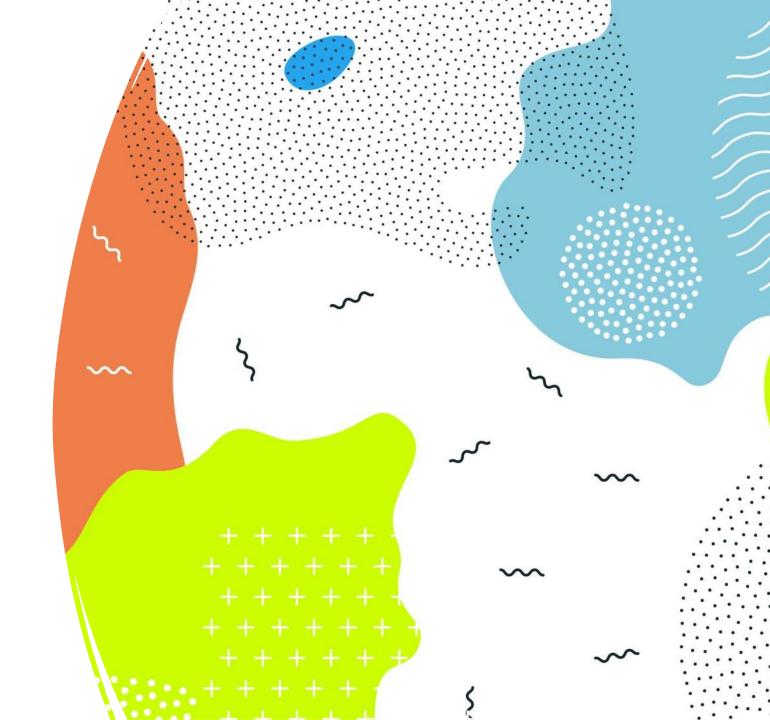


Default order settings

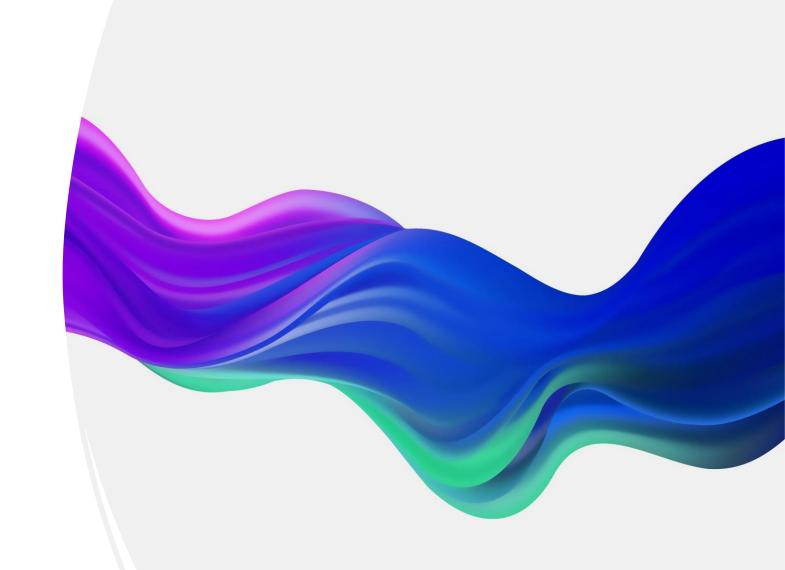


Calendars

Demo: master planning workspace



Demoimatching matching supply to demand



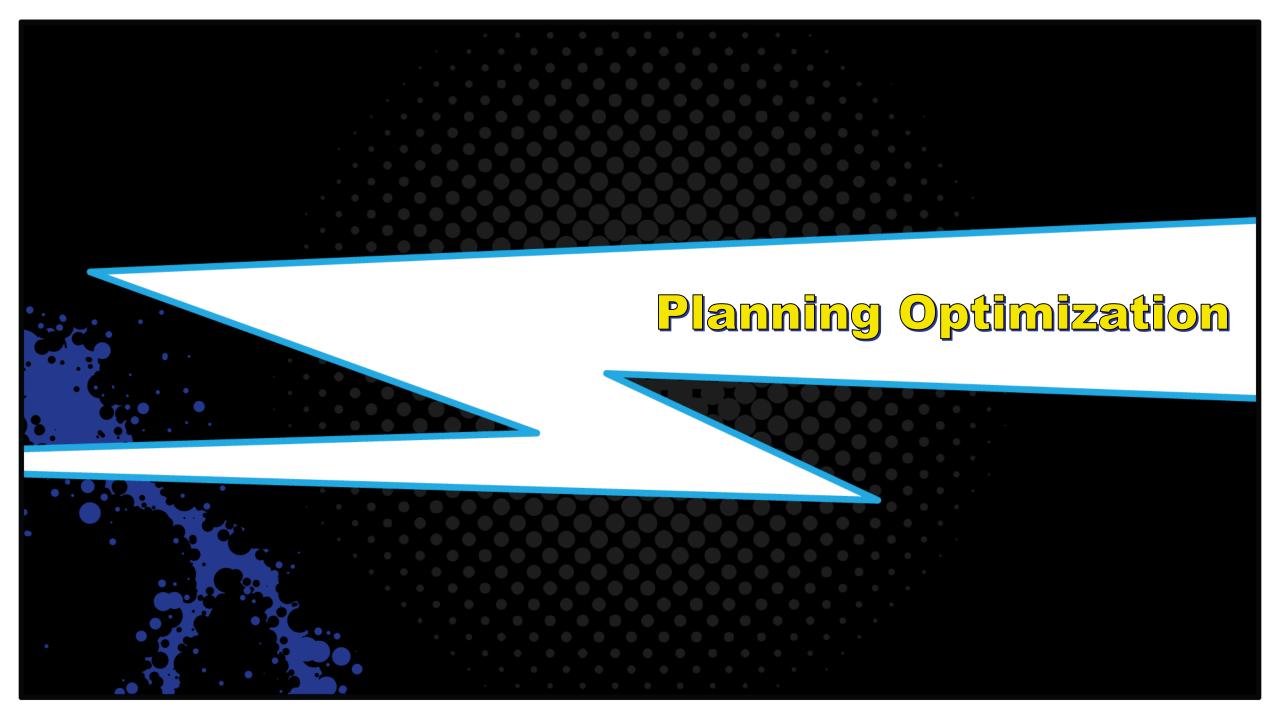
What's new?

Recently added

- Priority based planning
- Demand Driven Material Requirements Planning (DDMRP)

Upcoming

- Multi-sourcing planned purchases
- Planning Optimization feature parity



What is Planning Optimization?

Runs master planning activities on a separate workload with no additional cost

Significantly reduces the time it takes to generate planned orders

Working on feature parity with classic MRP – most scenarios planned by Oct 2022

