

Jan 2014

Big Data Solution Strategy: Gain Insight ; Make Decisions



What is BIG Data



BIG Data Problem

High **Volume**

High **Velocity,**

High **Variety**

assets that require **new forms** of processing or **Analytics** to enable enhanced **decision making**, insight discovery and process optimization



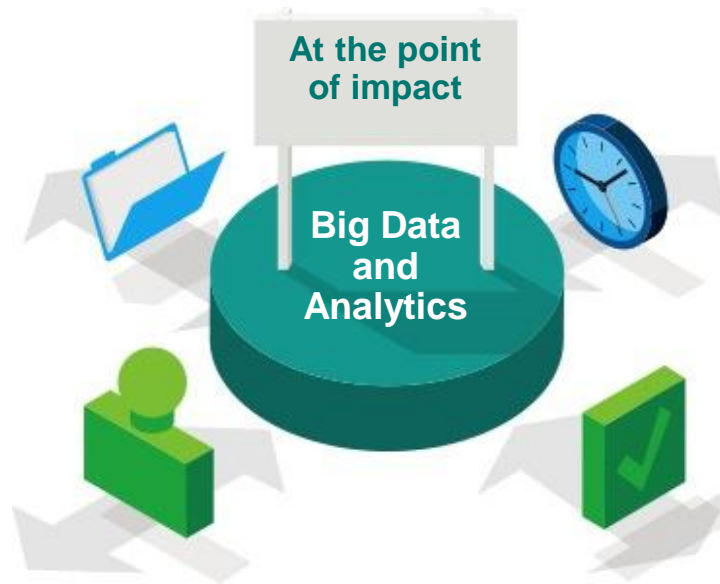
Why Analytics for Big Data is Needed

