Analytics that drive high impact customer-focused enterprises

Rebecca Wormleighton
Sr Product Marketing Manager
Analytics on System z

The customer focused enterprise

Motivations for Superior Customer Service

- Effective customer experiences impact the bottom line!

- Happy customers who get their issue resolved tell about 4 to 6 people about their experience.[4]

- Attracting a new customer costs 5 times as much as keeping an existing one.[5]

- 86% of consumers quit doing business with a company because of a bad customer experience, up from 59% 4 years ago.[2]

- For every customer complaint, there are 26 other customers who have remained silent.[3]

- A dissatisfied consumer will tell between 9 and 15 people about their experience. About 13% of dissatisfied customers tell more than 20 people.[1]

[1] Source: White House Office of Consumer Affairs, Washington, DC
[2] Source: Harris Interactive, Customer Experience Impact Report
[3] Source: Lee Resource Inc
[4] Source: White House Office of Consumer Affairs, Washington, DC
[5] Source: Lee Resource Inc.

Leading with customer service is critical to the business

Customer Service across the Business

- Customer Care
- Help Desk/Line
- Product Support
- Telesales
- Inside sales
- Order Desk

Mission Statement

- Develop loyal customers

- Meet and exceed customer expectations and contribute to their success

- Provide timely, accurate and professional service at each and every customer contact

The state of customer service today

Instill confidence in customers
- 76% of customers believe companies lie in advertisements
- Growing trust gap in many consumer focused industries

Adapt how you interact with customers
- Social media changed purchaser influence; opinions viewable instantly
- Mass customization and personalization of products and services

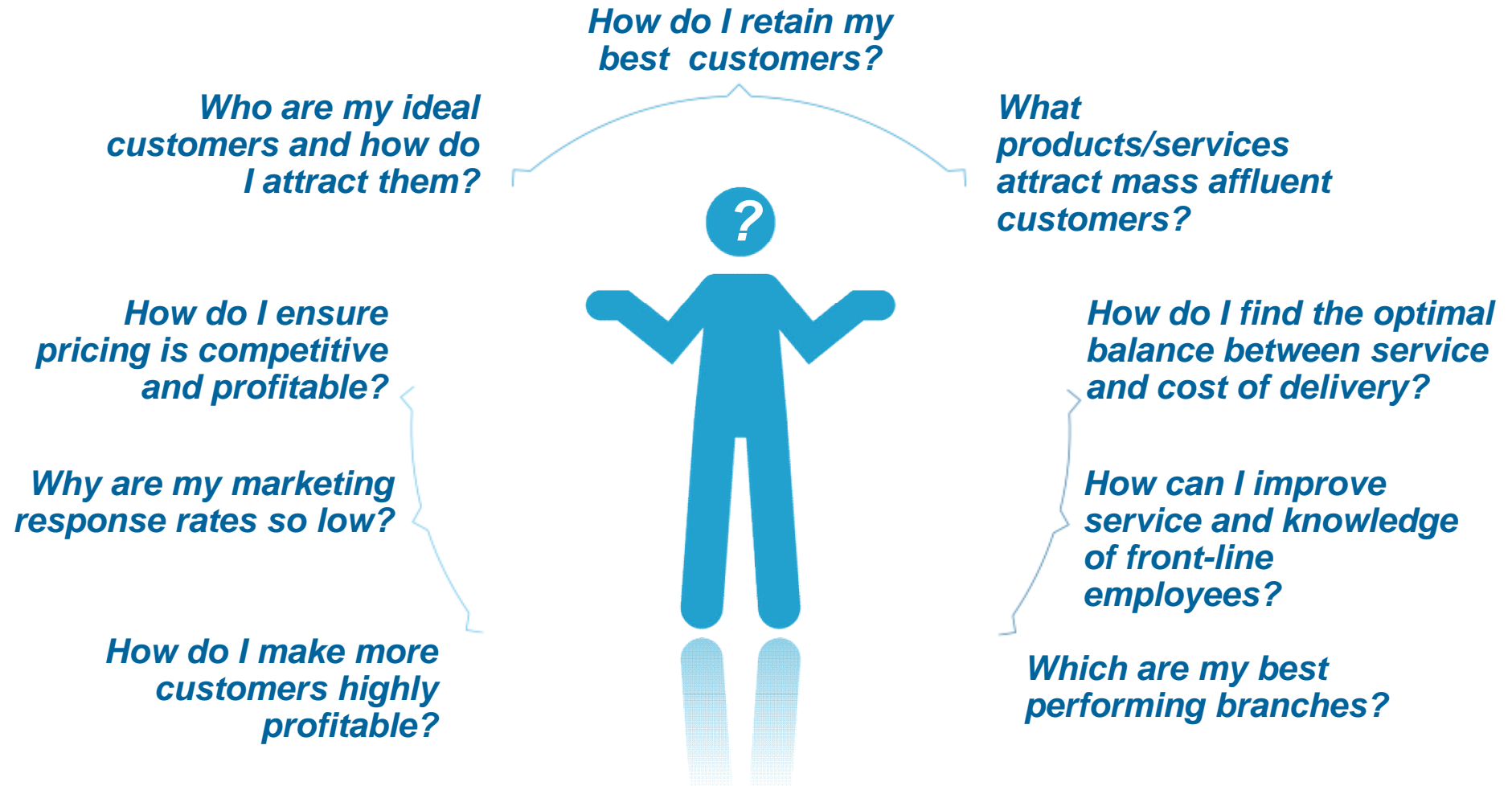## Understand changes in customer expectations
- Focus is on value, transparency and accountability
- Customers want to be seen holistically across the enterprise

