Big Data
and
Location Location Location

Jay Terrill, Esri Canada

Trends

Microsoft Alliance Summit 05/2013

Consumer experiences are changing expectations

The four trends that are shaping today's enterprise – mobility, social, cloud and big data – give you an unprecedented opportunity, the opportunity to re-evaluate and transform your company's business strategies.

Trend

85
billion
Mobility
Social
Cloud
Big Data
Mobility
The proliferation of new device types, along with the connectivity of the cloud, is making us more mobile and changing the way we work and play.

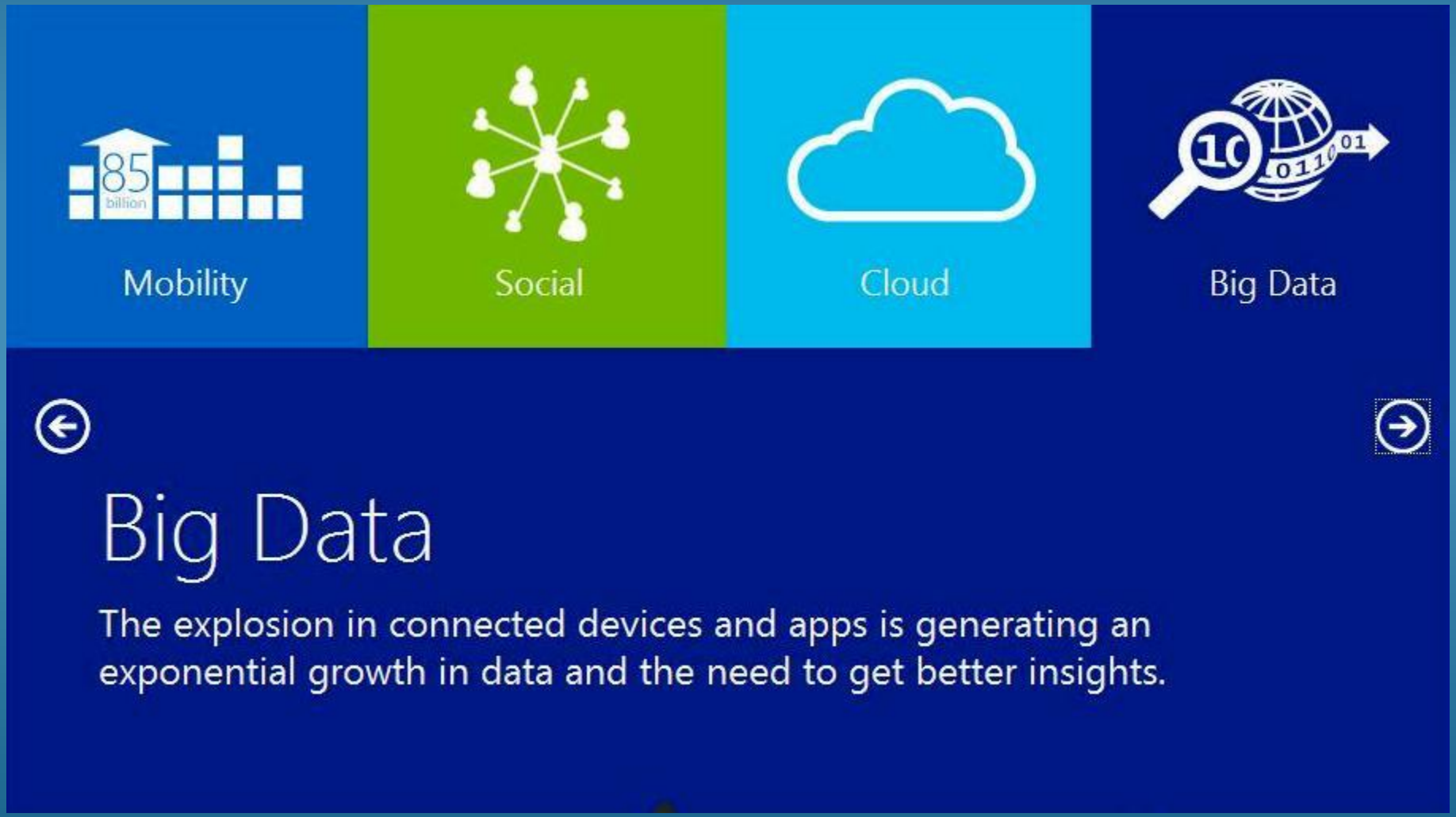
Trend

85
billion
Mobility
Social
Cloud
Big Data
Social
Social networking is changing how people expect to interact. Not only with other people, but also with the products and services they care about.

