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Oracle Real-Time Decisions (RTD)
Ecommerce Interaction Management Use Case

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Agenda

- Introduction to RTD
- RTD Key Features
- Ecommerce Interaction Management Use Case
- Q&A

Oracle RTD – Transforming Insight

Empower Users

- Provide proactive, real time insight and action at the moment of customer interaction through a flexible real time decision engine

Enable Business Responsiveness

- Enable the business to respond to ongoing business process changes and to directly improve the customer experience

Ensure Value

- Provide choice by supporting multiple deployment options and ease of integration at the lowest cost

Oracle RTD

Extends the Business Intelligence Foundation

EPM Workspace

Performance Management Applications

BI Applications

RTD

Business Intelligence Foundation

RTD

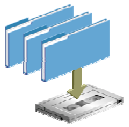
Fusion Middleware

OLTP & ODS Systems

Data Warehouse Data Mart

OLAP

SAP, Oracle, Siebel, PeopleSoft, Custom



Excel XML

Business Process

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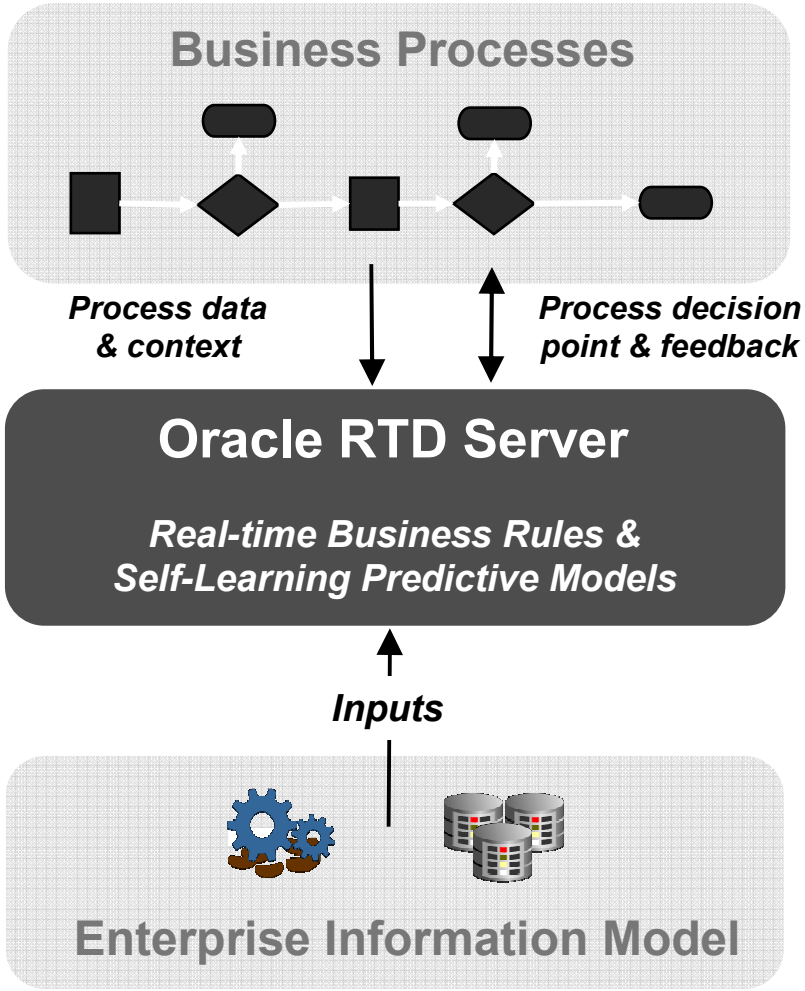
RTD Enables Adaptive Business Processes



Process learns and continuously optimizes in real-time based on closed loop information

