



## **OPTIMUM** SOLUTIONS

WWW.OPTIMUMSOLUTIONS.COM

### Demantra:

**Understanding Causal Factors -**

The Next Logical Steps to Improving Your Forecasts

#### PRESENTED BY:

### **Michael Pearson**

Director, SCM Practice

April 14, 2008









## **Agenda**

- Introduction
- Optimum Solutions Corporate Snapshot
- Demantra Overview
- Traditional vs. Next Generation of Forecasting
- What are Causal Factors?
- How do you Identify Causal Factors?
- Examples of Causal Factors
- Question and Answers





## Introduction





## **Corporate Snapshot**

#### SERVICE OFFERINGS

Solution Value Assessment, Process Roadmaps, Business Process / Knowledge Transfer Approach

Centers of Excellence:

DEMANTRA, Oracle, PeopleSoft, Siebel, CRM, HCM, Financials, SCM, EPM, Portal, Business Intelligence

Industry leading Methodology:

Optimum METHOD<sup>SM</sup>,

OptimumTOOLKIT<sup>SM</sup>,

OptimumSUPPORT<sup>SM</sup> Program





Optimum Solutions is a full-service consulting firm, specializing in enterprise system implementation and integration solutions.







## Selected Clients by Industry

PRODUCTS:

Dolby DRS

1

Emerson

Ricoh

**Springs Creative** 

Tootsie Roll

Weyerhaeuser

**COMMUNICATIONS &** 

**MEDIA:** 

AT&T Wireless

CNET

Hawaiian Telcom

McClatchy Company

PacWest Telecomm

8X8

ENERGY:

Calpine

Omaha Public Power

Kerr-McGee

**FINANCIAL SERVICES:** 

Charles Schwab

Chicago Board Options

Exchange

Fidelity National Financial

Fireman's Fund

**Guarantee Trust** 

**PayPal** 

Wells Fargo

**HEALTH & LIFE SCIENCES:** 

Affymetrix

Alcon Labs

Bio-Rad

ChartOne

Genentech

Premera Blue Cross

St. Joseph Health Systems

Theravance

TriWest Healthcare

PROFESSIONAL SERVICES:

**Ajilon** 

Expedia

Latham & Watkins LLP

Morrison & Foerster LLP

Paul Hastings LLP

Pomeroy

PUBLIC SECTOR &
HIGHER EDUCATION:

**Corinthian Colleges** 

Foxwoods Resort

Ramsey County

Salt River Pima Maricopa

**Indian Community** 

**RETAIL:** 

Kohl's

Pamida

Raley's

**Ross Stores** 

ShopKo

The Sak

SOFTWARE:

Ariba

**Business Objects** 

**Electronic Arts** 

EMC | Documentum

**FileNet** 

Informatica

Interwoven

Intuit

**TECHNOLOGY:** 

ADP

**DataCard** 

Expedia

Fujitsu

Hitachi

Logitech

NEC

Rockwell Scientific

Yahoo!





## **Optimum Solutions**

#### **BUSINESS PROCESS EXPERTISE**

- · Business Intelligence
- Customer Relationship Mgmt
- Enterprise Service Automation
- Financial Mgmt
- · Human Capital Mgmt
- · Supply Chain Mgmt

#### **ERP EXPERTISE**

- Top-tier ERP Solution Experience
- Strong Vendor Relationships
- Direct Product Input
- Enterprise-wide Implementations
- Cross-Functional Consultants

#### **TECHNICAL EXPERTISE**

- & Configurations
- Custom Development
- Database Administration & Optimization
- Interface Development
- Data Conversion Automation
- System Performance Tuning
- Middleware / Integration

#### **FULL SERVICE**

- Implementation & **Upgrade Assessments**
- ROI Analysis
- Technical Infrastructure Planning
- Project JumpStart Capability
- Business Process Optimization

**EACH** 

**OPTIMUM** 

**PROJECT** 

Customized Training

## **OptimumMETHODSM**

- Process-based Orientation
- · Stresses Knowledge Transfer
- Incorporates Industry Best Practices
- Thorough User Defined System Testing
- End User Preparation Training & Procedures

#### **OptimumTOOLKIT<sup>SM</sup>**

- Process Analysis & Design Tools
- · Requirements Database
- Customization Templates
- Test Script Library
- Project Administration Tools

- Planning & Architecture
- Hardware/Software Assessment

#### **OptimumLABS**<sup>SM</sup>

- Upgrade & Implementation Lab
- Support Services
- Hosting
- Demonstration & **Training Environments**
- Testing Facilities

#### INDUSTRY FOCUS

- Communications & Media
- Energy
- Financial Services
- Health & Life Sciences
- Products
- Professional Services
- Public Sector & Higher Education
- Retail
- Software
- Technology







## **Optimum | Oracle**

Oracle and PeopleSoft have long recognized Optimum's industry domain expertise and leadership position in target markets, viewing Optimum practitioners as trusted business advisors and industry thought leaders.



