

April 11, 2018

Next Generation Supply Chain Vision & Roadmap

Oracle Retail Supply Chain

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Planning and Forecasting and Operations, Best Buy

Mike Johnson, Solutions Director, Enterprise &
Supply Chain, Oracle Retail

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Oracle Retail User Group

Supply Chain SIG

What is ORUG?

- The Oracle Retail User Group (ORUG) is an independent community that provides dynamic forums for customers to share information, experiences, and expertise.
- Special Interest Groups (SIGs): Supply Chain, Merchandising, Omnichannel, Technical, Brand Compliance, Loss Prevention and Planning & Optimization SIGs



Strategy Overview Session

Agenda

- 1 Oracle Retail User Group Update
- 2 Supply Chain Trends
- 3 Oracle Vision
- 4 Q&A



Oracle Retail Supply Chain User Group

Introduction & 2018 View

Lindsay Plagge – ORUG Supply Chain SIG Lead
Kroger Co.

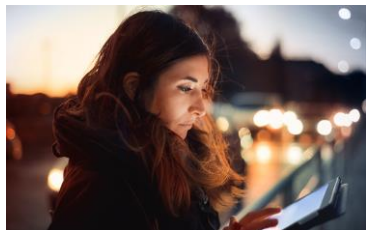


Supply Chain Trends & Oracle Vision



Today's Retail Landscape

Retail in 4 Dimensions



42%

are now shopping both
online and in-store every
week



55%

want to be able to
reserve online for same
day pick-up



73%

want to return an online
purchase to a store



50%

would be attracted to
personalized offers
based on purchase,
loyalty and browsing
data



65%

say personalized offers /
promotions are most
important to them

Empowered Commerce

Anticipate • Simplify • Inspire

Empowered Commerce speaks to both the Retailer and the Consumer: it simultaneously enables consumers to shop how, when and where they want – and enables retailers to engage consumers and drive them to desired resolution without sacrificing profits.



Modern Retailing in the Cloud

Oracle Retail



Supply Chain Market Drivers

Flexibility & Efficiency Powered by Intelligence



Data & Science

Machine Learning

Retail Science

Insights & Automation



New Technologies

Blockchain

IoT

Cloud Services

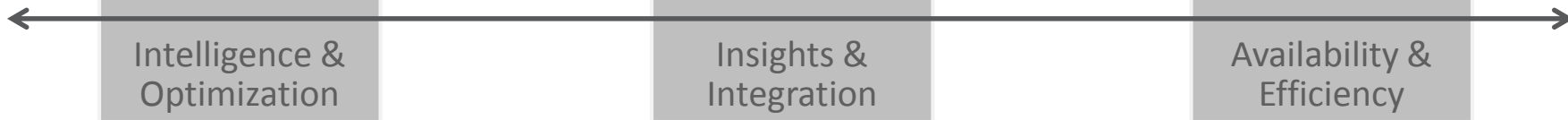


Market Expansion

Customer Fulfillment

Flexible Supply

Marketplaces/Role of store



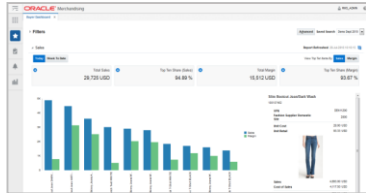
Enabling Supply Chain Efficiency

Real-time visibility, insights, and action powered by pluggable science



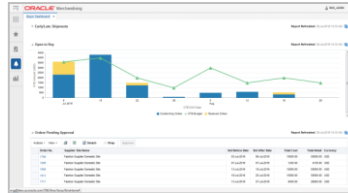
Cloud & Mobile Platform

Role-based enterprise wide launch page & workflow; Consolidated notifications, exception management and favorites



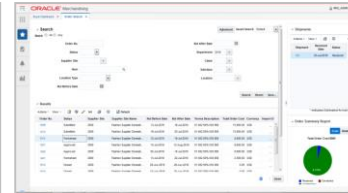
Enterprise Inventory Visibility

Real-time granular view of inventory within any location; Web service enabled to connect with Blockchain & IoT expansion



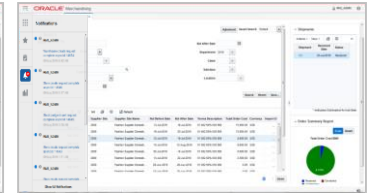
Inventory Planning & Movement

Efficient, modular services used to move inventory to meet consumer needs; common integration & data; Real-time execution



