



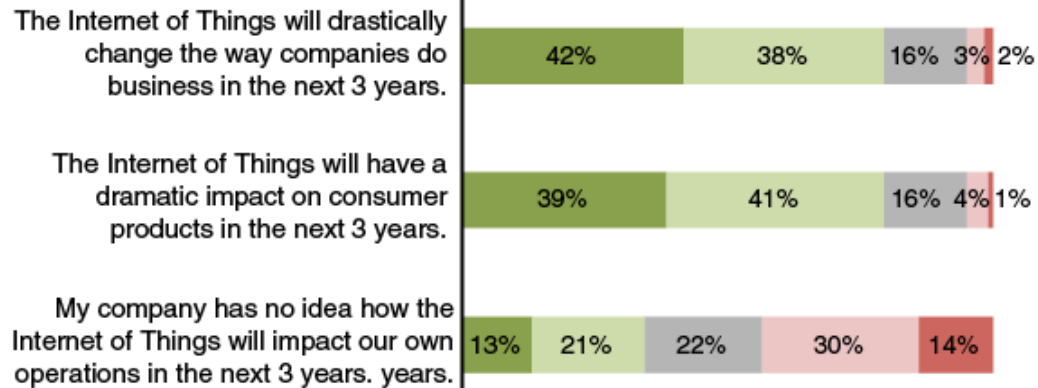
# Harness the New Consumer & Retail Reality through Connected Trade Assets

**SAP**

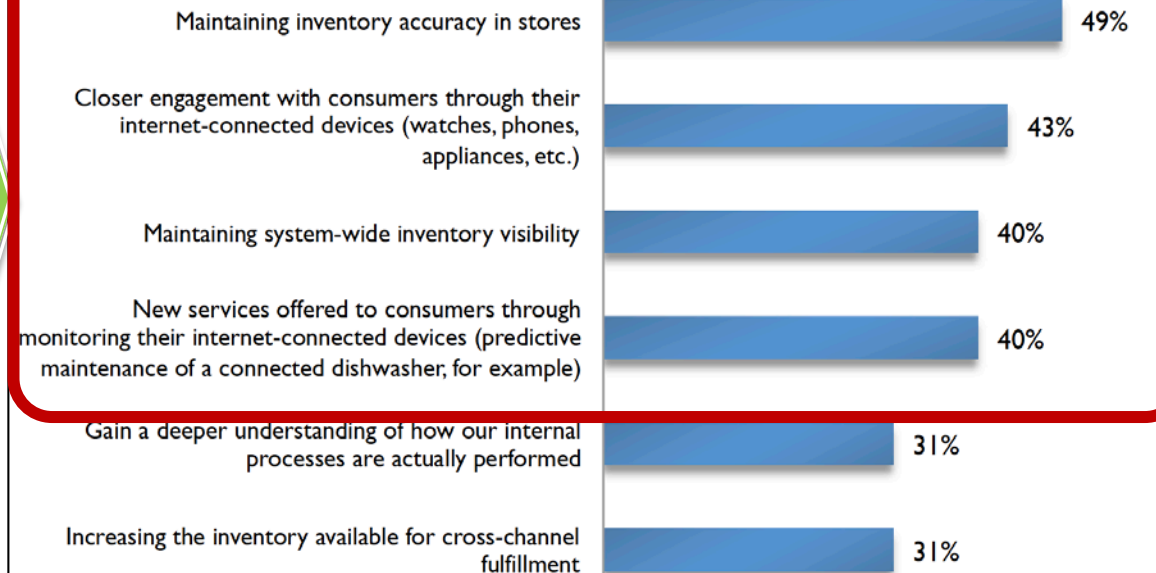
# Market Perspective: 2015 Analyst Survey says IoT will transform Retail...

## IoT Perceptions In Retail

■ Strongly Agree 
 ■ Agree 
 ■ Neutral 
 ■ Disagree 
 ■ Strongly Disagree



## Top Scenarios for IoT in CPG, Retail, Wholesale



Source: RSR IoT in Retail Survey August 2015  
 138 Respondents in August 2015, between 50M and 5B USD in revenue.

**Retail Systems Research (RSR)** is the only research company run by retailers for the retail industry. RSR provides insight into business and technology challenges facing the extended retail industry, and thought leadership and advice on navigating these challenges for specific companies and the industry at large.