**E-BUSINESS SUITE** 

#### **Oracle E-Business & BI**

Optimum has been working with Oracle applications since the introduction of release 9.3. We have seen the product evolve and mature from an initial release of core functionality to today's robust ERP solution. As a result, we know how to maximize the benefits of Oracle and deliver exceptional added value to the enterprise.



PEOPLESOFT ENTERPRISE

### **PeopleSoft Enterprise**

We have significant experience with the newest releases of PeopleSoft Enterprise including working with v9.0 since late 2004 and continuing through our numerous implementations to date – a claim few can make.



### **Demantra Demand Management**

Optimum has been selected by Oracle as one of two National Demantra Partners.

As one of the few truly capable Demantra implementers in the marketplace, Optimum continues to solidify its leadership position with client successes and its jointly-sponsored events.







## A Completely Integrated Solution

### **Promotions & Trade Management**

## Oracle Demantra Predictive Trade Planning

- Promotion definition & management
- Lift computation, decomposition, and display
- Promotion impact, ROI analysis

## **Promotion Optimization**

 Suggested optimum promotions to maximize ROI

# Deductions & Settlement Management

 Reconciliation of deductions and payments with performance proof

### **Demand & Replenishment Planning**

## Oracle Demantra Demand Management

- Statistical, attribute-based forecasting
- Monitoring and responding to demand
- Collaborative planning

# Advanced Forecasting & Demand Modeling

- Promotional lifts
- Demand shaping
- Cannibalization & halo effects
- New release planning