Rediscover your customers
- Consumers are experiencing brands in new ways though new channels
- Micro-targeting: the move beyond 1 on 1 is accelerating

Rediscovering Customers

How do I retain my best customers?

Who are my ideal customers and how do I attract them?

What products/services attract mass affluent customers?

How do I ensure pricing is competitive and profitable?

How do I find the optimal balance between service and cost of delivery?

Why are my marketing response rates so low?

How can I improve service and knowledge of front-line employees?

How do I make more customers highly profitable?

Which are my best performing branches?

Customer-focused enterprises strive to optimize…

Customer Interactions

- Identify the most profitable customers

- Identify clients most likely to respond with the correct offer, channel, & time

- Improve 1st contact resolution with personalized up-sell & cross-sell offers

- Help detect & mitigate customer issues during interactions

- Uncover emerging patterns in customer behavior

- Deliver targeted retention offers in real time

Operations

- Measure and report performance & customer KPIs

- Improve agent productivity

- Reduce cost per interaction

- Help customers help themselves by providing routine analytics to customers directly

- Optimize budgets to align with goals

- Ensure investment is delivering the ROI

Looking at the Business of Customer Service

Fundamental Customer Service Tools & Technology

Having the Right People in the Right Place at the Right Time

A call/contact distribution solution
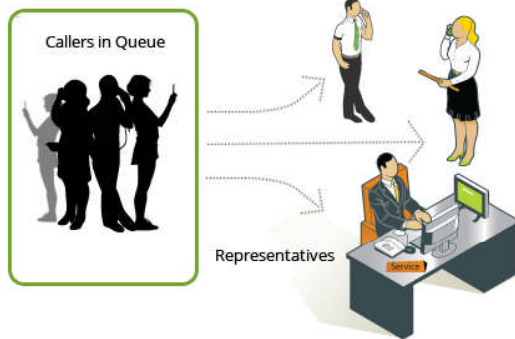
Customer Relationship Management

