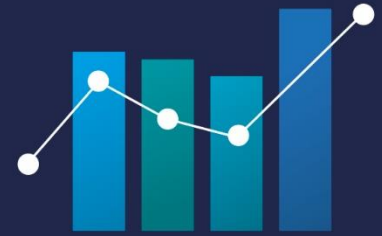


Demand Forecasting for Dynamics 365 for Finance and Operations



BENEFITS:

- Improved customer service arising from better visibility of customer demand
- Lower stock levels due to better planning to meet customer demand
- Better use of resources through more accurate planning & scheduling
- Increased forecast accuracy through tracking of forecasts against actual demand
- Visibility of sales promotions and their effect on sales forecasts
- Lower forecasting costs through automatic calculation of forecasts for items with stable demand patterns

Demand Forecasting 365 for Finance and Operations

Demand Forecasting for Microsoft Dynamics 365 for Finance & Operations from Farsight Solutions is a fully integrated module that calculates forecasts of future demand for items based on sales order or invoice demand, and optionally production and projects demand, providing a powerful tool that enables companies to intelligently plan ahead.

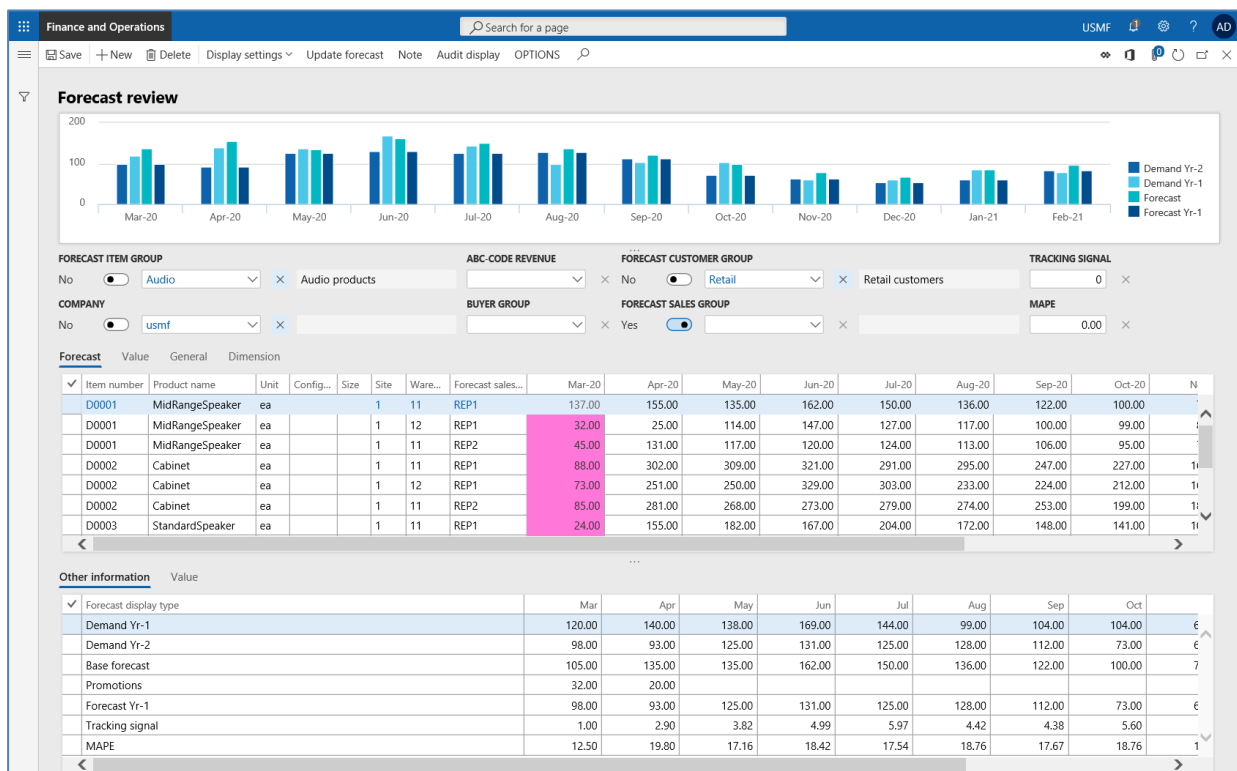
Turn raw demand into intelligent demand forecasts

Demand Forecasting for Dynamics 365 lets you forecast demand weekly, monthly, or by any user-definable periods such as 4 & 5-week months to suit.