Analytic decisions are taken for each interaction

RTD decisions based on rules and predictive models

RTD optimizes across conflicting business process goals

Process leverages common data model of real-time and historical data

Decisions based on facts, context, analytic insights

Business Intelligence Foundation

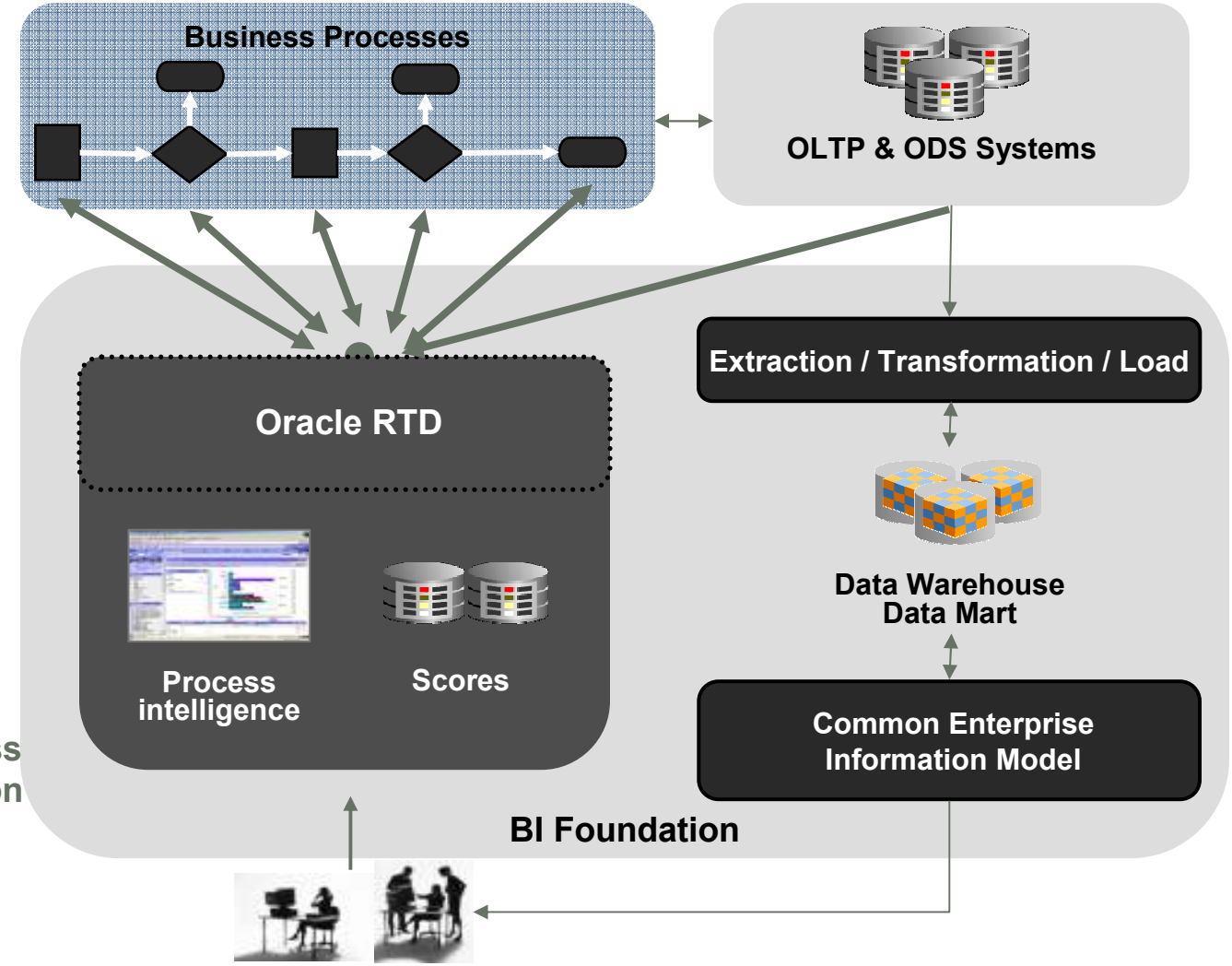
Turning Insights into Actions

4 *Operationalize* Business Intelligence into Applications

3 Produce process intelligence for consumption.

2 Explore data for process *performance* drivers

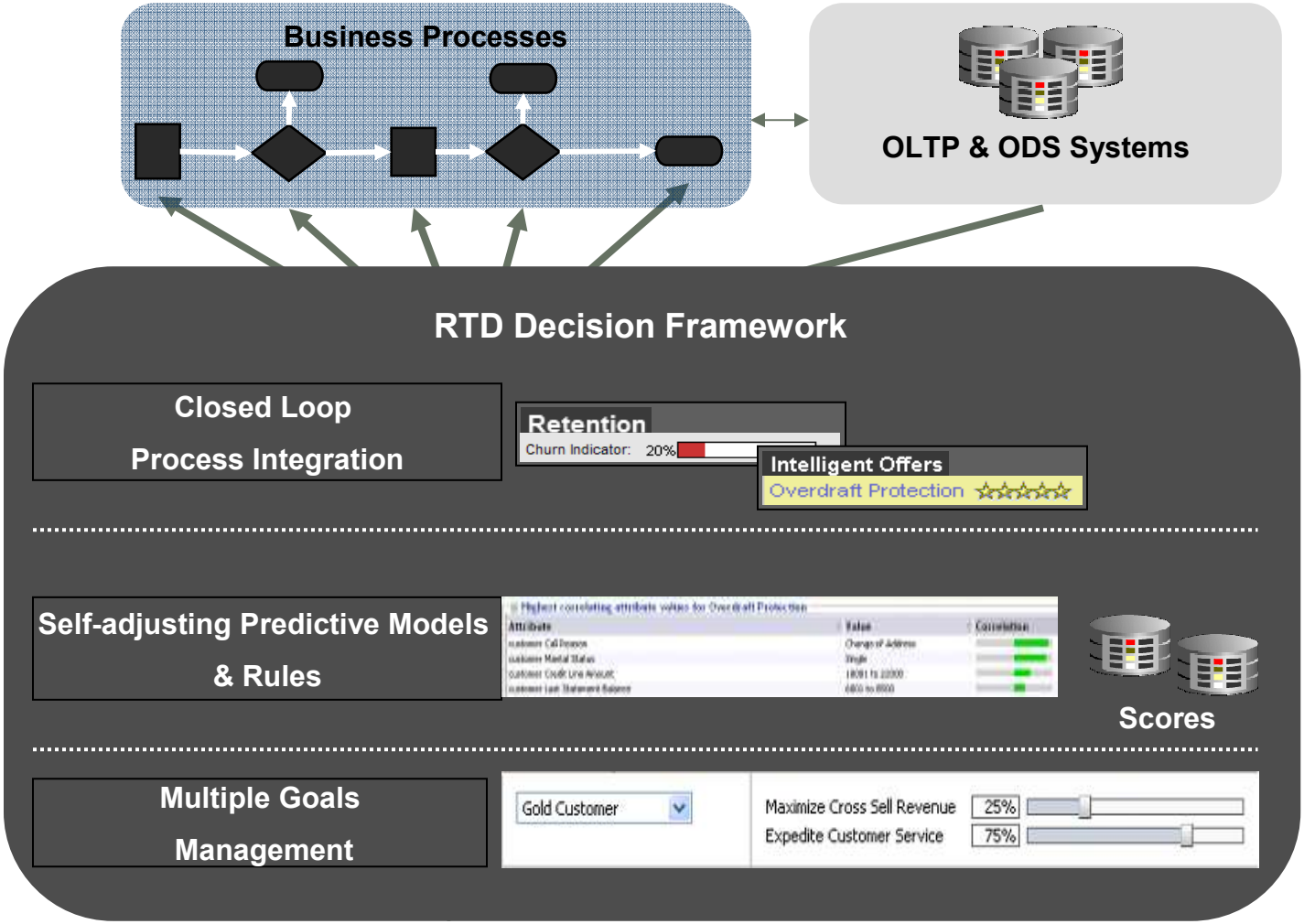
1 Establish the business intelligence foundation



