IBM BusinessConnect 2014

A New Era of Smart

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IBM BusinessConnect 2014

A New Era of Smart

Fueling A New Era of Competitive Advantage Through Big Data & Analytics

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IBM

Eras of computing

Tabulating Systems Era

Programmable Systems Era

Cognitive Systems Era

cog·ni·tive: of or pertaining to the mental processes of perception, memory, judgment, learning, and reasoning.

Data is the new natural resource

2.5 Billion

gigabytes new every day

1 Trillion

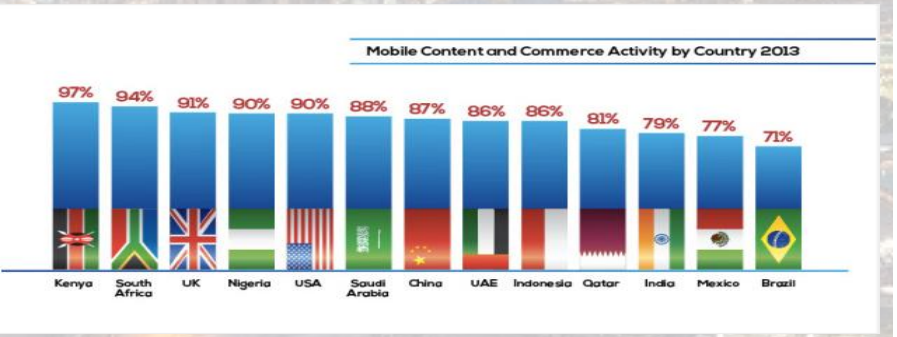
connected **things** by 2015

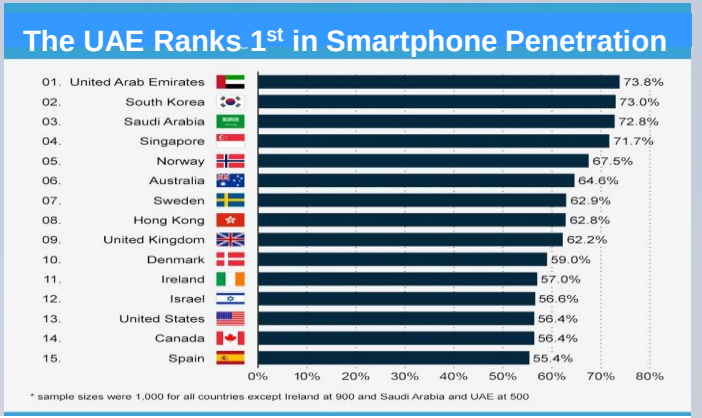
3 Times

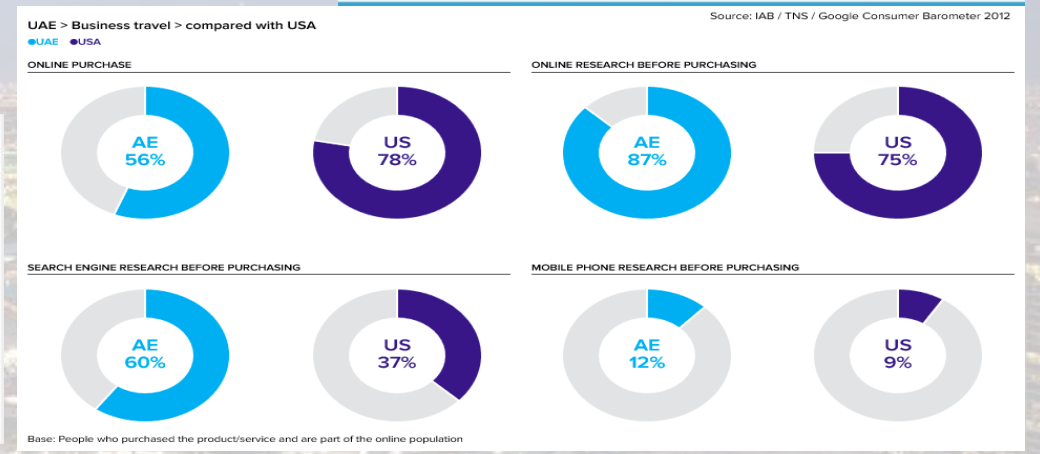
Increase in **transistors per human** by 2017

Even Locally ..