You can group customers with similar demand characteristics into user-defined groups so that forecasts are calculated based on their accumulated demand, increasing the reliability of forecasts.

You can also group items in the same way, in which case the forecasts for individual items can be calculated from item group forecasts according to the proportion of each item's historical demand in the group.

Forecasts can be calculated by item and any combination of item configuration, colour, size, style, site & warehouse, providing a highly flexible tool for managing different types of items.



Tightly manage critical customers & items

You can manage your critical customers and items by exception, manually altering demand history and forecasts as you wish without ever losing the original demand or calculated forecasts. You can also attach notes to manual changes so that you have a record of the reason why figures have been changed.

Forecasts can be reviewed online via standard Dynamics 365 screens or offline via Excel spreadsheets to ensure mobile sales personnel can be involved in the forecasting process. This flexibility means that changes can be made by the personnel responsible for individual items and customer groups to provide you with a collaborative forecasting tool that combines the power of the forecasting module with the practical knowledge of your sales & marketing personnel.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	
	Forecast cu	ABC-c	Buyer	Forecast item	Item num	Product name	Sales	Site	Ware	Config	Color	Size	Style	Data type	Mar-20	Apr-20	May-20	Jun-20	Jul-20
1	Retail	None		Audio	D0001	MidRangeSpeaker	ea	1	11					Original Forecast	137	155.00	135.00	162.00	1
2	Retail	None		Audio	D0001	MidRangeSpeaker	ea	1	11					Demand History - 1	120	140.00	138.00	169.00	1
3	Retail	None		Audio	D0001	MidRangeSpeaker	ea	1	11					Demand History - 2	98	93.00	125.00	131.00	1
4	Retail	None		Audio	D0001	MidRangeSpeaker	ea	1	11					New Forecast	137	155.00	135.00	162.00	1
5	Retail	None		Audio	D0001	MidRangeSpeaker	ea	1	11					New Adjustment	0	0	0	0	0
6	Retail	None		Audio	D0001	MidRangeSpeaker	ea	1	12					Original Forecast	32	25.00	114.00	147.00	1
7	Retail	None		Audio	D0001	MidRangeSpeaker	ea	1	12					Demand History - 1	74	97.00	95.00	148.00	1
8	Retail	None		Audio	D0001	MidRangeSpeaker	ea	1	12					Demand History - 2	68	96.00	88.00	122.00	1
9	Retail	None		Audio	D0001	MidRangeSpeaker	ea	1	12					New Forecast	32	25.00	114.00	147.00	1
10	Retail	None		Audio	D0001	MidRangeSpeaker	ea	1	12					New Adjustment	0	0	0	0	0
11	Retail	A		Audio	D0002	Cabinet	ea	1	11					Original Forecast	88	302.00	309.00	321.00	2
12	Retail	A		Audio	D0002	Cabinet	ea	1	11					Demand History - 1	168	271.00	292.00	340.00	3
13	Retail	A		Audio	D0002	Cabinet	ea	1	11					Demand History - 2	177	214.00	285.00	317.00	2
14	Retail	A		Audio	D0002	Cabinet	ea	1	11					New Forecast	88	302.00	309.00	321.00	2
15	Retail	A		Audio	D0002	Cabinet	ea	1	11					New Adjustment	0	0	0	0	0
16	Retail	A		Audio	D0002	Cabinet	ea	1	12					Original Forecast	73	251.00	250.00	329.00	3
17	Retail	A		Audio	D0002	Cabinet	ea	1	12					Demand History - 1	173	261.00	217.00	340.00	3
18	Retail	A		Audio	D0002	Cabinet	ea	1	12					Demand History - 2	214	244.00	261.00	287.00	3
19	Retail	A		Audio	D0002	Cabinet	ea	1	12					New Forecast	73	251.00	250.00	329.00	3
20	Retail	A		Audio	D0002	Cabinet	ea	1	12					New Adjustment	0	0	0	0	0
21	Retail	None		Audio	D0003	StandardSpeaker	ea	1	11					Original Forecast	24	155.00	182.00	167.00	2
22	Retail	None		Audio	D0003	StandardSpeaker	ea	1	11					Demand History - 1	124	145.00	191.00	182.00	1
23	Retail	None		Audio	D0003	StandardSpeaker	ea	1	11					Demand History - 2	119	121.00	164.00	149.00	1
24	Retail	None		Audio	D0003	StandardSpeaker	ea	1	11					New Forecast	24	155.00	182.00	167.00	2
25	Retail	None		Audio	D0003	StandardSpeaker	ea	1	11					New Adjustment	0	0	0	0	0
26	Retail	None		Audio	D0003	StandardSpeaker	ea	1	12					Original Forecast	42	110.00	101.00	91.00	1
27	Retail	None		Audio	D0003	StandardSpeaker	ea	1	12					Demand History - 1	117	117.00	116.00	100.00	1