All information

- All information
- Transaction data
- Application data
- Machine data
- Social data
- Enterprise content

All perspectives

- Past (historical, aggregated)
- Present (real-time)
- Future (predictive)



All people

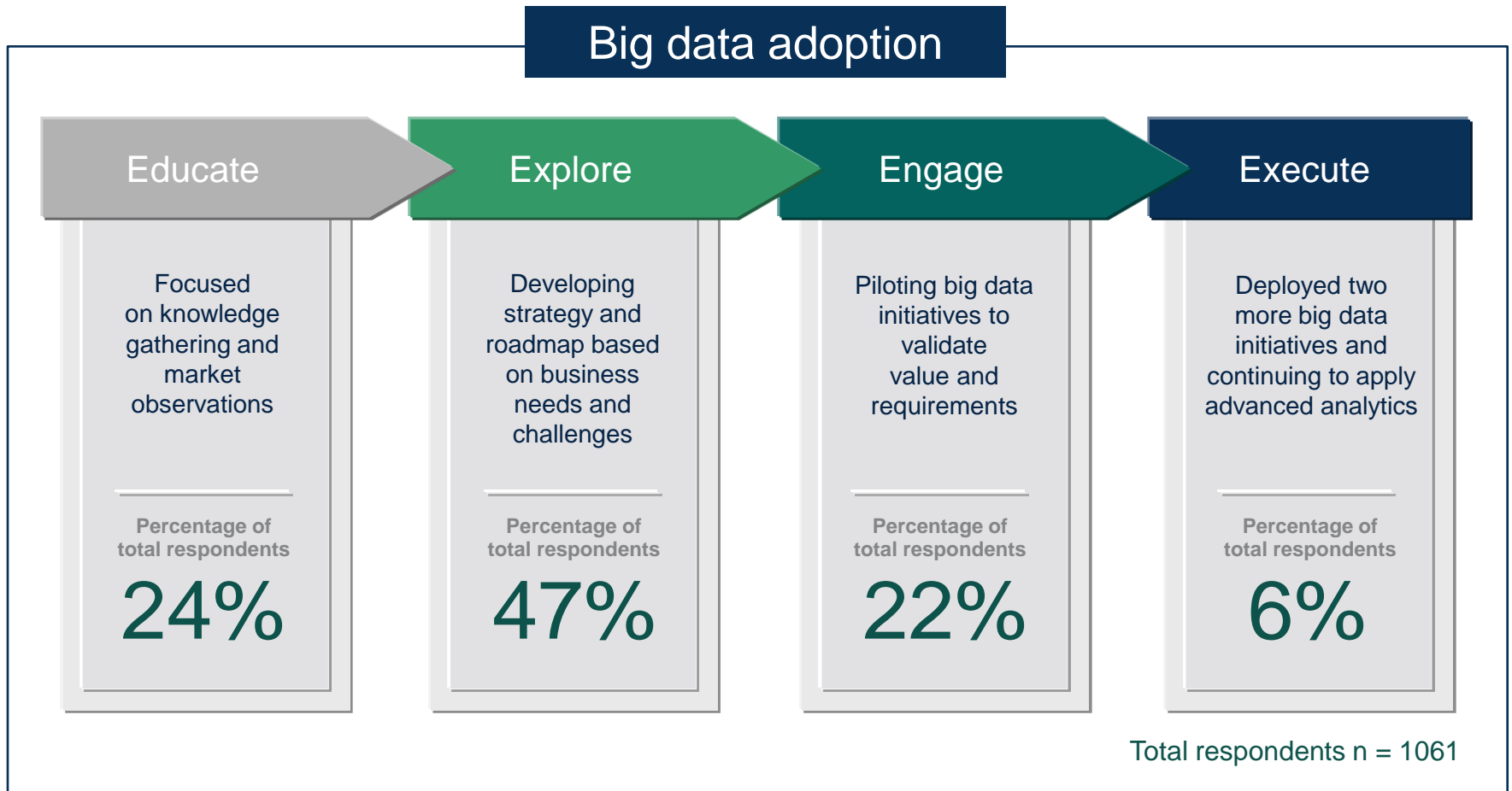
- All departments
- Experts and non-experts
- Executives and employees
- Partners and customers

