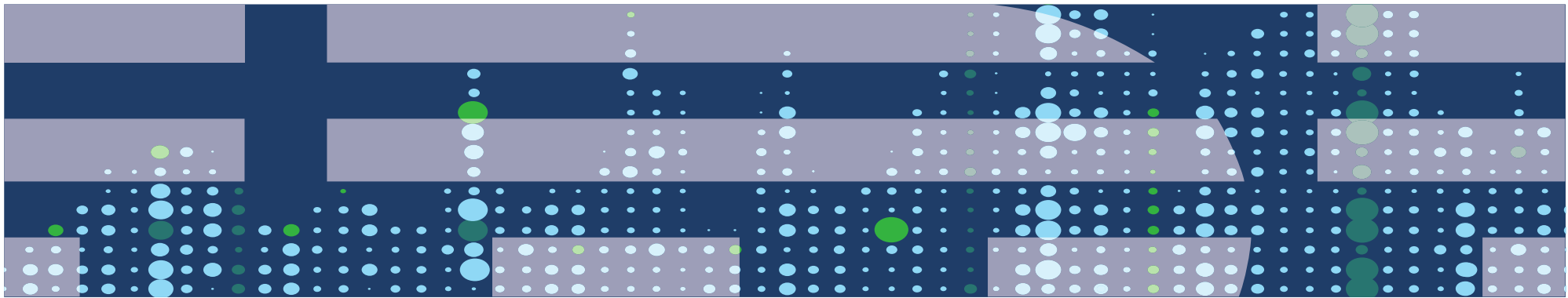


Keynote: Big Data, Big Deal

Piyush Malik

Global Business Services,
IBM Silicon Valley



San Diego
October 6th, 2015

Outline

1

Why
Big Data
matters



2

Real World
Applications

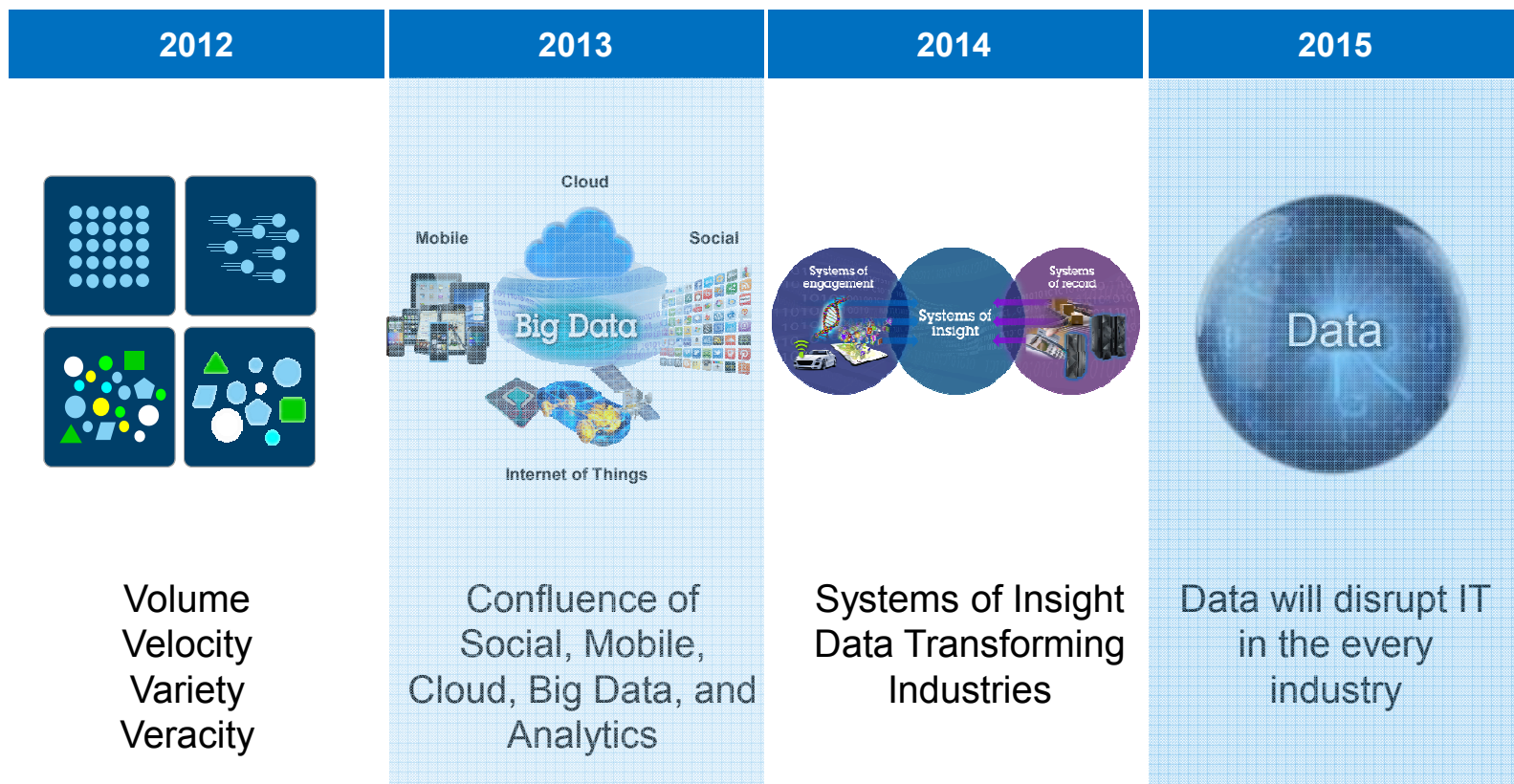
3

Future in a
Data-Driven
world

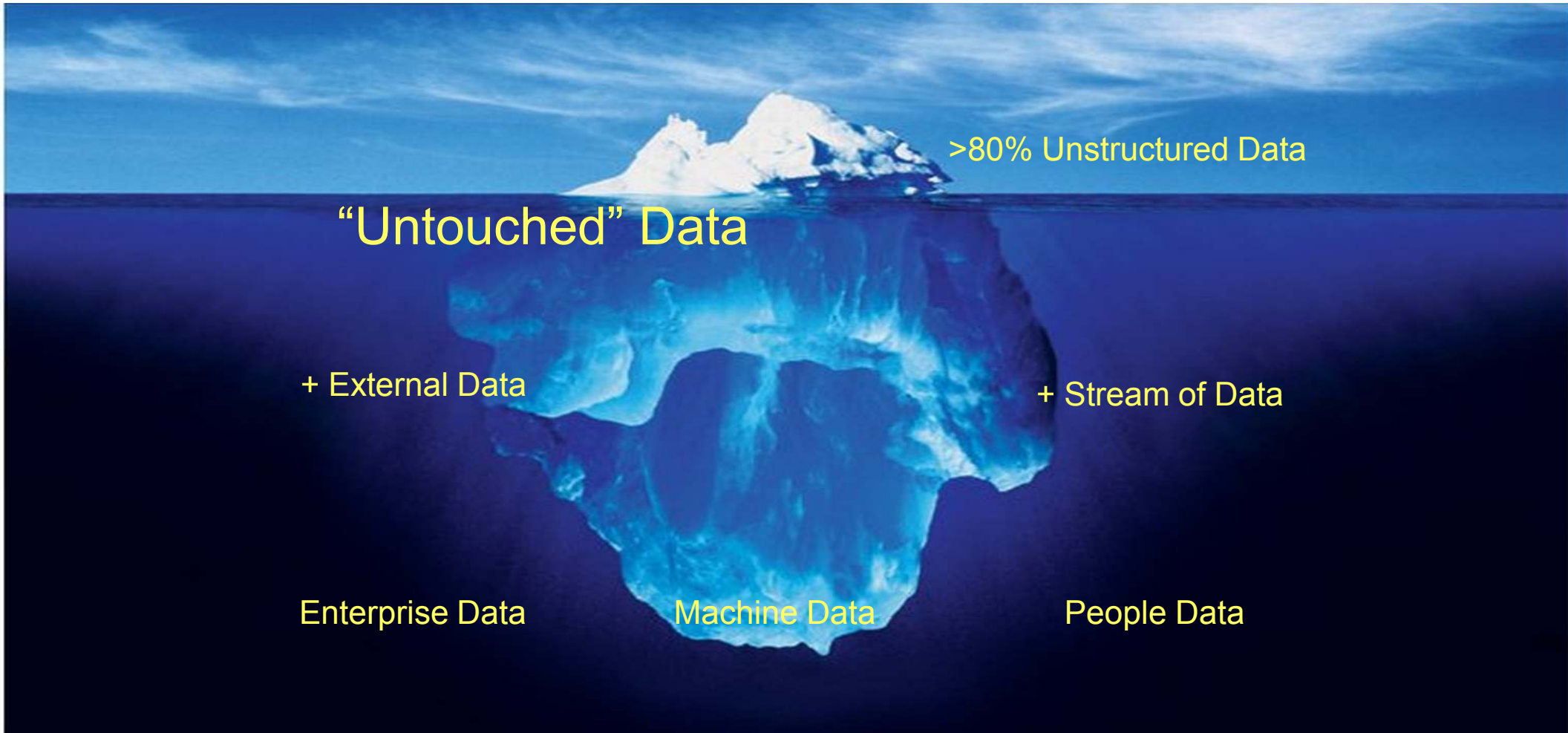
Big Data is Big News



Big Data has been a popular topic in client discussions