# SAP's Vision for the Digital Store

Connecting Commerce where it touches the consumer

## Intelligent Marketing

- 1:1 customer targeting
- Detailed market segmentation
- Portfolio optimization

## Optimized Operation

- Fleet Analytics
- Demand based pricing
- Predictive Planogram Optimization
- Forward-looking analytics

## Supply Chain Management

- Real Time Inventory
- Dynamic truck routing
- Customized product mix by location
- Machine-initiated inventory replenishment



## Customer Experience

- Cashless payments
- Viral features enable growth
- Real-time behavior capture
- Audience Analytics



## Asset Management

- Event-driven maintenance
- Remote control and campaign initiation
- Real-time analytics at single asset level

# ...and what it means to You



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Creating New  
Consumers, New  
Markets



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Personalized and  
Relevant Products



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Accelerating the  
pace of Innovation



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Resilient and  
flexible value  
chains



---

Efficient Servicing  
of Point of Sale  
Locations

**What are the winners doing differently?**

**How will digitization accelerate competitive advantage?**

# Hyper Connectivity is here



**People**



**Communities**



**Sensors**

# New Digital Business Opportunities



**Consumer Moments  
(B2C)**



**Customer Moments  
(B2B)**



**Market Moments  
(B2B2C)**

# What efficiencies can Digital Store address?



**Consumer  
profiling**



**Targeted marketing  
using sensors**



**Product  
identification  
technology**



**Effective price  
tool for customers**



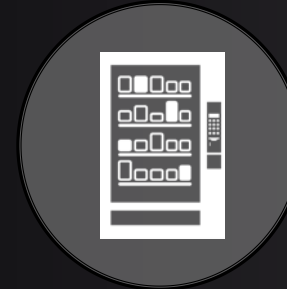
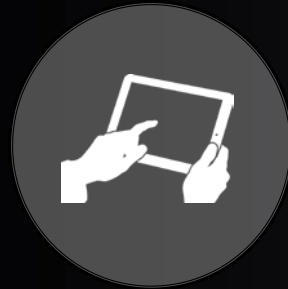
**Advanced  
trendspotting**

# Scope

MORE TARGETED  
COMMUNICATION?

LEVERAGING  
“SMART” IN RETAIL

PREVENT OUT OF  
STOCK AND BRING  
EFFICIENCIES IN  
DISTRIBUTION



HOW TO  
INTERACT WITH  
CONSUMER &  
RETAILERS?

HOW CAN  
DYNAMIC BRAND  
STAGING AND  
PRICING IMPACT  
OUR BUSINESS?

HOW CAN  
VENDING IMPACT  
YOUR CURRENT  
BUSINESS  
MODEL?

...BEST  
PRACTICE



# Scope

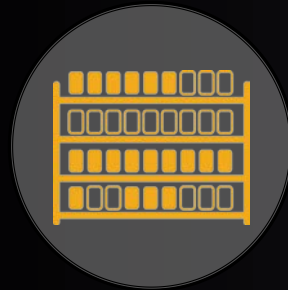
AGE AND GENDER  
DETECTION

NFC TAGS

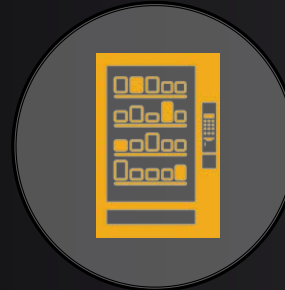
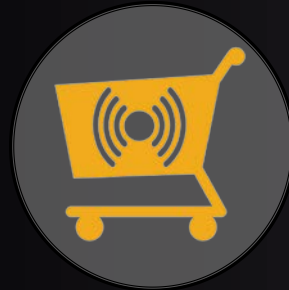
ELECTRONIC  
PUSHERS