Pluggable Science & Optimization

AI, Machine Learning, Optimization, Science deployed against a common data set; provides insight & automation to make better decisions with inventory & assets



Foundation & Operations

Single view of item, location, order, financials as the backbone to the supply chain; execution of inventory updates & moves across supply chain

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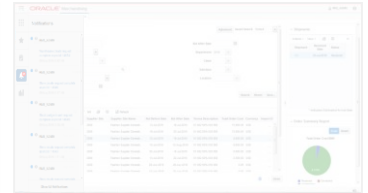
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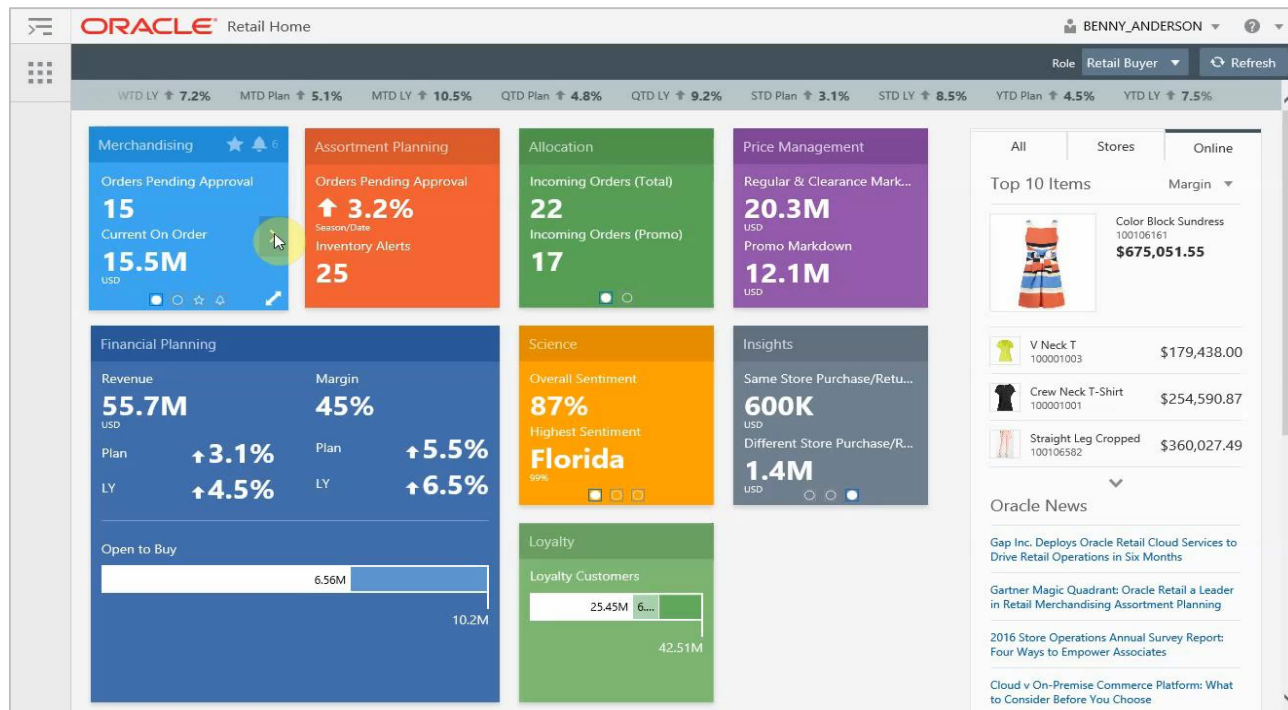


