Decoding CAMS:
Cloud, Analytics, Mobile, & Social Technologies:
A Discussion of the Implications for Enterprises and their Providers

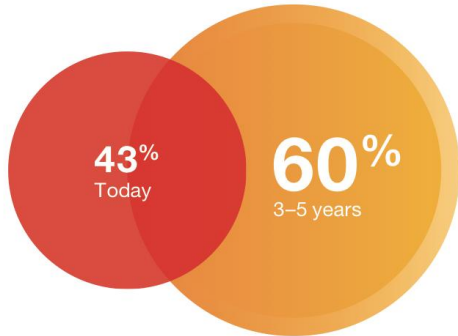**Steve Sheahan**
Client Solutions Executive
IBM Global Business Services
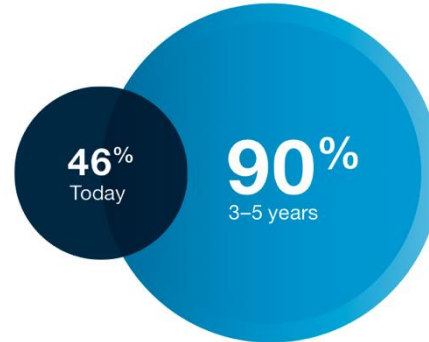
IAOP Atlanta Chapter
4Q14 Meeting

C-Suite Executives are embracing a:
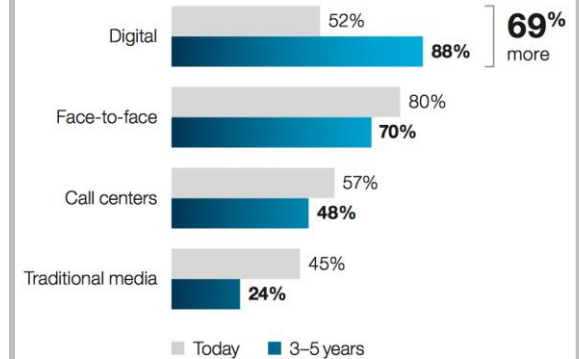## Customer Activated Enterprise

Rising profile: The area in which CEOs expect to see customer influence grow most is business strategy development

43% Today

60% 3–5 years

Strong links: CxOs plan to collaborate much more extensively with customers

46% Today

90% 3–5 years

Changing channels: CxOs intend to interact digitally with customers to a much greater extent in the future

Digital 52% / **88%** — **69%** more
Face-to-face 80% / **70%**
Call centers 57% / **48%**
Traditional media 45% / **24%**

Today ▪ 3–5 years

Cloud...

Defining the Cloud

- Cloud computing is a model for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction."

- **5 Characteristics** - on demand self-service; ubiquitous network access; resource pooling; rapid elasticity; measured service