It is Evolving

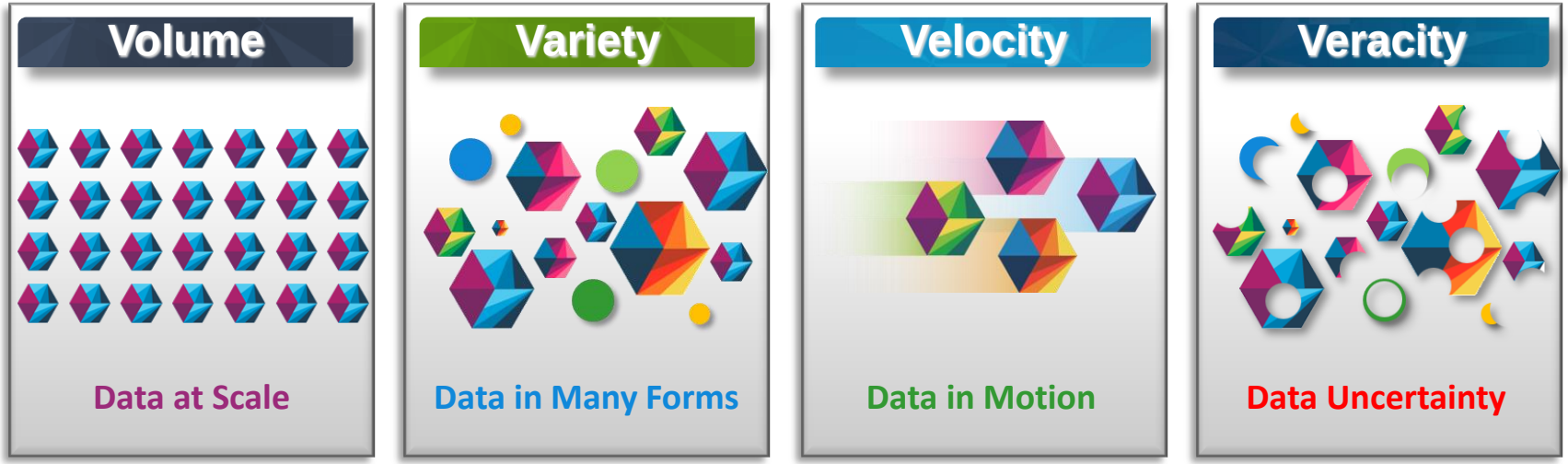




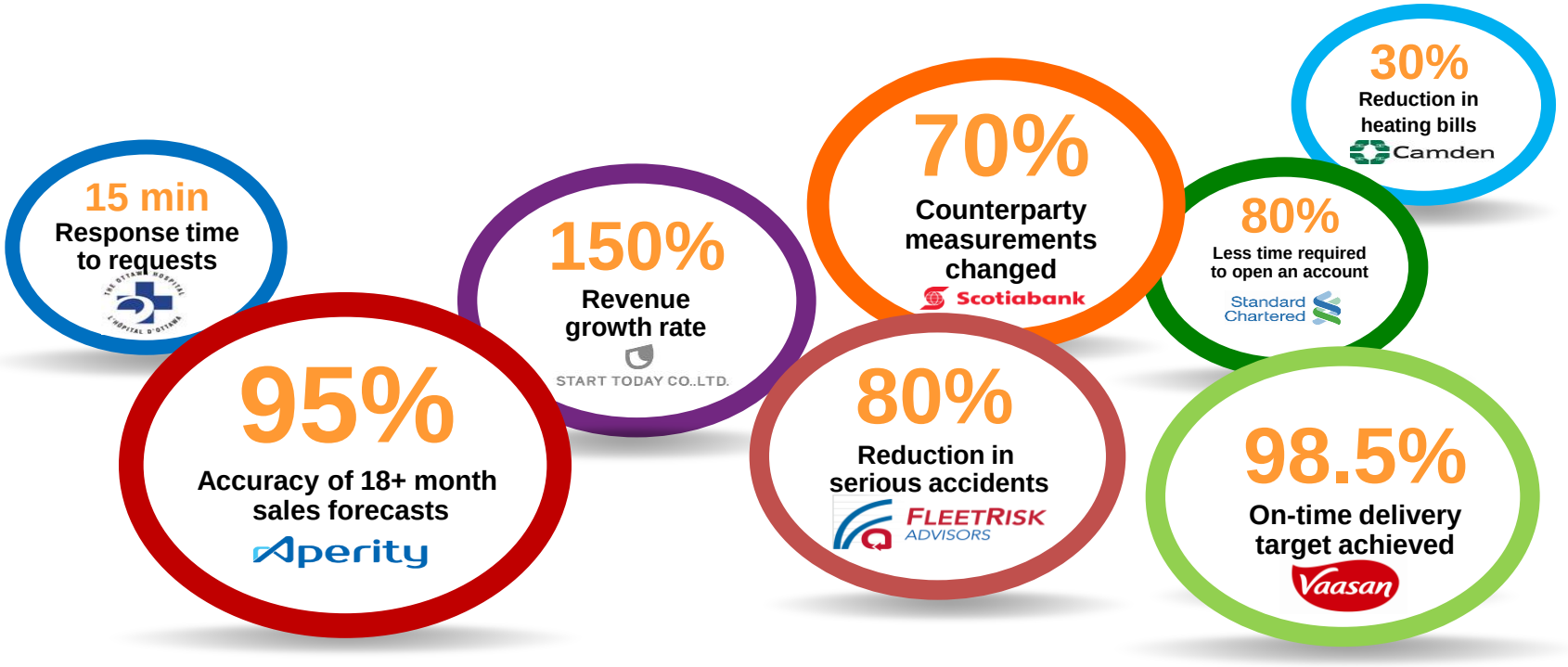


** Non IBM surveys*

Big Data Is All Data



The Opportunities from Big Data & Analytics Are Infinite



Three Key Imperatives for Big Data & Analytics Success

Build a culture that infuses analytics everywhere

Imagine It.

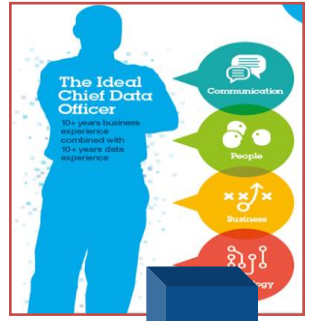
Invest in a big data & analytics platform

Realize It.

Be proactive about privacy, security and governance

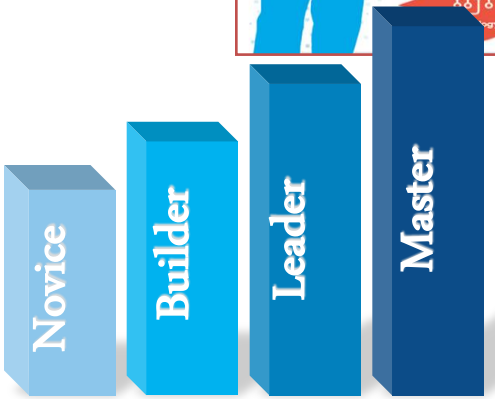
Trust It.

Imagine It. Start with your people.