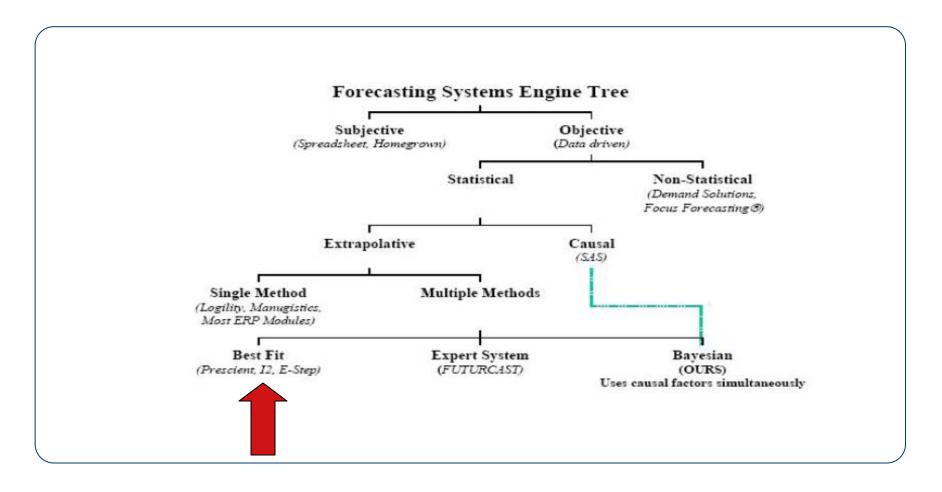
#### **Real Time S&OP**

- Balanced supply and demand
- Stock replenishment





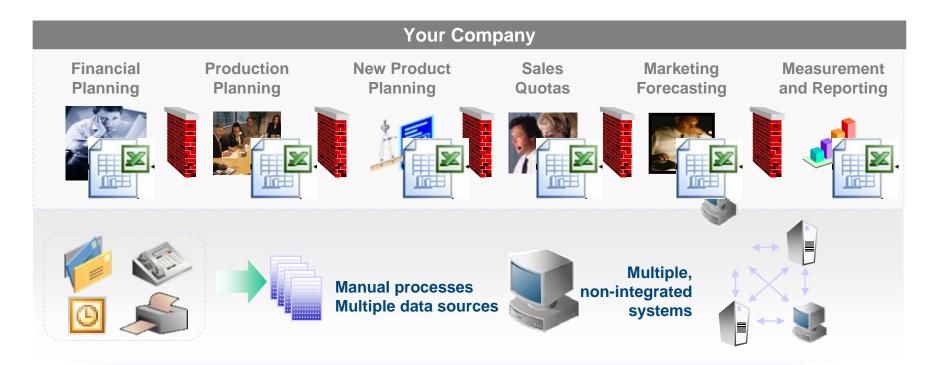








## **Traditional Approach to Demand Planning**





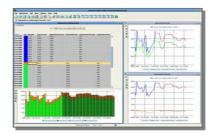
No connection between plans, plans not tied to execution Misalignment between metrics and objectives Unreliable forecasts and production plans





## **Better Approach to Demand Planning**







# Eliminate decision making latency by focusing on excellence in demand visibility

- Sense demand more frequently and closer to the point of consumption
- Replace spreadsheets with one number demand management Collaborate with all constituents

### Improve your forecast accuracy

- Use advanced analytics and statistics
- Formally introduce Causal Factors into your forecast

### Shape demand

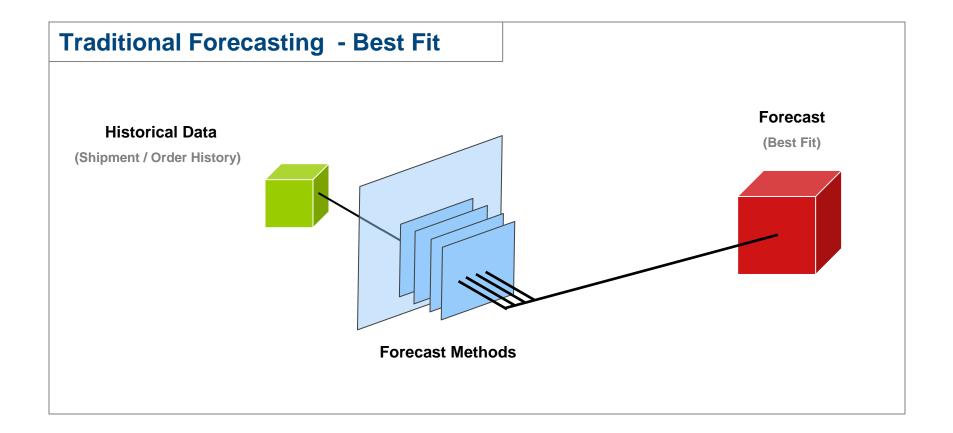
- Promotion excellence and decomposition
- Leverage granular demand signals (customer, channel, store, shelf)
- Identify and simulate cross selling opportunities

#### Evolve to real-time S&OP

- Profitable demand response
- Identify supply side opportunities
- Define and monitor customer based metrics
- Get real time visibility to sales tactics (price breaks, promotions, deals)