Foundation & Operations

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Oracle Retail Home

Portal to the Retail Enterprise

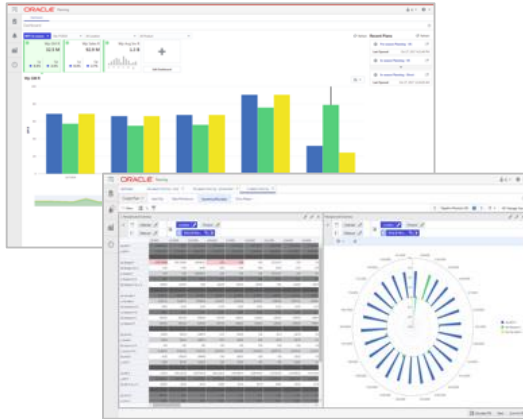


Experience Inspired Consistency

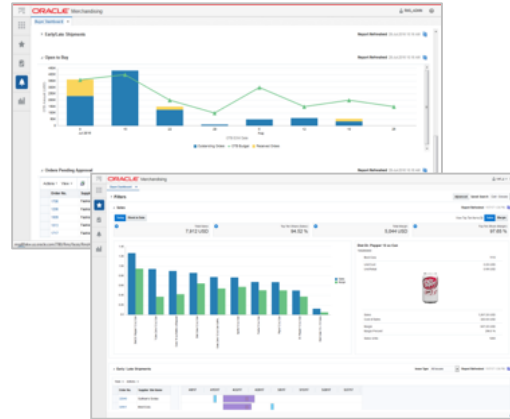
Exception Driven Experience



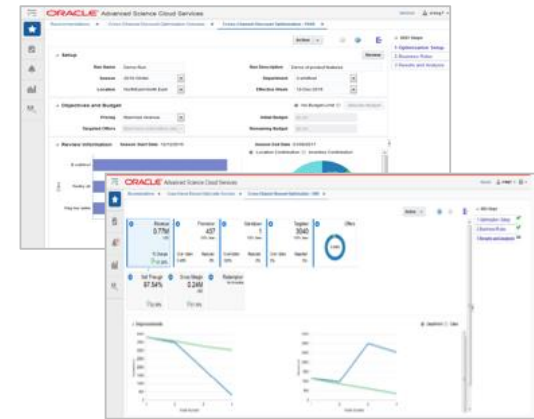
From Planning ...



... to Operations ...



... to Science



Across Any Device



Oracle Retail Mobile

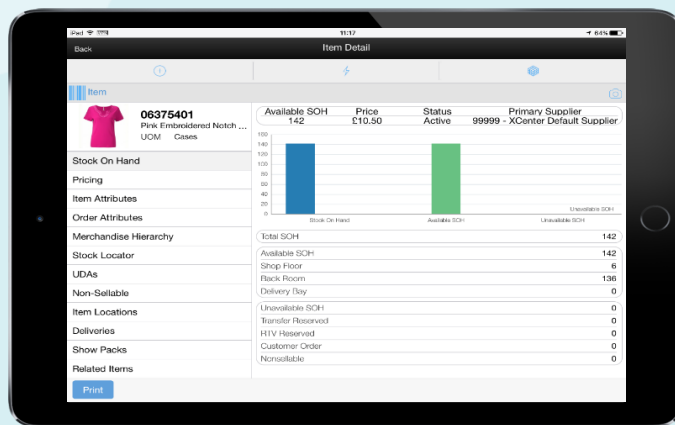
Expanding Information & Action



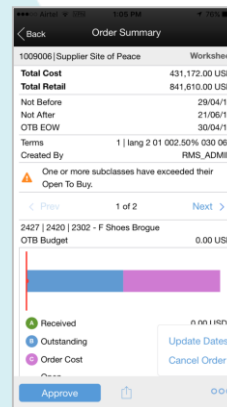
Action Oriented



Contextual Information

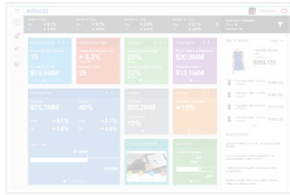


Role Based



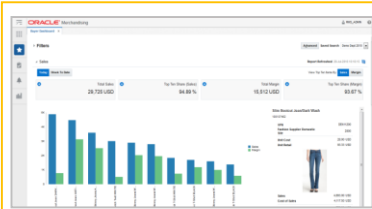
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Inventory Transparency & Availability

Connecting technology & process

Enterprise Inventory Cloud Service (EICS)

Real-Time Sequential Inventory

- Pre-integrated with inventory updating apps & services (POS, SOCS, IoT, RSCN, RFID, WMS, etc.)
- Real-Time & on-demand web service integration
- Granular, sub-location view of inventory
- Embedded analytics & dashboard tooling