20%

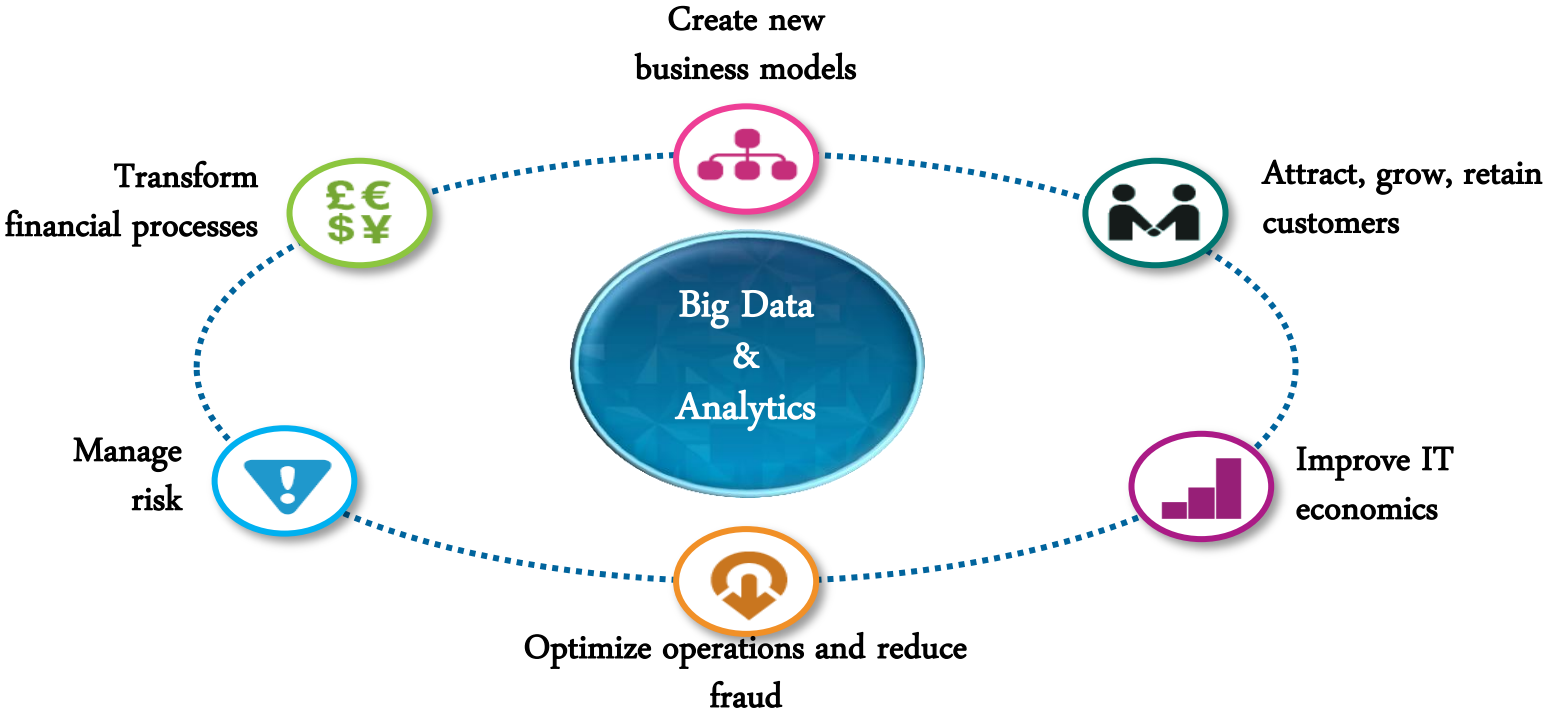
U.S. Department of Labor Forecasts*

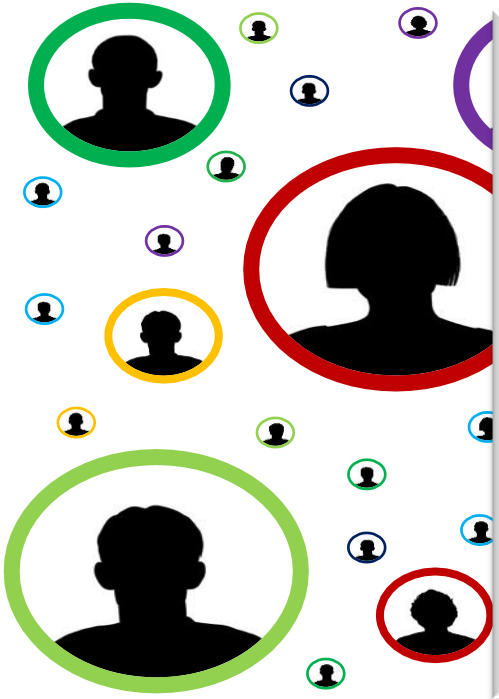


Skills | **Roles** | **Mastery**

*More than 20 percent increase in analytics-based jobs between now and 2018.

Imagine It. Infuse analytics into key business processes.





Action	Impact on Churn	Impact on Customer Lifetime Value	Likelihood to respond positively
$20 off this month's bill			
Deliver an apology — Issue with cell tower being fixed this weekend			
6 months free unlimited data plan			
Upgrade phone			

Ufone reduced churn and kept subscribers happy, helping ensure that campaigns are highly effective and timely

Attract, grow, retain customers

Improving current processes and performance

Needs

- To ensure that its marketing campaigns targeted the right customers, before they left the network
- To keep its higher usage customers happy with campaigns offering services and plans that were right for them

Benefits

- Predictive analytics is expected to improve the campaign response rate from about 25% to at least 50%
- CDRs can be analyzed within 30 seconds, instead of requiring at least a day
- Expected to reduce churn by approximately 15-20%

One of the largest Telco service provider in Egypt more than 32M subscribers ,

Is using IBM’s predictive analytics solutions to reduce customer churn.

