



BJ's Customer Success Story of Implementation of CAR for Sales,
Promotional Management for Retail, and Unified Demand Forecasting
Suraj Pabbathi and Sherri Courtney, Lead IT SAP Program Analyst,
BJ's Wholesale Club Inc
Session ID #**84142**

About the Speakers

Suraj Pabbathi

- Lead IT SAP Program Analyst, BJ's Wholesale Club Inc.
- 15 Years of experience
- Technical Areas: SAP ABAP, PI, CPI, BODS, SLT, Fiori, Hana Modeling, Solution Manager
- Functional Areas: POSDTA, UDF
- Founder and President of People For India Inc. (Non-Profit Organization)

Sherri Courtney

- Lead IT SAP Program Analyst, BJ's Wholesale Club Inc.
- 25+ Years of Retail Experience
- Technical Areas: SAP IS-Retail, ARIS, PMR, TCxVector
- Functional Areas: Master Data, Pricing, Promotions, External Integration
- Avid rock collector

Agenda

- ✓ **BJ's at a Glance**
- ✓ **BJ's CAR Platform**
- ✓ **BJ's Innovation Journey**
 - ✓ **POSDTA**
 - ✓ **PMR**
 - ✓ **UDF**

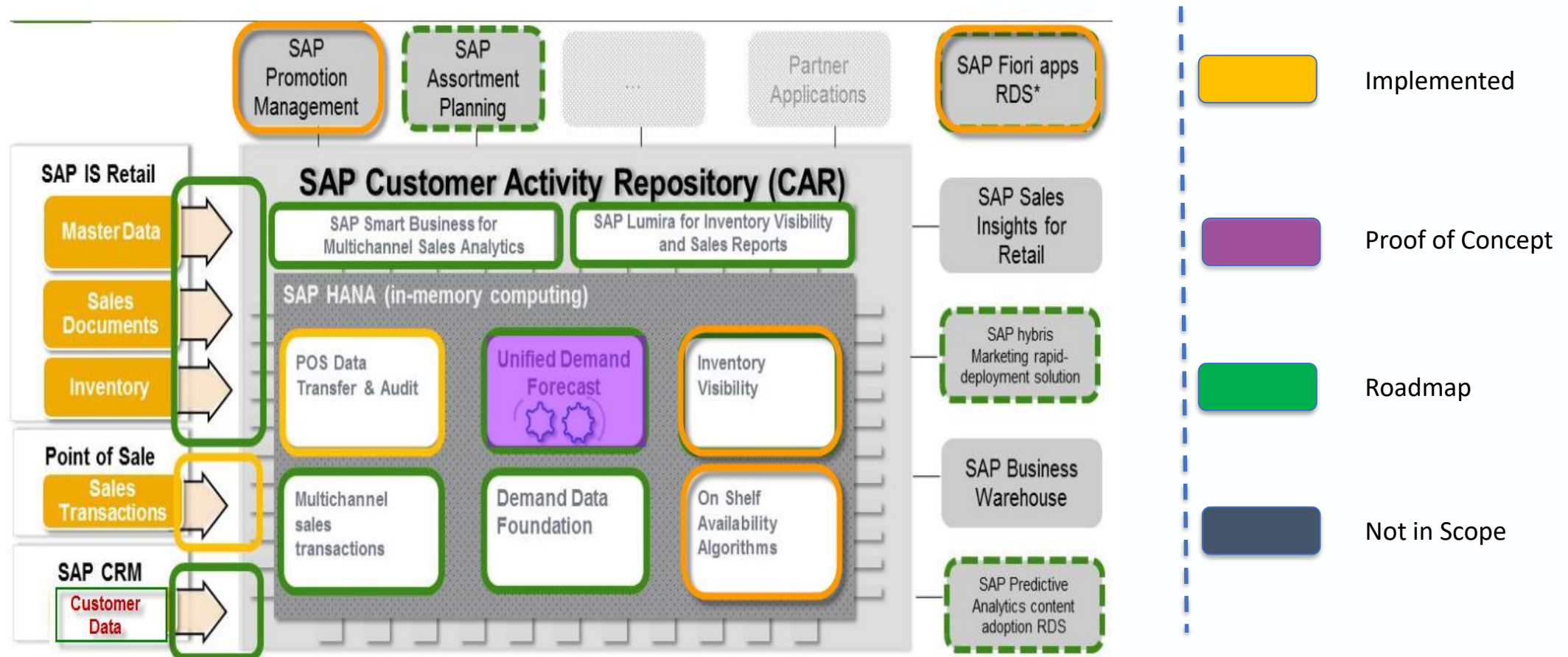
BJ's at a Glance

- 217 CLUBS IN 16 STATES FROM MAINE TO FLORIDA
- 135 gas stations
- 5.3 million members
- 25,000 employees
- Assortment variety of grocery items including fresh meat, produce and private brands – **Wellsley Farms and Berkley Jensen**
- Other service options include **Travel, Cellular and Optical**
- Increased Digital Presence to offer strong engagement with our members