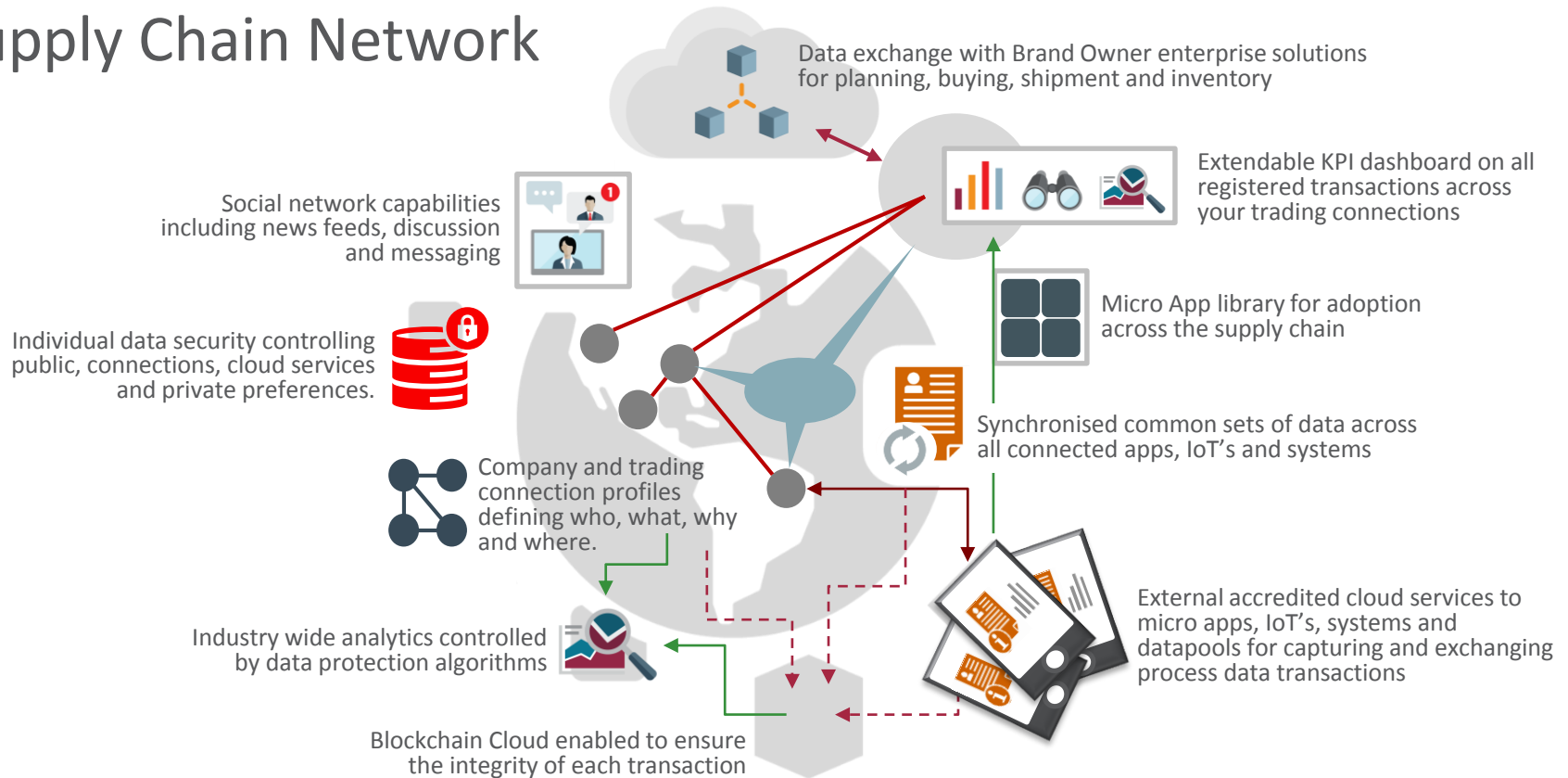
Store Operations Cloud Service (SOCS)

In-Store Inventory Operations & Tasks

- Streamline in-store customer facing activities & remote store processes
- Provide flexibility in inventory movement tasks (Ordering, Outbound, Customer Fulfillment)
- Improve merchandise management & labor productivity



Supply Chain Network



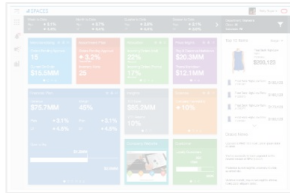
Supply Chain Network

Network Micro Apps



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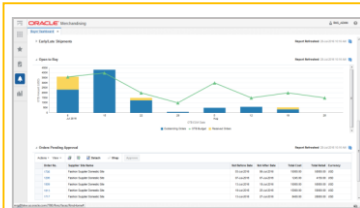
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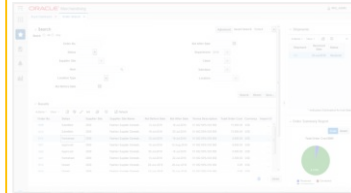
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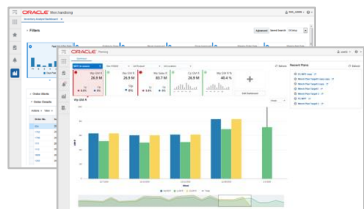
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Strategic Application Evolution