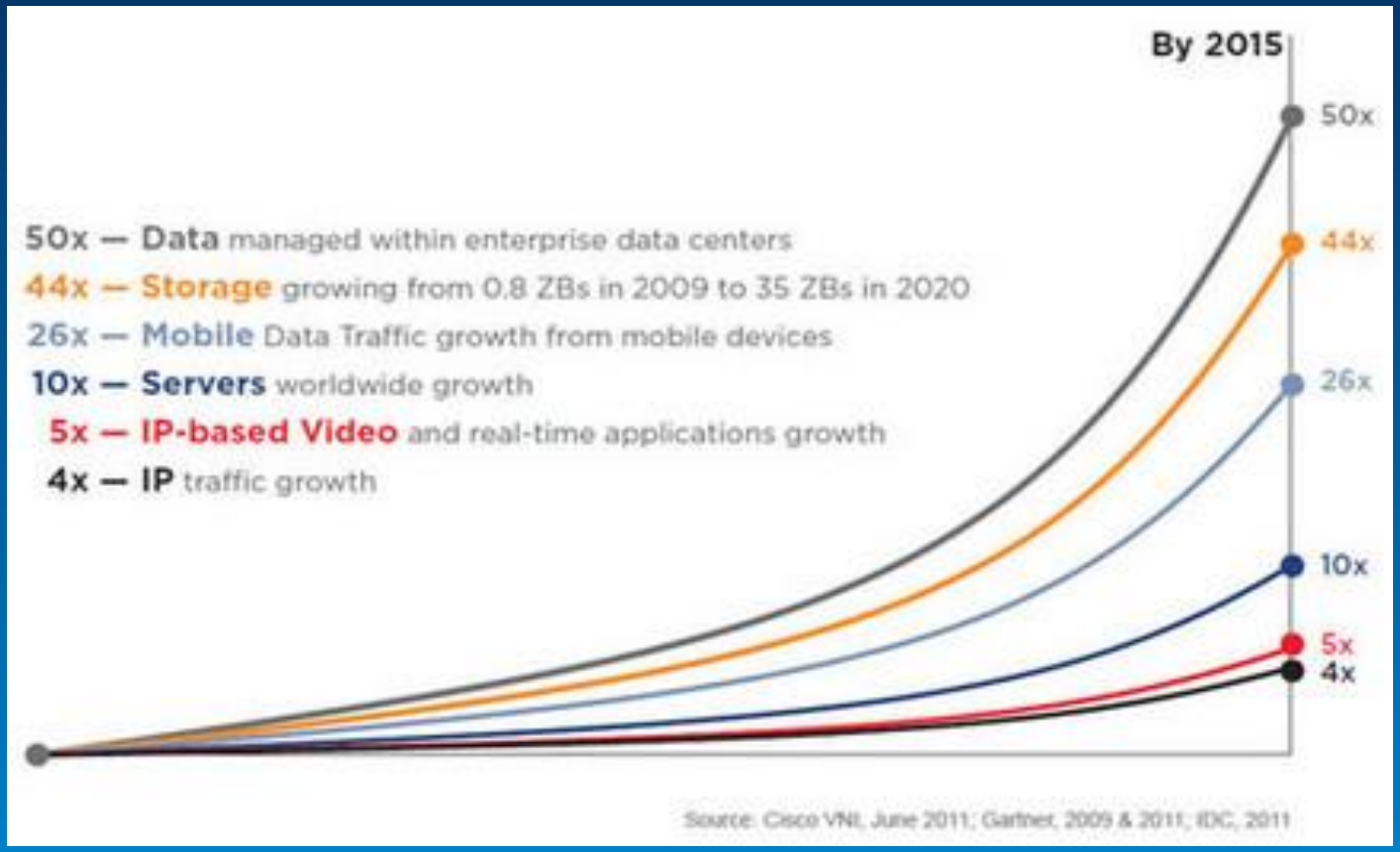
Trend

85
billion
Mobility
Social
Cloud
Big Data
Cloud
The cloud is changing what we expect from technology. With an always-on connection, apps can provide innovative new services with instant scalability and attractive economics.