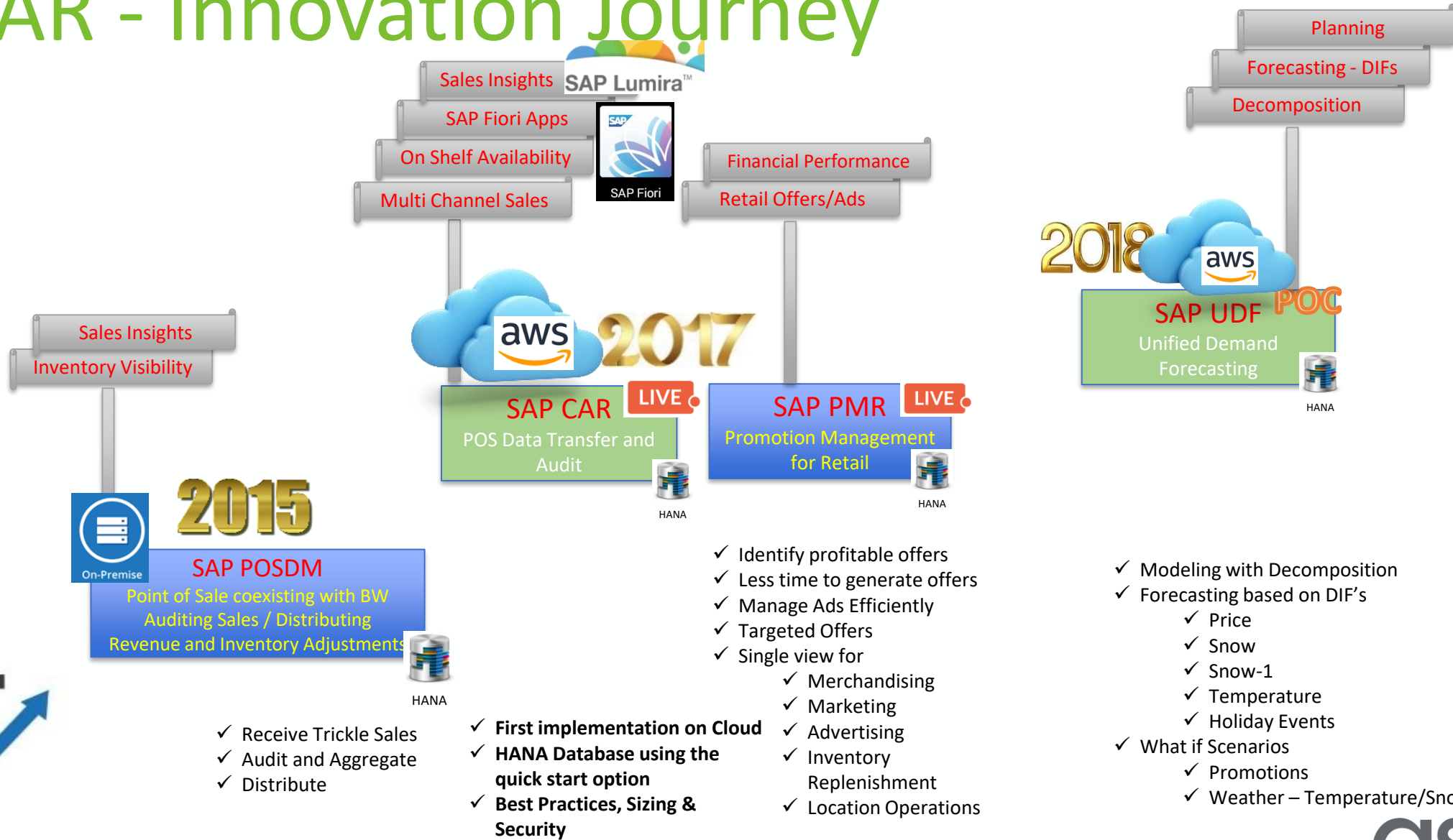
BI's CAR Platform

Implement the next foundational element in the SAP retail roadmap...the data framework for advanced **SAP retail planning engines**

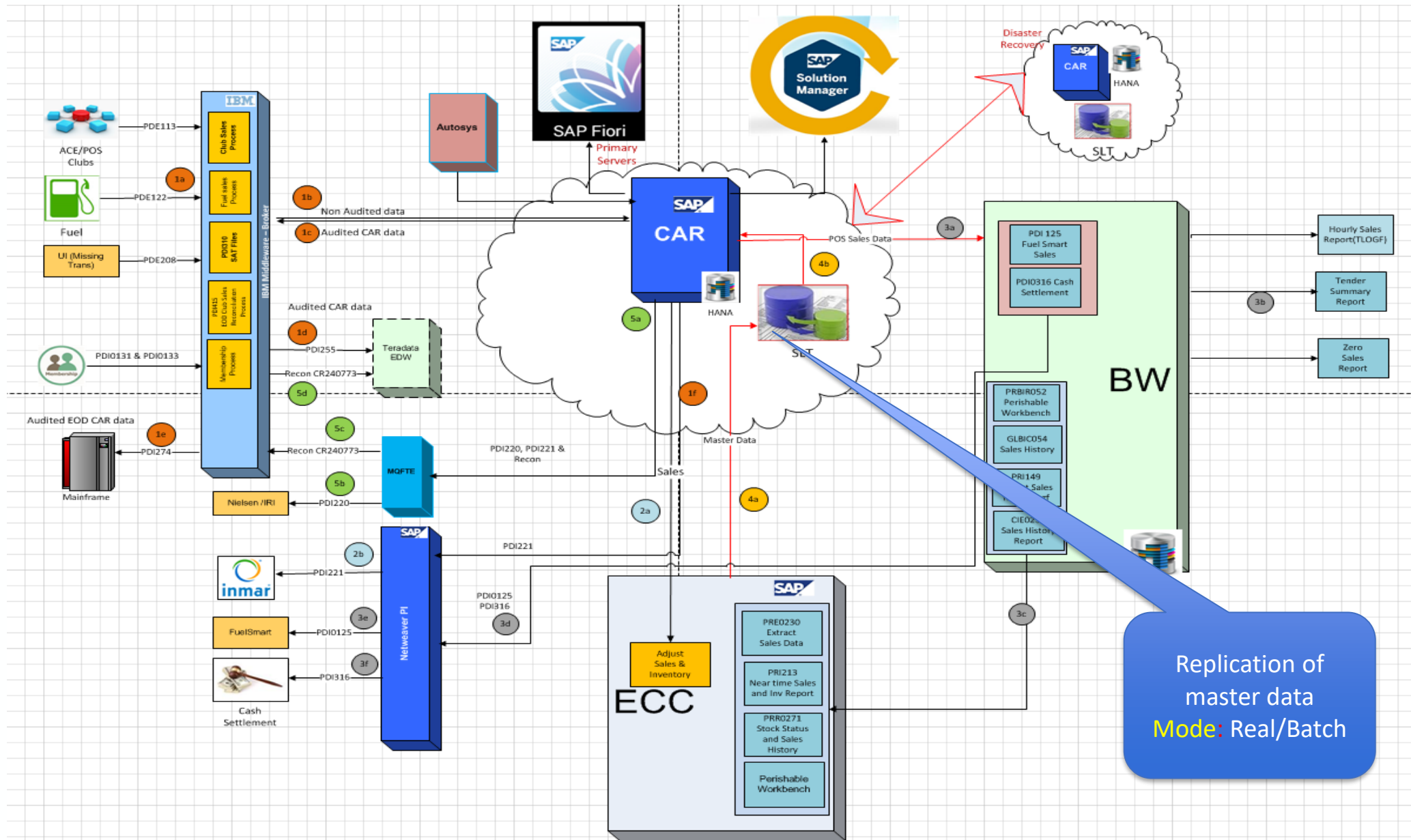


CARAB stands for CAR Application Bundle
 Assortment Planning, Merchandise Planning, Promotion Planning, Allocation Planning
 Installed as Bundle, can implement the products separately.

CAR - Innovation Journey



CAR - POSDTA – Point of Sale Data Transfer and Auditing



Replication of master data
Mode: Real/Batch

Fiori Apps

CAR Sales Reporting

Net Sales
Net Sales Evaluation

73 [▲]_M

Gross Margin
Gross Margin Evalu...

31 [▲]

Average Items Per
Transaction
Items Per Transactio...

7 [▲]

Number Of
Transactions
Number Of Transacti...

11 [▼]_M

Average
Transaction Value
Average Transaction...

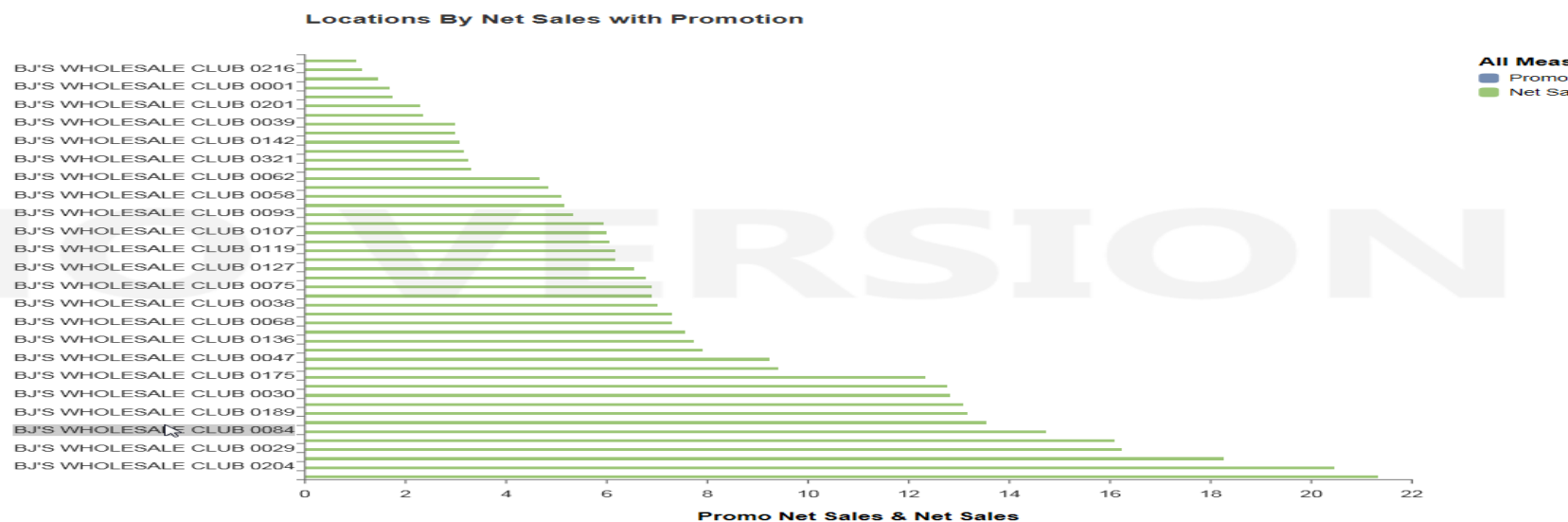
72 [▼]