Historical reporting to measure contact center performance

Real-time traffic monitoring to respond instantly to changing traffic volumes

Broader requirements for success

Access the full spectrum of data required for a 360 degree view of the customer

Leverage the **right data, faster** for more effective customer service

Embed analytics into the fabric of the agents day to day activities
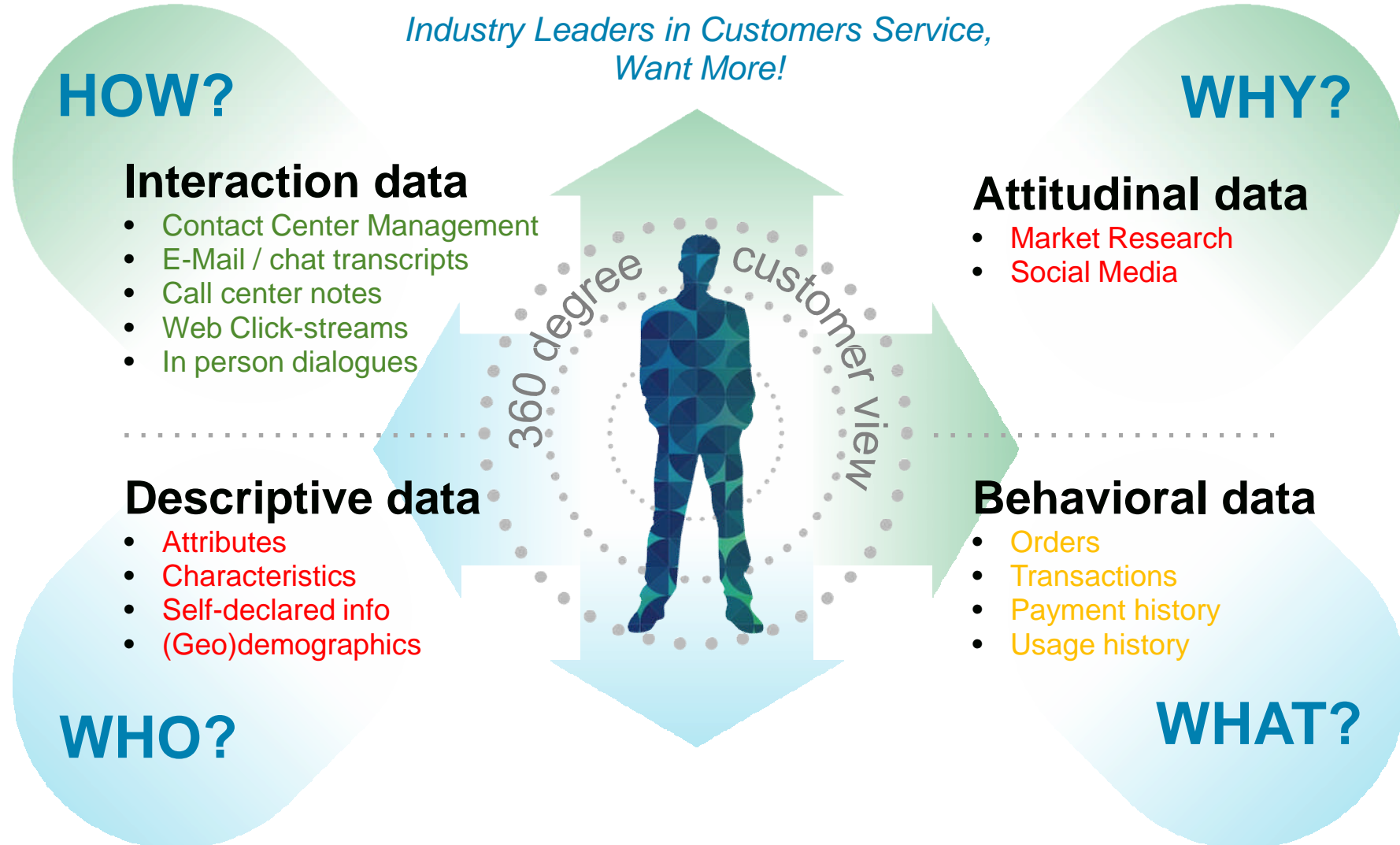
Ensure with great confidence the qualities of service required in customer service departments at all times

Addressing the broader customer service requirements with the right analytics and infrastructure
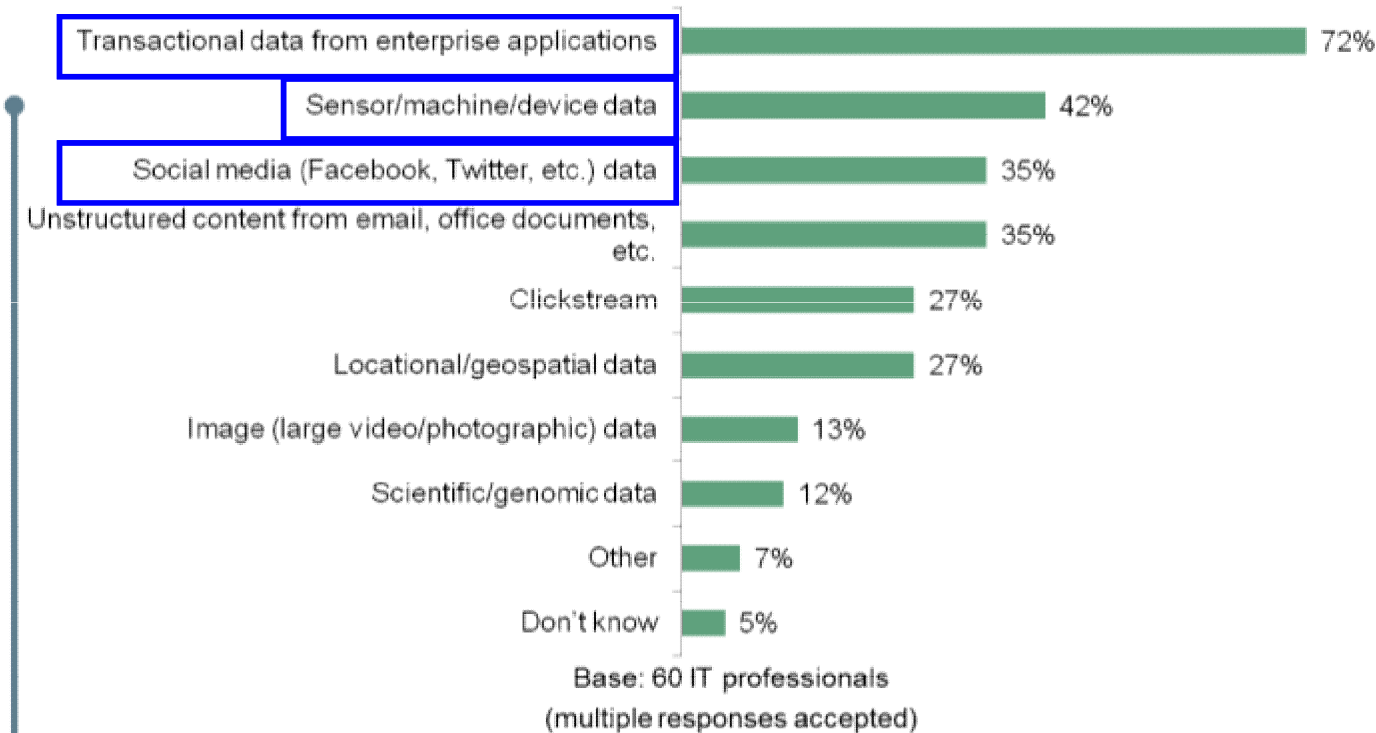
Broader requirements for success