All decisions

- Major and minor
- Strategic and tactical
- Routine and exceptions
- Manual and automated

65% of business are not using big data for business advantage

Organizations moving from the possible to the proven are gaining first mover advantage...



Source: *Analytics: The real-world use of big data*, a collaborative research study by the IBM Institute for Business Value and the Saïd Business School at the University of Oxford. © IBM 2012

How Organizations are Evolving their Analytics Strategy



**PLANNING &
VALUE**

What are the key business issues or opportunities that Big Data can help me to address?



TECHNOLOGY

What are the essential analytics capabilities we need to ensure we have in place?

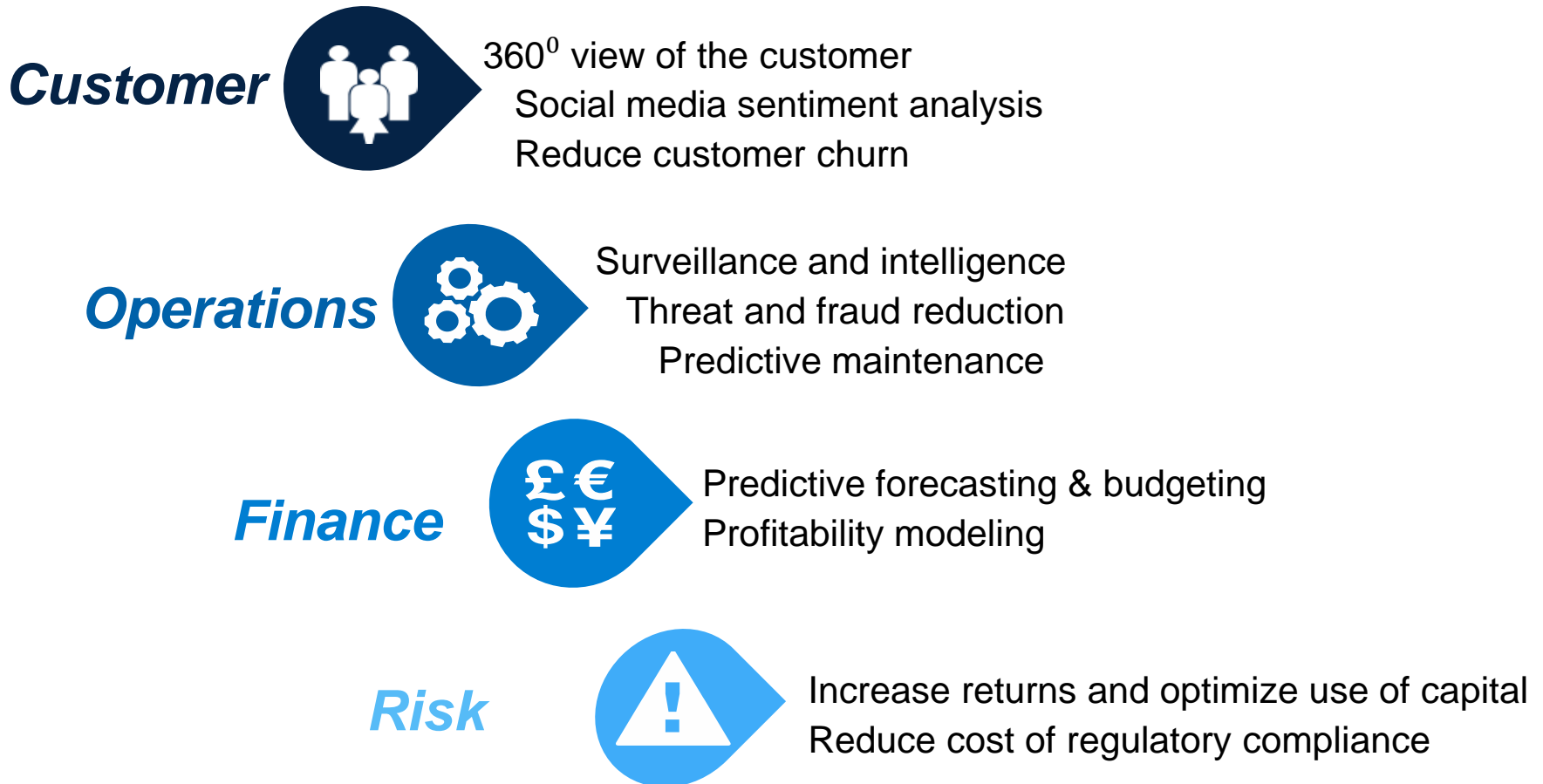


PEOPLE & PROCESS

What analytics skills and processes do I need to add or modify to be successful?



It is Imperative to Develop a Plan that Identifies where Big Data and Analytics can Add Business Value





...and ensure the initiatives align with key industry imperatives for the organization