Modular, Connected, Real-Time in the Cloud



Next Generation RPAS



Modernized Integration
Real-Time Performance
Exception & Persona Driven

Modular Applications



Applications

Allocation

Replenishment

Purchasing

Customer Order Distribution

Inventory Balancing

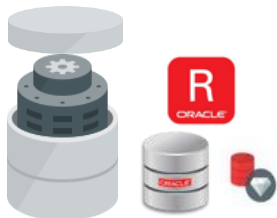
Reverse Movements

Store Ordering

Build Your Own

Real-Time Execution
Modular Deployment Packs
Retail Vertical Based Templates

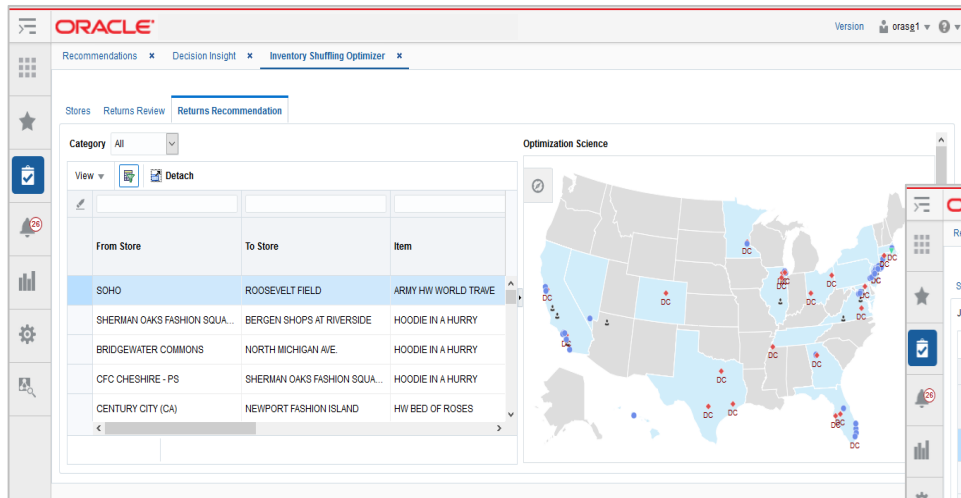
Pluggable Science



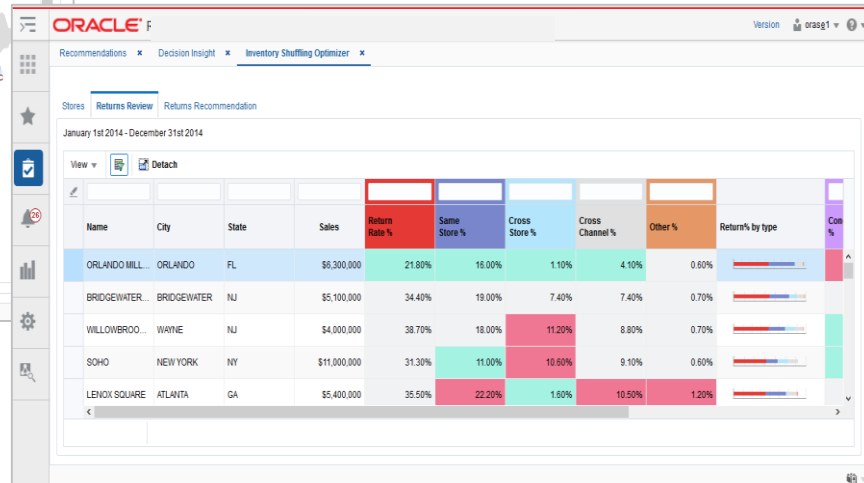
Purpose Built ML & AI
Ongoing Innovation

Inventory Balancing

Re-distribution science powering planning & operations



Should I re-think my plans & supply chain fulfillment strategies?



Where do returns happen & what should I do with that inventory?

What is the cost effective execution strategy?