Access the full spectrum of data required for a 360 degree view of the customer

SmarterAnalytics

IBM

Gaining a 360 degree view to better service customers

Industry Leaders in Customers Service, Want More!

HOW?

Interaction data
- Contact Center Management
- E-Mail / chat transcripts
- Call center notes
- Web Click-streams
- In person dialogues

WHY?

Attitudinal data
- Market Research
- Social Media

360 degree customer view

WHO?

Descriptive data
- Attributes
- Characteristics
- Self-declared info
- (Geo)demographics

WHAT?

Behavioral data
- Orders
- Transactions
- Payment history
- Usage history

Where are organizations are currently getting the most return out of Big Data Analytics

"What types of data/records are you planning to analyze using big data technologies?"

Data type	Percentage
Transactional data from enterprise applications	72%
Sensor/machine/device data	42%
Social media (Facebook, Twitter, etc.) data	35%
Unstructured content from email, office documents, etc.	35%
Clickstream	27%
Locational/geospatial data	27%
Image (large video/photographic) data	13%
Scientific/genomic data	12%
Other	7%
Don't know	5%

Base: 60 IT professionals
(multiple responses accepted)

Most big data use cases hype its application for analysis of new, raw data from social media, sensors, and web traffic, but we found that firms are being very practical, with early adopters using it to operate on enterprise data they already have.

Source: 2012 IBM Global Big Data Online Survey

Where is data coming into your business?

For many organizations the answer to that question is the IBM System z mainframe

- *25 of the top 25 worldwide banks*
- *23 of the top 25 U.S. retailers*
- *9 of the top 10 global life/health insurance providers*
- *64% of Fortune 500*
- *45% of Fortune 1000*
- *71% of Fortune Global 500*

These organizations benefit from a platform that

- Runs many of the worlds mission critical business applications
- Renowned superior qualities of services
- Touts that an estimated 80% of world's corporate data resides or originates on its servers

Big Data Analytics on IBM System z

Improves Experience → Increases Adoption→ Drives greater insight

Big Data Sources *

Business Critical Analytics

Data Warehousing

Query Acceleration

Business System / OLTP

A Single Solution to:

- ACCESS, COMBINE & MANAGE a relevant mix of information
- TIMELY & SECURE ACCESS for more accurate answers

Broader requirements for success

Leverage the right data, faster for more effective customer service

Leverage the right data, faster for more effective customer service

Speed up complex query response times by up to 2000x for improved insight

➢ Help detect & mitigate customer issues during interactions

➢ Uncover emerging patterns in customer behavior

Support better, faster, more cost effective analysis and scoring of data as it is coming into the business

➢ Improve 1st contact resolution with personalized up-sell & cross-sell offers

➢ Deliver targeted retention offers in real time

Why speed up complex query response times?
The faster you can analyze it, the sooner you can use it!

Capture customer preferences through survey research
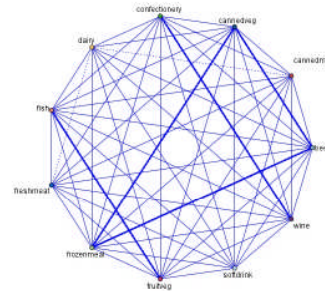
Uncover patterns in customer behavior through market basket analysis

Target those likely to respond with the correct offer, channel, & time
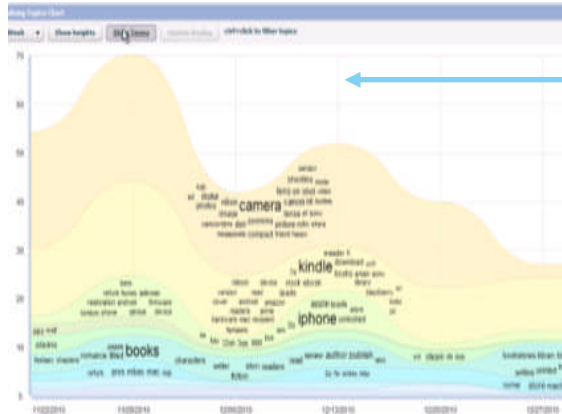
Personalize up-sell & cross-sell offers with social media data