Lumira Reports

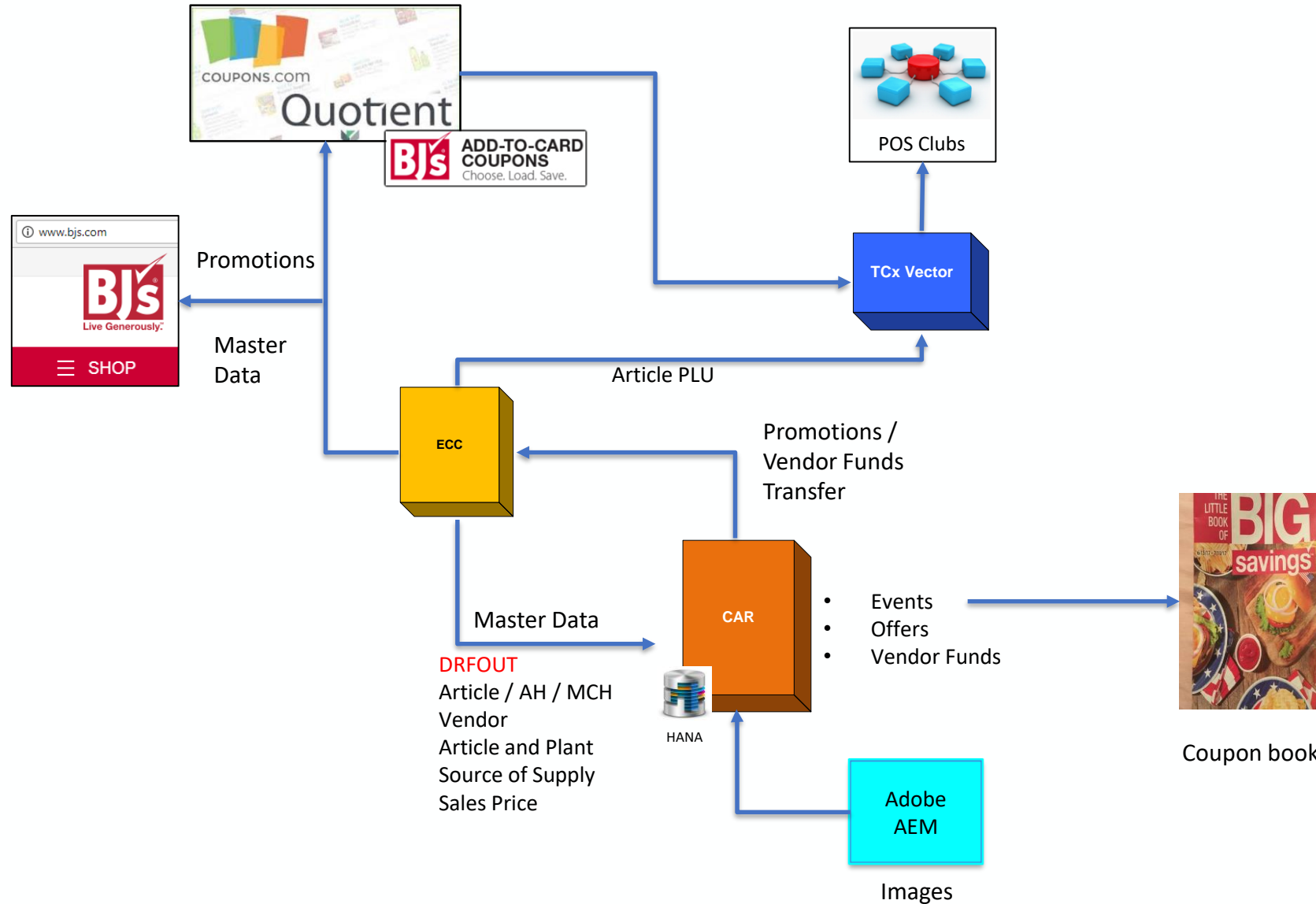
Title ^	Type	Description	Date Modified
Forecast Accuracy	Lumira Document		Apr 26, 2017 10:08 PM
Intraday Forecast	Lumira Document		May 9, 2017 8:54 PM
Inventory Visibility Report by Store	Lumira Document		May 9, 2017 8:49 PM
On-Shelf Availability Report	Lumira Document		Jan 22, 2018 8:48 AM
POS Sales Report	Lumira Document		Jun 13, 2017 2:31 PM
Product Affinity Analysis	Lumira Document		May 9, 2017 8:57 PM
Regional Manager Overview Board	Lumira Document		May 9, 2017 8:59 PM
Rolling Gross Margin	Lumira Document		May 9, 2017 9:00 PM

D & W C SHARP CHEDDAR
 Merchandise Category

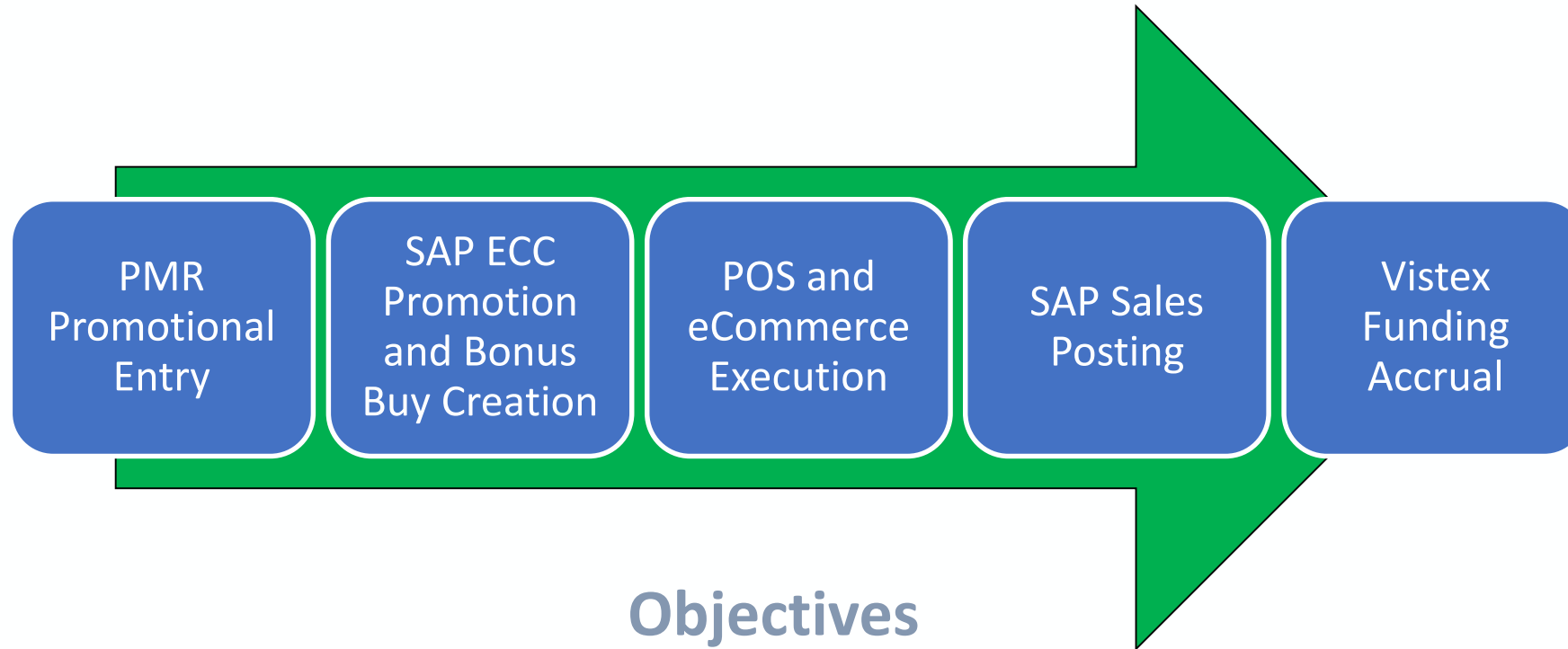
BJ TODDLER/FAMILY WIPES 432CT
 BLCK BN SEA SALT CHPS 22OZ
 CT SPONGEBOB 3 PACK
 D & W C SHARP CHEDDAR
 HOLIDAY VALUE ASST
 PAPERMAGIC 18C T CARDS
 SLATE OUTDOOR TABLE LAMP
 SNUG & DRY STEP 4 200 CT