Business Intelligence Foundation

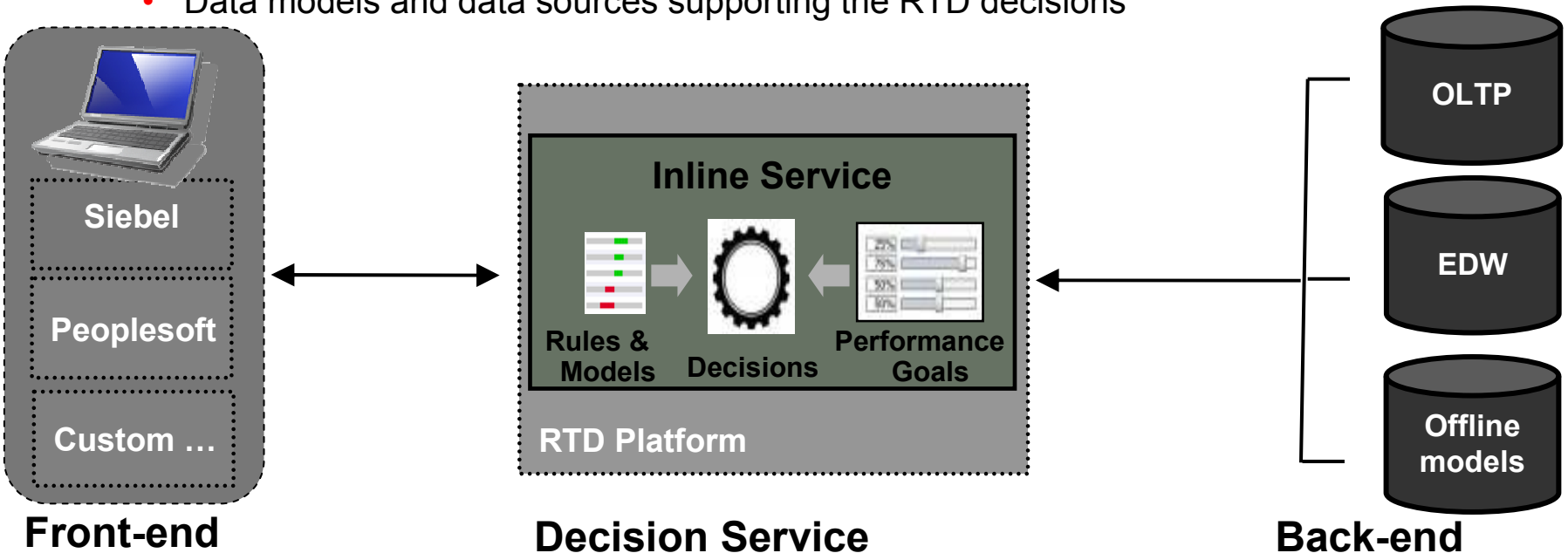
Turning Insights into Actions

With RTD business processes can continuously adjust based on closed loop data

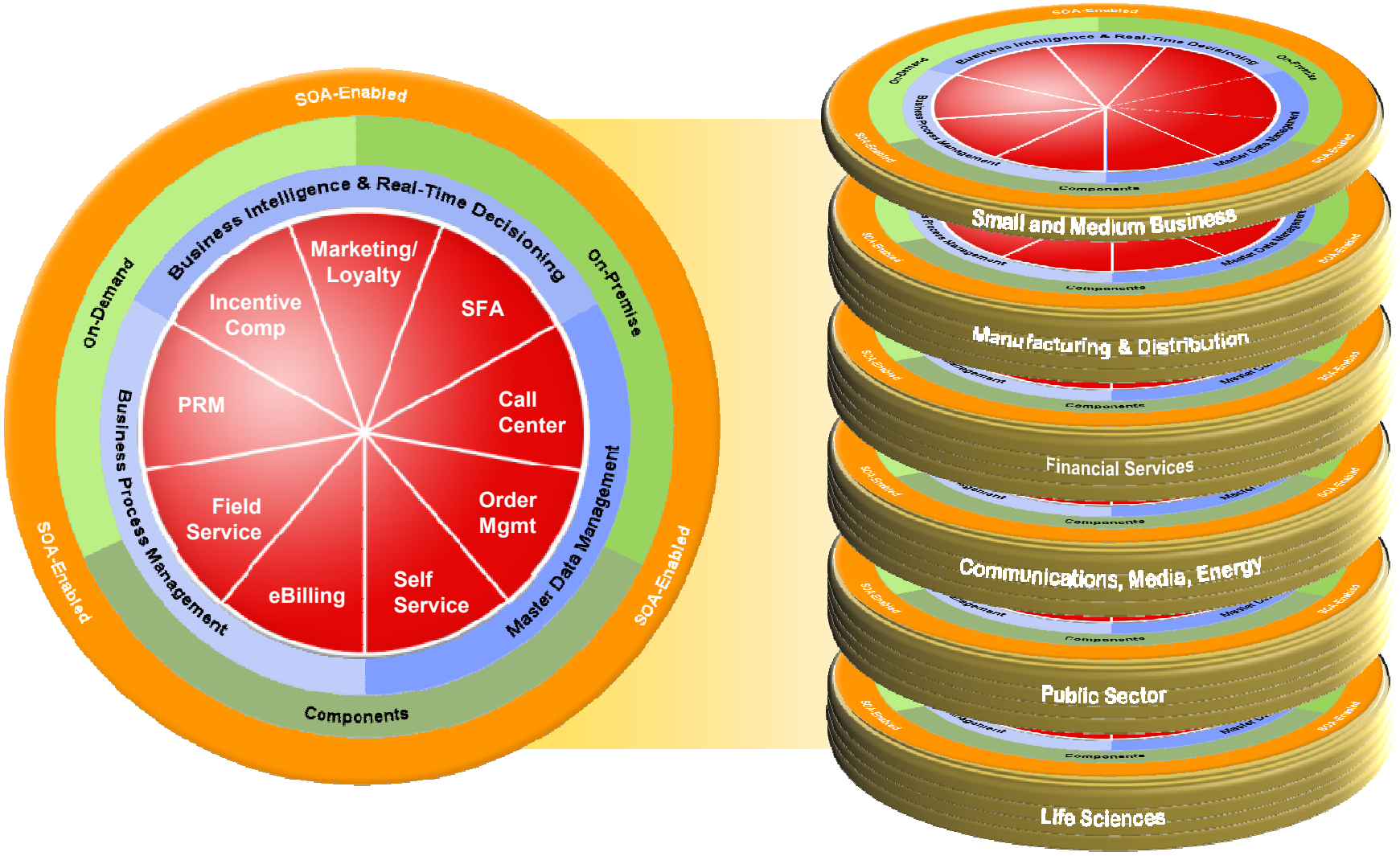


What is an RTD Solution?

- A product that can be used by a business audience vs. a technology audience
- RTD Solutions are composed of integrated pieces
  - Front-end
    - The interfaces through which RTD predictive or rule based recommendations are surfaced
  - Decision Service
    - The combination of predictive models, rules and interaction flows supporting the RTD recommendation logic