We are at the inflection point in the industry…

Systems of Record

- Data & Transactions
- App Infrastructure
- Virtualized Resources

Next Generation Architectures

New Modes of Engagement

- Expanding Interface Modalities
- Big Data and Analytics
- Social Networking
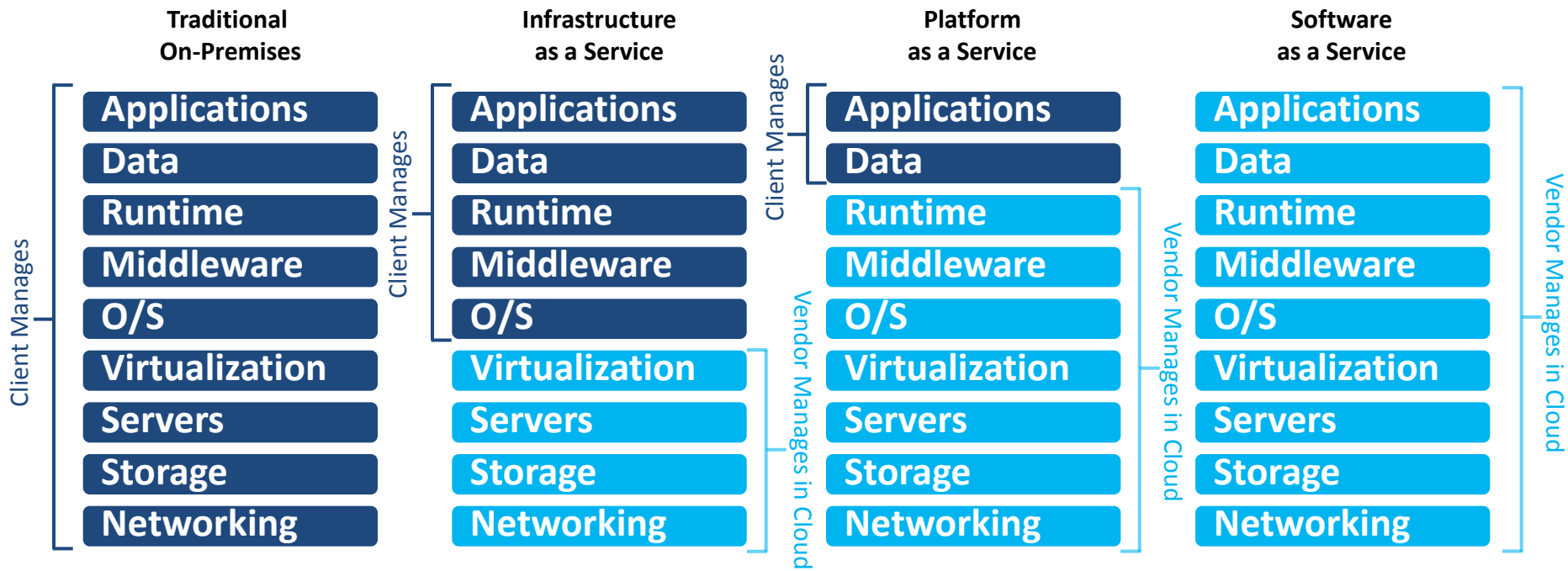
Data & Transaction Integrity → ← **Smarter Devices & Assets**

Focus on Operational Costs

Focus on Speed and Agility

Cloud service models

10 predictions on how Cloud will impact this industry in 2014

The Cloud is no longer an "if" for many businesses it is a given.

Platform as a Service

Business Process as a Service

Infrastructure as a Service

Software as a Service

- Further segmentation , Greater Education
- Human resources and Marketing take charge of Tech Innovation
- The CIO becomes a Cloud Enabler
- Small Companies have access to Big software
- Shift to application centric software development
- It Increasingly Decentralizes
- The Cloud drives Software on Tap
- Providers Add Gravity to the Cloud
- The Cloud Gets Intelligent
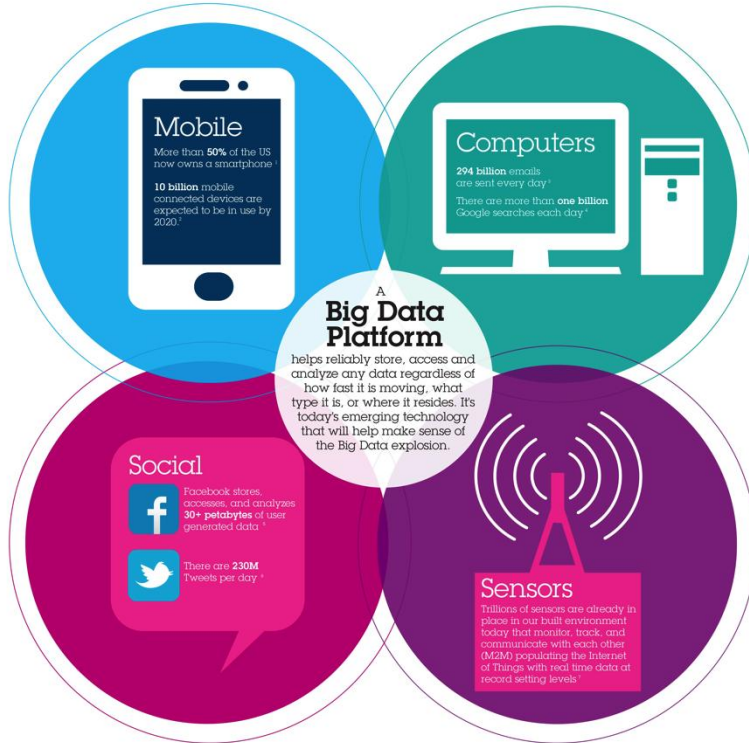- Machine-to-Machine (M2M) Comes Into Its Own