PROXIMITY  
MARKETING



VIRTUAL  
PLANOGRAM



INTERACTIVE  
VENDING



...BEST  
PRACTICE

# Consumer Journey and Operational Excellence

## PRE-PURCHASE



PROXIMITY  
MARKETING

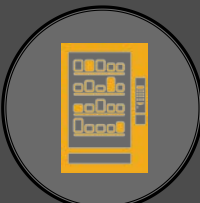


AGE AND GENDER  
DETECTION

## POS



VIRTUAL PLANOGRAM



INTERACTIVE VENDING



DISTRIBUTION



OOS



DISTRIBUTION

## POST-PURCHASE



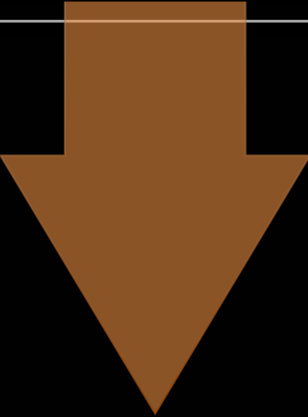
MOBILE  
PAYMENT



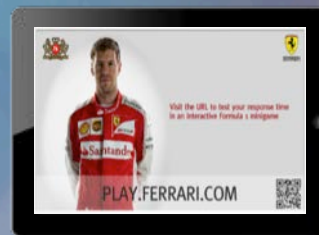
NFC TAGS



NFC TAGS



# IoT Enabled Digital Transformation Platform



**IOT-enabled E-Commerce, Digital Economy Backbone.**



# DigiStore Detailed Vision



## Vending Machine:

Vending Machine with different Planograms based on time of day Morning: Premium Brands, Lunch, other brands

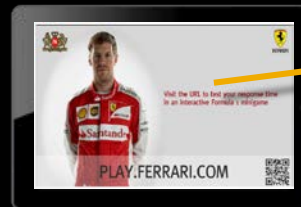


## Audience Detection:

Camera will be mounted on top of LCD Displays.  
Camera will capture Audience gender, age and trigger different mood videos on LCD screens.

## Smart Shelf:

Trays will be equipped with sensors and report product removal and remaining quantity to backend

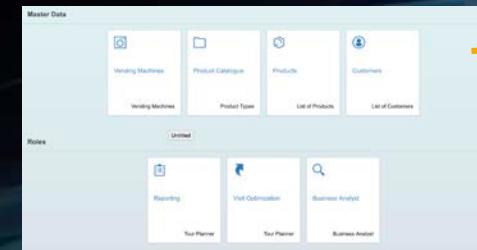


## Consumer Display (PC with Display, Identical to Game on Vending Machine scenario)

1. Scan QR code
2. Accept T&C
3. Play Video, Game, Video (Win, lose)
4. Capture consumer details to receive voucher

## POS:

- ✓ Real time Inventory
- ✓ POS with EAN bar code scan and payment transaction
- ✓ POS will display Quantity in Shelf and machine as well as reorder button on low stock



**CTA Backend ties everything together: Reporting, Alerts, Triggers, Optimization, OP Integration**

# DigiStore Detailed Capabilities

## Vending Machine:

Vending Machine with different Planograms based on time of day  
Morning: Premium Brands, Lunch, other brands



## Audience Detection:

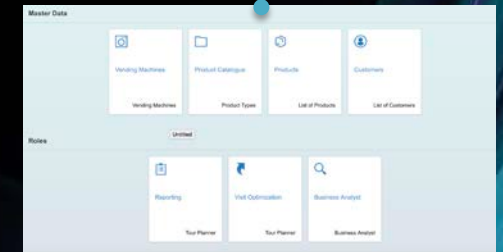
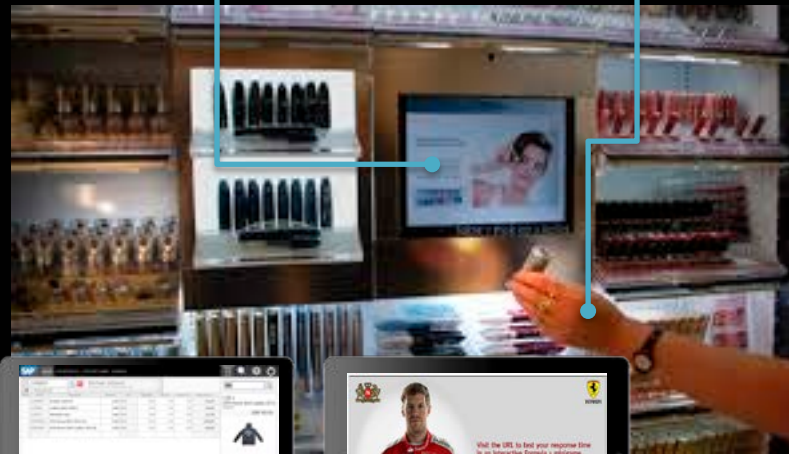
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# Connected Coffee