Visualizing the concept of Big Data





**Business
Users Want
to Access
More Data**

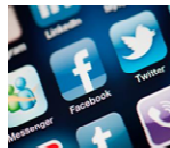
**Business Users
Already Suffer
from Information
Overload**

The Big Data Paradox

All You Can Eat Buffet

It's Time to Evolve the Way the World Works with Data

Data is Growing at an Accelerating Pace



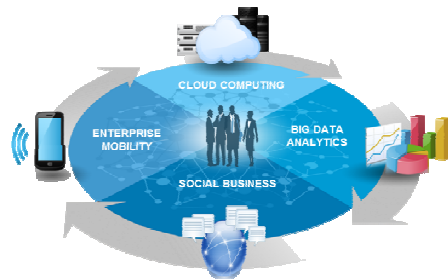
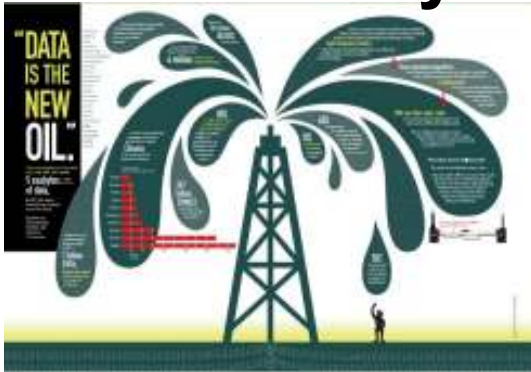
Users Demand Better Access to Data



Cloud Facilitates Access for All



Data is an asset ..are you treating it as a liability?



- Data is the new natural resource that needs to be harnessed amidst characteristics of rising volumes, variety and velocity

- Embracing Analytics enhances the chances of an enterprise to succeed amongst its peers by a factor of 5

- Complexity of integrating Big Data and Analytics is driving demand for cloud based BD&A solutions

