

VELOCITY

CONNECT + ACCELERATE + INNOVATE

25-27 March 2019 | Orlando, Florida



Dynamic What-If Scenario Analytics with Halo

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Halo – The supply chain intelligence experts

“Trusted data, new insight, better decisions”

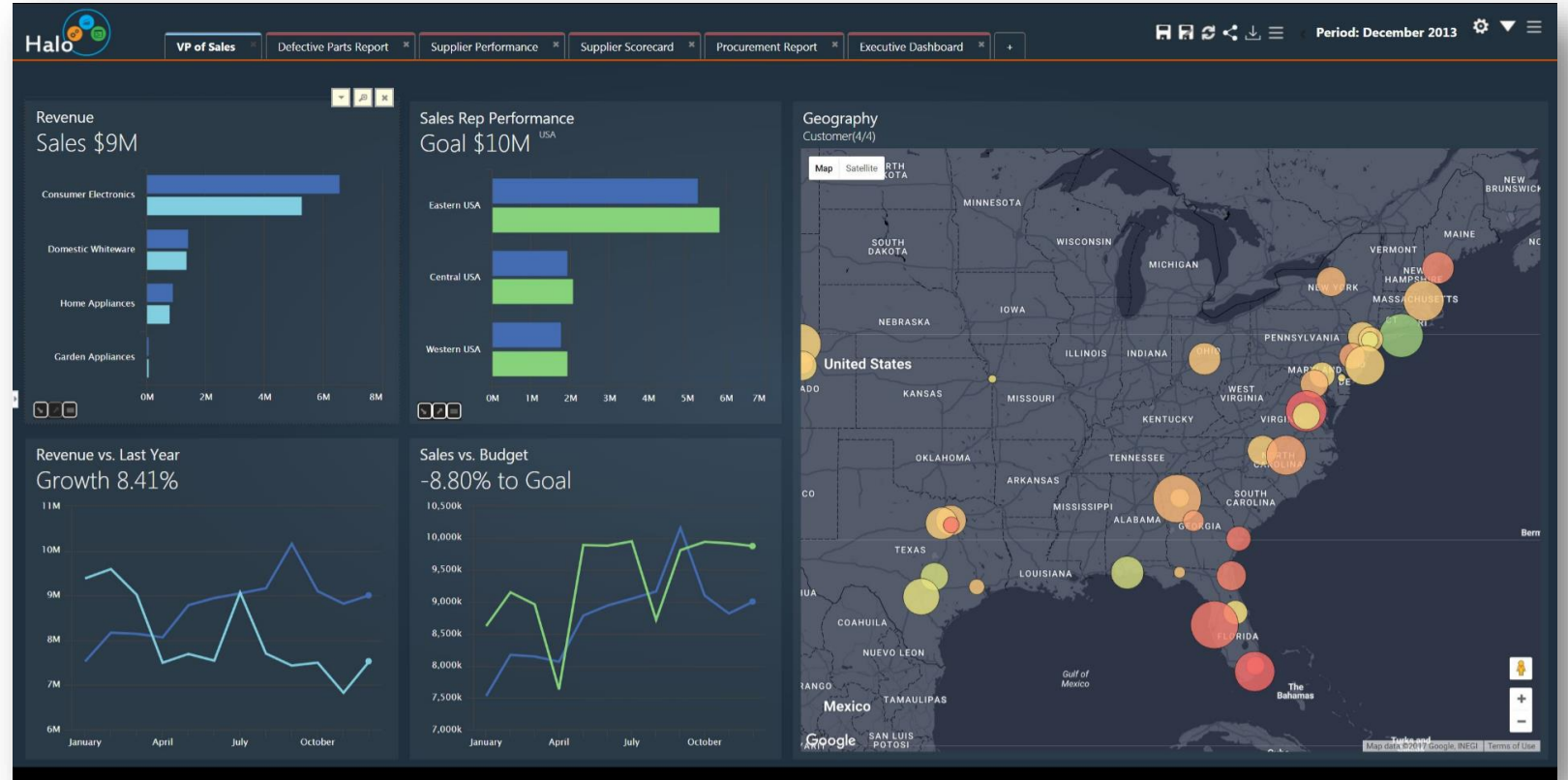
Data integration, analytics software and services