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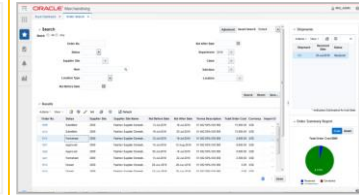
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Oracle Retail Advanced Science Cloud Services

The Intersection of Human Judgment and Machine Automation

Connect people to the applications
& information they need


CONNECT

Enable innovation with science
and advanced analytics


ANALYZE


EXPERIMENT

Take informed and
timely action


EXPLORE

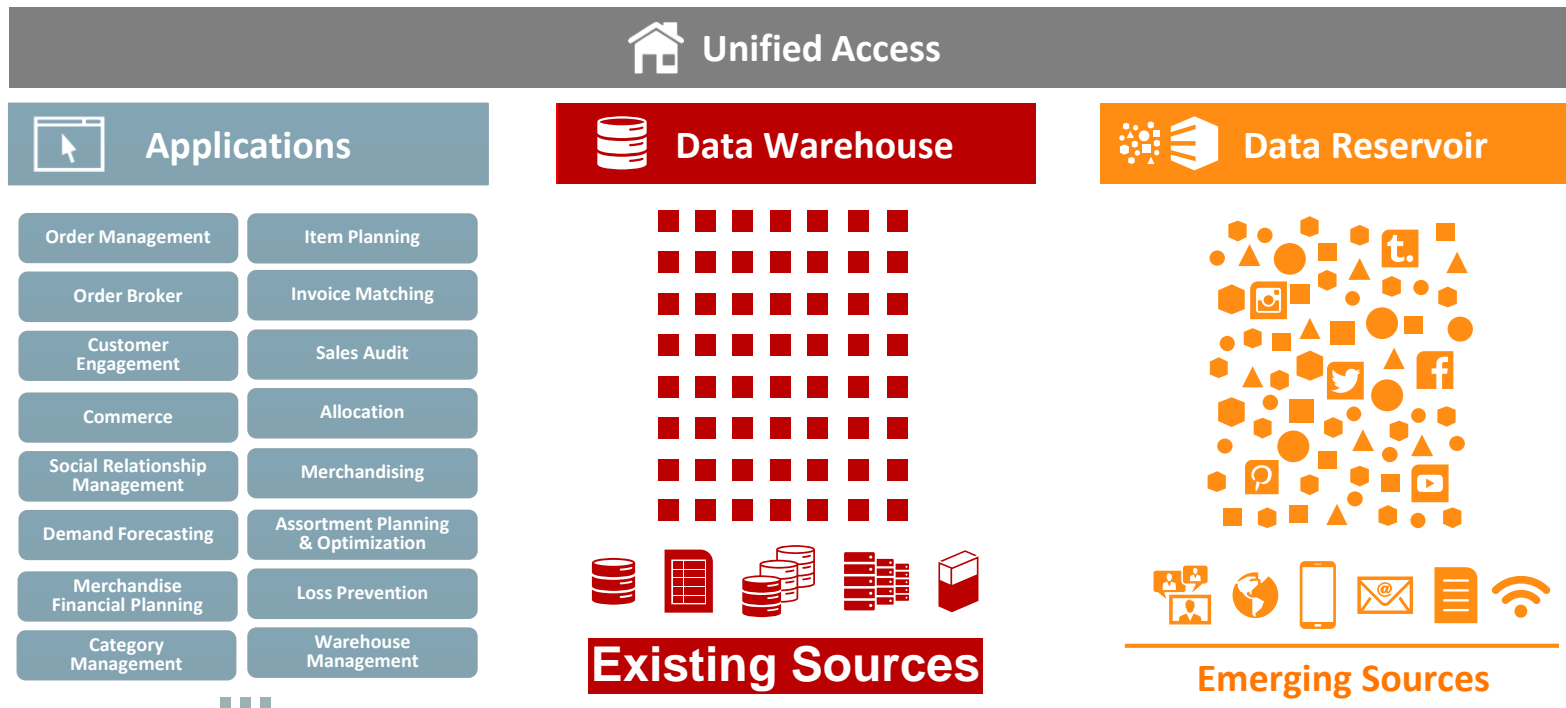

ACT

Provide dynamic
dashboards, with
filtering, drilling, slicing,
dicing

Support highly-visual and
self-service data discovery

Oracle Retail

A Connected Data Approach



Automating At Scale

Oracle Retail Science



Inventory Movement

Demand-Driven Enterprise

Replenishment

Allocations

Transfers

How do I best position my inventory across my network?