- We are unleashing a new era of computing

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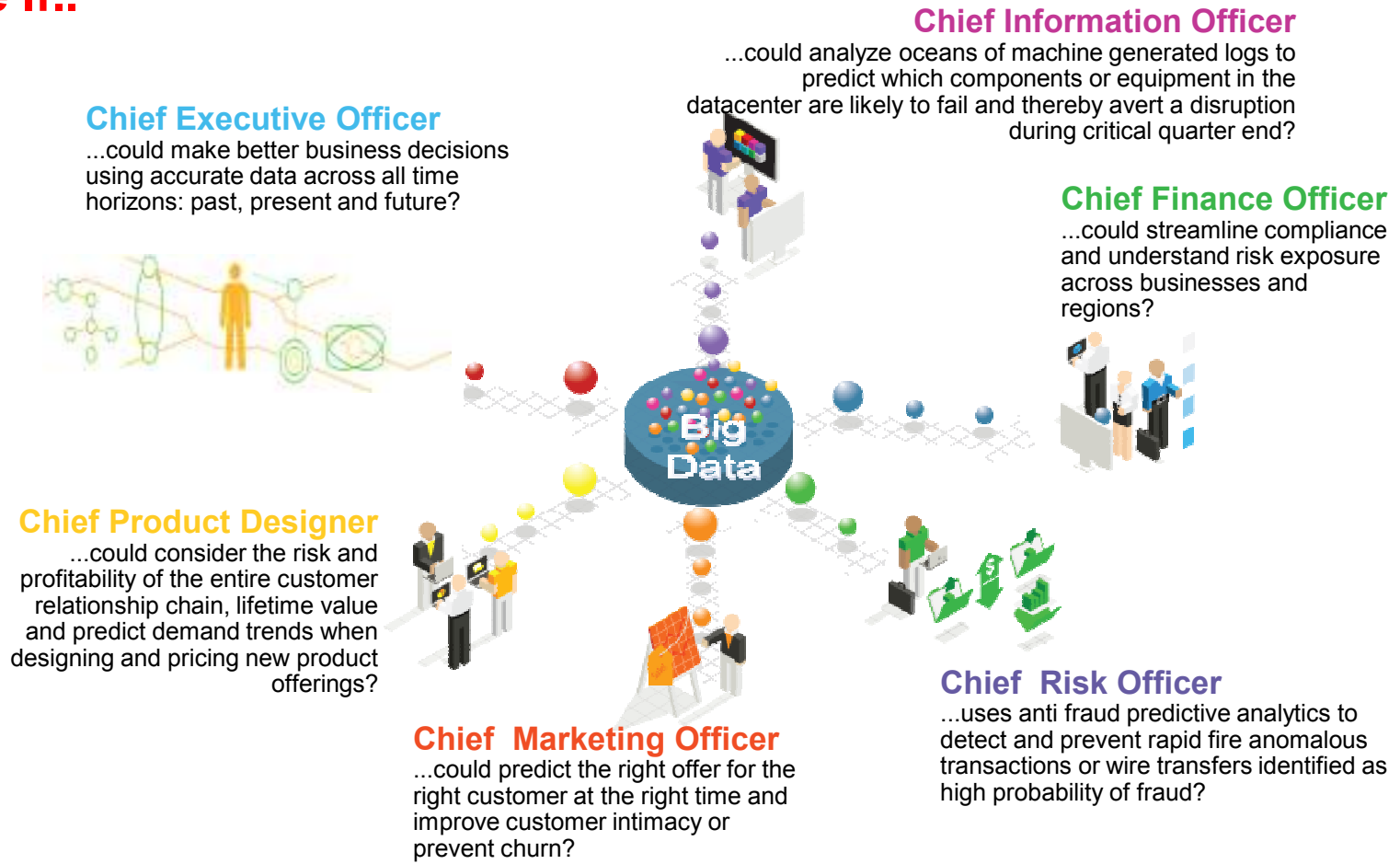