  - Back-end
    - Data models and data sources supporting the RTD decisions



Oracle Transformational CRM



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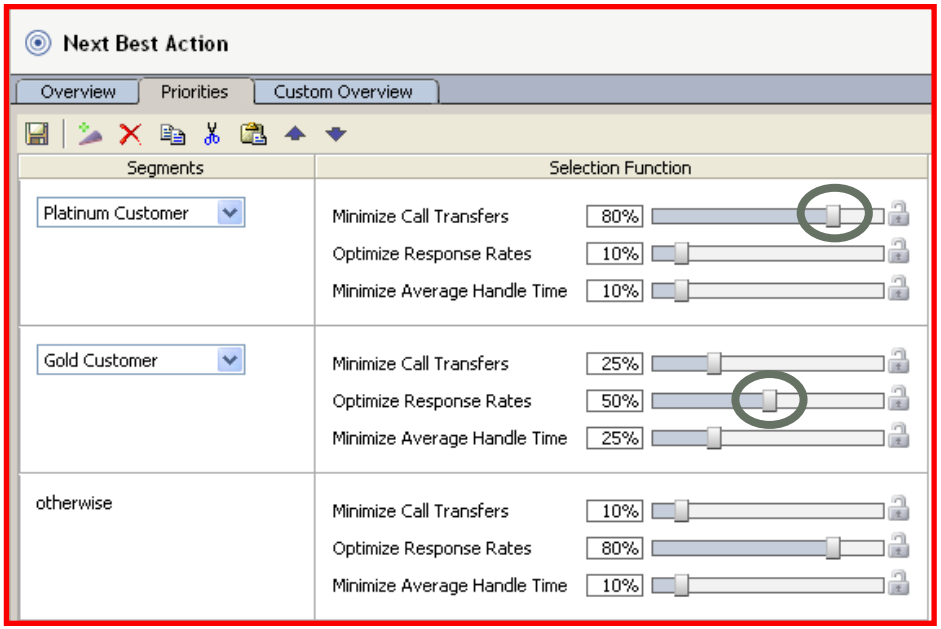
RTD Decisions

Managing Competing Business Goals

- **User defined business goals**
- **Weighted business priorities can change over time**
- **Balance between competing alternatives**
  - Maximize Response Rate
  - Maximize Revenue
  - Minimize Handle Times
  - Minimize Churn Risk
  - Minimize Service Cost