Value being realized today

PETROL

"The store employee enters what the customer is purchasing, and with the DB2 Analytics Accelerator appliance, the Cognos BI and SPSS tools **deliver information on complementary products in seconds**." --A Chief Information officer--

BANCA CARIGE
Cassa di Risparmio di Genova e Imperia

"DB2 Analytics Accelerator **helps over 1,000 business users to get fast access to vital insights** – informing the development of new products, services and strategies to grow the business."
Daniele Cericola, CIO, Banca Carige

Swiss Mobiliar
Insurance & Pensions

"**Queries that used to take five hours to complete are now processed in just 20 seconds** in the optimized mainframe environment—and we can run them any time, day or night, with **no interruption to our production systems** on the mainframe."
Thomas Baumann, IT Performance Architect at Swiss Mobiliar

What makes it possible…

- **IBM DB2 Analytics Accelerator**

  - A high performance appliance that integrates Netezza technology with zEnterprise technology, to deliver dramatically faster business analytics

- **What does it do?**

  - Accelerates complex queries, up to 2000x faster

  - Lowers the cost of storing, managing and processing historical data

  - Minimizes latency

  - Reduces zEnterprise capacity requirements

  - Improves security and reduces risk

  - Complements existing investments

Support better, faster, more cost effective analysis & scoring of data as it is coming into the business

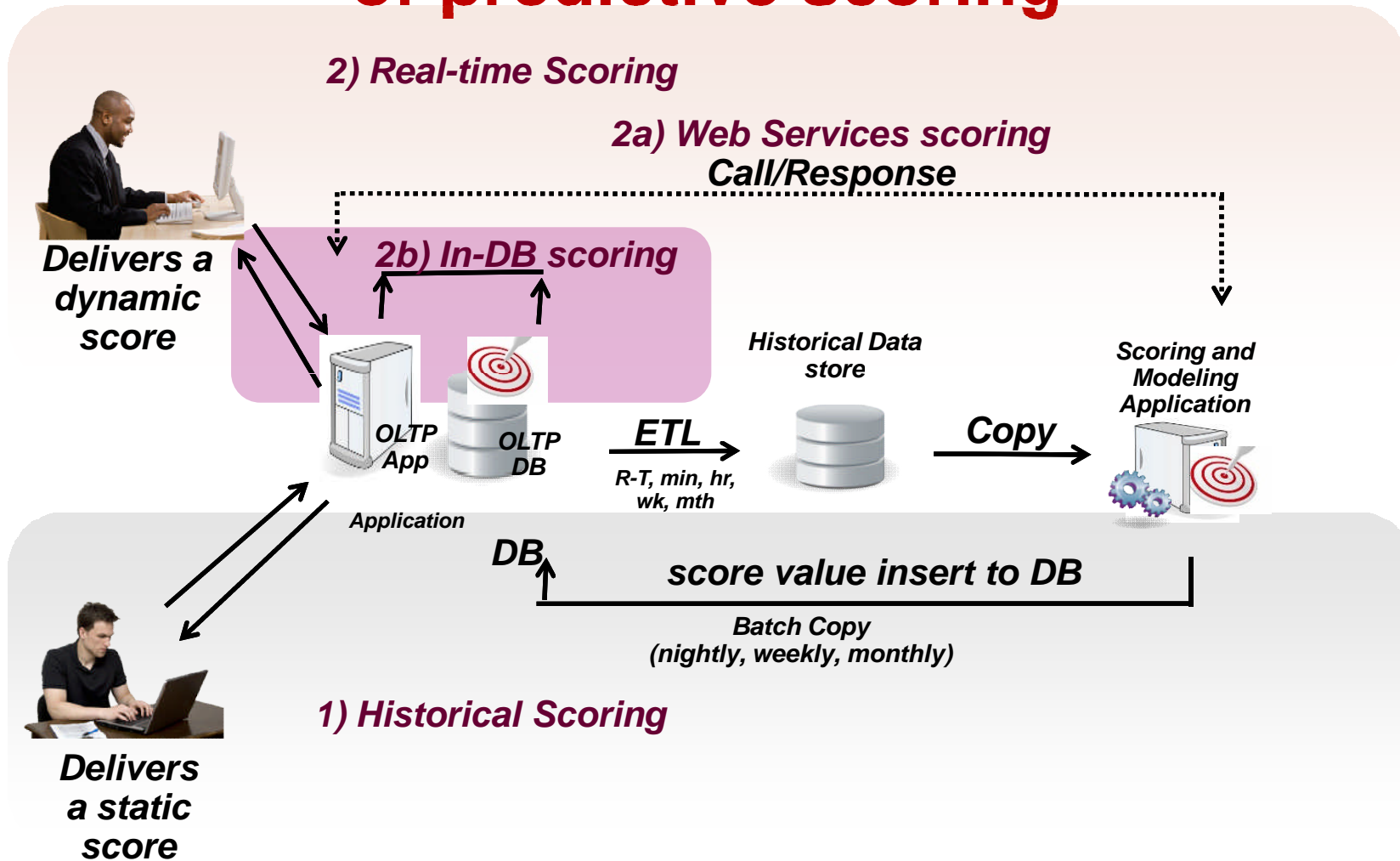|	
Banking	Monitor credit card usage in real time to proactively detect/prevent fraud
Insurance	Score claims in real time to immediately identify fraudulent claims and identify up-sell opportunities
Retail	Combine today's purchase details, with current market information and historical purchase patterns to determine the best upsell opportunity when they are ready to spend money.
Telco	Combine today's complaint with the current account status and previous behavior to determine best upsell