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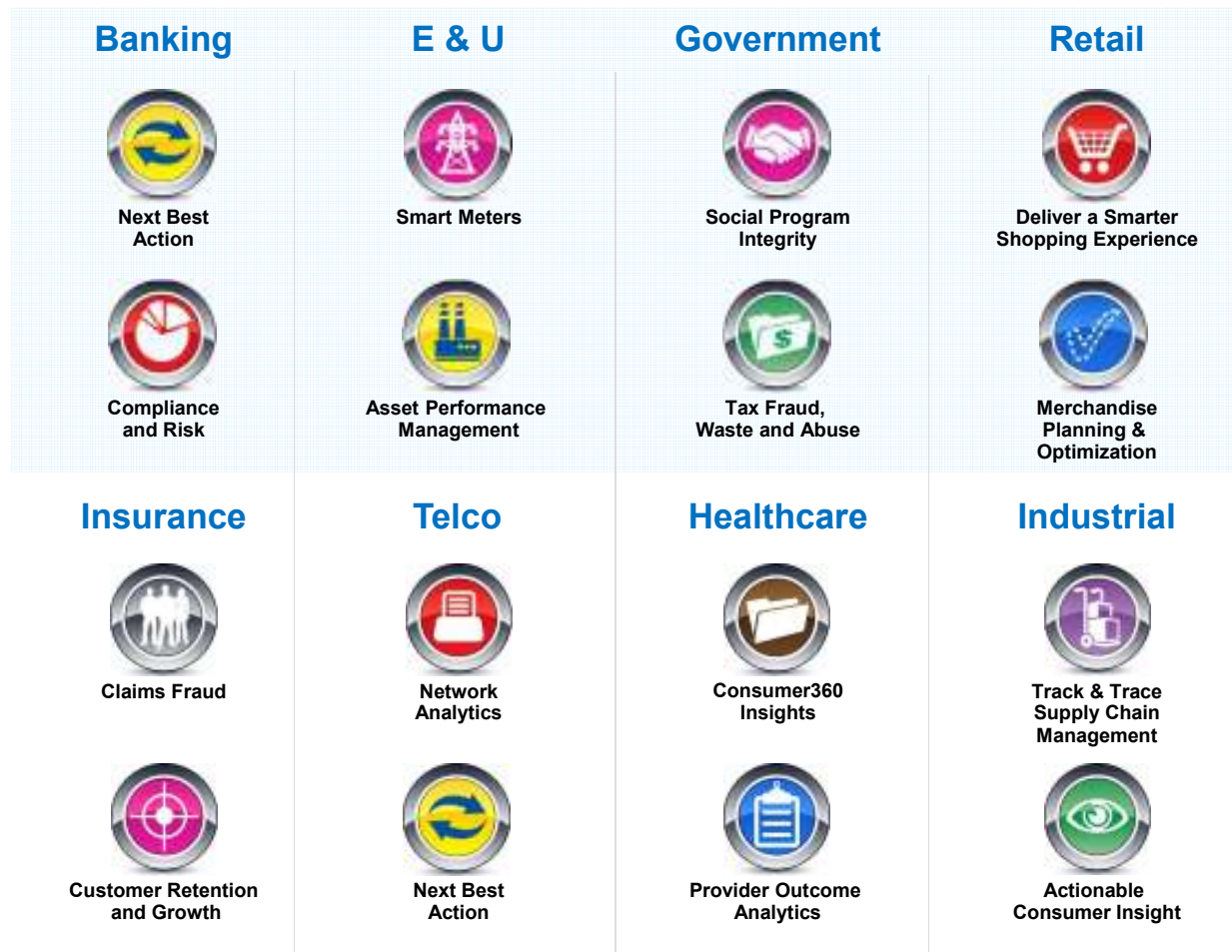
Future in a
Data-Driven
world

Big Data holds opportunities for a number of stakeholders

Imagine If..



Popular use cases across all Industries



Big Data drives Enterprise Transformations on 3 themes



Four Application Cases

1. Industrial



2. Telecom



3. Financial Services



4. Healthcare





Do you recognize this?



SCIENCE & DATA TO EXTEND HUMAN CAPABILITY

13 WEEKS

GNIP, BOARDREADER &
FACEBOOK DATA

GBS, RESEARCH, SW &
CLIENT

SOCIAL DATA DISCOVERY

ANALYSIS &
INTELLIGENCE

HOW DOES INFLUENCE SPREAD?



USE CASE #1
**PROMISED LAND
ANALYSIS**

USE CASE #2
**INFLUENCER
ANALYSIS**

USE CASE #3
**MESSAGING
ANALYSIS**

USE CASE #4
**GEO-TARGETING
ANALYSIS**

Four Application Cases

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4. Healthcare



What is changing in the Telecom industry

Consolidation continues



**15 multi-country
(10 or more countries)
companies now
control > 3 billion subs**

Over-the-top (OTT) providers thrive



**4 companies make up
70% of the total market
value of the top 25
drivers of internet
traffic: Apple, Google,
Amazon and Facebook**

Mobile data explodes



**By 2016, mobile
traffic projected to
grow to
11 exabytes / mo;
70% of that video
content**

Consumers are seizing control



**Only 18% of people
trust information
from retailers and
manufacturers**



Published by “The Star”
on 3rd January 2012

StarBytz, TUESDAY 3 JANUARY 2012 CORPORATE IT II

CELCOM Axiata Bhd has selected IBM's business analytics solutions to provide the telco with better consumer insights.