"Steering Wheel" for business

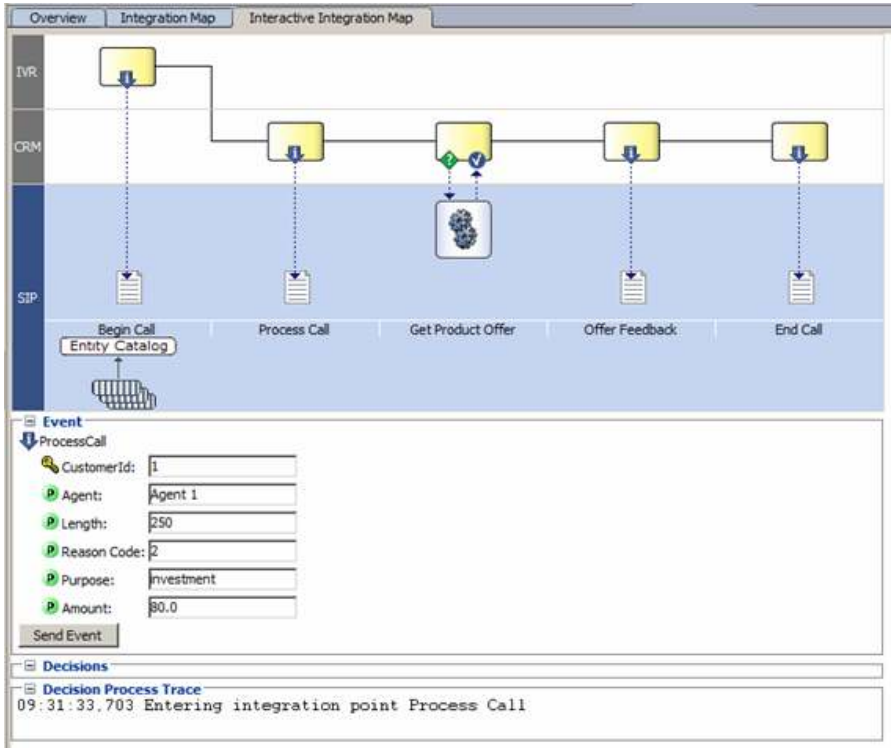


RTD decision strikes an optimal balance across competing business goals

RTD Decisions

Taking Into Account Real Time Context

- **Combining both historical and real time information**
  - Historical
    - Demographic profile
    - Billings
    - Account transaction
    - Assets
  - Real time
    - Call reason and customer purpose
    - Agent skill level
    - Time of day
    - Other information provided during interaction
  - Combination typically increases conversions rates by 20% - 100%