What is Predictive Scoring

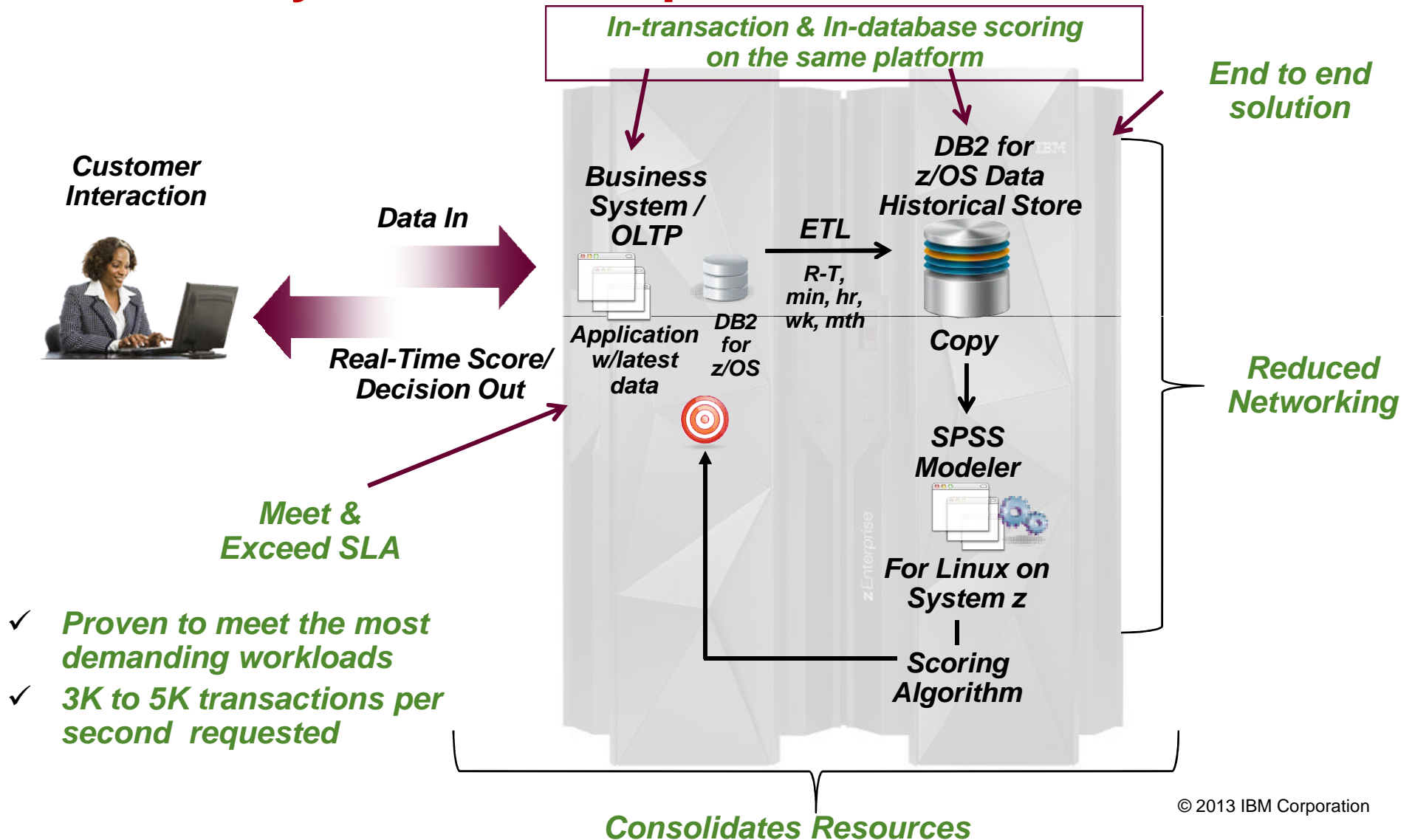Identify **predictive models/patterns** found in historical data

Use those predictive models with variables to score transactions & **identify the best possible future outcomes**

Data:
Demographics
Account activity
Transactions
Channel usage
Service queries
Renewals
...