Trend


85
billion
Mobility
Social
Cloud
Big Data
Big Data
The explosion in connected devices and apps is generating an exponential growth in data and the need to get better insights.

Prediction



McKinsey & Company

- 2015 - 50x the amount of data in your enterprise
- Traditional BI inadequate for large problem spaces

Big Data Definition Gartner IT Glossary

Big data *is high-volume, high-velocity and high-variety information assets that demand cost-effective, innovative forms of information processing for enhanced insight and decision making.*

Big Data – the V's (source: Mike Rhodin, Senior Vice President IBM)

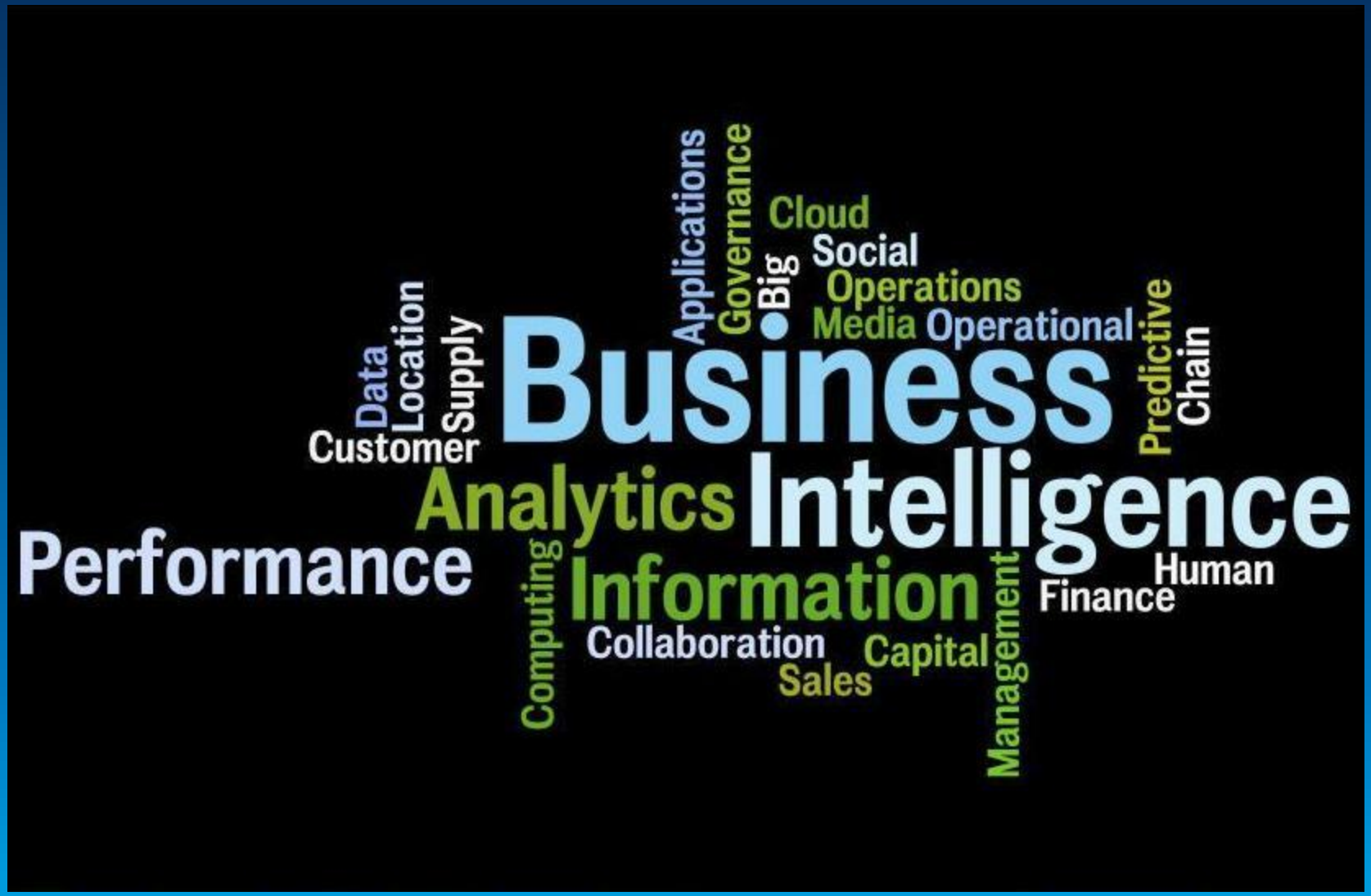
Big Data described using the Three "V"s: Volume, Velocity, Variety