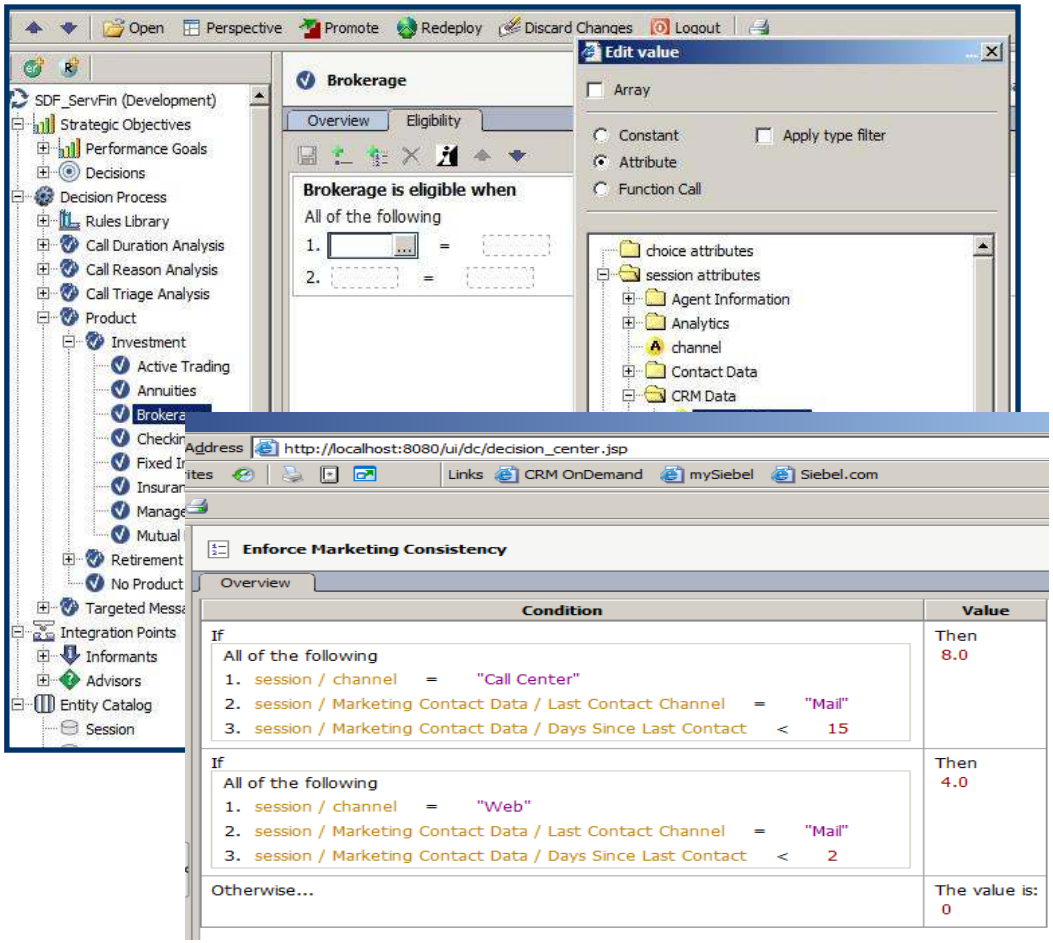


RTD decision uses real time context to increase business value

RTD Decisions

The Best of Rules and Predictive Models

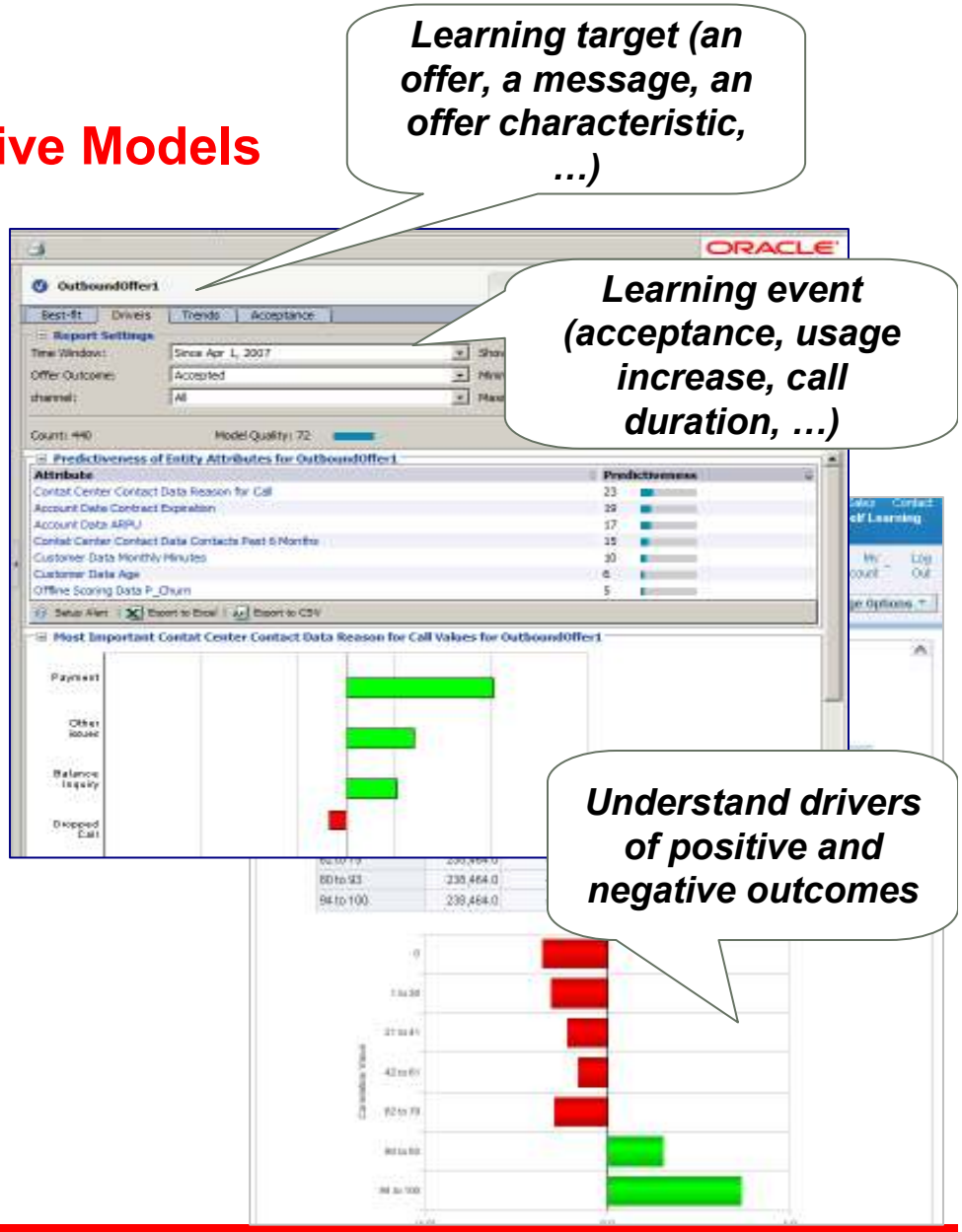
- **Business Rules**
  - Filtering rules
  - Segmentation rules
  - Eligibility conditions
  - Scoring Rules



RTD Decisions

The Best of Rules and Predictive Models

- **Third-party predictive models**
  - Pre-Scored data
  - Real-Time Scoring functions (Oracle Data Mining)
  - Real-Time Scoring functions (Web Service calls)
- **RTD self-learning models**
  - Self-learning for both analysis and decisioning
  - Can leverage offline and real-time data
  - Models automatically adapts to market conditions and over time
  - **Built-in features**
    - Multi-level of responses (clicked, accepted, fulfilled, usage etc.)
    - Multiple partitions in a single model to analyze segments, time periods, regions etc.
    - Time-window analysis
    - Integrated with OBI EE



RTD for Ecommerce / Self-Service

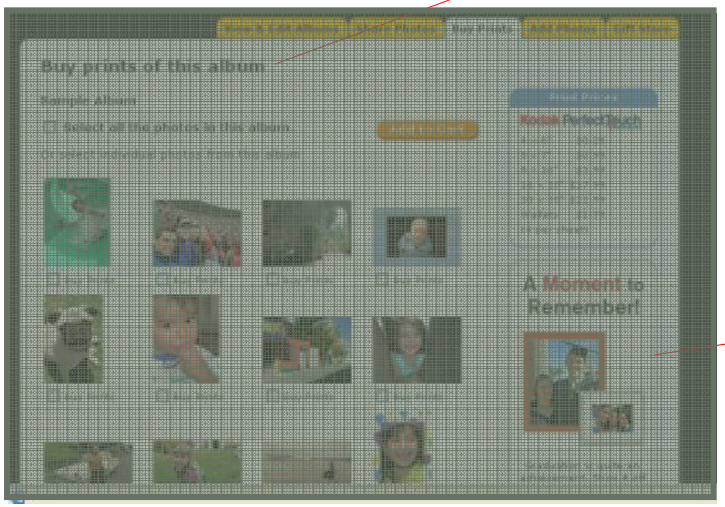
Customer logs into the website to access their account