## Scenarios:

- ✓ Detect patterns in machine and historic data (service tickets, counters, error messages) and gain insight to further enhance maintenance intervals, parts used, etc.
- ✓ Role Based internal and external Dashboards that provide full and real time insight into the machine fleet both on operational and transactional data.
- ✓ Monitor material inventory and trigger daily visit and routing optimization to only visit machines that are low on stock in the shortest route.
- ✓ Enable direct consumer engagement on next-gen Display machines

# Connected Trade Assets – Examples

The logo for WeissBeerger, featuring the brand name in a stylized, golden, cursive font.

WeissBeerger applies analytics to the beer tap with **providing insight into consumption patterns.**



The desire to **gain a deeper understanding** of its customers, and manage complex buying processes triggered a transformation at Nespresso.



Tennant used CTA concepts to move from a sales to a service based business model.

# End to End Architecture

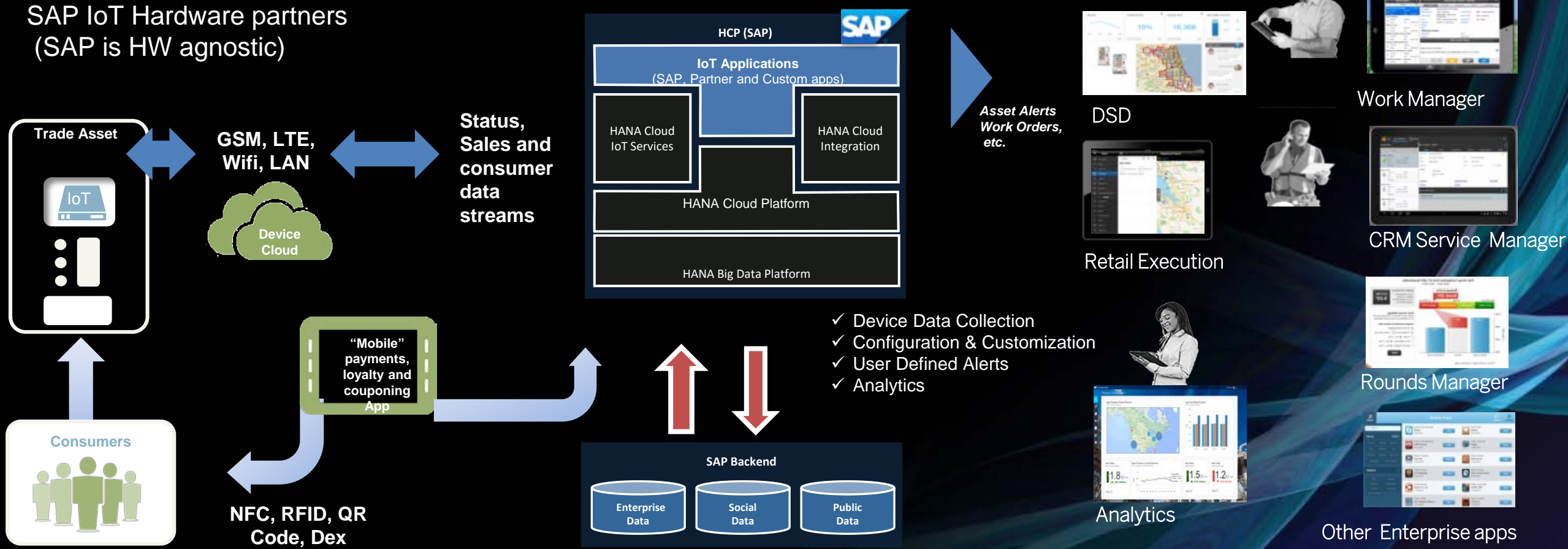
- ✓ Monitor
- ✓ Connect

- ✓ Collect
- ✓ Consolidate
- ✓ Automate

- ✓ Visualize
- ✓ Analyze
- ✓ Optimize

- ✓ Execute
- ✓ Plan
- ✓ Transform

SAP IoT Hardware partners  
(SAP is HW agnostic)





A person wearing a bright yellow jacket and dark shorts stands on a dark, rocky outcrop. They are looking out over a wide expanse of blue water towards a distant, hazy coastline. The sky is filled with soft, wispy clouds, illuminated by the warm light of a sunset or sunrise, with colors ranging from pale yellow to deep blue. The foreground shows some green grass and rocks.