Question:

- How is the proliferation of Cloud computing affecting your business and your customers' businesses?

- Does the broad availability of cloud computing strengthen or weaken the fundamental value proposition of outsourcing?

Big Data Analytics…

Big Data:
Making the World go Round

Big Data is growing and moving fast from a variety of sources; are you keeping up?

Mobile
More than **50%** of the US now owns a smartphone [1]

10 billion mobile connected devices are expected to be in use by 2020. [2]

Computers
294 billion emails are sent every day [3]

There are more than **one billion** Google searches each day [4]

A Big Data Platform
helps reliably store, access and analyze any data regardless of how fast it is moving, what type it is, or where it resides. It's today's emerging technology that will help make sense of the Big Data explosion.

Social
Facebook stores, accesses, and analyzes **30+ petabytes** of user generated data [5]

There are **230M** Tweets per day [6]

Sensors
Trillions of sensors are already in place in our built environment today that monitor, track, and communicate with each other (M2M) populating the Internet of Things with real time data at record setting levels [7]
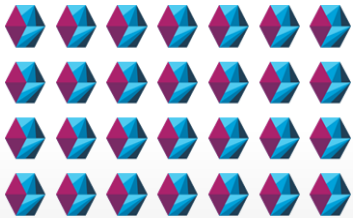

RELAX

Information gathered by IBM:

1 Chetan Sharma Consulting - US Mobile Data Market Update Q2 2012
2 2011 Economist
3 IBM - Managing the Big Flood of Big Data in Digital Marketing
4 Google - How Google Search Works
5 Wikibon - Taming Big Data
6 IBM - Managing the Big Flood of Big Data in Digital Marketing
7 IBM

IBM

Big Data is all data...

Volume

Data at Scale

Terabytes to petabytes of data

Variety

Data in Many Forms

Structured, unstructured, text, multimedia

Velocity

Data in Motion

Analysis of streaming data to enable decisions within fractions of a second.

Veracity

Data Uncertainty

Managing the reliability and predictability of imprecise data types.

Three Key Imperatives for Big Data & Analytics Success

Build a culture that infuses analytics everywhere

Invest in a big data & analytics platform

Be proactive about privacy, security and governance

Imagine It.

Realize It.

Trust It.

Every industry can leverage Big Data Analytics...

Banking
- Optimizing Offers and Cross-sell
- Customer Service and Call Center Efficiency

Insurance
- 360° View of Domain or Subject
- Catastrophe Modeling
- Fraud & Abuse

Telco
- Pro-active Call Center
- Network Analytics
- Location Based Services

Energy & Utilities
- Smart Meter Analytics
- Distribution Load Forecasting/Scheduling
- Condition Based Maintenance

Media & Entertain
- Business process transformation
- Audience & Marketing Optimization

Retail
- Actionable Customer Insight
- Merchandise Optimization
- Dynamic Pricing

Travel & Transport
- Customer Analytics & Loyalty Marketing
- Predictive Maintenance Analytics

Consumer Products
- Shelf Availability
- Promotional Spend Optimization
- Merchandising Compliance