View the effect of sales promotions on forecasts

You can estimate future demand attributable to sales promotions and view the promotional forecasts separately so that you always have complete visibility of your promotional campaigns.

An item can be in multiple promotions that overlap and a promotion can include multiple items.

The screenshot displays two overlapping windows from the Dynamics 365 Finance and Operations interface.

The top window is titled "Promotions Inquiry - Item number: D0001, Audio, Forecast display type: Promotions, Forecast item group: Audio, Forecast customer group: Retail,..." It features a bar chart showing demand over time from March 2020 to February 2021. Below the chart is a table with columns for Item number, Unit, Configuration, Site, Warehouse, and forecast data for various months. A pink highlight is visible on the March 2020 forecast value of 14.00 for item D0002.

The bottom window is titled "PRO-00000008 : Retail promotion". It shows configuration options for a promotion, including a table for percentage changes and a list of items included in the promotion.

From date	Promotion factor	Description	Percentage change
15/03/2020	Ticket	25% discount	60.00
25/03/2020	Aisle	25% discount	40.00

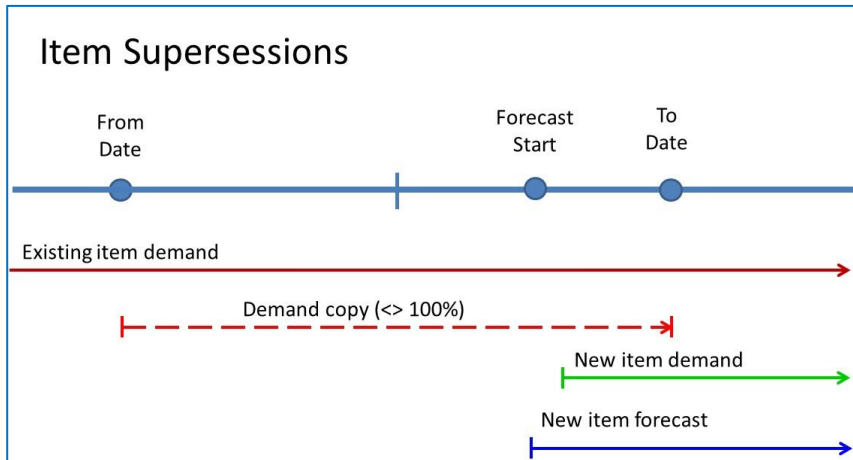
Item number	Product name	Configuration	Site	Warehouse	Forecast customer group	Forecast sales group	Item factor
D0002	Cabinet		1	11	Retail	REP2	60
D0003	StandardSpeaker		1	11	Retail	REP1	80
D0003	StandardSpeaker		1	11	Retail	REP2	80
D0007	Speaker Pro Kit		1	11	Retail	REP1	100
D0007	Speaker Pro Kit		1	11	Retail	REP2	100
L0001	MidRangeSpeaker2		1	11	Retail	REP1	100
L0001	MidRangeSpeaker2		1	11	Retail	REP2	100



Item supersessions for new items

Item supersessions enables new items to be forecast using demand from items they replace or are similar to. Once a supersession rule is created, demand from one or more existing items is automatically copied to create demand for the new item.

If sales demand for the new item overlaps with the demand copied from the existing item, the total demand is used to forecast the new item, enabling an old item to be phased out and the new item phased in.



Automatic detection of demand outliers

The system can examine demand history for quantities that are abnormal and may unduly influence future forecasts unless they are adjusted. Abnormal demand can be caused by external events such as promotions or can just arise from customers ordering significantly more or less than they normally do. This can create demand 'outliers' that lie outside what are considered to be acceptable limits. These limits are user-definable.

Recommended outlier adjustments are created in the form of a journal that you can review before posting. Once posted they are held separately from demand history generated from source transactions and from any other manual adjustments made to demand history, and are displayed separately on the Demand History Adjustments screen.