Attract, grow, retain customers

Reducing customer churn and increasing revenue.

Needs

- Did not have a clear understanding of customer churn, including exactly how many customers it was losing, why the customers were leaving and what the company could do to stop them.
- Needed a way to analyze the data, predict which customers were likely to switch providers and launch targeted marketing campaigns and products specifically designed to retain those individuals.

Benefits

- Reduced the churn rate by 10 % overall by identifying and targeting high-risk customers with relevant offers.
- 23 % decrease in the rate of the increase in churn annually.
- Helped increase revenue and lower costs by keeping more customers from switching to competitors.

Reduce warranty claims for new cars by analyzing historical information and vehicle data using IBM Predictive Asset Optimization (PAO).

Optimize operations

Improving current processes and performance

Customer Overview

- German manufacturer of quality vehicles for worldwide markets
- Manufacturing plants in Germany and elsewhere
- Service / Warranty agencies worldwide

Business Challenges

- Needed to gain deeper insights into the causes and combinations of circumstances which led to warranty issues in each geography
- Needed to increase customer satisfaction through increased product quality and reduced warranty issues

Solution Implemented

- Implemented a data mining capability to gain actionable insights across a wide range of warranty issues
- Fed back issue findings into product design process for improvements and modified service patterns

Does this sound familiar?

Today we treat Aki like any other customer in her segment… …but Aki is an individual

By using only our limited segmentation, we treat Aki like anyone else

Aki holds a mortgage and a sav accoun u

Action	Impact on Retention	Impact on Customer Lifetime Value	Likelihood to respond positively to action
Cash Management Acct.			
Set meeting with Private Banking and Wealth Mgt. Advisor for a Portfolio Review			
Equity Bank Line / Secured Line-of-Credit			
Preferred Gold Credit Card			

Information helps us understand how Aki is different, but do we use it?

Aki holds a mortgage and a savings account with us

Last week Aki asked the Call Center about loan processing times

Aki has also posted property photos to Facebook asking friends to vote

This week, she checked mortgage rates on the Web Site three times

Aki's current credit score and profitability qualifies her for a preferred rate

And today she's tweeted a link to an article about buying a second home

By using all the information we can make our service unique to Aki

Aki holds a mortgage and a savings with

Action	Impact on Retention	Impact on Customer Lifetime Value	Likelihood to respond positively to action
Cash Management Acct.			
Preferred Gold Credit Card			
Equity Bank Line / Secured Line-of-Credit			
Mortgage special rate discount 25 basis points			

Optimize operations

Improving customer experience and providing real time responses.

Nedbank Limited, a leading financial services provider throughout Southern Africa,
Is using IBM's predictive analytics solutions to improve the customer experience and provide more responsive real-time services.

Needs

- Bank recognizes the growing importance of social media as a marketing tool, actively reaching out to customers through Facebook, LinkedIn and Twitter, as well as through blogs and customer

Benefits

- **Saving of US$105,000 per year** in social media monitoring costs
- **20% increase** of customer service productivity levels.

Create new business models

Delivering new insights and new possibilities

Uganda has selected IBM and Waterfund to benchmark water Infrastructure
and provide a vital tool for attracting funding for national projects

Imagine It. Every Industry can Leverage Big Data and 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 & Entertainment
- 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