Integrate enterprise data assets

Predict demand: supply problems and root causes

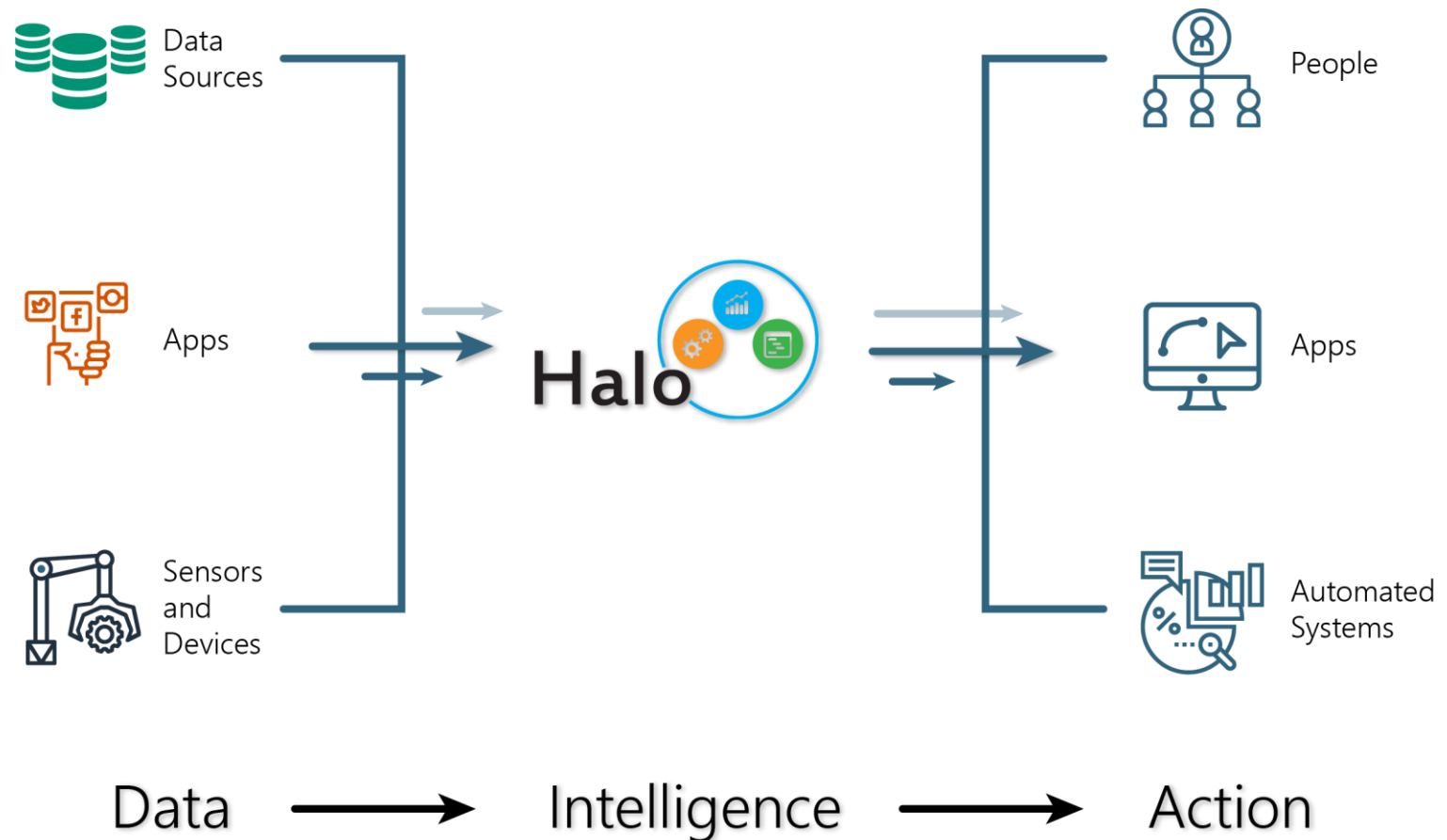
Optimize your Next Best Action

Automate sequences of actions





The Halo Platform

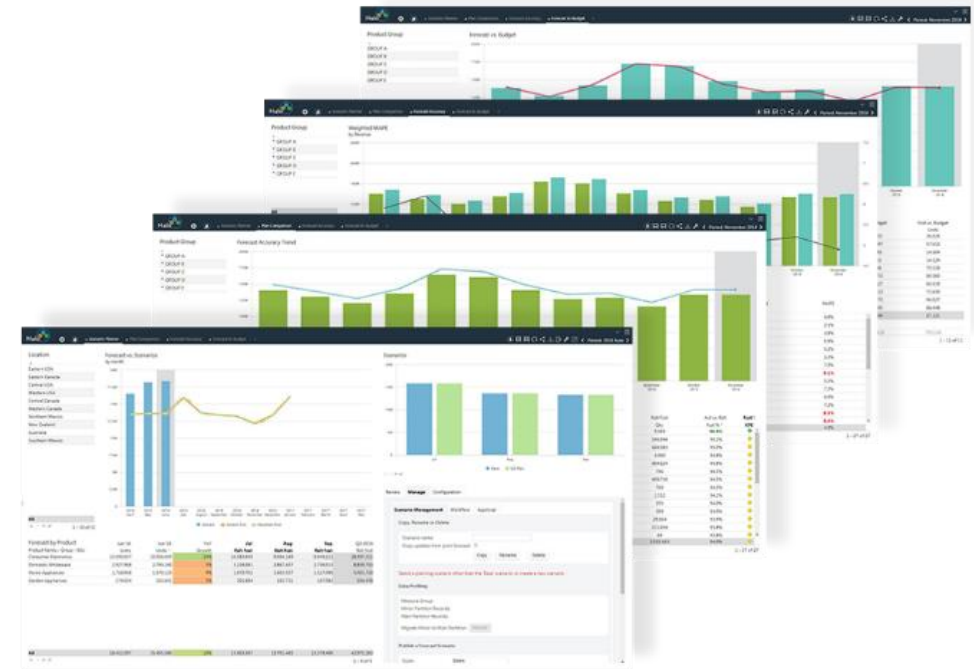




Dynamic What-if Scenario Analytics

A **multi-step** process used to create reliable long term forecasts

- ⦿ Users can visualize the forecast
- ⦿ Adjust for multiple scenarios
- ⦿ Make comments
- ⦿ Submit consensus analytics scenario for:
 - Demand
 - Replenishment
 - Supply
 - Capacity
 - Budget





Managers, Planners, Analysts modify the forecast using their knowledge of the future of the business

Q1 2019 Plan

Review **Manage** Configuration Debug

Scenario Management **Workflow** Approval

Select which user groups to include in the review cycle

Select user groups:

- FolderRO-Halo
- Halo BI Demo
- Logility Planners
- North America
- Planning**

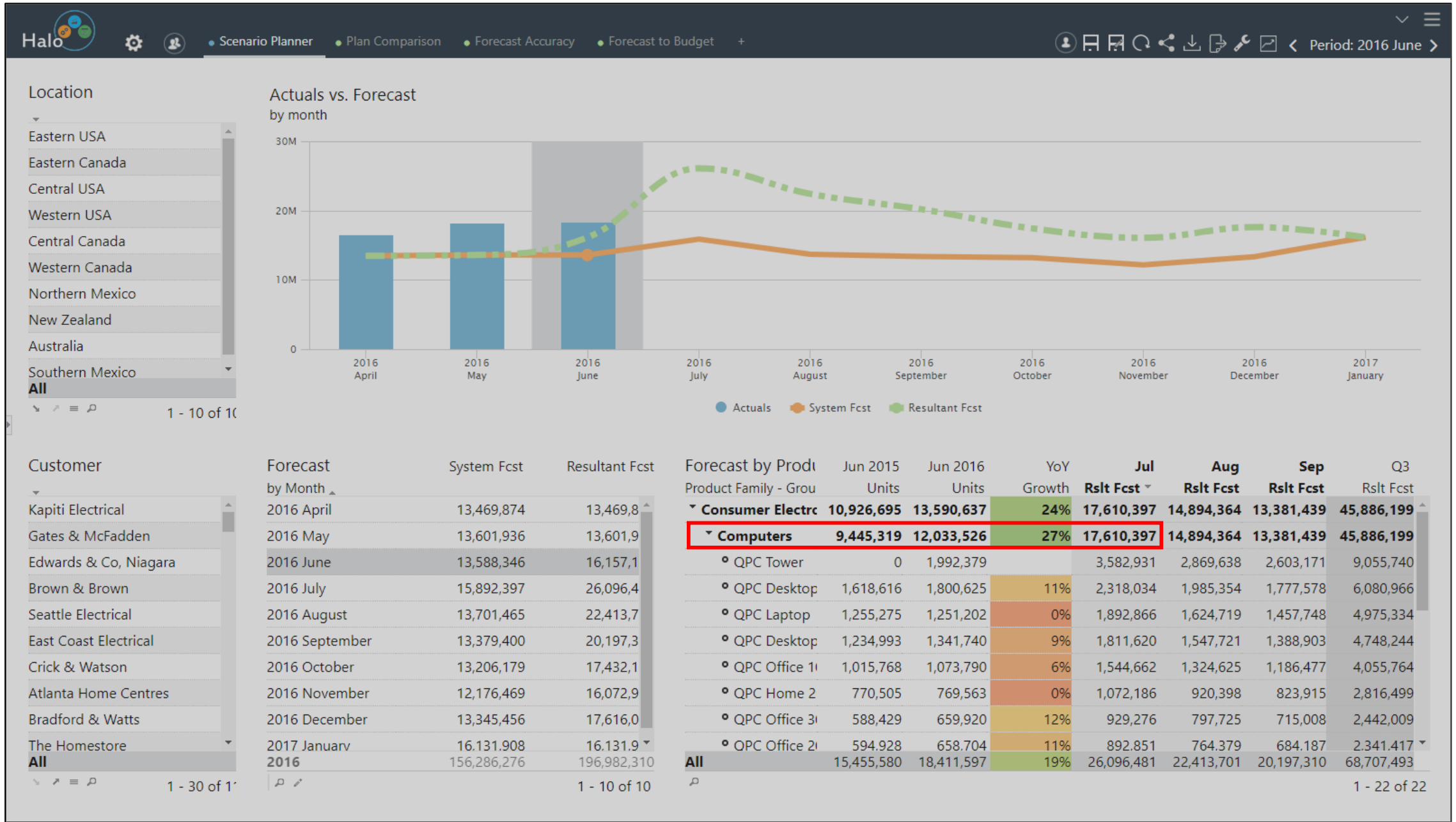
Administrator: JerryS ▼ Update Users

Initiate or pause/unpause the review cycle

Review cycle instructions: Initiate Pause

New budget cycle initiated.