The screenshot displays two SAP Finance and Operations screens. The top screen is titled 'OUTLIER ADJUSTMENTS' and shows a journal header for 'FJ00000030 : Outlier adjustments'. Below this is a table of journal lines with columns for Adjustment type, Item number, Product name, Unit, Config., Size, Color, Style, Site, Warehouse, Date, Forecast custom., Forecast sales, Outlier demand, and Adjustment quantity. The bottom screen is titled 'Demand entry - Item number: D0001, Audio, Forecast display type: Demand, Forecast item group: Audio, Forecast customer group: Retail, Forecast...' and features a bar chart showing demand over time from March 2019 to February 2020. Below the chart is a table with columns for Item number, Unit, Config., Color, Size, Style, Site, Warehouse, and monthly demand data from March 2019 to November 2019.

FEATURES

Fully integrated	<ul style="list-style-type: none"> Operates as a standard D365 module accessible from the D365 menu All demand forecasting data is stored in the D365 database for ease of management & reporting
Forecast calculation	<ul style="list-style-type: none"> Customers can be grouped in 2 ways for consolidating demand for forecasting purposes. Items can be also be grouped. These groupings enable forecasts to be generated and adjusted at different levels of detail as required Customer forecast groups can be automatically mapped to any 2 of 12 standard customer fields and/or derived from these customer fields Forecasts are generated in either weekly, monthly or user-definable periods Forecasts can be calculated automatically from either sales order or invoice demand history; demand history may also include production and/or projects demand for selected items Forecasts can be calculated and reviewed by any combination of site, warehouse and all or some of the 4 standard product dimensions
Forecast formulas	<ul style="list-style-type: none"> 5 forecast formula options are provided, 4 basic formulas and an 'Expert selection' formula option The 'Expert selection' option uses the Forecast Pro forecasting engine to automatically select the best forecasting formula for an individual demand pattern from a range of powerful industry-standard forecasting formulas The forecast formula used for any item can be specified by any combination of group of items or item, all or selected product dimensions, site, warehouse and/or customer forecast groups, with a system default for those items where no formula is specified at a more detailed level
Graphical comparison of forecast against history	<ul style="list-style-type: none"> Forecasts are graphically displayed alongside up to five years of demand history for comparison purposes The display of forecasts can be filtered using a Mean Absolute Percentage Error (MAPE) measurement to enable any inaccurate forecasts to be easily highlighted
Manual adjustments to forecasts	<ul style="list-style-type: none"> Demand forecasts may be manually adjusted at any level in the forecasting hierarchy; all adjustments are automatically allocated down to the most detailed level and are immediately visible at all levels All manual adjustments are automatically recorded for audit tracking purposes, together with the user who made the change and the date of the change Notes can be optionally recorded against changes or can be mandatory in which case a change won't be accepted without a note being recorded Manual adjustments and promotional forecasts are held separately so that forecasts generated by the system aren't altered Forecasts may be reviewed online using standard Dynamics 365 screens, or offline using Excel spreadsheets generated for individual people responsible for the forecasts
Promotions	<ul style="list-style-type: none"> Promotions can be defined to create promotional adjustments to forecasts A promotion can run over any date range which is independent of the start and end dates of the periods that forecasts are generated and displayed in A promotion can include multiple items and a single item can be included in multiple overlapping promotions
Item supersessions	<ul style="list-style-type: none"> Supersession rules can be specified to enable forecasts for a new item to be based on demand history from one or more existing items; the percentage of demand history used can vary by item
Abnormal demand	<ul style="list-style-type: none"> The system can recommend adjustments to be made to demand history to remove promotions and obvious 'spikes' or outliers, or they can be manually removed Outlier and manual adjustments are held separately so that the original history is always retained Notes may be recorded against adjustments to explain why a figure has been altered
Safety stock based on forecast accuracy	<ul style="list-style-type: none"> An alternative safety stock calculation is provided to that provided by the D365 Master Planning Safety Stock Journal This is based on forecast accuracy and is applied to future forecasts to provide a Minimum stock on an item's coverage settings that tracks future forecasts Safety stocks can also be based on a simple number of days cover applied to future forecasts
Reporting	<ul style="list-style-type: none"> A Forecast Accuracy report is provided that enables forecasts to be compared with actual demand over any period of time

For more information about Demand Forecasting for Dynamics 365 for Finance and Operations, email: dynamics@farsight.co.nz.
For more information about Microsoft Dynamics 365, visit: www.microsoft.com

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