CAR - PMR Execution (Promotion Management for Retail)



PMR Business Process and Objectives



- More efficient and controlled promotional planning cycle
- Effective financial analysis of offers and events
- Accurate promotional execution through accountability and visibility
- Integration with Vistex
- Future automated forecasting capability with UDF (Currently in POC)

PMR Promotion Objects

Events



EXCLUSIVE IN-CLUB COUPON collection

OVER \$687 IN SAVINGS
VALID ONLY AT BJ'S - 3/30/17 - 4/26/17
WHILE SUPPLIES LAST

OVER \$4,800 IN-CLUB SAVINGS
PLUS \$6,100 ONLINE SAVINGS

THE LITTLE BOOK OF **BIG savings**

3/30/17 - 4/26/17

Special Savings on Smithfield Hams Starting at **\$159/lb.**
See Inside

BLACK FRIDAY SAVINGS EVENT

FRIDAY, NOV. 17 - MONDAY, NOV. 27
OPEN 7AM, BLACK FRIDAY

Offers

8
RV201

SAVE \$20

VALID ONLY AT BJ'S
3/30/17 - 4/26/17

Any TWO (2) HP Ink Packs
Limit 2 per Member



0886111-866588



In-Club Coupon • Coupon supported by manufacturer funding. Coupon valid at all BJ's Wholesale Club locations. Required purchase within effective dates necessary. Limit one offer per coupon. Limit one per Member. May not be combined with other BJ's coupons. Void if altered, reproduced.

8
RV0300

SAVE \$100

Automatically Deducted at Register

VALID ONLY AT BJ'S
3/30/17 - 4/17/17

Any ONE (1) Wellsley Farms Extra Fancy Mixed Nuts
35 oz.



SAVE \$300

VALID ONLY AT BJ'S
3/30/17 - 4/17/17

Any ONE (1) Puffs Plus Lotion OR Ultra Soft and Strong Facial Tissues



Print Templates

SAVE \$250 Any ONE (1) Egghead Best Milk 1/2 Gallon, 6.75 qt. Pages 11, 12	SAVE \$200 Any ONE (1) The KitchenAid Mixer 5 Qt. Stand Mixer, 5 Speed, 350 W. Pages 11, 12	SAVE \$250 Any ONE (1) The KitchenAid Mixer 5 Qt. Stand Mixer, 5 Speed, 350 W. Pages 11, 12	SAVE \$200 Any ONE (1) The KitchenAid Mixer 5 Qt. Stand Mixer, 5 Speed, 350 W. Pages 11, 12
SAVE \$300 Any ONE (1) Maxwell House® Cold Grande Single-Serve Coffee Item	SAVE \$100 Any ONE (1) Maxwell House® Cold Grande Single-Serve Coffee Item	SAVE \$150 Any ONE (1) Maxwell House® Cold Grande Single-Serve Coffee Item	SAVE \$500 Any ONE (1) Maxwell House® Cold Grande Single-Serve Coffee Item
SAVE \$200 Any ONE (1) Land O'Lakes Salted OR Unsalted Butter 1 lb.	SAVE \$200 Any ONE (1) Land O'Lakes Salted OR Unsalted Butter 1 lb.	SAVE \$150 Any ONE (1) Land O'Lakes Salted OR Unsalted Butter 1 lb.	SAVE \$400 Any ONE (1) Philadelphia Cream Cheese, 8 oz. (16 ct.)
<p>A touch of spring.</p> <p>Cut Tulips and 5" Anthuriums Multiple Item is \$7.99 - \$8.99</p> <p>10" Tulips, 10" Hydr and 10" Easter Lilies Multiple Item is \$14.99 - \$19.99</p>			
SAVE \$300 Any ONE (1) Scott's® Toilet Paper, 24 pk., 100 ct.	SAVE \$300 Any ONE (1) Bounty® Enormous Roll Paper Towels	SAVE \$300 Any ONE (1) Charmin® Roll Bath Tissues	SAVE \$300 Any ONE (1) Charmin® Roll Bath Tissues

Event Types in SAP



- Big Brand Mailer
- Front of Club
- Demos
- Displays
- Unadvertised Events

Event Implementation

Multiple Event Types

- ⇒ Print Vehicle Events
- ⇒ Unadvertised Events

Multiple Approval Levels – View and evaluate the financials of events/offers

- ⇒ Use Open Partitions to simulate the highest level merchandising approval process
- ⇒ Use Area Definitions to simulate the lower level merchandising approval process

Print Templates

- ⇒ Block Templates for Offers for both print and in-club signage
- ⇒ Area Templates for Pages

Desktop Publishing Integration

- ⇒ Standard Output used for external integration
- ⇒ Custom Pagination Report for Marketing team
- ⇒ Image Integration with Adobe AEM

Print Templates

Block Templates

- ❑ Used for printed advertisements and in-club signage
- ❑ Only one template can be assigned per offer
- ❑ Template contains boxes which are defined with data contained in the offer
- ❑ Must be careful about the box numbering as PMR does not allow a “description” for a box in the extract
- ❑ Low resolution images can be added as attributes and the image URL is provided in the extract
- ❑ Content templates are not used at BJ's

The screenshot displays the ASUG Offer Management interface. At the top, the 'Offer ID' is 1000581. The offer name is 'Transition State 2 ATC - Quaker'. The start date is 18/05/04/2018, 00:00:00, and the end date is 18/05/04/2018, 23:59:59. The calculated unit projection is 500, and the calculated margin projection is 8.50. The sales organization is 1000, and the distribution channel is 10. The currency is USD, and the tactic type is 'Tactic'. The print name is 'BBM', and the reference event ID is provided.