Planning

Customer Driven Assortments

Assortment Plan

Item Plan

Promotion Plan

How do shopping behaviours differ online versus at stores?

Pricing and Promotions

Omnichannel Offers

Promotions

Markdowns

Offers

What should I promote to a given customer and when?

RDF

Demand Forecasting



RO

Replenishment Optimization

SPO

Size Profile Optimization

IW

Innovation Workbench

MSO

Macro Space Optimization

AE

Attribute Extraction



AC

Advanced Clustering

CS

Customer Segmentation

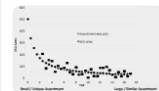
CDT

Customer Decision Trees



DT

Demand Transference



OO

Offer Optimization



PMO

Promotion & Markdown Optimization



Statistics

Data Visualization

AI

Machine Learning

Optimization

Single Data Flow

ORACLE

RDF Cloud Service

Where We Are Headed



Lifecycle Forecasting Mentality

R&D *emphasis* on evolving Short Lifecycle Forecasting capabilities

Tailored methods for short and long lifecycle forecasting

Seamless transitions from one lifecycle stage to another

Common demand parameters throughout the product lifecycle



Powered by Best-fit Science

Unsupervised Machine Learning (ML)

Attribute-based New Item Forecasting
Data Pooling Classification
Customer Segment Identification
Raw Promotion Classification

Supervised ML & Natural Language Processing

Attribute Extraction
Attribute Binning
Social Sentiment Effects

Data Mining

Customer Offer Demand Effects
Cannibalization Group Classification
Halo Effect Estimation

Statistics and Optimization

Regression Trees
Robust Estimation
Cannibalization Effect Estimation
Escalation Level Optimization
Method & Parameter Optimization

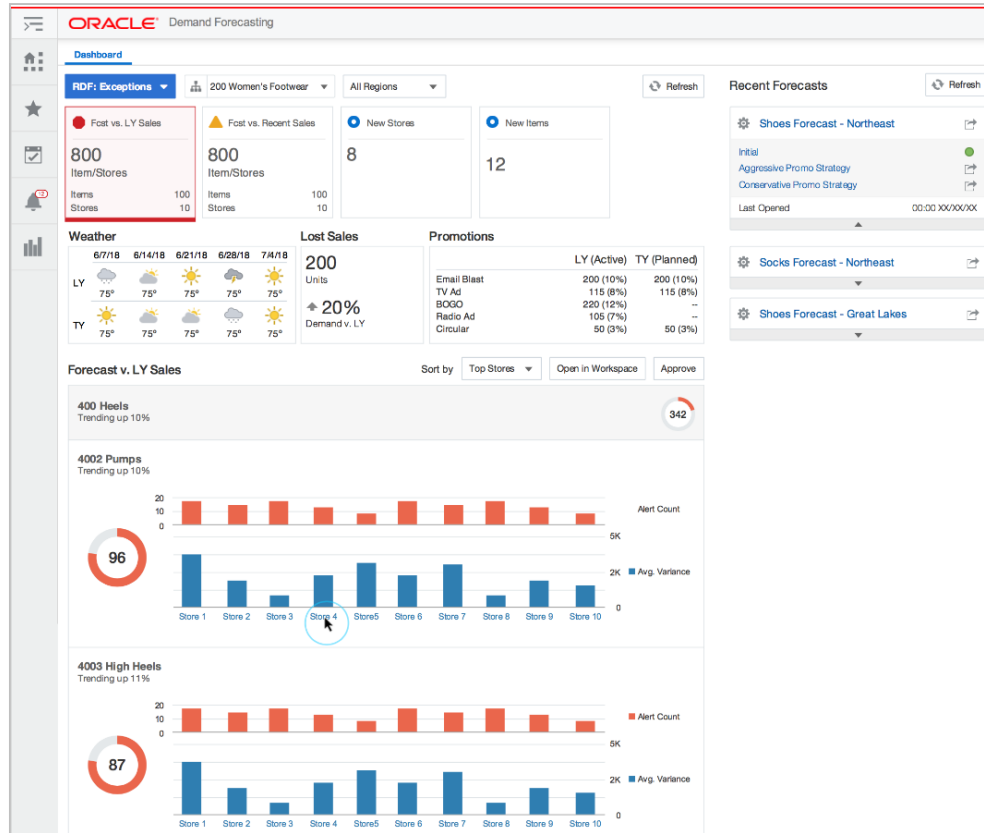
User Experience Optimized for Productivity