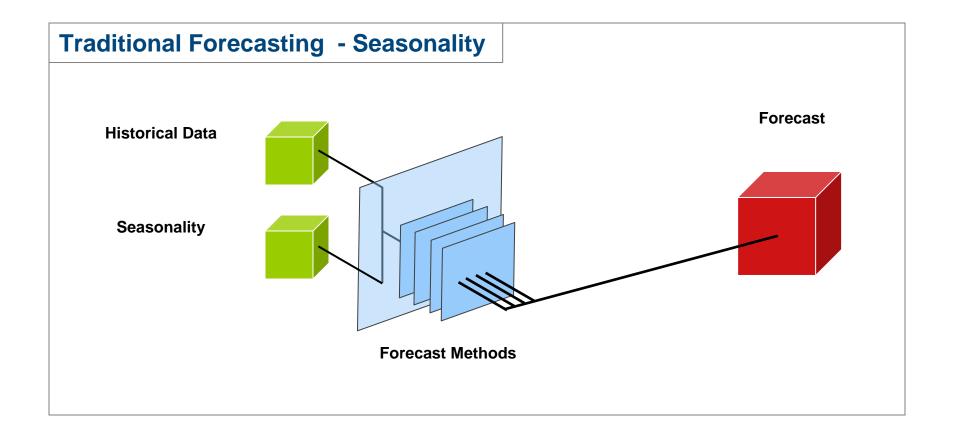
















### What are Causal Factors?

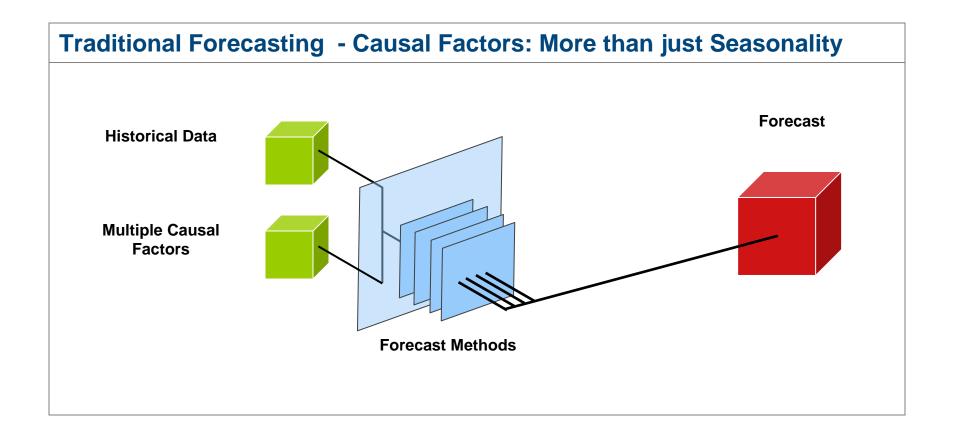
### **Traditional Forecasting Methods:**

## **Seasonality**

January	February	March	April	May	June	July	August	September	October	November	December
1.3	1.2	1.0	1.0	8.0	8.0	0.7	0.7	0.8	0.9	1.4	1.8
1.3	1.2	1.0	1.0	0.0	0.0	0.7	0.7	0.6	0.9		1.4











### What are Causal Factors?

### Oracle's Definition of Causal Factor:

- Causal factors provide information about historical events that are expected to recur in the future
- Causal factors cause demand to deviate from a norm
- Causal Factors can be treated as time varying quantities that affect demand
- Engine establishes a relationship between sales and each of these causal factors (Correlation)
- In the future, engine predicts the demand by multiplying these estimated coefficients with causal factor value