Banking



Optimize profitability and cross-sell

Telecommunications



Network analytics

Manufacturing



Predictive Maintenance

Healthcare



Understand patients and populations

Retail



Deliver personalized customer engagement

Government



Anti-fraud, waste, and abuse

Insurance



Claims fraud

Energy and Utilities

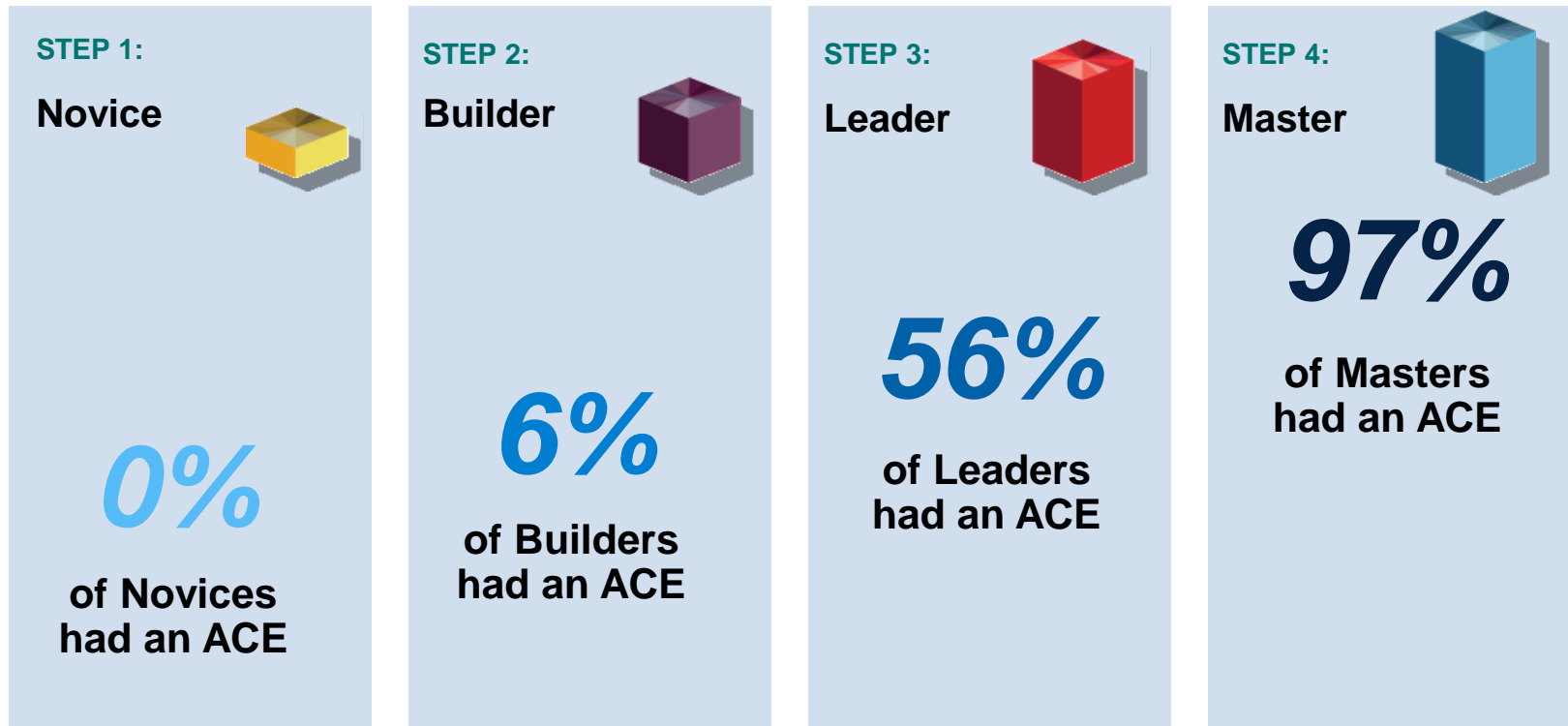


Predict and manage demand



IBM provides Guidance and Resources as you Develop your Roadmap and Establish your ACE

Strong linkage between analytics maturity and Analytics Centers of Excellence (ACE)



Manual, slow, error prone, cumbersome, fragmented data quality concerns

n = 5748 organizations
IBM Study of AQ respondents, 2012

Automated, instant, accurate, seamless, converged Data governance is in place



Analytics Capabilities Expand for Big Data

From

Assemble & Combine
relevant mix of information

- Reconcile sources together
- Query relational warehouses
- Individual transaction records

Discover & Explore
with smarter visualizations

- Graphs and reports
- Hierarchical navigation
- Managed and adhoc delivery
- Manual analysis and action

Analyze, Predict & Automate
for more accurate answers

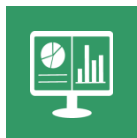
- Sample based models
- Data analyzed at rest
- Humans interpret patterns

To






- Surface data directly from source
- Query specialized systems
- Data relationships and networks

- Visualize masses of data
- Context and relationship navigation
- Exploration of what's important
- Automated visualization

- More accurate models
- Analyze stream data in motion
- Algorithms uncover hidden patterns