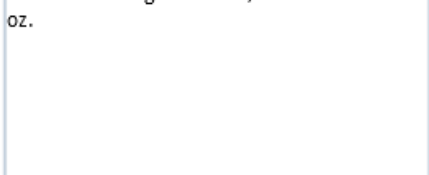

The interface is divided into several sections:

- Properties, Versions, Attributes, Financials, Offer Preview, Vendor Fund:** A navigation bar at the top of the main content area.
- Selected Offer Version:** MULTI-CHANNEL LOC HIERARCHY
- Description of Selected Offer Version:** Transition State 2 ATC - Quaker
- Templates:** A dropdown menu showing the selected template.
- Assign Block Template:** A section where the template name is 'Paper Coupon - No Math' and the template ID is '400000007'.
- Assign Content Template:** A section with fields for 'Content Template Type', 'Content Template Category' (set to 'All'), and 'Template Name'. There are 'Assign' and 'Remove' buttons.
- Current Assignment:** A section showing 'Box ID 9', 'Attribute Type Free Text', 'Attribute Open', 'Language', 'Allow Override', 'Enforce Style', 'Realization Level', 'Enforce Realization', 'Block Group Box ID: 0', and 'Attribute Value'.
- Formatting and Content:** A rich text editor with a toolbar (bold, italic, underline, strikethrough, font size, font face) and a preview area. The preview area shows a coupon with a price of '\$2.25', an expiration date of 'May 4, 2018', and the text 'Transition State 2 ATC - Wellsley Farms'. There is a 'WELLSLEY FARMS' logo and a 'Not Available in All Clubs' message.

Print Templates

Area Templates

- Used for printed advertisements
- Block Templates are assigned to specific page layouts (Areas)
- Provides a visual of the page including chosen images
- Works very well for ads that are consistent in structure
- Pagination is made more difficult if using print coupons with barcodes
- Custom report was created for BJ's marketing team to be able to apply block templates due to the fluid nature of our print books

\$7.00	\$3.00	\$2.00
March 15 2018 April 11 2018	March 15 2018 April 4, 2018	March 15 2018 April 4, 2018
Green Mountain Coffee K-Cup Pods	Ocean Spray Craisins, 48 oz., OR Reduced Sugar Craisins, 43 oz.	(1) Land O'Lakes Salted OR Unsalted Butter Quarters, 3 pk./1 lb.
		
Product ID Product ID Product ID Product ID	11103 27120 Product ID Product ID	24559 24559

Offer Types in SAP

8 RV0300

SAVE \$3⁰⁰

VALID ONLY AT BJ's 3/3/16 – 3/16/16

LOCATED IN THE FREEZER AISLE
Wellsley Farms Wild Caught Ahi Tuna Steaks, 2 lb.



In-Club Coupon • Coupon supported by manufacturer funding. Required purchase necessary. Limit one offer per coupon. One coupon per Member. Only original coupons will be accepted. Duplicate use of coupon is prohibited. Not valid on purchases made before or after the effective dates stated on the coupon. Coupon valid at all BJ's Wholesale Club locations. Coupon may not be combined with any other offer or coupon. No cash redemption value. Nontransferable. State and local laws may require sales tax to be charged on BJ's pre-discounted price if the product is subject to sales tax. Selection and pricing may vary. **Items available only while supplies last.** Void where prohibited by law. **Item #032726**

0888670-174130



CLIPLESS COUPON
 Automatically Deducted at Register

SAVE \$3⁰⁰

VALID ONLY AT BJ's
 3/3/16 – 3/16/16

Sony DVD-R OR DVD+R, 100 pk.



BJ's In-Club Price	\$19.99
Off at Register	-3.00
YOUR PRICE	\$16.99

- Paper Coupons
- Clipless Coupons
- Demos
- Displays
- Free Shipping
- Instant Savings
- Everyday Savings

Offer Implementation

Promotion Type Definition drives functional and redemption definitions

- ⇒ Promotion Type defines redemption method – paper coupon, clipless coupon, digital coupon
- ⇒ Promotion Type defines usage within POS – award at product scan or award at total time (offer requires total basket evaluation for award)
- ⇒ February 2019 rolled out full promotional capability to Club POS system with Toshiba TCxVector integration

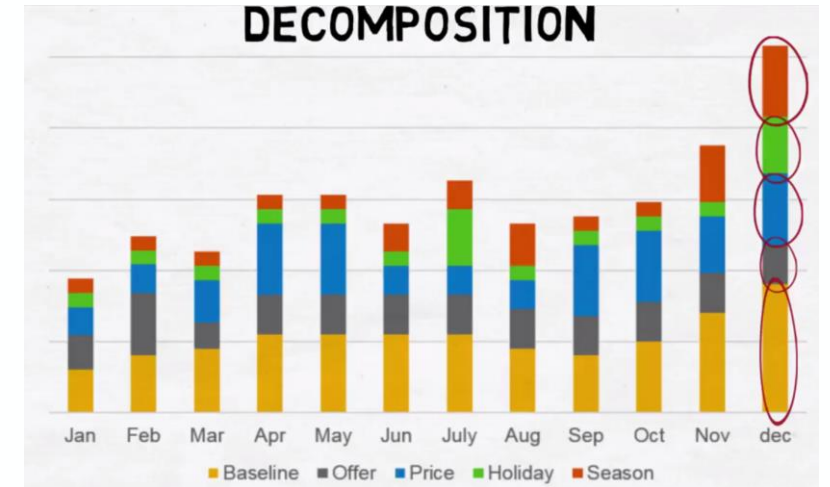
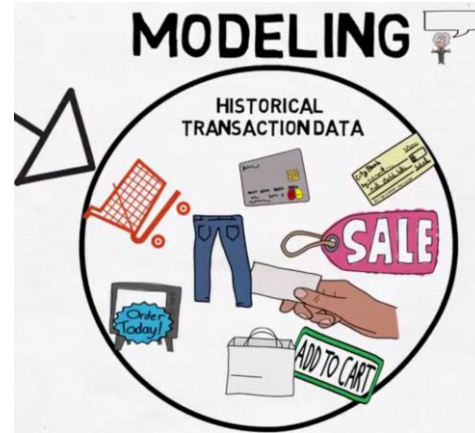
Standard PMR and ECC promotion definitions used for external integration

- ⇒ Using standard offer transfer to create standard promotional constructs in ECC with minimal enhancements (customer type, promotion description)

Integration with 3rd party Vistex tool for promotional vendor funding

- ⇒ Custom integration with Vistex tool (SAP standard integration is with Condition Contracts)