Create weekly, month, quarterly plans to track against





Adjust to a value, by a percent, by an increment or weighted

Forecast by Product	Jun 2015	Jun 2016	YoY	Jul	Aug	Sep	Q3
Product Family - Group - SKU	Units	Units	Growth	Rslt Fcst	Rslt Fcst	Rslt Fcst	Rslt Fcst
QPC Tower	0	1,992,379		1,705,183	1,460,351	1,438,823	4,604,358
QPC Desktop	1,618,616	1,800,625	11%	1,467,271	1,255,494	1,238,716	3,961,481
QPC Laptop	1,255,275	1,251,202	0%	1,199,547	1,028,508	1,017,060	3,245,116
QPC Desktop Pro	1,234,993	1,341,740	9%	1,145,659	977,939	966,904	3,090,501
QPC Office 1000	1,015,768	1,073,790	6%	977,593	837,537	826,653	2,641,783
QPC Home 2000	770,505	769,563	0%	678,098	581,577	573,614	1,833,289
QPC Office 3000	588,429	659,920	12%	587,663	504,022	497,738	1,589,422
QPC Office 2000	594,928	658,704	11%	564,927	483,198	476,575	1,524,700
QPC Tower Pro	581,922	589,749	1%	528,946	454,794	449,536	1,433,275
QPC Home 1000	512,063	553,817	8%	520,027	445,103	440,277	1,405,406
Laundry 3000 Front-Loader	388,691	416,958	7%	464,824	422,664	386,587	1,274,075
	374,643	391,486	4%	430,877	395,561	359,758	1,186,197
	475,079	482,738	2%	428,439	367,294	363,540	1,159,273
	290,082	346,859	20%	335,983	289,945	270,734	896,662
	15,455,580	18,411,597	19%	15,892,397	13,701,465	13,379,400	42,973,263

123
 %
 +
 v

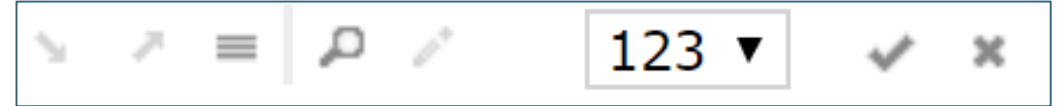
Spread weighted
 Spread equal w/o zero
 Spread equal w/ zero

February Forecast
✓
✕

By Value

By Value is denoted by "123" in the drop down in the tool bar

Allows you to make adjustments to a specific value in the pane that is configured for adjustments.



Forecast by Product	January	February	February	Variance	Var.%
Product Family - Group - SKU	Actual	Base Forecast	Forecast		
Consumer Electronics	10,906,579	11,789,165	12,000,000	0.00	0.00
Domestic Whiteware	2,889,173	3,550,799	3,550,799	0.00	0.00
Home Appliances	1,590,810	2,009,068	2,009,068	0.00	0.00
Garden Appliances	175,445	203,959	203,959	0.00	0.00
All	15,562,007	17,552,991	17,552,991	0.00	0.00

Below the table, there is a toolbar with icons for navigation and editing, and a dropdown menu showing '123'. The page number '1 - 4 of 4' is visible in the bottom right corner.



By Percent

By Percent is denoted by a percent “%” sign in the drop down in the tool bar

Allows you to adjust the selected member(s) by a percentage such as increase by 10% or decrease by 25%.

Toolbar showing a percent sign dropdown menu and a selected filter: February Forecast

Forecast by Product	January	February	February	Variance	Var.%
Product Family - Group - SKU	Actual	Base Forecast	Forecast		
Consumer Electronics	10,906,579	11,789,165	11,789,165	0.00	0.00
Domestic Whiteware	2,889,173	3,550,799	3,550,799	0.00	0.00
Home Appliances	1,590,810	2,009,068	2,009,068	0.00	0.00
Garden Appliances	175,445	203,959	203,959	0.00	0.00
All	15,562,007	17,552,991	17,552,991	0.00	0.00

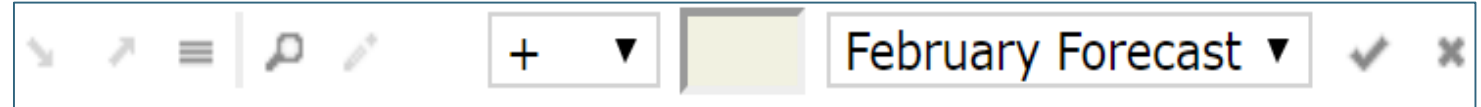
Toolbar below table showing a percent sign dropdown menu with '10' entered and a selected filter: February Forecast



By Increment

By Increment is denoted by a plus "+" sign in the drop down tool bar

Allows you to adjust the selected member(s) by an incremental value such as increase by 50 or decrease by 200.