Fuel all Decision-Making with Powerful Analytics

-  Data
-  Media
-  Content
-  Machine
-  Social

Natural language processing

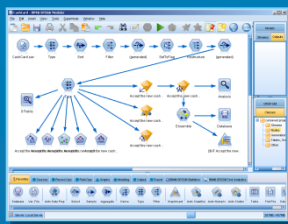
Entity and predictive analytics

Social network analytics

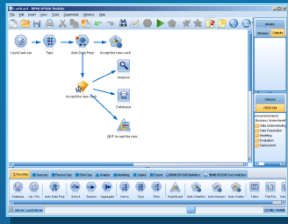
Content and text analytics

Trend, pattern and temporal deviation


Find what is relevant



expert



intermediate



novice

Model Development


Specialized visualizations

Result Sets

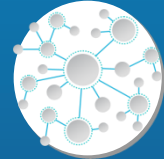
Real-time Scoring

Decision Management


Inform and automate



Reporting & Analysis



Operational Systems

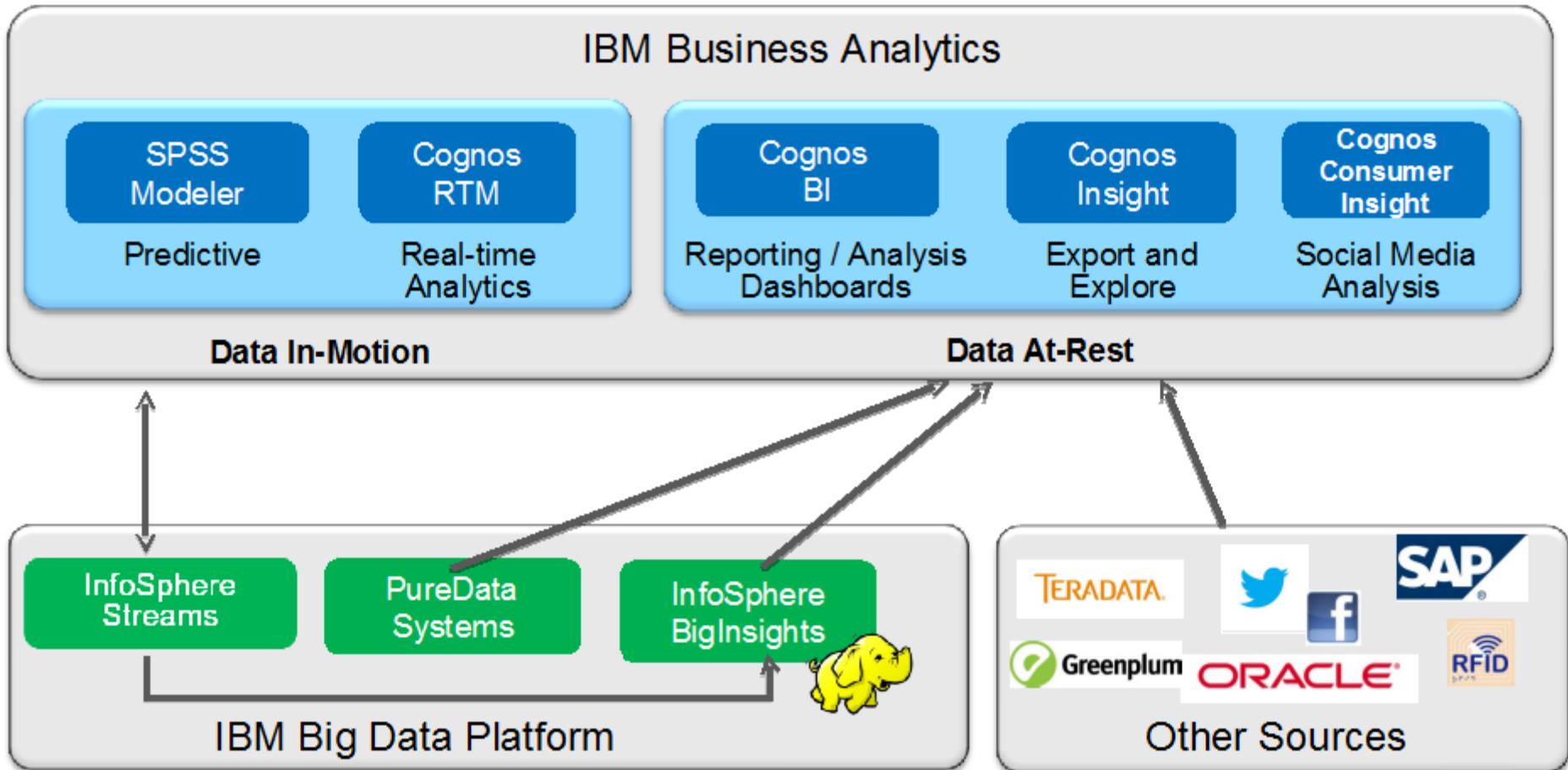


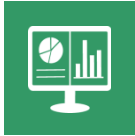
Systems of Engagement



TECHNOLOGY

Example: Integrate big data sources with enterprise data