Analyses
Segments
Profiles
Scoring models
...

Scoring

Customer Service Center
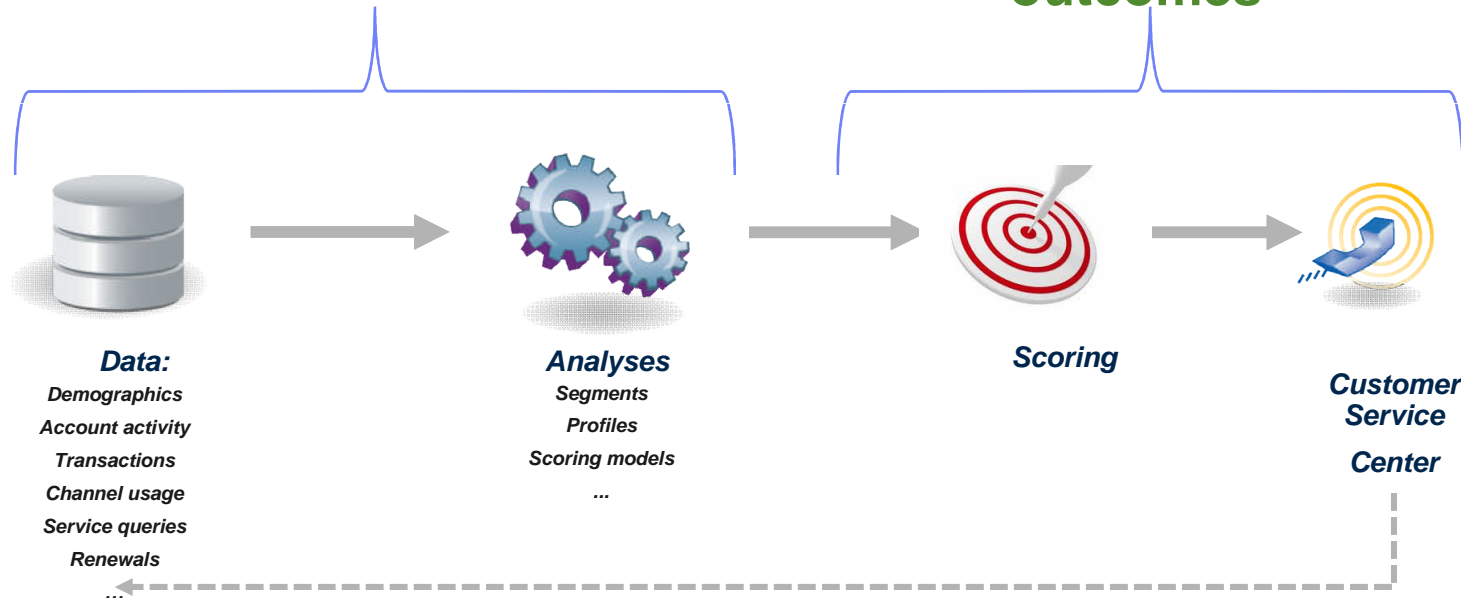
Understanding the fundamentals of predictive scoring

2) Real-time Scoring

2a) Web Services scoring
Call/Response

Delivers a dynamic score

2b) In-DB scoring

Historical Data store

Scoring and Modeling Application

OLTP App

OLTP DB

ETL
R-T, min, hr, wk, mth

Copy

Application

DB

score value insert to DB

*Batch Copy
(nightly, weekly, monthly)*

1) Historical Scoring

Delivers a static score

Taking Predictive Scoring to the next level with System z for improved customer service

In-transaction & In-database scoring on the same platform

End to end solution

Customer Interaction

Data In

Business System / OLTP

DB2 for z/OS Data Historical Store

ETL
R-T, min, hr, wk, mth

Real-Time Score/ Decision Out

Application w/latest data

DB2 for z/OS

Copy

Reduced Networking

Meet & Exceed SLA

SPSS Modeler

For Linux on System z

✓ **Proven to meet the most demanding workloads**

✓ **3K to 5K transactions per second requested**

Scoring Algorithm

Consolidates Resources

Broader requirements for success

Embed analytics into the fabric of the agents day to day activities

Why embed analytics into the fabric of the agents day to day activities?