# *Demo*



Master Data



Vending Machines

Vending Machines



Product Catalogue

Product Types



Products

List of Products



Customers

List of Customers

Roles



Reporting

Reports



Visit Optimization

Tour Planner



Business Analyst

Business Analyst

← List

Search 🔍

- Accenture
- Intel
- Philip Morris
- Philip Morris International
- SAP**
- Subsume
- ToDelete\_RegressionCustomer



# SAP



Information



Machines

## Machines

Reload

Machine ID	Model	Description	
0004A39F854F	POS-T ePusher	Smart Shelf	>
234NU35LR	VE Machine	CeBit: CRM Truck	>
36J6E7E72	AMS VISI COMBO39 5WIDE	SAP Labs Latin America	>
79B4WTA7M	VE Machine	CeBit: SAP Booth	>
IoTHouse-SVM1		Snack Vending Machine	>
JAYGTXN8H	VE Machine	SVM SAP Toronto	>
KFJQAUF6RA	VE Machine	SAP México Machine	>
L37VA8XYK	Simulator	Bratter VM	>

Search

- Snack Vending Machine
- JAYGTXN8H  
SVM SAP Toronto
- KFJQAUF6RA  
SAP México Machine
- KJQAUF6RA  
SAP Mexico
- L37VA8XYK  
Bratter VM
- P9ENSX4U4  
ToDelete\_RegressionBox
- Q85NLHCUR  
FRA 1
- S6A7UPAHQ**  
Bratter VM2
- S77PZPUYP  
NSQ Vending Machines
- SCHAPAD7J  
NSQ Smart Shelf Simulator
- SQ6NS4WGP  
TS Smart Shelf

## S6A7UPAHQ

Information

**Transactions**

Inventory

Events

Sales Orders

Svc. Tickets

### Vending Transactions

Transaction Date	Product ID	Product Name	Quantity	Currency	Price	Discount
Jul 8, 2016, 3:28:47 AM	1011727	Pretzels	1	USD	1.99	0
Jun 8, 2016, 8:14:36 PM	1010722	Salty	1	USD	99	0
Jun 8, 2016, 8:14:08 PM	1010722	Salty	1	USD	99	0
Jun 1, 2016, 9:24:39 PM	1011727	Mock	1	USD	1.99	0
Jun 1, 2016, 8:53:21 PM	1010722	Mock	1	USD	99	0
Jun 1, 2016, 8:43:18 PM	1010722	Mock	1	USD	99	0
Jun 1, 2016, 8:43:18 PM	1010722	Mock	1	USD	99	0
Jun 1, 2016, 8:43:02 PM	1010722	Mock	1	USD	99	0