RTD determines the best offers and content to present

RTD presents targeted content at the individual visitor and message level

RTD for Ecommerce / Self-Service

Context Is Important



Context and profile information is used to determine optimal offers and content

RTD drives specific content for each interaction

RTD uses profile and contextual info to deliver the most likely to succeed offers and content for each interaction

RTD for Ecommerce / Self-Service

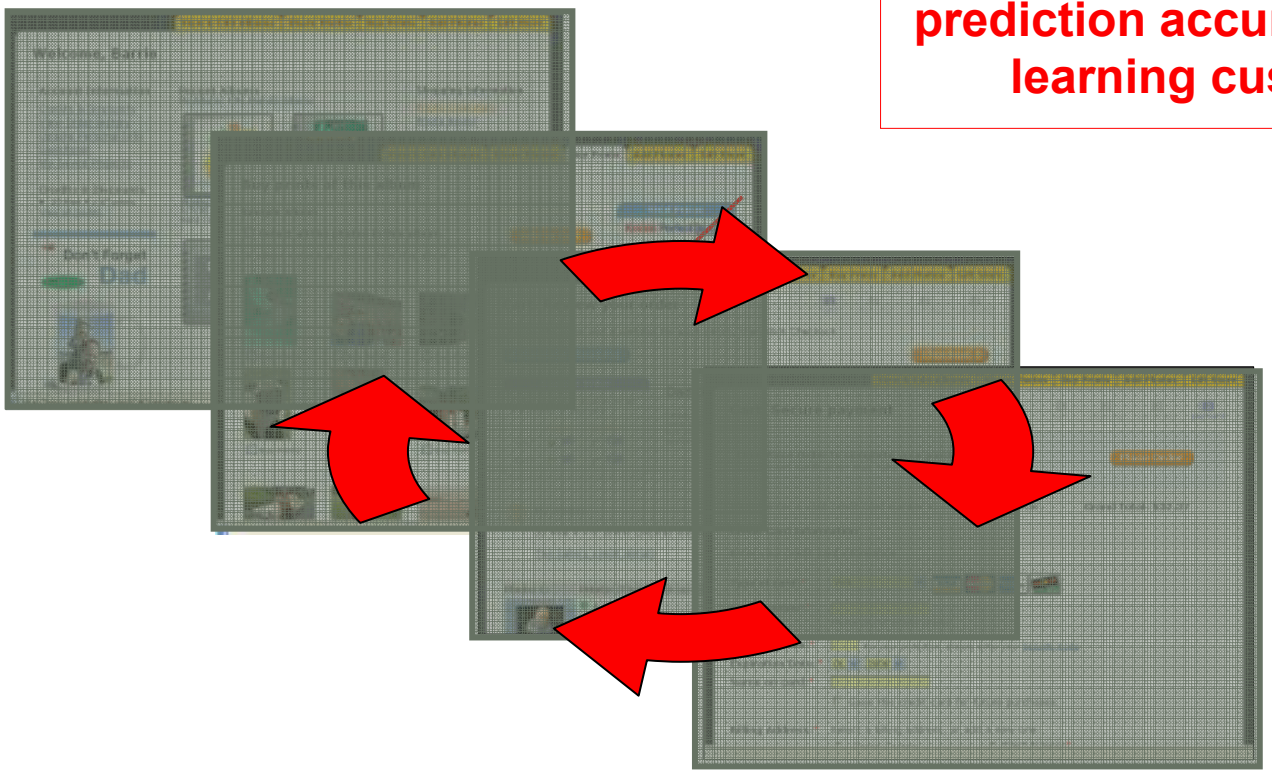
Closing the Loop to Learn and Measure Success

RTD measures each step in the cycle for complete closed loop analysis

RTD tracks the entire click to convert process enabling the measurement of offer and message effectiveness

Continuous And Automatic Self-Learning

Continuously refine and adjust prediction accuracy by tracking and learning customer behavior



RTD predicts the "Next Best Offer" by continuous self-learning feedback throughout the customer lifecycle

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Q&A

RTD Examples

- RTD Solutions have been successfully deployed in
  - Contact Centers for Inbound Marketing Purposes
  - Contact Centers for Proactive Retention Purposes
  - Contact Center for Resources Selection Purposes
  - Ecommerce Sites for Interaction Management Purposes
  - Transactional Systems for Risk Management Purposes
- RTD customers are going cross-channel

Challenge: Cycle Time for Experiments

- Up to 3 months to vet an idea
  - Conception
  - Design
  - Implementation
  - Deployment
  - Metrics Collection
  - Analysis
- Single-threaded
  - Concurrent experiments cloud and/or skew results

Approach: Divide & Conquer

- People strengths
  - Creativity, innovation
  - Interpretation
    - Reporting on success (control mechanism)
    - Reporting on gathered insights
- Machine strengths
  - Speed, iteration, volume
    - Automating the process of deciding in the context of each interaction what is the optimal message to present for each visitor to the Ecommerce site
    - Learning from each interaction and applying latest learning when making decisions
    - Load balanced RTD servers in a cluster of J2EE server delivering complex decisions in milliseconds
  - Computations, metrics, reporting
- Distribute tasks accordingly
  - Compress time from concept to results

