Raising Supply Chain Performance to New Levels
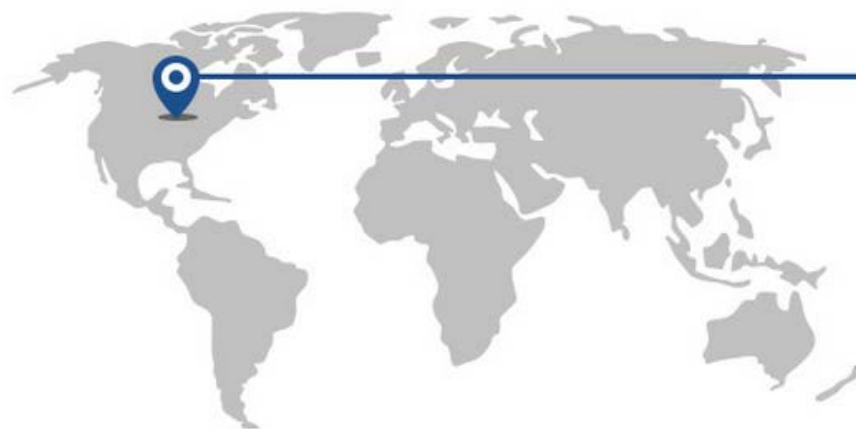
Gian Leocata

Supply Chain Director, Latin America
Sensient Colors SA de CV

veloc|ty

CONNECT + ACCELERATE + INNOVATE

LOGILITY   Halo   NGC   Demand Solutions

Sensient Technologies

World headquarters:

Milwaukee, WI

CEO: Paul Manning

NYSE: SXT
Revenue: $1.38b

Employees:
more than
4,000
worldwide

Global Presence:
60% of sales
from international business

Sensient Technologies is comprised of three groups:

► Flavors & Fragrances

► Colors

► Asia Pacific

SENSIENT

Sensient Colors

#1 in food & beverage colors

#1 in cosmetic ingredients

#1 in digital inks

#2 in pharma excipients

Food Markets:

▶ Beverage

▶ Bakery

▶ Dairy

▶ Confection

▶ Pet Food

▶ Grocery

Non Food Markets:

▶ Cosmetics

▶ Personal Care

▶ Pharmaceutical

▶ Specialty Inks and Imaging

▶ Industrial Applications

▶ Ag-Business and Landscape

SENSIENT

Sensient Colors

► USD 500+ million Revenue in 2018

► Five Market Segments

► Presence in 100+ Countries

► Operating Manufacturing Sites in:

- North & South America

- Europe

- Africa

- Asia

- Oceania

World map with manufacturing sites: Canada, St. Louis, New Jersey, Mexico, Brazil, Argentina, UK, France, Switzerland, Germany, Italy, South Africa, China, Philippines, Singapore, Australia

SENSIENT

Sensient Colors and Forecast: An Evolving Relationship

Implementation

Go live 2016

Voyager DP/IP/RP/IO

First Steps

Improved +4% Forecast Accuracy in the first 18 months (US)
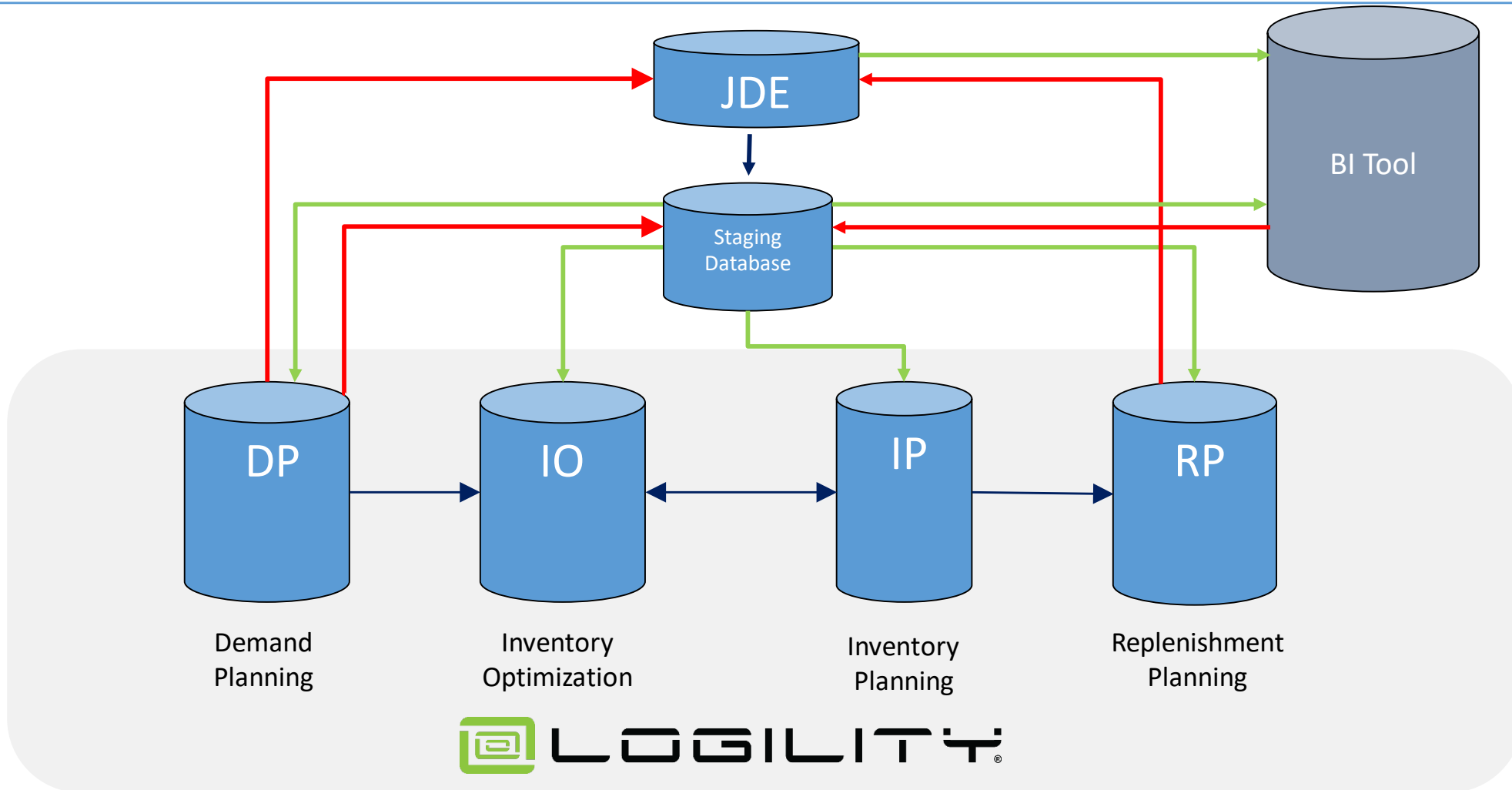
Decreased Inventory by $6M (USD)