Forecast by Product	January	February	February	Variance	Var.%
Product Family - Group - SKU	Actual	Base Forecast	Forecast		
Consumer Electronics	10,906,579	11,789,165	11,789,165	0.00	0.00
Domestic Whiteware	2,889,173	3,550,799	3,550,799	0.00	0.00
Home Appliances	1,590,810	2,009,068	2,009,068	0.00	0.00
Garden Appliances	175,445	203,959	203,959	0.00	0.00
All	15,562,007	17,552,991	17,552,991	0.00	0.00

Below the table is a tool bar with a plus sign in a dropdown menu, a text input field containing '-100', and a 'February Forecast' dropdown menu. The page number '1 - 4 of 4' is visible in the bottom right corner.

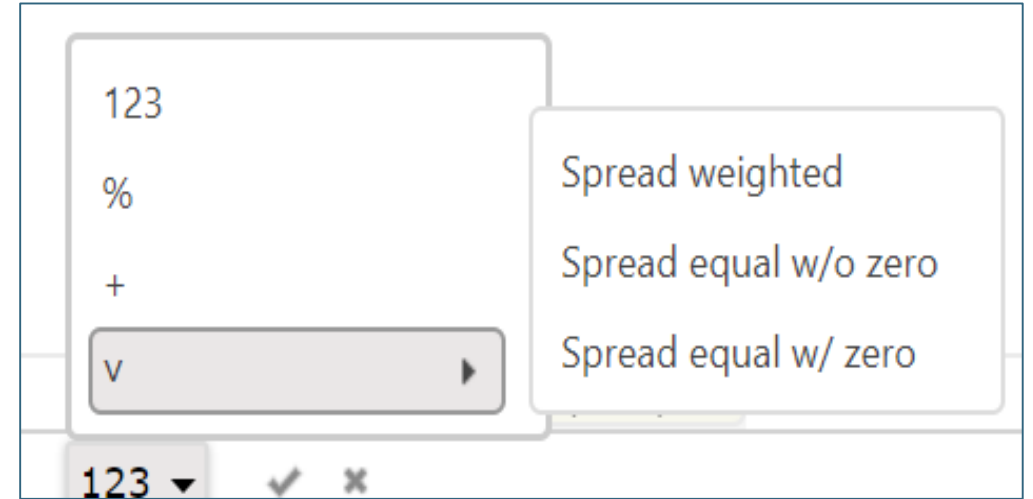
The background is a light green color with various geometric patterns. There are several concentric circles, some with dashed lines. On the right side, there is a hexagonal grid pattern. In the top left corner, there are some small symbols like a plus sign and a minus sign. The overall design is clean and modern.

Spread Options

Spread Options

Denoted with a "v" icon Adjustments can be spread across members in the following ways:

- *Spread down weighted*
- *Spread down equal without zero*
- *Spread down equal with zero*





Spread down weighted

Will **weight** the **adjustment** value according to the values associated with each member.

Forecast by Product	January	February	February Forecast	Variance	Var.%
Product Family - Group - SKL	Actual	Base Forecast			
Consumer Electronics	10,906,579	11,789,165	11,789,299	134.33	0.00
Domestic Whiteware	2,889,173	3,550,799	3,550,840	40.46	0.00
Home Appliances	1,590,810	2,009,068	2,009,091	22.89	0.00
Garden Appliances	175,445	203,959	203,962	2.32	0.00
All	15,562,007	17,552,991	17,553,191	200.00	0.00

Navigation: v w February Forecast 1 - 4 of 4



Spread down equal without zero

Will apply the adjustment values **equally** to all members but will **ignore** any members with **zero** values