Because it will:

- Improve the ROI
- Improve agent productivity
- Reduce cost per interaction

APPROVED

But it Must be:

- Easy to Use
- Integrate into Existing Tools
- Optimize Resources

What you need to be successful

Cognos BI for System z
Business intelligence

- Understand your current state and your potential state
- Monitor results and fine-tune your business
- Inform strategy with a view into the future

SPSS for System z
Predictive analytics

- Predict customer segment and category affinity
- Market Basket Analysis to identify the next best offer for the customer
- Overlay browsing history onto purchase history to profile customers

TM1 for System z
Performance management

- Reporting, analysis, operational & financial planning and consolidation.
- Product profitability solutions across customers, business lines and channels
- Sales Performance Management to improve pay-for-performance programs and efficiency in incentive compensation processes
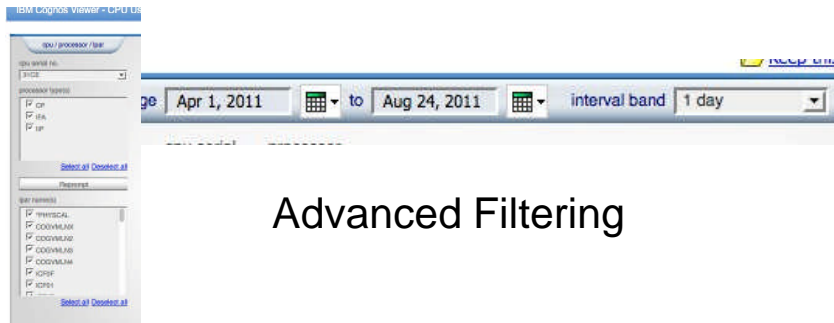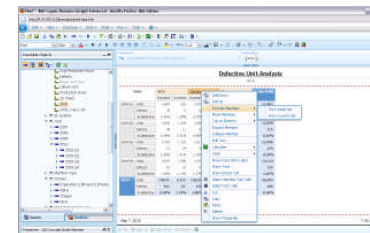
Easy to use…
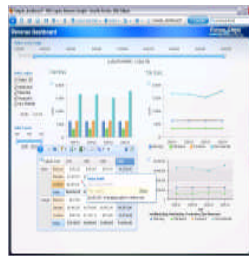
A workspace with greater power, intuitive navigation & cleaner look
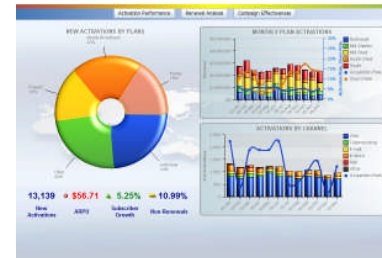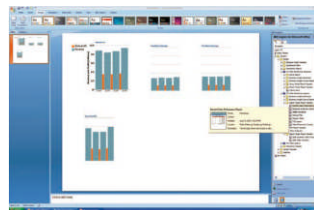
Pixel perfect reporting

Advanced Filtering

Seamlessly shift to more advanced analysis interaction

Communicate your analysis using Microsoft Office

Analytics on the go with Mobile devices and disconnected interaction

Integrates into existing tools…

Analytics integrated in the agents desktop, to improve agent productivity.

Optimizes Resources…

Agents	Costs	Time
• Scales to support offloading routine analytics to customers and partners	• Reduces the hardware and software investment required to leverage analytics	• Reduces the time to execute on new or growing analytics initiatives

Broader requirements for success

Ensure with great confidence the qualities of service required in customer service departments at all times

High impact customer service organizations demand an always on environment

Getting at the insight they need demands low latency, high qualities of service and performance

- Infrastructure must be scalable, available and reliable

- Data governance and security must be effective

- Analytics must be timely and accurate

Extend the same QoS to analytics that you rely on for transactional systems

System z proven QoS deliver on business critical analytics

- High security (EAL5+)

- High availability (99.999%)

- Performance at 100% capacity

- Prioritization of critical queries & workloads

- Integrated disaster recovery

Supporting a high impact, customer focused enterprise with IBM System z Analytics

✓ Easily and efficiently **integrate social data & operational data**

✓ Give the business faster, more direct access to the data as it is coming into the business to drive **real time analytic insights and decision making**

✓ Extend the same **proven qualities of service** that you depend upon today for your transactional environments to your business critical analytic processes

✓ Run transactional and analytic processing in a single environment with **minimal to no impact on transactional workloads and expense**

Where do you go from here?

If you're in customer service:

- Do you have the insight you need when you need?

- Do you have access to data as it is coming into the business?

- Can your technology support you in the 24x7, on demand customer service workforce you work in?

If you're in IT:

- Can you give your customer service teams access to data as it is coming into your business?

- Are your customers service teams able to fully exploit analytics for competitive advantage?

- Are you able to deliver business critical analytics effectively and cost competitively?

Learn more!

- <u>Visit the zAnalytics Website</u>

- <u>Join the Analytics Networking Community</u>