Started rolling out globally

Continuous Improvement

Where do we go from here?

Evolving Software Structure

Continuous Improvement

▶ **Early Success**

▶ **Footprint Expansion**

▶ **New Challenges**

- Bigger dataset

- Different businesses at different stages of maturity

- Collecting market intelligence in different regions

- Process, process, process…. (or lack of thereof)

Supply Chain Integration in Latin America

velocity

- Faster, more accurate and actionable insights
- Forecasting closer to the customer
- "Slicing 'n dicing" the data to better understand it
- Holistic business collaboration

Time to Insights

Implemented in February 2018

- ► Excel vs. Logility

- ► Inventory decisions

- ► Forecast accuracy tracking and scorecard

- ► Benefits

  - Access to historic demand by requested date

  - Access to forecast by account manager, customer, ABC strata (segmentation)

  - Customer prioritization and faster allocation decisions

  - 54 DIH reduction in 2018 for Sensient LatAm business

Time to Insights

Example of forecast accuracy tracking and scorecard

Forecast Accuracy	3 months avg	Oct-18	Nov-18	Change vs Avg
Total	58%	68%	82%	24%
Items A	65%	56%	90%	25%
Items B	56%	77%	76%	20%
Items C	67%	74%	86%	19%
Items D	60%	59%	60%	0%

Forecasting Segmentation by Customers & Market

Forecasting Segmentation Customers & Markets

► Included Logility tables in our BI tool

► Created reports to sales to track forecast month-by-month

► Changed where we create the forecast

  ▪ Managed at Level 1 = Item/location/customer

► Benefits

  ▪ Reduced lead time (Faster)

  ▪ Decreased inventory levels (Accelerated)

  ▪ Collaboration with customers (Satisfaction)

Forecasting Closer to Customers & Segmentation of the Data

Forecasting Segmentation of Customer & Market Data

DC

Historic Demand

Forecast

ARTURO QUIRINO SIERRA DIAZ				201808	201809	201810	201811	201812	201901	201902	201903	201904	201905
Customer	M73000020 - ROJO NO. 6	5841	Actual_Demand_KG	400	400	500	260	620	0	0	0	0	0
			Fcst_Resultant_KG	339	356	348	356	356	379	379	379	379	379
	M77070020 - ROJO NO. 40	5841	Actual_Demand_KG	0	0	0	0	0	0	0	0	0	0
			Fcst_Resultant_KG	15	8	5	2	3	0	0	0	0	0
	M86000020 - AMARILLO NO. 5	5841	Actual_Demand_KG	1,000	700	700	1,000	1,240	0	0	0	0	0
			Fcst_Resultant_KG	681	717	697	714	664	767	767	767	767	767
	M86040020 - AMARILLO NO. 6	5841	Actual_Demand_KG	60	60	0	60	60	0	0	0	0	0
			Fcst_Resultant_KG	39	42	44	44	44	42	42	42	42	42
	VB0010025 - VAINILLINA	5841	Actual_Demand_KG	50	0	50	0	0	0	0	0	0	0
			Fcst_Resultant_KG	10	10	19	9	17	17	17	17	17	17
	VB0040R25 - ETIL VAINILLINA	5841	Actual_Demand_KG	25	0	0	0	0	0	0	0	0	0
			Fcst_Resultant_KG	3	3	5	5	5	3	2	2	2	2