**Product Info**

**Pretzels**

Pretzels

Product Catalogue:  
Salty

SKU:  
123456

Reload

Periodic Sales

Sales Period: 2016 year

Inventory Status by Network

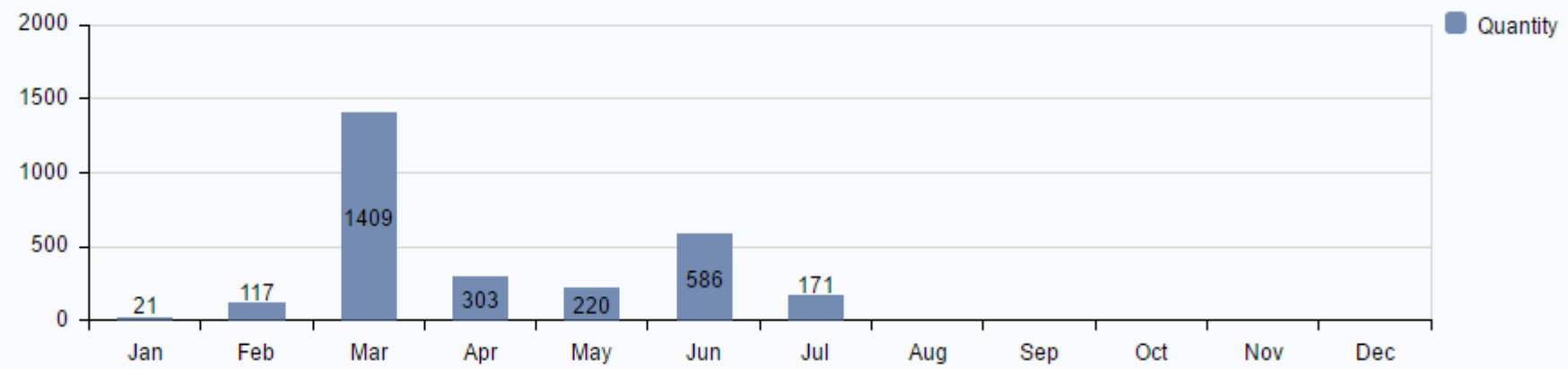
Inventory Status by Machine

Sales Overview Week over Week

Sales Detailed Analysis

Machine ID	Customer Na...	SKU	Product Name	Price	Quantity	Revenue	Days w/o Vend
234NU35LR	SAP		Coca Cola 500ml	1.5 EUR	16	22.56 USD	35
234NU35LR	SAP		Snickers 58g	0.8 EUR	28	21.05 USD	6
234NU35LR	SAP	1001825	Coca-Cola 12oz	2 EUR	23	43.24 USD	13
234NU35LR	SAP	1009581	SAP Medium Black T-Shirt	15 EUR	17	239.7 USD	13
234NU35LR	SAP	4311501370216	Orange Orchard	4 EUR	9	33.84 USD	31

Product Vended Month Over Month



Revenue Vended Month Over Month

Report List
Periodic Sales
Inventory Status by Network
Inventory Status by Machine
Sales Overview Week over Week
Sales Detailed Analysis

## Inventory Status by Machine



Customer: Philip Morris International

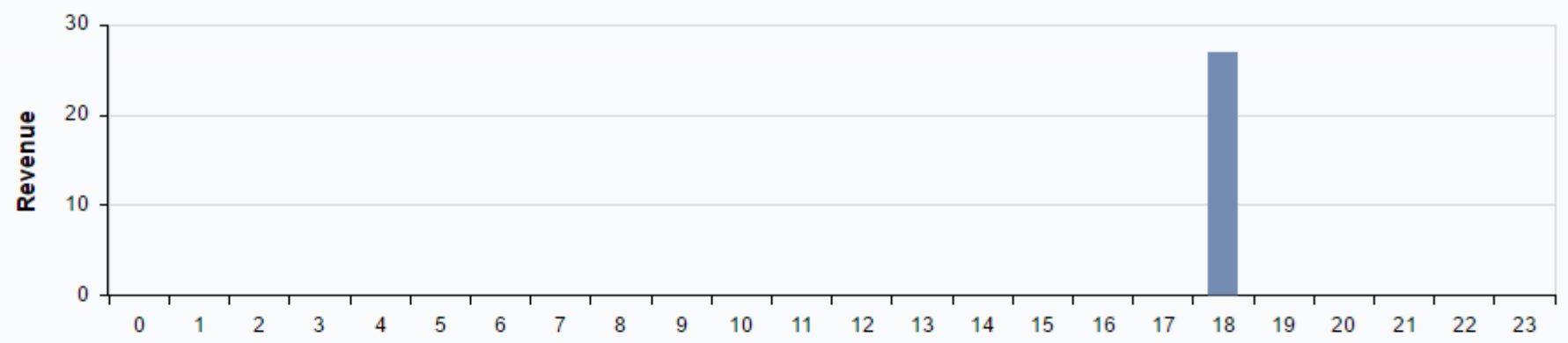
Vending Machine: SQ6NS4WGP

### Stock on Hand by Vending Machine



### Sales by Time of Day and Vending Machine

Date: July 13, 2016





Periodic Sales

Customer:

SAP



Sales Period:

2016



year

Inventory Status by Network

Inventory Status by Machine

Sales Overview Week over Week

Sales Detailed Analysis

Product Vended in Past Week

**18**

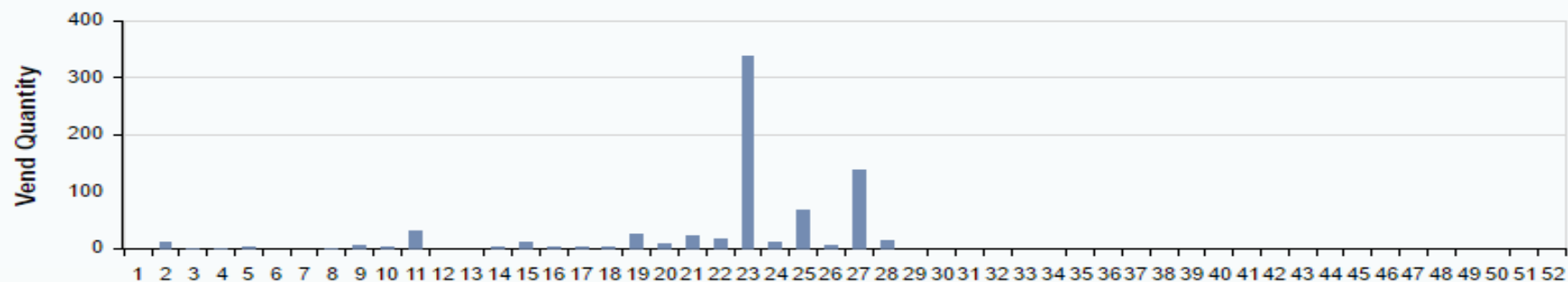
07-Jul-16 to 14-Jul-16

Revenue in Past Week

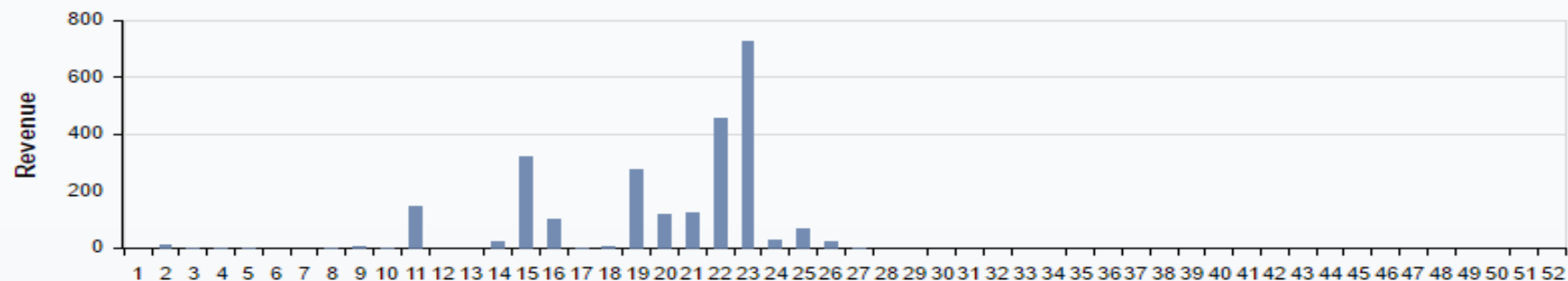
**3.732** USD

07-Jul-16 to 14-Jul-16

Product Vended Week over Week



Revenue Week over Week





Periodic Sales

Customer: Philip Morris International

Sales Period: 2016 year

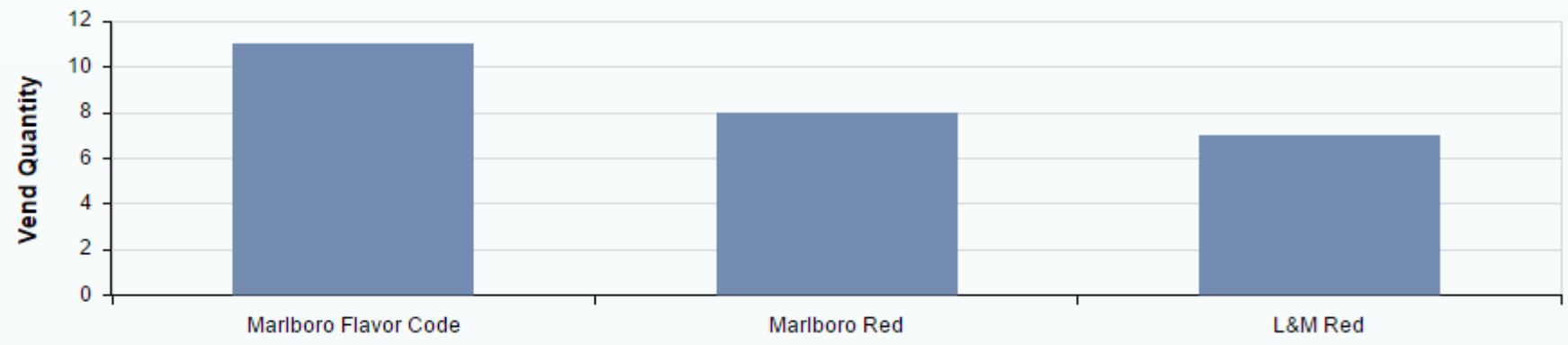
Inventory Status by Network

Top 3 Products Sold

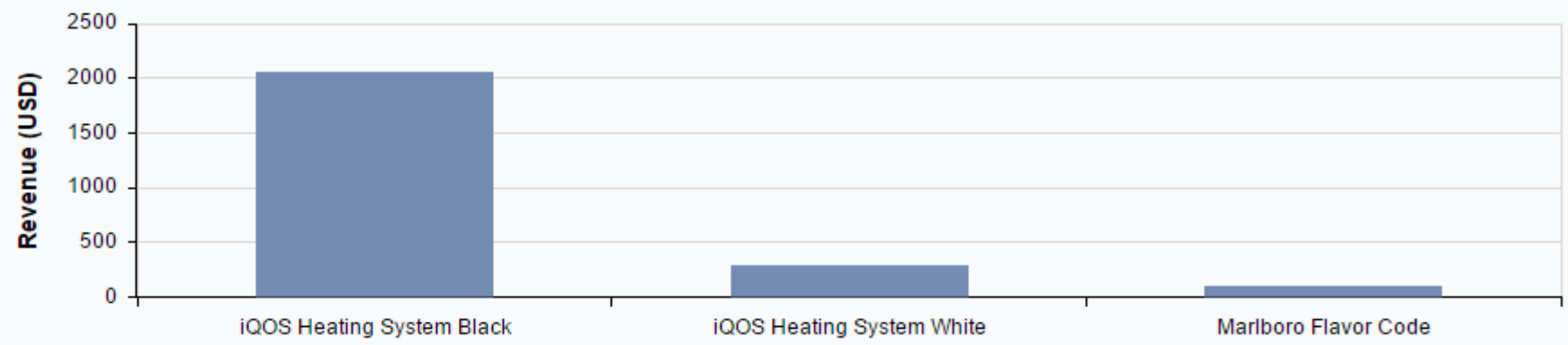
Inventory Status by Machine

Sales Overview Week over Week

Sales Detailed Analysis







Top 3 Revenue Earners





[Route Map](#)[Machine Details](#)[Build Route](#)

Sequence	Machine ID	External ID	Address	Driving Time	Waiting Duration	Visit Required
<input checked="" type="radio"/> 1	36J6E7E72	IOT_SVM005	188 Avenida SAP, São Leopoldo	0	0	
<input type="radio"/> 2	INTEL01	INTEL01	2 Viale Severino Boezio, Milano	0	0	
<input type="radio"/> 3	INTEL02	INTEL02	15 Via Lazzaretto, Milano	0	0	
<input type="radio"/> 4	INTEL03	INTEL03	9 Via della Moscova, Milano	0	0	

[Visit Requirements](#)

Slot Position	Selection Code	Product ID	Current Qty	Required Qty
3:0	130	1006310	3	15
3:1	131	1006310	4	14
3:2	132	1006312	3	15
3:3	133	1006312	4	14
4:2	142	1006284	1	5

# Digital Economy



## ▪ Optimize Operations

- Real-time data on all vending machines
- Automatic service ticket creation and maintenance
- Real-time inventory & streamlined replenishment



## ▪ Real-Time Analytics

- Up to date revenue and location analysis
- Interpret and predict purchase patterns
- Understand sales down to the individual consumer level



## ▪ Expand Market Reach & Channel Utilization

- Create new revenue streams
- Reach new market segments and locations faster



## ▪ A Direct Channel to Consumers

- Create a superior mobile experience
- Create a real-time, personalized, consumer experience
- Create network effects between groups of individuals