Compatible with new planning features being released

When will classic MRP be removed?

Deprecation

- Distribution April 2021
- Manufacturing April 2022
- Reduced/no support on bugs
- Warning message when running classic MRP
- Not compatible with new features

Removal

- All scenarios not announced
- 12 18 month transition window (likely) after announcement
- Functionality removed from system

How do I implement Planning Optimization



Run <u>Planning</u> <u>Optimization Fit</u> <u>Analysis</u>



Review
differences
between built-in
master planning
and Planning
Optimization



Install LCS Add-in in non-production environment



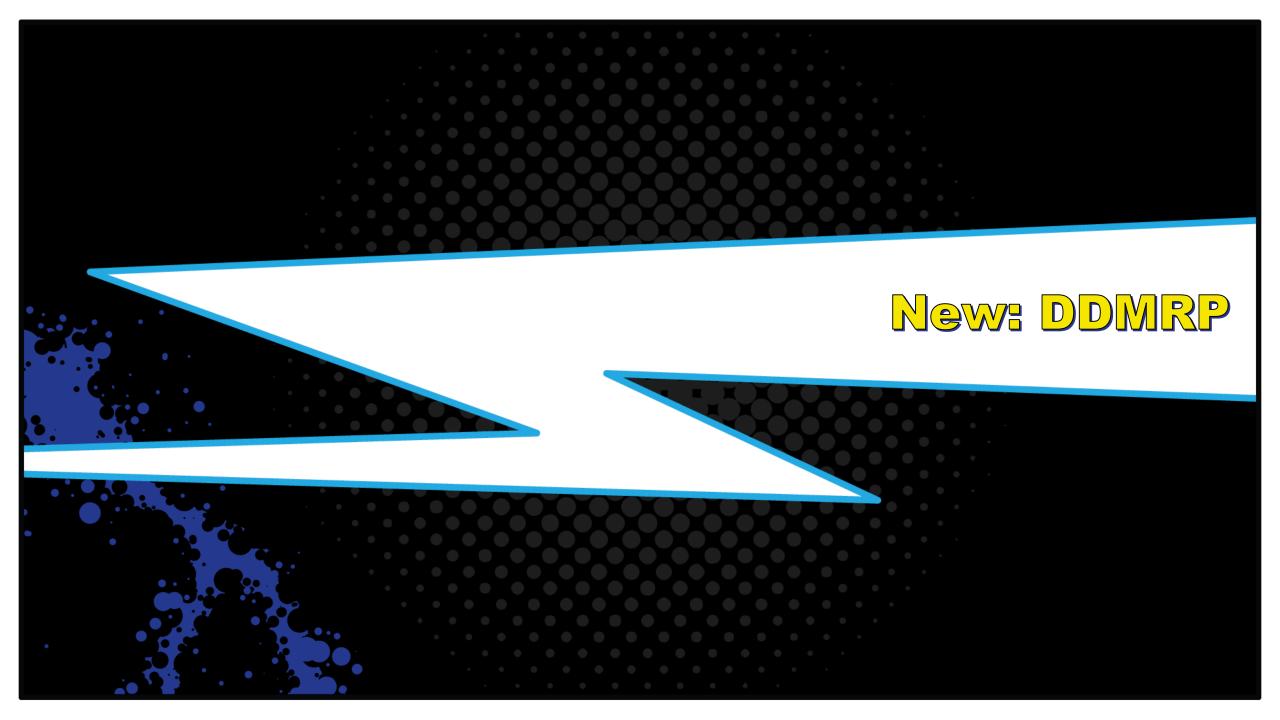
Test - compare classic MRP with Planning Optimization results