CAR – Unified Demand Forecasting

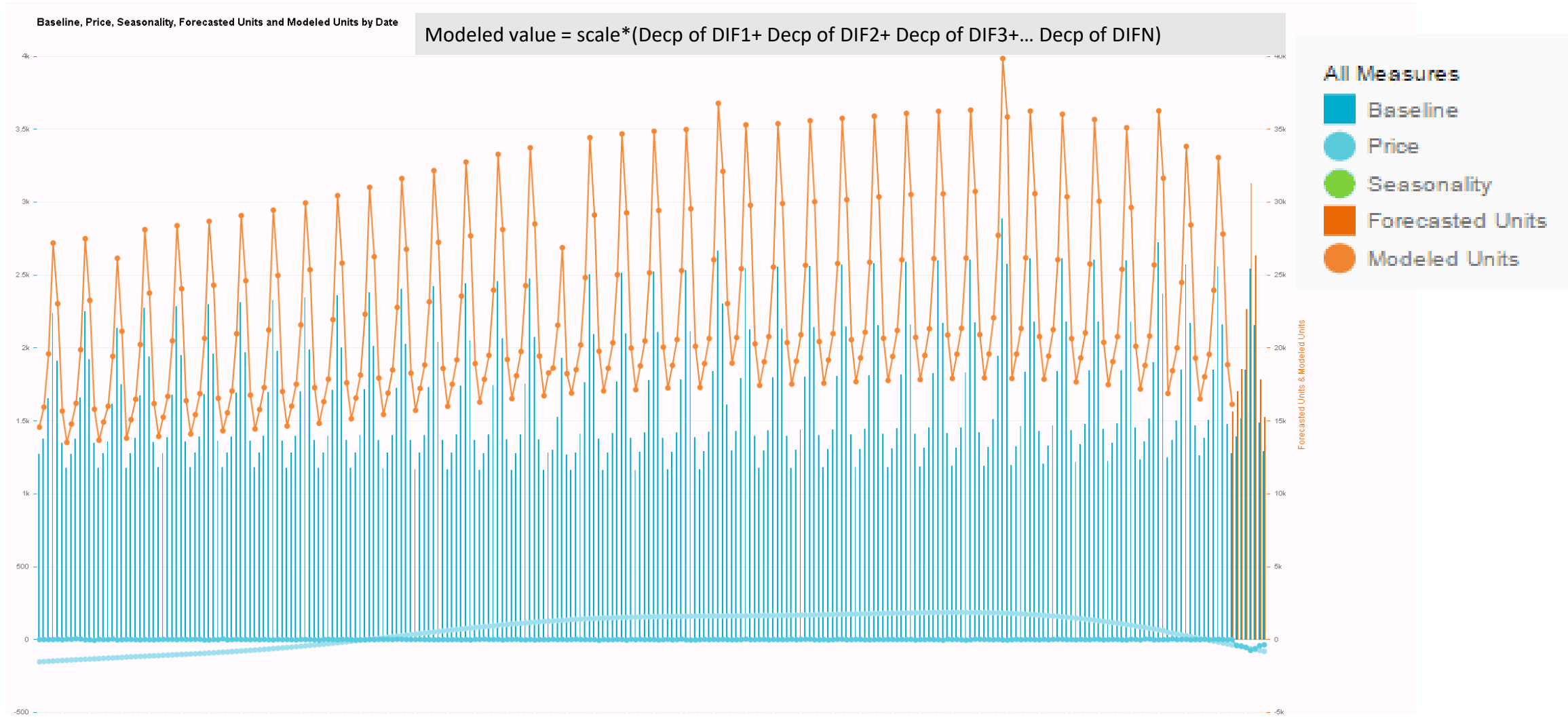


Others

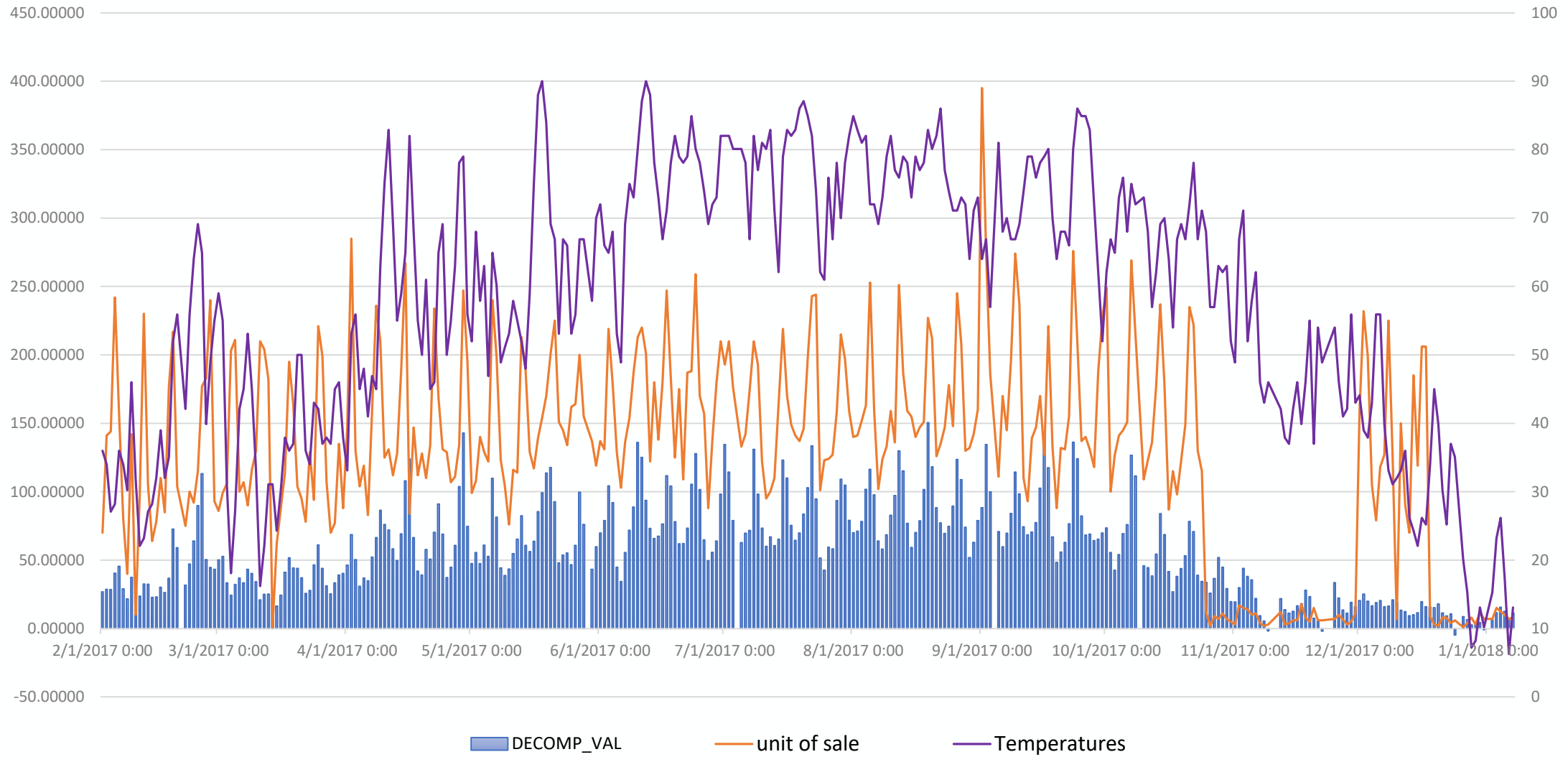
- ✓ Temperature
- ✓ Snow Days
- ✓ Snow Day -1

TAKING THE HISTORICAL DEMAND DATA PROVIDED AS INPUT, UDF TRIES TO EXPLAIN THE HISTORICAL SALES AND THE IMPACT THAT EACH DEMAND INFLUENCING FACTOR HAD ON CONSUMER DEMAND IN THE PAST.

Decomposition based on DIFs for Spring Water using LUMIRA



Influence of Temperature (user DIF) on Spring Water



Opportunity

- ❑ Set up forecasting engine and enable PMR to forecast Sales Units for each offer

- ❑ While creating an offer, System does forecast and decompose as follows
 - ✓ Base Units
 - ✓ Seasonality
 - ✓ Holidays
 - ✓ Promotional Lift
 - ✓ Price
 - ✓ Tactic Type