Government
- 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

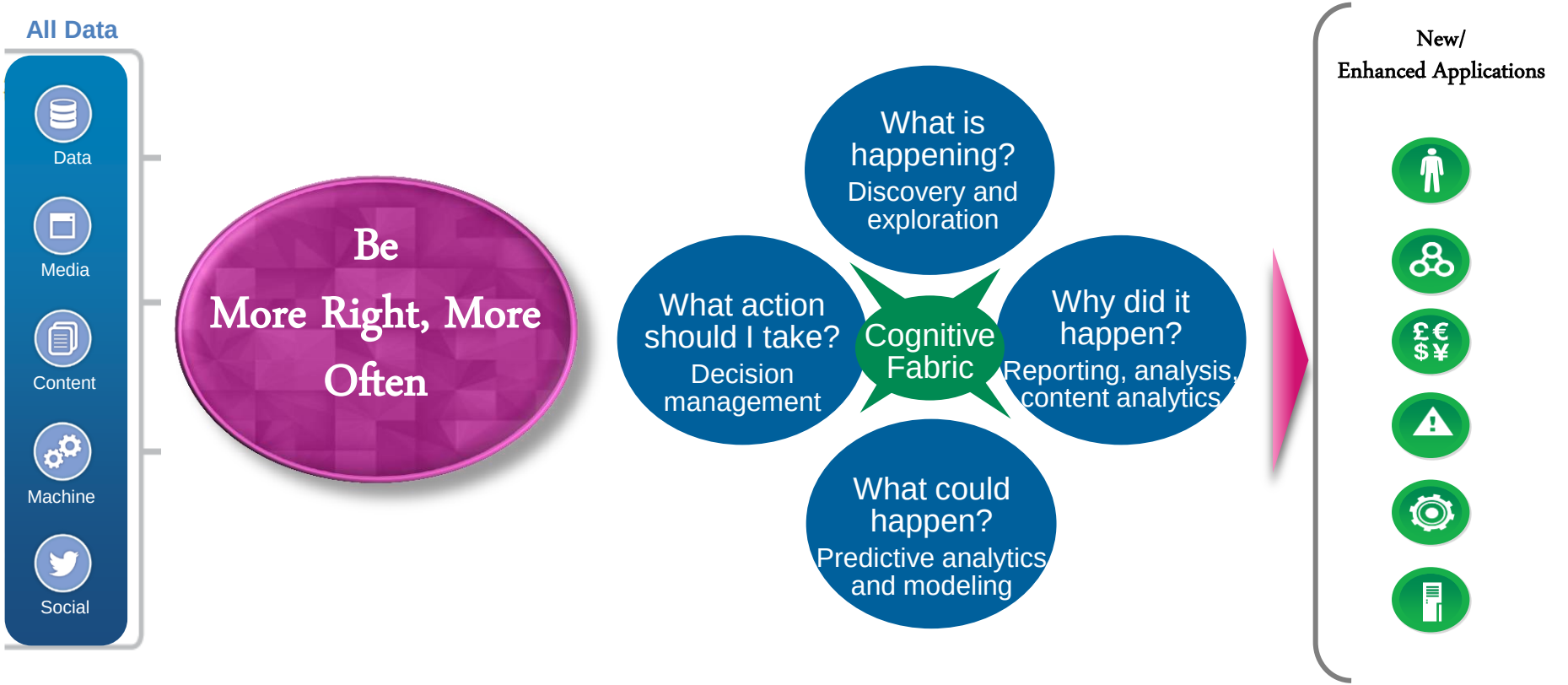
Chemical & Petroleum
- Operational Surveillance, Analysis & Optimization
- Data Warehouse Consolidation, Integration & Augmentation