Install and enable in production environment

Additional resources for Planning optimization

- Finance and Supply Chain Management: Planning Optimization Microsoft Dynamics Blog
- Yammer : Dynamics 365 and Power Platform Insider Program : Planning Service : All Conversations
- Planning Optimization overview Supply Chain Management | Dynamics 365 | Microsoft Docs



The evolution of master planning



Current state: MRP

Long lead times

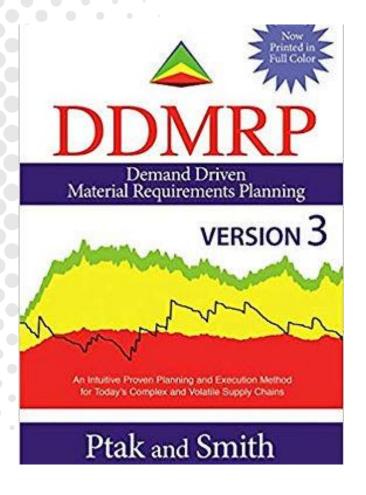
Stockouts and overstocks

High market fluctuation

Supply chain shortages

MRP tools are confusing

Demand Driven MRP



The five components of DDMRP

Strategic inventory positioning

Identify points in the supply chain to stock inventory and reduce order fulfillment times

Buffer levels

Use data-driven calculations of proper buffer levels for inventory

Dynamic adjustments

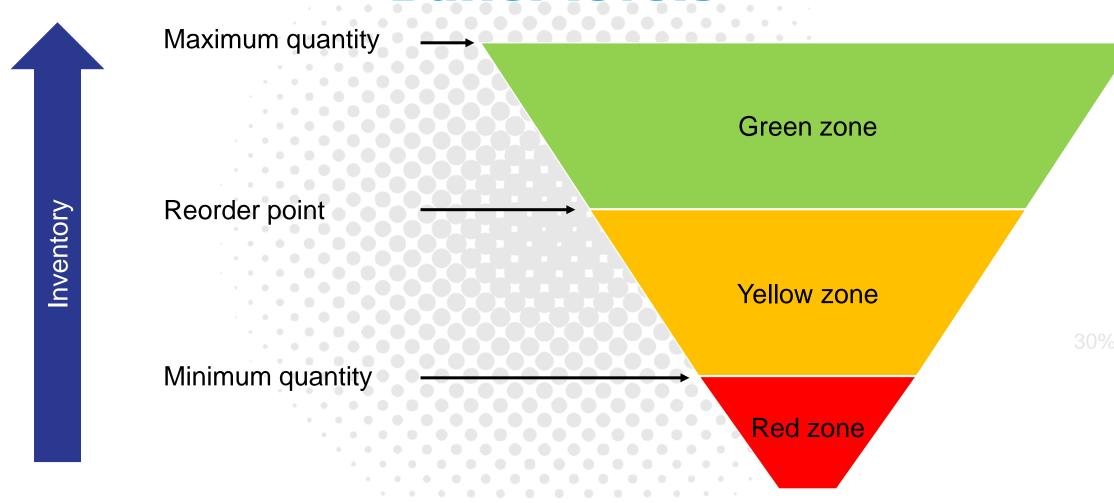
Adjust buffer levels based on expected market changes and other factors