Accelerate Business Value with Solutions

Analytic Skills

Big Data Use Cases

Products

Research

Marketplace Experience

Social
Social Media Analytics

Fraud
anti-fraud, waste,
and abuse

Asset
predictive asset
optimization

Customer
next best action



Banking



Communications



Consumer Products



Education



Energy and Utilities



Government



Healthcare



Industrial



Insurance

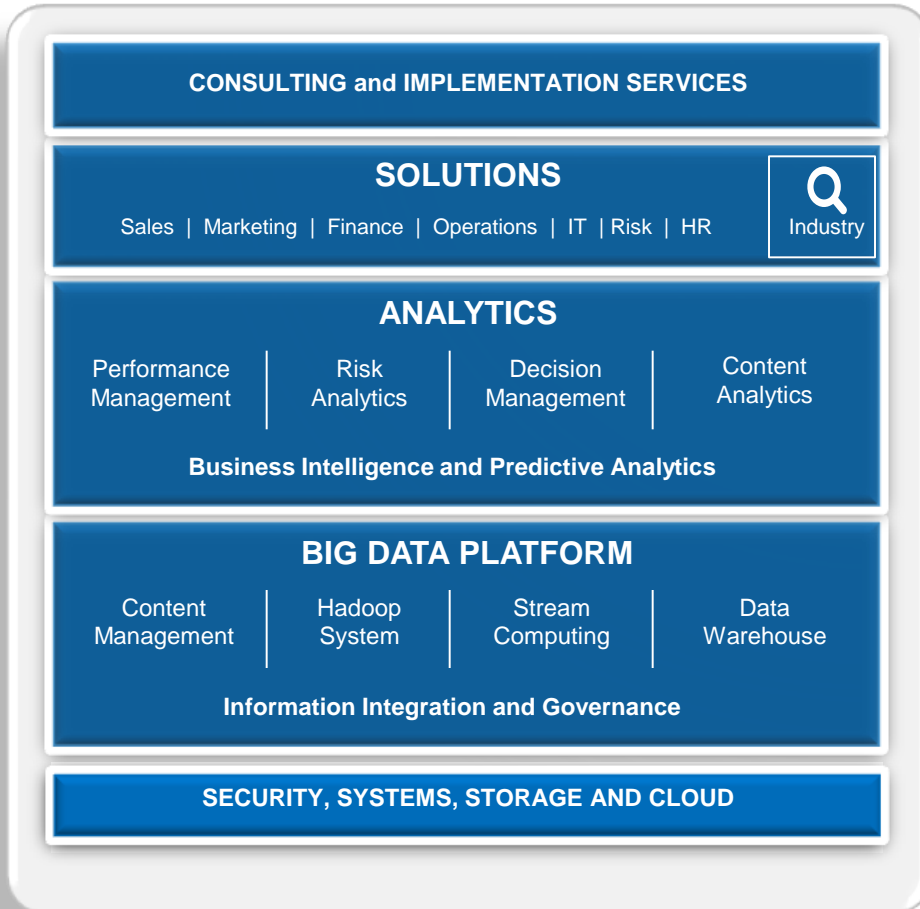


Life Sciences



Retail

IBM Provides a Holistic and Integrated Approach to Big Data and Analytics



- Fuel all decision-making with powerful analytics
- Broaden analytic adoption without silos
- Analyze all data wherever it lives
- Accelerate business value with solutions that have built-in analytics expertise