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

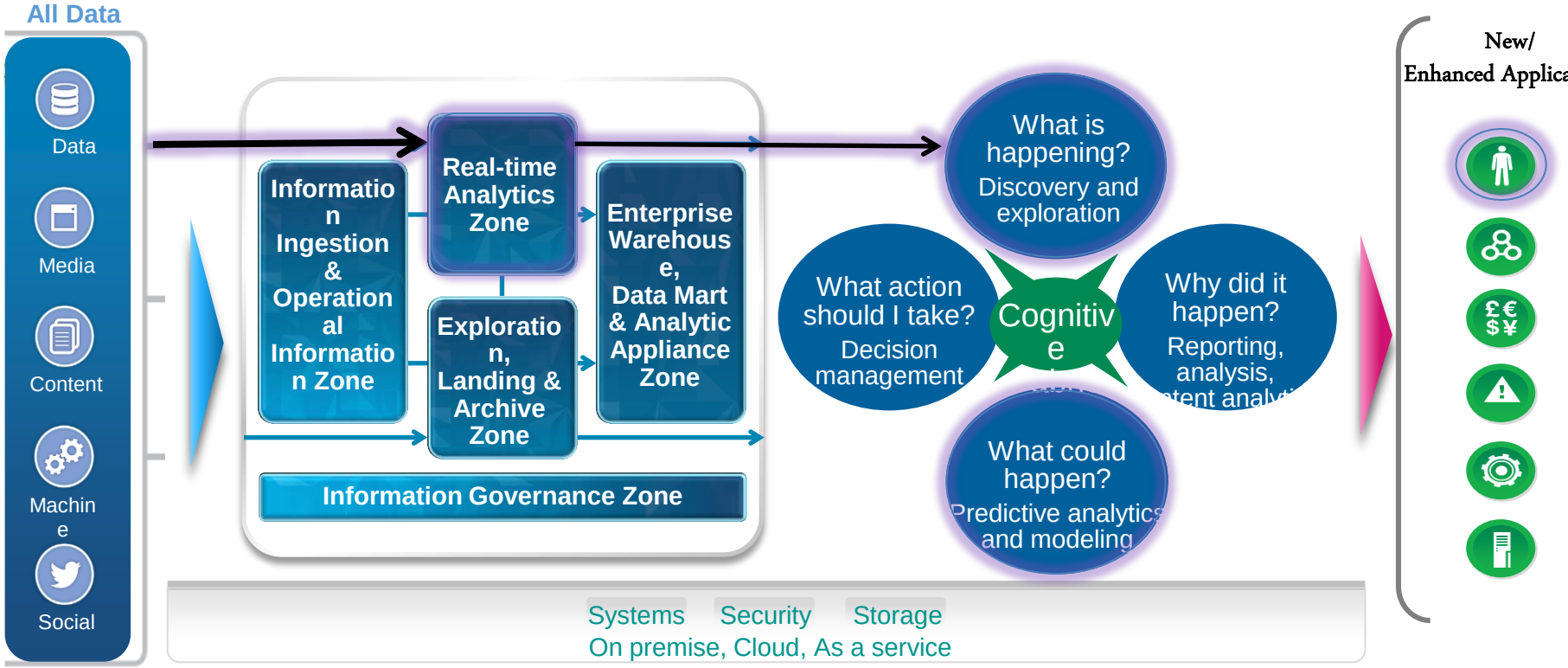
Electronics
- Customer/ Channel Analytics
- Advanced Condition Monitoring

Life Sciences
- Increase visibility into drug safety and effectiveness

Realize It. Invest in a Big Data & Analytics platform.

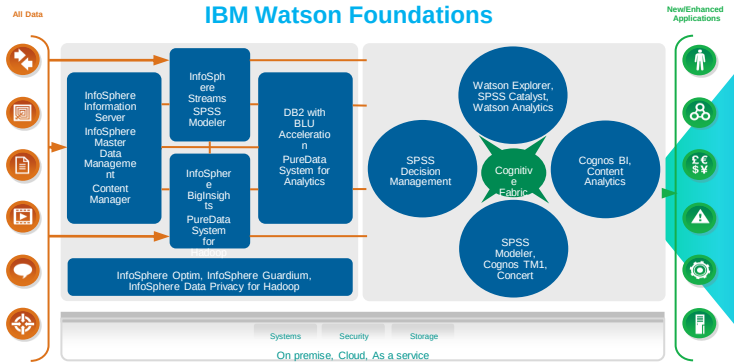


Realize It. Invest in a Big Data & Analytics platform.