Demand driven planning

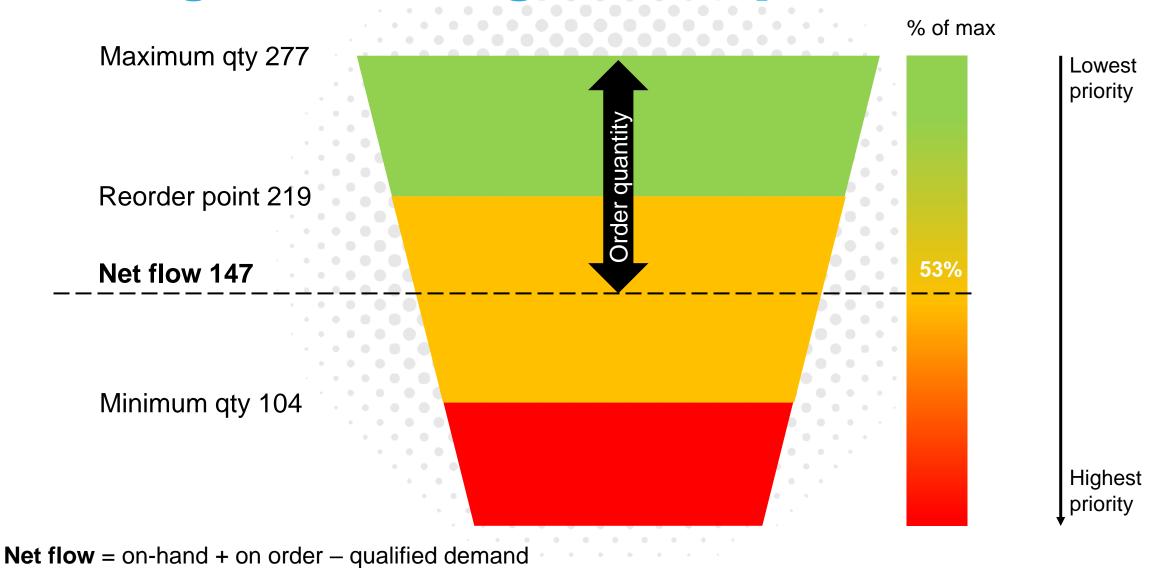
Creation and prioritization of planned orders as a reaction to expected demand

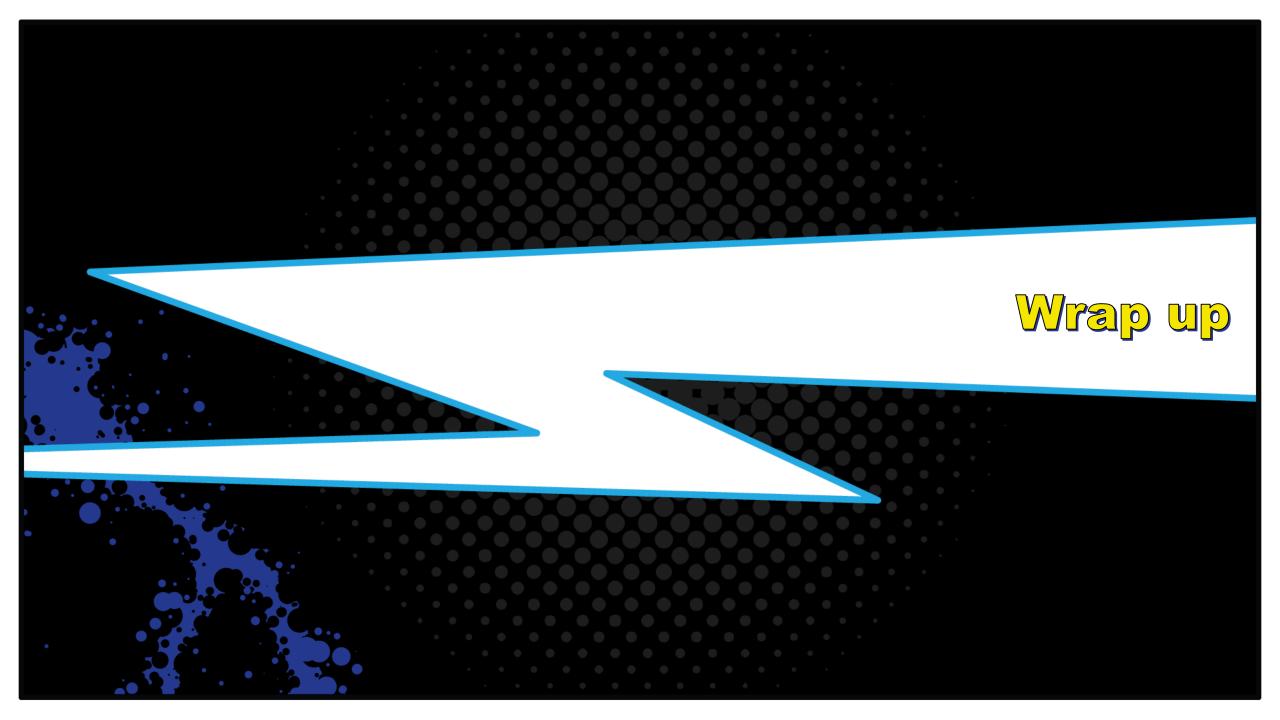
Visible and collaborative execution

Use system tools to support interactive planning experiences and visual indicators to trigger actions



Using DDMRP to generate planned orders





What happened to my plans to fix the hole in the floor?

They fell through



Q&A