Forecast by Product	January	February	February	Variance	Var.%
Product Family - Group - SKL	Actual	Base Forecast	Forecast		
Consumer Electronics	10,906,579	11,789,165	11,789,215	50.00	0.00
Domestic Whiteware	2,889,173	3,550,799	3,550,849	50.00	0.00
Home Appliances	1,590,810	2,009,068	2,009,118	50.00	0.00
Garden Appliances	175,445	203,959	204,009	50.00	0.02
All	15,562,007	17,552,991	17,553,191	200.00	0.00

Navigation: v e February Forecast 1 - 4 of 4



Spread down equal with zero

Will apply the adjustment values equally to all members but will **include** any members with **zero** values

Forecast by Product	January	February	February	Variance	Var.%
Product Family - Group - SKL	Actual	Base Forecast	Forecast		
Consumer Electronics	10,906,579	11,789,165	11,789,215	50.00	0.00
Domestic Whiteware	2,889,173	3,550,799	3,550,849	50.00	0.00
Home Appliances	1,590,810	2,009,068	2,009,118	50.00	0.00
Garden Appliances	175,445	203,959	204,009	50.00	0.02
All	15,562,007	17,552,991	17,553,191	200.00	0.00

Navigation: v e February Forecast 1 - 4 of 4



Example

Applying an **adjusted value of 200** will provide the following results

Forecast by Product	January	February	February	Variance	Var. %
Product Family - Group - SKL	Actual	Base Forecast	Forecast		
Consumer Electronics	10,906,579	11,789,165	11,789,299	134.33	0.00
Domestic Whiteware	2,889,173	3,550,799	3,550,840	40.46	0.00
Home Appliances	1,590,810	2,009,068	2,009,091	22.89	0.00
Garden Appliances	175,445	203,959	203,962	2.32	0.00
All	15,562,007	17,552,991	17,553,191	200.00	0.00

Spread down weighted

Forecast by Product	January	February	February	Variance	Var. %
Product Family - Group - SKL	Actual	Base Forecast	Forecast		
Consumer Electronics	10,906,579	11,789,165	11,789,215	50.00	0.00
Domestic Whiteware	2,889,173	3,550,799	3,550,849	50.00	0.00
Home Appliances	1,590,810	2,009,068	2,009,118	50.00	0.00
Garden Appliances	175,445	203,959	204,009	50.00	0.02
All	15,562,007	17,552,991	17,553,191	200.00	0.00

Spread down equal without zero



Slices and Adjustments



Slices and Adjustments

Slices and adjustments will pertain to the slice that is on the pane.

Forecast by Product	January	February	February	Variance	Var.%
Product Family - Group - SKU	Actual	Base Forecast ▼	Forecast		
Consumer Electronics	10,906,579	11,789,165	11,789,165	0.00	0.00
Domestic Whiteware	2,889,173	3,550,799	3,550,799	0.00	0.00
Home Appliances	1,590,810	2,009,068	2,009,068	0.00	0.00
Garden Appliances	175,445	203,959	203,959	0.00	0.00
All	15,562,007	17,552,991	17,552,991	0.00	0.00

+ ▼ 150 February Forecast ▼ ✓ ✕
1 - 4 of 4



Committing Adjustments

Select the check mark icon on the footer tool bar.

Forecast by Product	January	February	February	Variance	Var.%
Product Family - Group - SKU	Actual	Base Forecast	Forecast		
Consumer Electronics	1			0.00	0.00
Domestic Whiteware				0.00	0.00
Home Appliances				0.00	0.00
Garden Appliances				0.00	0.00
All	1			0.00	0.00

Comment ✕

Adjusted numbers to reflect demand based upon last discussion with Marketing. |

Confirm **Cancel**

123 ✕

1 - 4 of 4



Review and approvals at the Executive Level take place to finalize various adjustments

Q1 2019 Plan

Review Manage Configuration Debug

Status: Plan in progress

Comments:

Filter by selections

Created	User	Member	Context	Time	Measure	Comment	Update Type	Original Value	Final Value	Variance%
1/4/2019 11:42:45 PM	amandas	Garden Appliances		2016 February	Forecast_RevenueForecast	Adjusted numbers to reflect demand based upon last discussion with Marketing.	ToValue	203,959.37	200,000.00	-1.94
1/4/2019 11:42:45 PM	amandas	Home Appliances		2016 February	Forecast_RevenueForecast	Adjusted numbers to reflect demand based upon last discussion with Marketing.	ToValue	2,009,067.75	2,000,985.00	-0.40
1/4/2019 11:42:45 PM	amandas	Domestic Whiteware		2016 February	Forecast_RevenueForecast	Adjusted numbers to reflect demand based upon last discussion with Marketing.	ToValue	3,550,799.42	3,550,700.00	0
1/4/2019 11:42:45 PM	amandas	Consumer Electronics		2016 February	Forecast_RevenueForecast	Adjusted numbers to reflect demand based upon last discussion with Marketing.	ToValue	11,789,164.86	12,000,000.00	1.79



Finalized adjusted forecasts are published as Final Plans

Q1 Plan

Review **Manage** Configuration Debug

Scenario Management Workflow **Approval**

Review and approve/reject each user's updates

Comments:

<input type="checkbox"/>	User	Status ▲	Date	Comment
<input type="checkbox"/>	amandas	In progress	3/15/2019 5:15:22 PM	
<input type="checkbox"/>	bglendening	In progress	3/15/2019 5:15:22 PM	
<input type="checkbox"/>	CarmenW	In progress	3/15/2019 5:15:22 PM	
<input type="checkbox"/>	KeithP	In progress	3/15/2019 5:15:22 PM	
<input checked="" type="checkbox"/>	demo	Submitted	3/15/2019 5:07:26 PM	Adjustments made based off discussions





Scenario Analysis Example

Halo Scenario Analysis + Period: 2016 June

Scenarios	Sales Revenue	Sales Budget	Achievement to Budget	Production Costs	Holding Costs	Material Costs	Total Costs	Profit	Margin	Capacity Utilization	Service Level DOT
Base	156.3	162	96.5%	15.1	13.9	65.6	94.6	61.7	60.5%	99.4%	95.2
Q3 Plan	156.3	162	96.5%	15.1	13.9	65.6	94.6	61.7	60.5%	99.4%	95.2
Q4 Plan	156.3	162	96.5%	15.1	13.9	65.6	94.6	61.7	60.5%	99.4%	95.2
Test	156.3	162	96.5%	15.1	13.9	65.6	94.6	61.7	60.5%	99.4%	95.2
Whiteware changes	156.3	162	96.5%	15.1	13.9	65.6	94.6	61.7	60.5%	99.4%	95.2



Reorder Quantity Automation via Reports and Alerts

- Use **Halo Scheduled Reporting** to distribute reports from Halo on a scheduled basis to both users within the organization as well as external parties.
- With the power of a **built-in alerting** component, Halo Scheduled Reporting can also be configured to distribute certain reports only when a specific pre-set condition within the data has been met.

Period: 2016 Oct

The following data triggered this alert:

Reorder Quantity for any member in Product is > 1

Product	Reorder Quantity
V333 6CS TIE DWN HANDLE ALUM	285
V920BL 6CS PNEUMATIC CLSR BL	174
BOLT EYE W/NUT 5/16"X6"	118
V16 10CS ADJUSTABLE DR SPRING	31
V321WH 5CS VINYL SCREEN DOOR KIT - WHITE, 98053123	28



See it in Action!



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More**

Find Me:

Email: Daniel.Bachar@halobi.com

Slack: danielb

Reach out to your Technical Account Manager (TAM)

Eric Ervin - Mid West, South East

Lars Renteria - Beverage, West, North East

Olly Smith - APAC

A blurred city street at night with light trails and a yellow underline.

QUESTIONS?

THANK YOU