Responsive Forecasting for On-demand forecast updates

Exception Driven processes - set priorities with the Exception Dashboard and manage exceptions with re-engineered Real-time Alerts

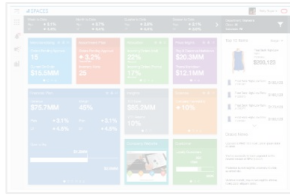
Designed for the typical end-user (rather than the scientist)





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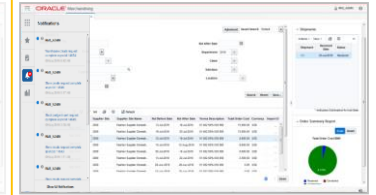
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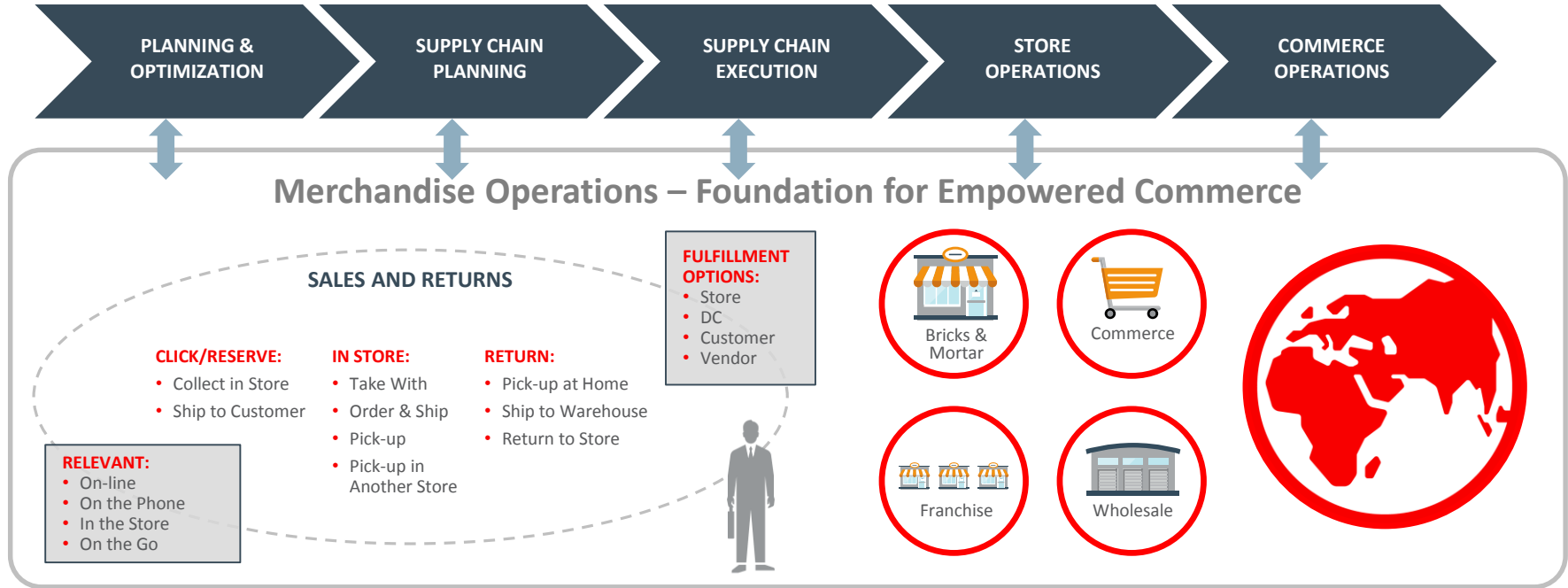


Foundation & Operations

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Merchandise Operations Management (MOM)

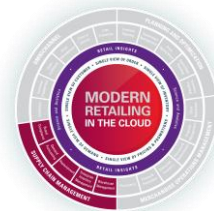
Operational Backbone For All Systems | Provides the foundation for all other retail systems



Improve responsiveness - Improve efficiency of process execution - Improve decision making

Warehouse Management Cloud

Enabling Empowered Commerce Execution



FULLFILL ANYWHERE

BUY ANYWHERE

RETURN ANYWHERE





Questions?

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