- ❑ Forecast allocation by Club

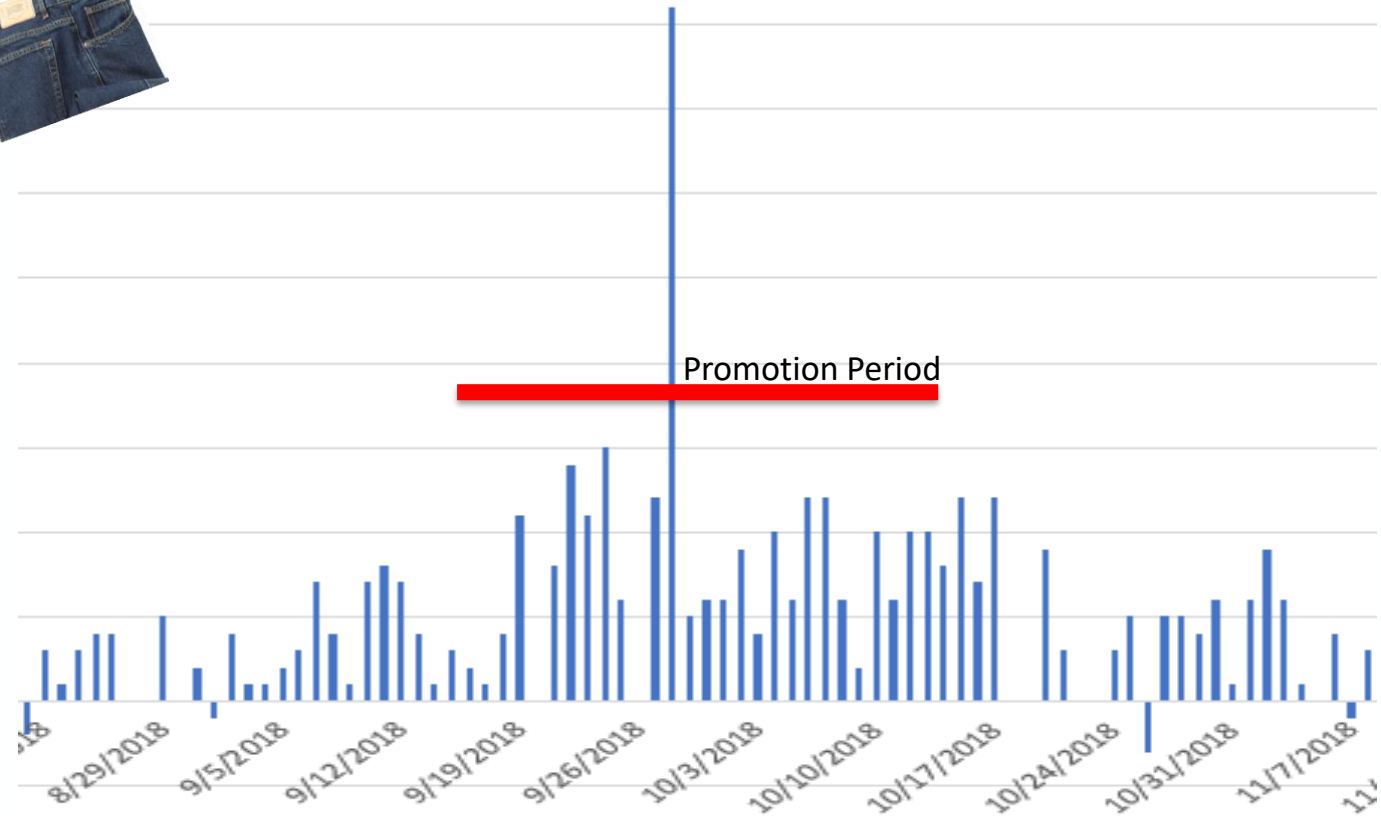
Understanding the History

BERKLEY JENSEN DENIM JEANS

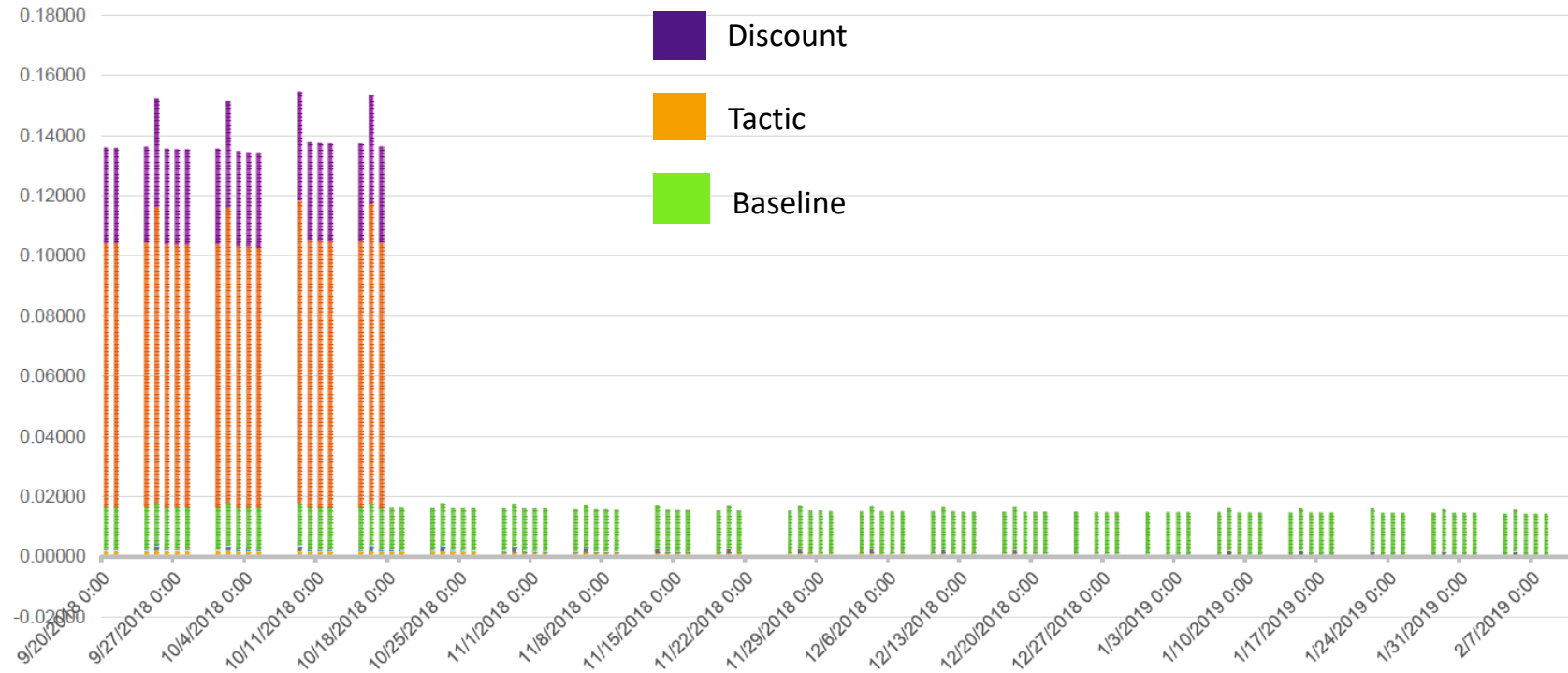
- Articles
10062001 to 10062082
(All Sizes of Dark stone, Stone Wash)
Increase in sales revenue during Sep and October due to a promotion

Sep 20th to Oct 17th

- Promotion Name: **BBM_BUY1_BJDENIM_SAVE\$2**
- Promotion Type: **Clipless**
- Tactic: **BBM**
- Clubs 101 (**Dedham**)



Model Decomposition



Forecast Allocation by Article/Club

Offer ID 4000581 **Offer Name** FY19_BBM_BUY1_BJBOTTOMS_SAVE\$2 **Start (CW, Date, Time)** 07, 02/18/2019, 00:00:00
Calculated Sales Projection 929.95 **Calculated Profit Projection** 110.91 **Calculated Margin** 11.94
Distribution Channel 10 **Currency** USD **Tactic Type** : Tactic **Print** :BBM ;
Last Changed By SAPMAX02 **Last Changed On** 02/15/2019 15:22:29

Properties **Versions** Attributes Financials Offer Preview Vendor Fund

Offer Version Name: FY19_BBM_BUY1_BJBOTTOMS_SAVE\$2 Enforce Multiple: Promotion Type:
Offer Version Description: FY19_BBM_BUY1_BJBOTTOMS_SAVE\$2 Transfer Date:
Offer Version ID: 4000581 ERP Promotion ID:
 Packaged Offer Discount Value: 0.00 Offer Version Dates:

Location Hierarchy

Location	Offer Version Count
TEST-0075	1
0101	
0138	

Term Construction

View: System Forecast Append Term Insert Term Delete Term / Incentive

Operator	Term Type	Quantity	Product Dimension Type	Product Dimension	Discount Type	Promoted UoM	System Forecast	Discount Value
	B	1	Prod...	BERKLEY	Di...	EA	78	2.00
	B	1	Prod...	BERKLEY	Di...	EA	37	
	B	1	Prod...	BERKLEY	Di...	EA	41	

Update User Projection Based on System Forecast

Decomposition	System Fo...	User...
Baseline Units	64	64
Base Demand Units	65	65
Seasonality Units	0	0
Holiday Units	0	0
Other	0	0
User DIF	0	0
Promotional Lift	14	14
Price Units	2	2
Tactic Units	7	7
Offer Type Units	4	4
Reward Incentives	0	0
Cannibalization	0	0
Total	78	78

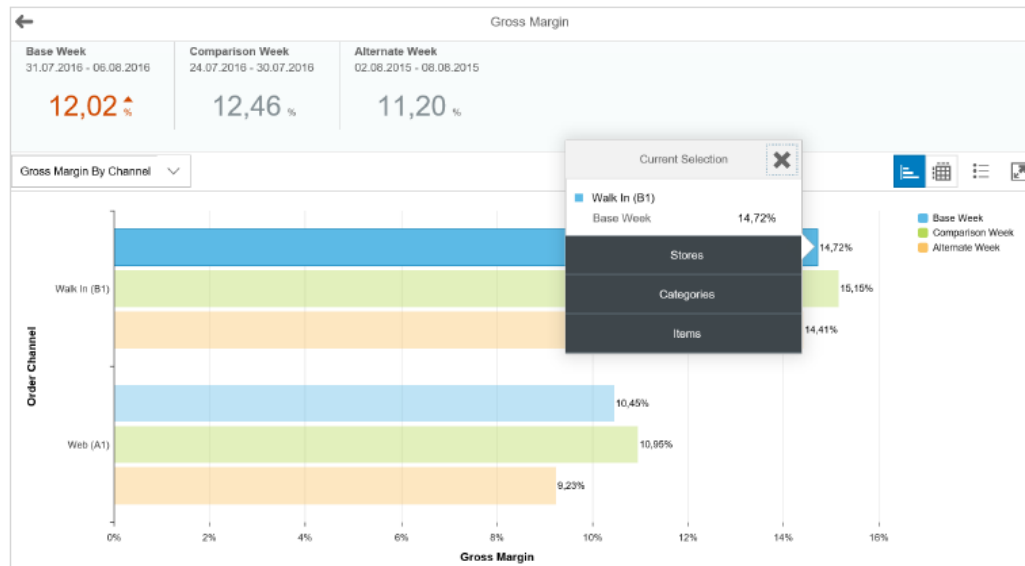
101 (Dedham)
138 (Brooklyn)

CAR2.0: Value for the BJ's Team

RDS Out-of-the-box Capabilities

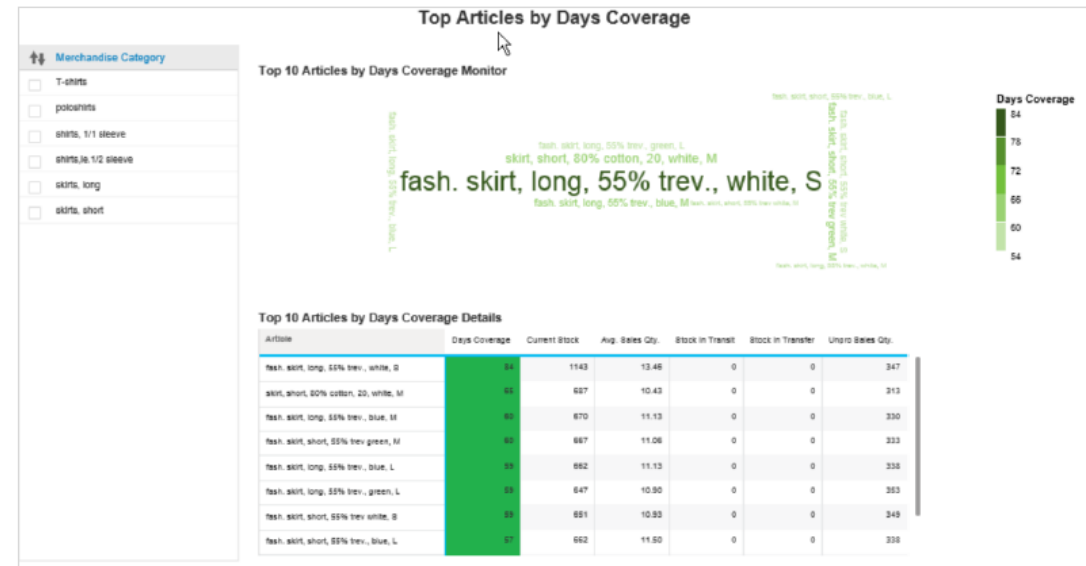
Merchants get

- “Drill down capability for Sales and Margin” analysis with exception-indicator available on Fiori-tile
- “Slice and dice capabilities for Sales and Inventory” analysis to identify root causes (with Lumira)
- Better preparation for vendor negotiations / meetings



Supply Chain planners get

- “Real-time visibility” of inventory and sales data, including current sales across stores (Lumira, Fiori)
- “Intra-day real-time” sales and inventory levels (Lumira, Fiori)
- “Promotion related sales” (based on POS feed on promotion) (Lumira)



CAR2.0: RDS Out-of-the-box Capabilities**

FIORI Apps

- Net Sales
- Gross Margin
- Number of transactions
- Average Transaction Value
- Items per transaction

Lumira Reports

- POS Sales Reports (Promotion reports based on promotion information contained in TLOGs)
 - Top / Low Performing Articles
 - POS Returns Report
 - POS Sales by Stores
 - POS Sales and Promotion by day
 - POS Sales and Promotions Overview by hour (OSA needs to be setup)
 - POS Promotions Analysis
 - POS Hourly Promotion Details
 - Traffic Analysis
 - POS Details Report

Lumira reports (continued)

- Regional Manager
 - Net Sales by Region
 - Stores Ranked by Net Sales and Gross Margin
 - Top 5 merchandise categories by net sales and gross margin
 - Net sales by Channel
- Gross Margin
 - Top net sales with gross margin %
 - Gross margin details report
- Inventory Visibility Report by Store
 - Bottom Articles by Days Coverage
 - Top Articles by Days Coverage
 - Inventory Totals Details

**** Requires configuration, data loading and setup;
see project activities**

Minimum requirements for CARAB

These the minimum requires software version for CARAB 2.0

- SAP CARAB 2.0 SP01
- SAP NetWeaver 7.5 SPS06
- SAP HANA
- SAP SLT 2.0 SP12
- SAP HANA Live for ERP (HBA SAP ECC) 1.0 SP10
- SAP FIORI For CARAB –
- SAP Lumira

Smart Business Apps

- SAP Smart Business is a framework for visualizing analytic content in the form of charts and tiles.
- KPIs can be visualized as SAP Fiori applications without writing any code. A Smart Business application is full-screen dashboard application that can visualize the KPI data in different perspectives along with associated KPI's.

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Presentation Materials

Access the slides from 2019 ASUG Annual Conference here:

<http://info.asug.com/2019-ac-slides>

Q&A

For questions after this session, contact us at [email] and scourtney@bjs.com.

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