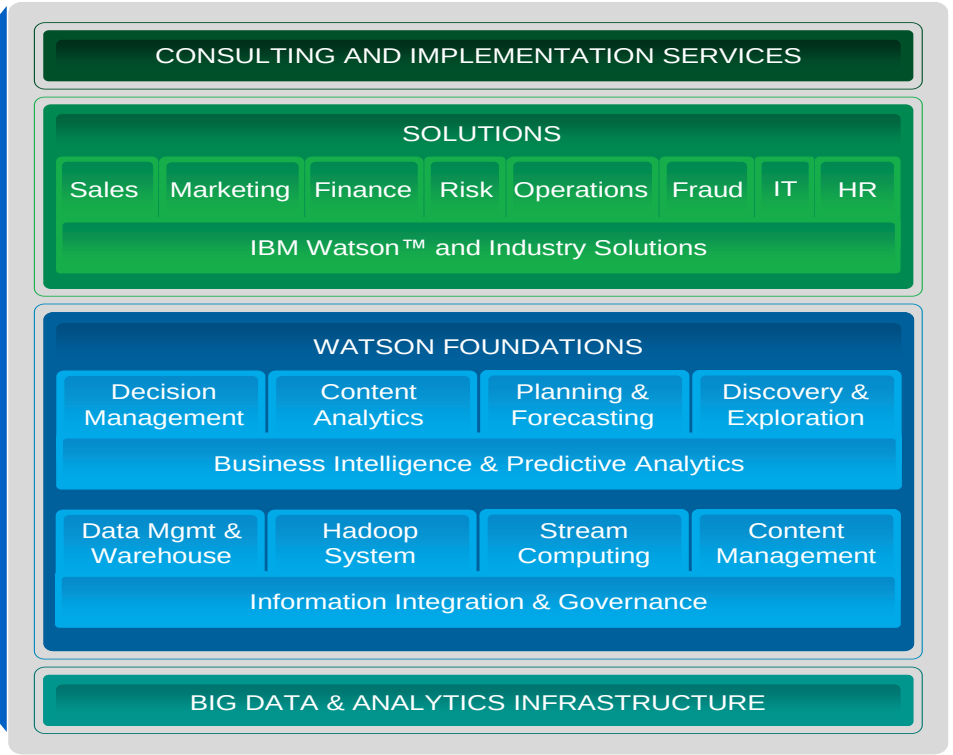


IBM Big Data & Analytics Infrastructure

BD&A Infrastructure as part of the IBM BD&A Capability stack



IBM Big Data & Analytics Infrastructure



IBM Systems portfolio and value for BD&A

POWER – Analytics Platform
Innovation to put data to work

Storage – Set the Data AGENDA
FlashSystem, XIV, GSS

FlashSystem Create a tipping point with FLASH

XIV Core technology designed to meet key analytics requirements

GPFS Storage Server (GSS)

System z – Mission Critical Analytics
Analytics in the right place

Scale-out Infrastructure
Linux on Power and x86

PowerLinux

X 3650 M4 BD

- **Optimized capabilities designed for big data and analytics workloads**
  - DB2 BLU on Power – **7-10X lower TCO**
  - Reference Architectures for Hadoop and Streams **– faster TTV**
  - IBM GPFS™ – worlds only proven **enterprise-grade** scale out file system
  - Platform Symphony – **record setting benchmark for Hadoop workloads**
- **Innovation in scale-out computing –x86**
  - x3650 M4 HD performance, flexibility, reliability & customer satisfaction that's **better than competitive offerings**

- **Storage Innovation for big data & analytics**
  - Real-time compression – 5X more data **no performance hit**
  - IBM MicroLatency™ - **100x performance improvement**
  - FlashSystem storage can **drive down costs by 50%**
- **Analytics closer to the data – System z**
  - **Much of the worlds transactional data sits on z** – integrate advanced analytics with IDAA; Enterprise Linux Server, SPSS/Cognos on z; enhanced Hadoop integration.

Trust It. Be proactive about privacy, security and governance.

Trust the facts

Create foundation of trusted data

Ensure privacy and security

Understand usage and monitor compliance

Make risk aware decisions

Model exposure and understand variability

We have built the world's broadest and deepest portfolio in data and analytics.

$24 billion
invested to date to build IBM's capabilities in Big Data and analytics, with $7 billion in organic investment

$17 billion
of gross spend for Big Data and analytics acquisitions, including more than 30 acquired companies

15,000
analytics consultants and 400 mathematicians

40,000
client engagements to date

$1 billion
investment in Flash technology, providing industry-leading speed and efficiency to enable data to be real-time ready for analytics

1,000
university partnerships, and 2,215 IBM Business Partners

500
analytics patents generated each year

2/3
of IBM Research is focused on data, analytics and cognitive computing

Go Further and Faster with IBM

Accelerated Discovery Lab

30K Engagements

9K Consultants

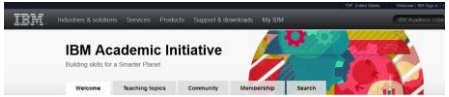
Expertise

2,500 Business Partners

Ecosystem

Analytics Solution Centers

1,000 Partnerships



Academic Initiative

Resources

thank you
danke
gracias
merci
grazie
спасибо
ありがとう
شكرا
धन्यवाद
감사합니다
děkuji
dziękuję
σας ευχαριστώ
ขอขอบคุณคุณ
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ви благодариме
gratias agimus tibi
go raibh maith agat
дзякуй
ngiyabonga
buíochas a ghabháil leat
დიდი მადლობა
շնորհակալություն
তোমাকে ধন্যবাদ
ধন্যবাদ
ขอบคุณครับ
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di ou mèsi
dank u paldies
cảm ơn bạn
спасибо
grazas
multumesc
kop khun krap
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asante
хвала

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