## What are Causal Factors?

# Seasonality

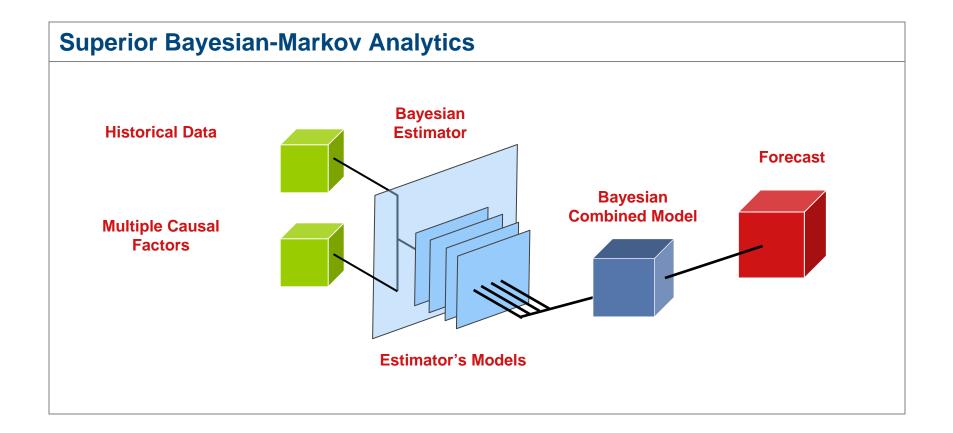
# **Price**

# **Promotions**

# What Else?

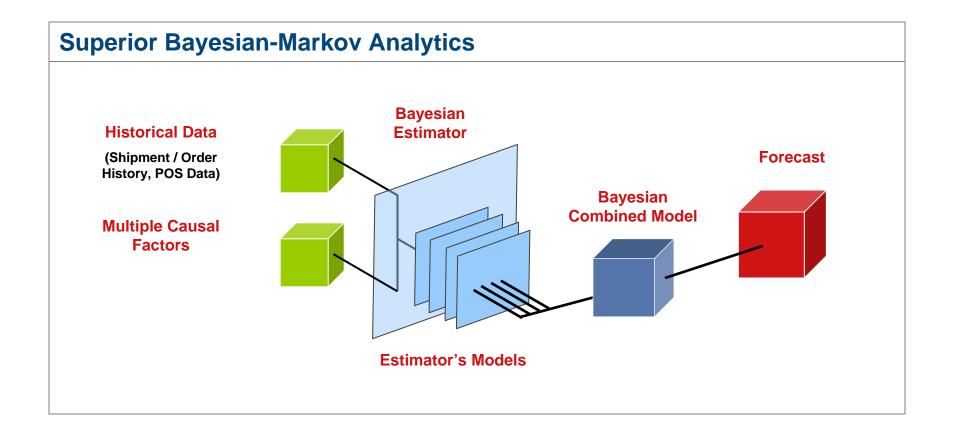






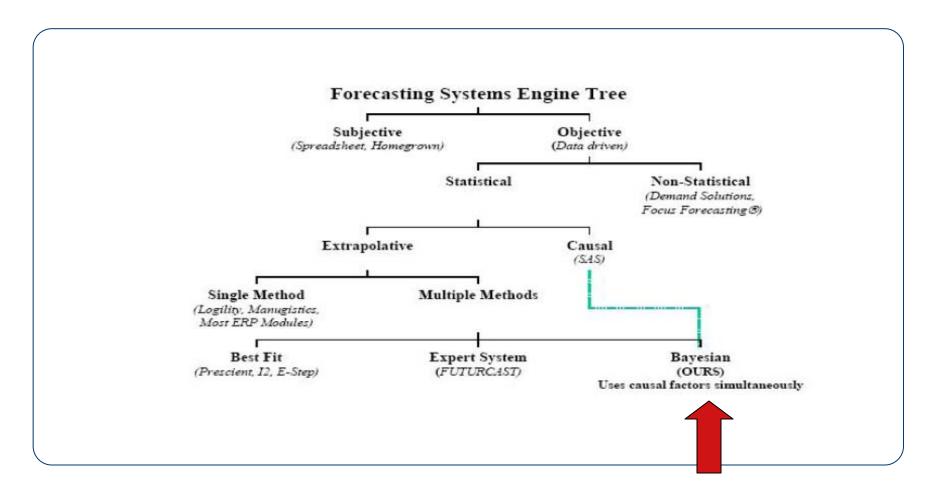
















## What are Causal Factors?

# **Price** Seasonality Other Complementary Products **Competitor's Products Promotions** What Else?





## **How to Identify Causal Factors**

### Questions to ask:

- Find out from the sales department what impacts their sales?
- Ask people in the marketing department who they do joint marketing ventures and why?
- Find out who and/or what people BLAME when a forecast is missed.





# Toys











# **Christmas - December 25th**









## Sale - A Promotion!









# **Housing Industry**

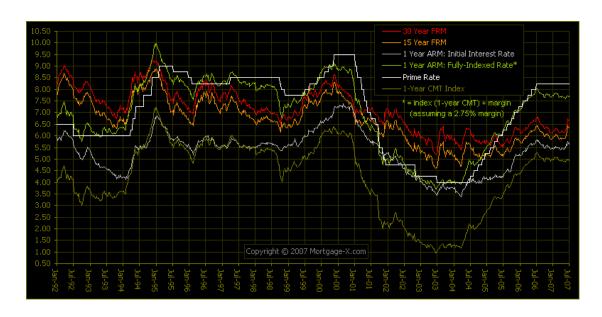








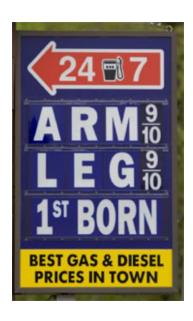
# **Mortgage Rates**







## **Gas Prices**











# Anything that uses gas



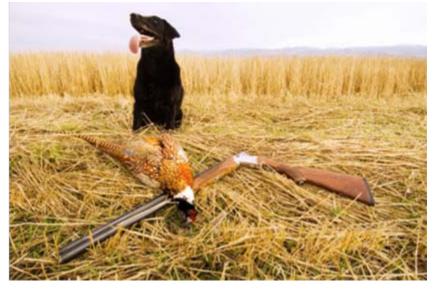






# Camouflage Clothing, Rifles









# **Broadway Plays**









# **Opera Season**









## **Snow Blowers**









## **Questions & Answers**





## **Contact Information**

"Quite simply, Optimum is the best ERP implementer in the marketplace."

— G. Abatjoglou CFO, ChartOne, Inc.

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## **Thank You**