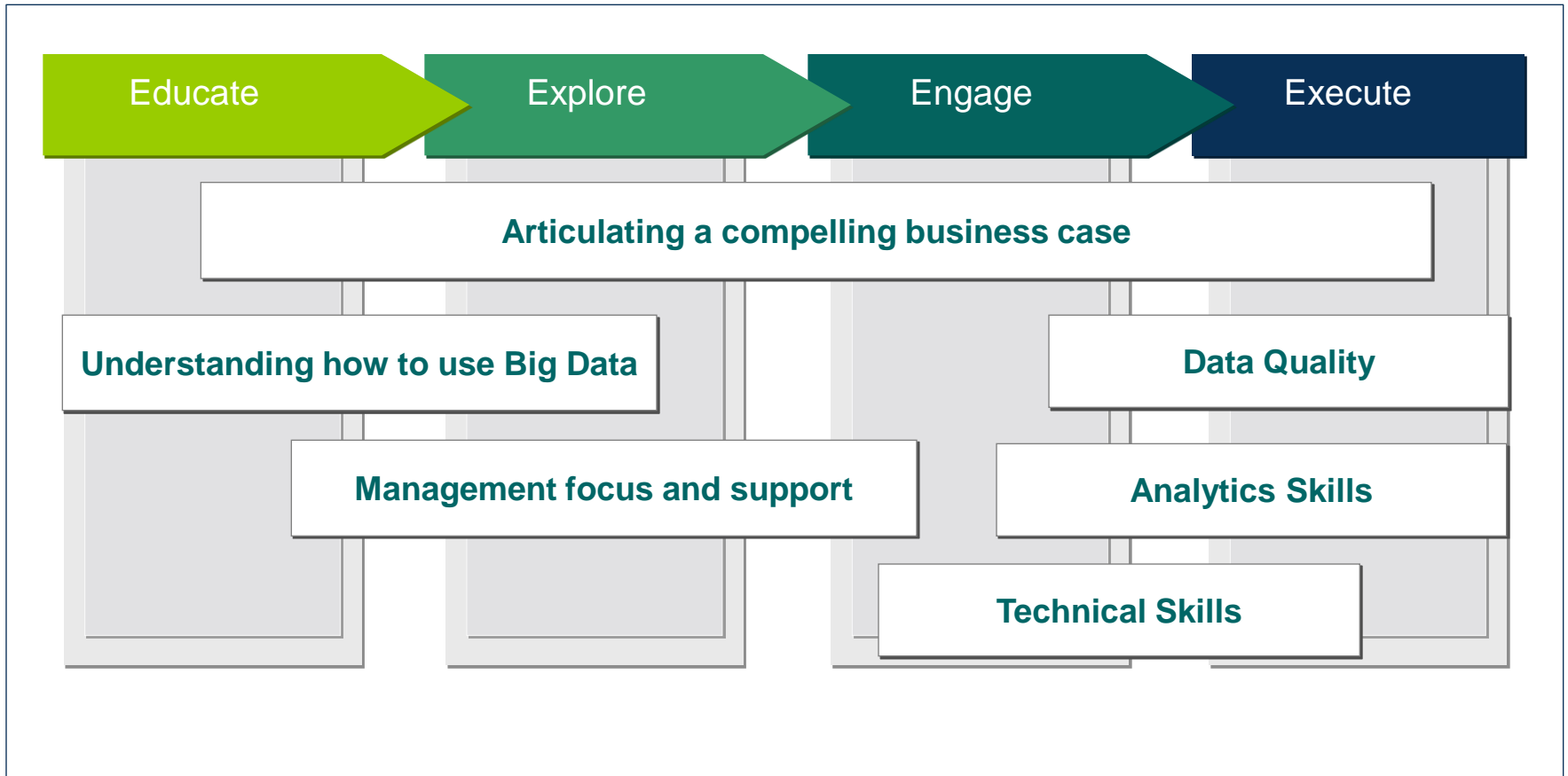
Analytics innovation that matters

Deep business expertise

Trusted analytics advisor with a proven track record for delivering value



Skills and Processes also Need to Evolve as Organizations Move through the Adoption Stages





IBM Offers Support to Help you Achieve Success with your Big Data and Analytics Initiatives

Accessing expertise and education
Analytics and Big Data at IBM
AnalyticsZone.com, Big Data University

Closing the skills gap
Partnering with 200+ Universities

Training and collaboration
IBM Analytics Solution Centers

Enabling the Business Partner community
Certifications and practice accelerators

Leveraging the power of IBM Research
IBM Customer Experience Lab



Get Started!



Thank You

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