The solutions comprise IBM Netezza Appliance for enterprise data warehousing, Cognos Business Intelligence software for reporting, Infosphere Information Server for job scheduling, Telco Data Warehouse for enterprise data modelling and IBM Power System servers.

They are currently being deployed in stages and Celcom expects the exercise to be completed in a few months.

Once up and running, the telco's current quantitative and qualitative data database systems will be

Celcom picks IBM analytics solutions

consolidated into a singular data warehouse to improve operational efficiency.

According to Celcom chief executive officer Datuk Seri Shazalli Ramly, with advanced analytics

capabilities in place, Celcom will be able to tap into its customers' psyche and effectively segment the company's target markets.

“We will be able to launch innovative products, more precisely

target promotional campaigns to individual consumers and speed up response times related to customer inquiries,” he said.

The system will also enable the telco to promptly identify broad-

band and data related services areas with the highest signal traffic and customer concentration, allowing it to effectively plan future network expansion and upgrades, said Shazalli.

Given the nature of today's business environment, leveraging on business analytics is a very important step for a company to stay ahead of the competition and market demands, he added.

The findings can also be used to create new business models and niche markets across different industries that are usually overlooked by conventional mobile marketing practices and campaigns.

GBS Led, collaboration with SWG for IBM's Biggest Telco Analytics Win in ASEAN (3Q, 2011), followed by biggest Enterprise Marketing Management – Next Best Action win in ASEAN (1Q, 2012)

Four Application Cases

1. Industrial



2. Telecom



3. Financial Services



4. Healthcare

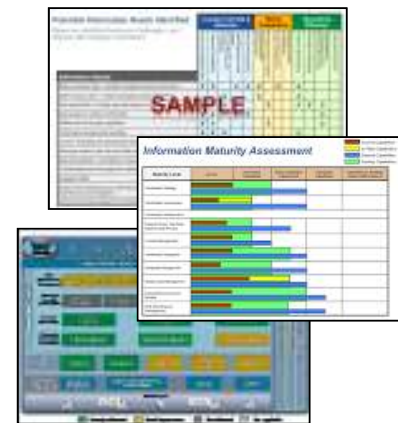


Digital Bank wanted Customer Centricity with big data

..But first they asked us to help them define an information management transformation roadmap



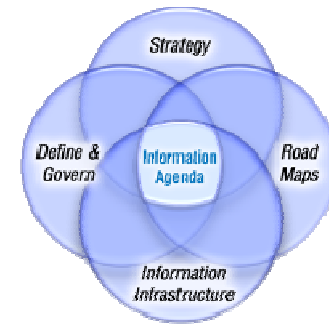
Understand Primary Business Challenges



Assess Current Information Capabilities and Prioritize Gaps



Develop Recommendations and Potential Roadmap



Identify Potential Business Value



The high-level roadmap justifies the transition from current to future state, as well as describing the initiatives needed to realize the strategic vision

Four Application Cases

1. Industrial



2. Telecom



3. Financial Services



4. Healthcare





US Pharmaceutical leader provides transparent access to enterprise information for 30,000 employees worldwide

- Need**
- Executives wanted to transform information and data sharing capabilities by providing access to huge volumes of customer, patient and research data stored in systems around the world
- Benefits**
- Improved R&D efficiency by 90 percent and reduced search time by 60 percent, saving millions of dollars in the first year alone
 - Reduced new staffing requirements by 1.2 percent, saving USD 13.4 million yearly
 - Improved sales productivity to increase revenue by 1.4 percent



University of Ontario Institute of Technology (UOIT) uses big data to improve quality of care for neonatal babies