Behavioral Targeting

- Track customer behavior, data and context for every interaction
- Associate ultimate outcome of each interaction
- Apply principles of Web analytics and business intelligence *in real time*
  - Close the loop and learn from each action
  - Apply latest learnings when deciding
  - Automate the insight to action process
- Individualize every interaction to achieve lift in desired outcome(s)
  - Decide what is best for each visit based on your goals and likely outcomes

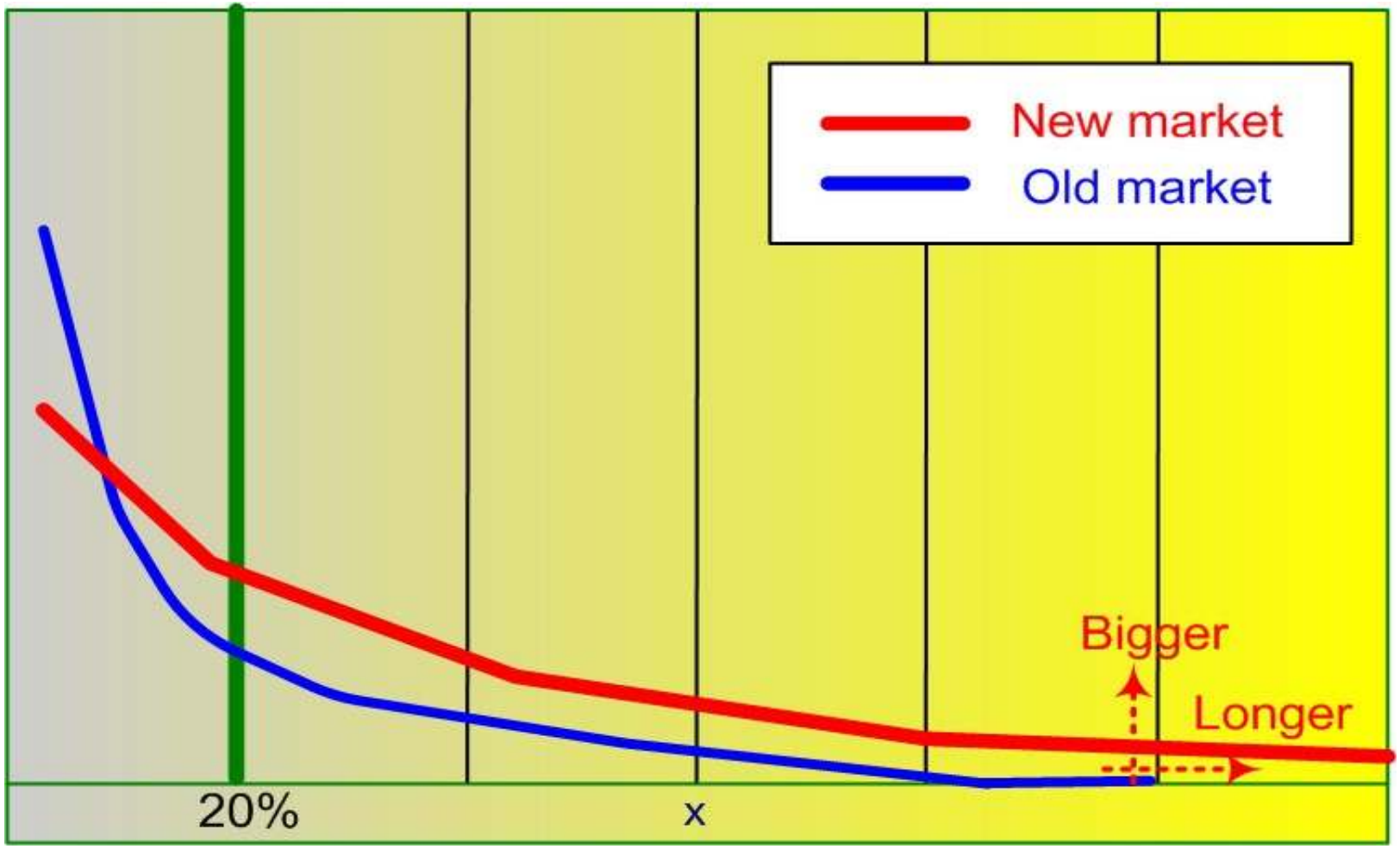
Oracle Real-Time Decisions (RTD)

- Generalized Platform, Rich Feature Set
  - Competing platforms generally more specialized, less robust
- Informants
  - Convey visitor behavior, data and context to RTD engine
- Advisors
  - Recommend appropriate content to present to a specific visitor in the current context
- Application
  - Localization, Personalization, Campaign Mgt
  - Automated, Continuous, Multi-Variate Testing

What did RTD “Learn?”

- It’s not just about price
- It’s not just about features
- It is about “Fit”
- Customers will pay a premium to get a proper fit
- Policies and guidelines based on past experience, or corporate culture, do not identify the best fit for a specific customer
- RTD will recognize previously unexploited up-sell opportunities, and recommend features that represent the best fit, yielding higher revenues as a side effect

The Long Tail



Chris Anderson, *Wired Magazine*, October 2004

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Summary – Oracle RTD

Advantages

- Extends your Business Intelligence investments
- Enables adaptive processes
- Tightly integrates with your CRM and BI Applications
- Reliable and massively scalable
- Impressive ROI