Forecasting Segmentation of Customers & Market Data

Forecast Accuracy % (by sMAPE)

$$y = 0.4476x + 69.924$$

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Fcst Acc %	69	70	69	73	74	75	73	74	75	77	71	74
A items %	73	72	74	77	78	77	76	77	77	80	74	79
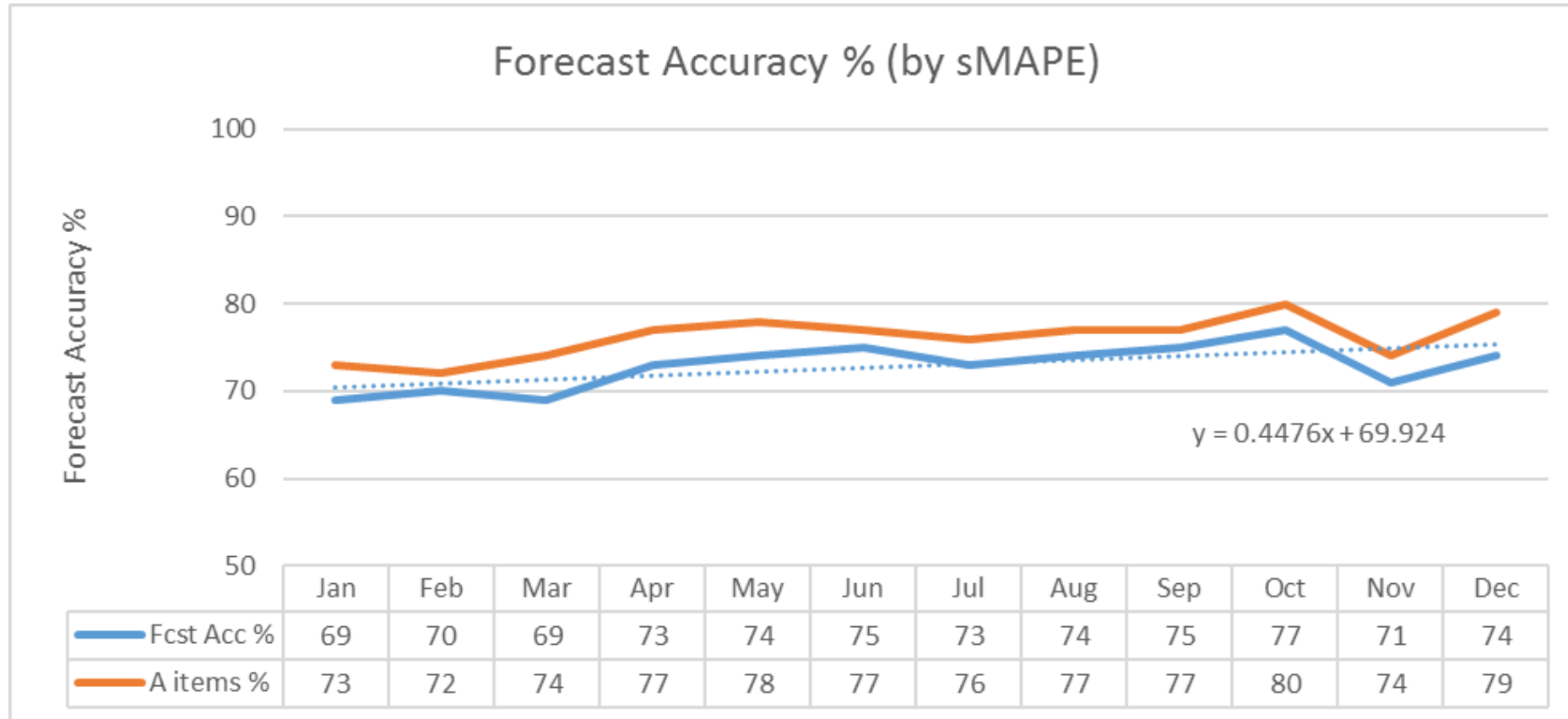
Holistic Business Collaboration

Holistic Business Collaboration

► Started a monthly S&OP process

► Leverage projected inventory coverage against forecast

► Using long term forecast to balance plant utilization/absorption

► Working with finance agree to a consensus forecast for the business unit

► Benefits

- Increased sales performance

- Plant leveling and maximizing absorption

- Leverage demand shaping when needed

velocity

Bringing it all together

Collaboration: All the departments involved are working based on the same numbers and assumptions

Process: We built the process around Logility that was best suited for us, enabling small incremental changes that resulted in overall business improvement

Customer Focus: We are going back to customers and sharing forecast with them, helping them improve their planning

Time to Insights: We are more agile and can take business decisions and actions based on demand data almost immediately

THANK YOU

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