- Need**
- Performing real-time analytics using physiological data from neonatal babies
 - Continuously correlates data from medical monitors to detect subtle changes and alert hospital staff sooner
 - Early warning gives caregivers the ability to proactively deal with complications
- Benefits**
- Detecting life threatening conditions 24 hours sooner than symptoms exhibited
 - Lower morbidity and improved patient care



Seattle Children's simplifies analytics and gains insight for developing new care protocols

- Need**
- Faced with an ever-growing volume and variety of patient data, Seattle Children's needed a consolidated platform to support healthcare analytics and reporting
- Benefits**
- Provides capabilities to analyze massive volumes of hospital and patient data to provide a holistic view and insight for improving care
 - Eliminates manual processes and accelerates query times by 80 to 100 percent. One query that took 14 minutes completes in 2 seconds
 - Reduced clinical report generation times from months to a single day, providing additional insights and improving staff efficiencies



The State University of New York (SUNY) at Buffalo gains insights from big data to slow progression of multiple sclerosis

- Need**
- Researchers needed to quickly build models using a range of variable types and run them on a high-performing environment on huge data sets, spanning more than 2,000 genetic and environmental factors that may contribute to multiple sclerosis (MS) symptoms
- Benefits**
- Able to reduce the time required to conduct analysis from 27.2 hours to 11.7 minutes
 - Researchers are empowered to look for potential factors contributing to the risk of developing MS



Data Baby Video Analytics



**University of Ontario
Institute of Technology
(UOIT) uses big data to
improve quality of care for
neonatal babies**

Need

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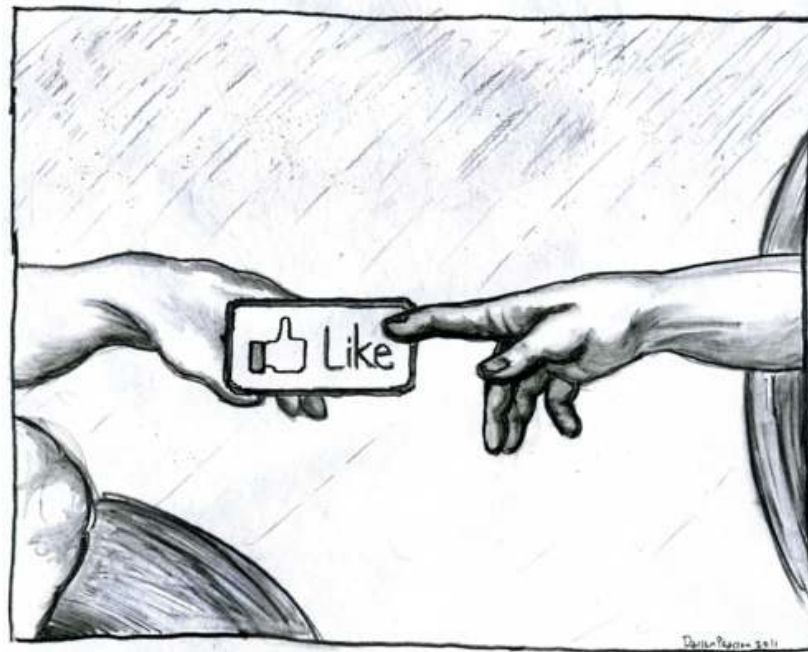
Real World
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Future in a
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world



Data is an invisible thread permeating our lives in many ways



We live in a data-driven world ...

- What movies you should watch
- What ads show up based on browsing history, likes, preferences, and so forth or location even on your phone as you are driving around
- How you connect to your friends
- What subjects you are interested in, how **YOU** influence the world



Which is rapidly transforming



- Change or Perish
- Disrupt or be Disrupted
- What interests you, how **YOU** influence the world and how would you like to **TRANSFORM**

5 Ways Data will drive our future



1. Hyper **Personalization** will become the norm

2. **Contextual and Cognitive** apps will make us smarter



3. Privacy will evaporate sooner than you think, while need for continuous refinement to boost **trustworthiness of data** will be paramount



4. Digital currencies will make way for a nearly **cashless society**



5. Innovative **Data Products** will mushroom around us boosting **Open Data movement** and creating opportunities to **disrupt or create entire industries**



Summary

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Q&A