Govern.
- Civilian Services
- Defense & Intelligence
- Tax & Treasury Services

Healthcare
- Measure & Act on Population Health Outcomes
- Engage Consumers in their Healthcare

Automotive
- Advanced Condition Monitoring
- Data Warehouse Optimization

Chemical & Petroleum
- Operational Surveillance, Analysis & Optimization
- Data Warehouse Consolidation, Integration & Augmentation

Aerospace & Defense
- Uniform Information Access Platform
- Data Warehouse Optimization

Electronics
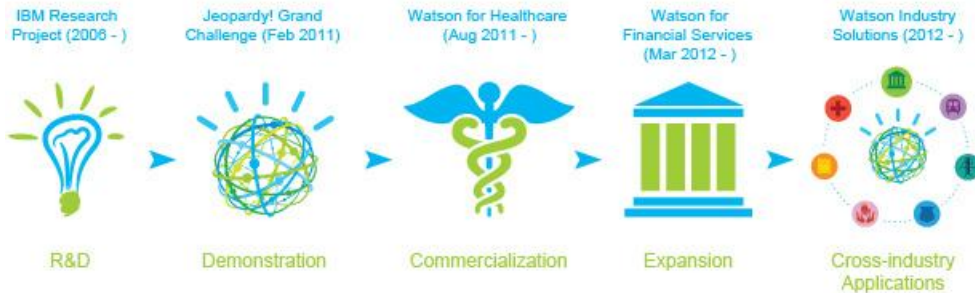- Customer/ Channel Analytics
- Advanced Condition Monitoring

Life Sciences
- Increase visibility into drug safety and effectiveness

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IBM Watson

Cognitive systems like Watson may transform how organizations think, act, and operate in the future.

Learning through interactions, they deliver evidence based responses driving better outcomes.

IBM Research Project (2006 -) — **R&D**
Jeopardy! Grand Challenge (Feb 2011) — **Demonstration**
Watson for Healthcare (Aug 2011 -) — **Commercialization**
Watson for Financial Services (Mar 2012 -) — **Expansion**
Watson Industry Solutions (2012 -) — **Cross-industry Applications**

WATSON Goes to Work (For You)

270 BILLION customer calls are handled annually

Nearly **50 PERCENT** of all incoming service calls require escalation, dispatch, or go unresolved

61 PERCENT of customer calls could have been resolved with better access to information

INSURANCE
In the past 12 months, approximately 1 in 6 customers have only interacted via digital channels. This is primarily driven by Gen Y customers, among whom more than 20% of recent interactions are digital only.

Only 44% of health insurance customers and 54% of provider consumers actually tell anyone within a month of having a positive experience, compared to 70% of retail and 66% of banking customers.

RETAIL
Enterprises in the U.S. lose an estimated $83 billion each year due to defections and abandoned purchases as a direct result of a poor experience.

A one-point change in customer satisfaction is associated with a 4.6% change in market value.

Research shows that 86% of consumers will pay more for a better customer experience, and 89% of consumers began doing business with a competitor following a poor customer experience.

Consumers are increasingly looking for personalized, efficient interactions with the companies they frequent. Is your organization making the grade?

IBM Watson Engagement Advisor
Fundamentally transforming the way people and companies interact and build relationships.

Consumers will interact directly with Watson to get timely, accurate, personalized responses to inquiries.

Understand the subtleties of human language

Search through vast amounts of Big Data

Deliver fast, evidence-based answers to users' questions

FINANCIAL SERVICES
Only 4% of customers think banks have a good understanding of customer experience and 62% of customers think that their banks don't listen to feedback and take action.

70% of customers worldwide are willing to provide their bank with more information if this leads to greater personalization or better service.

TELECOM
47% of telecom marketers will focus on retaining relationships and building stronger affinity with existing customers in 2013.

40% of telecom marketers plan to improve the relevance and value of communication and content in 2013.

Question:

- How is your business using analytics today?
- What analytics capability is at the top of your wish list?
- What about your customers?