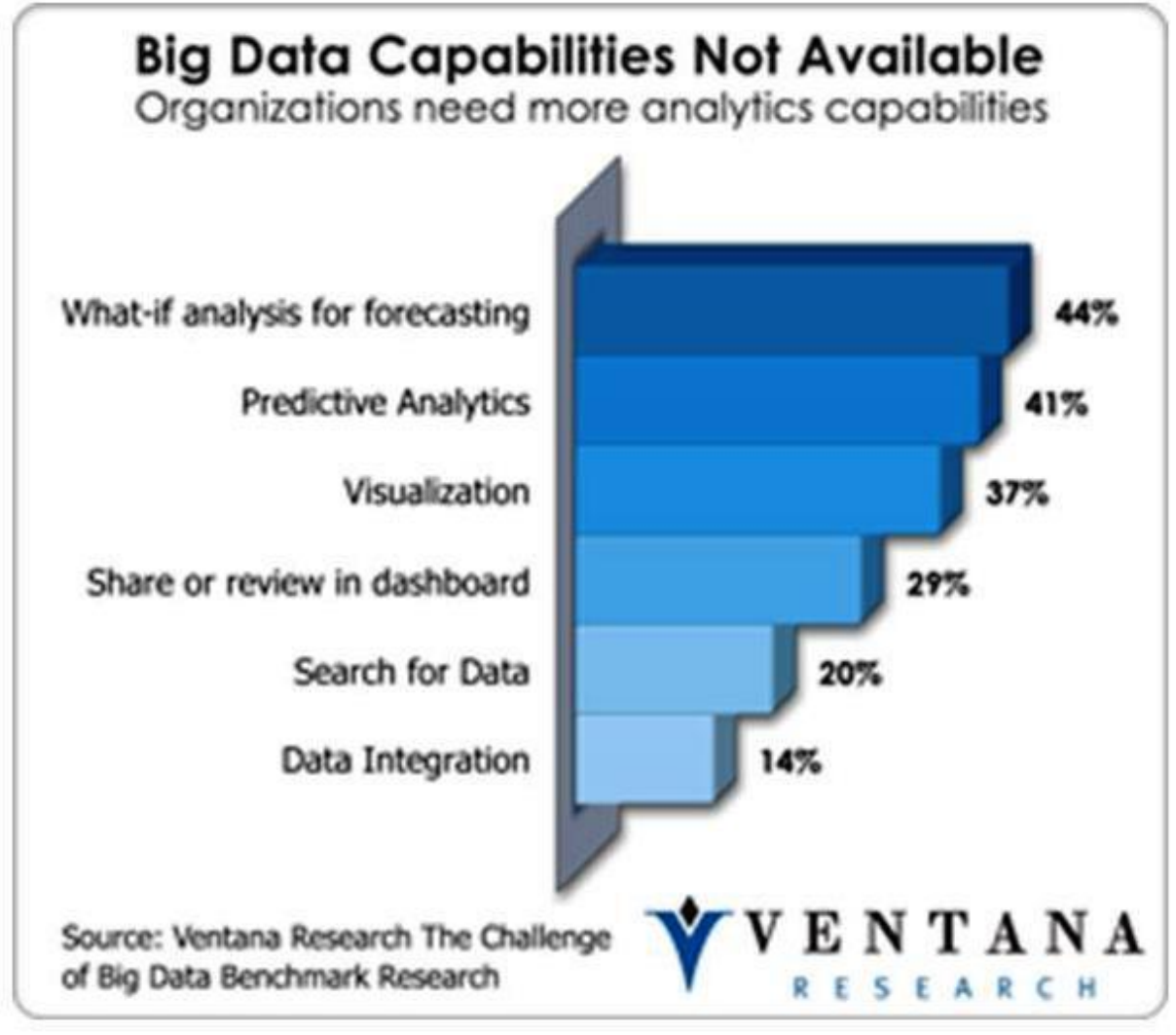
Utility companies record 350 *Billion* meter readings per year (= Volume);

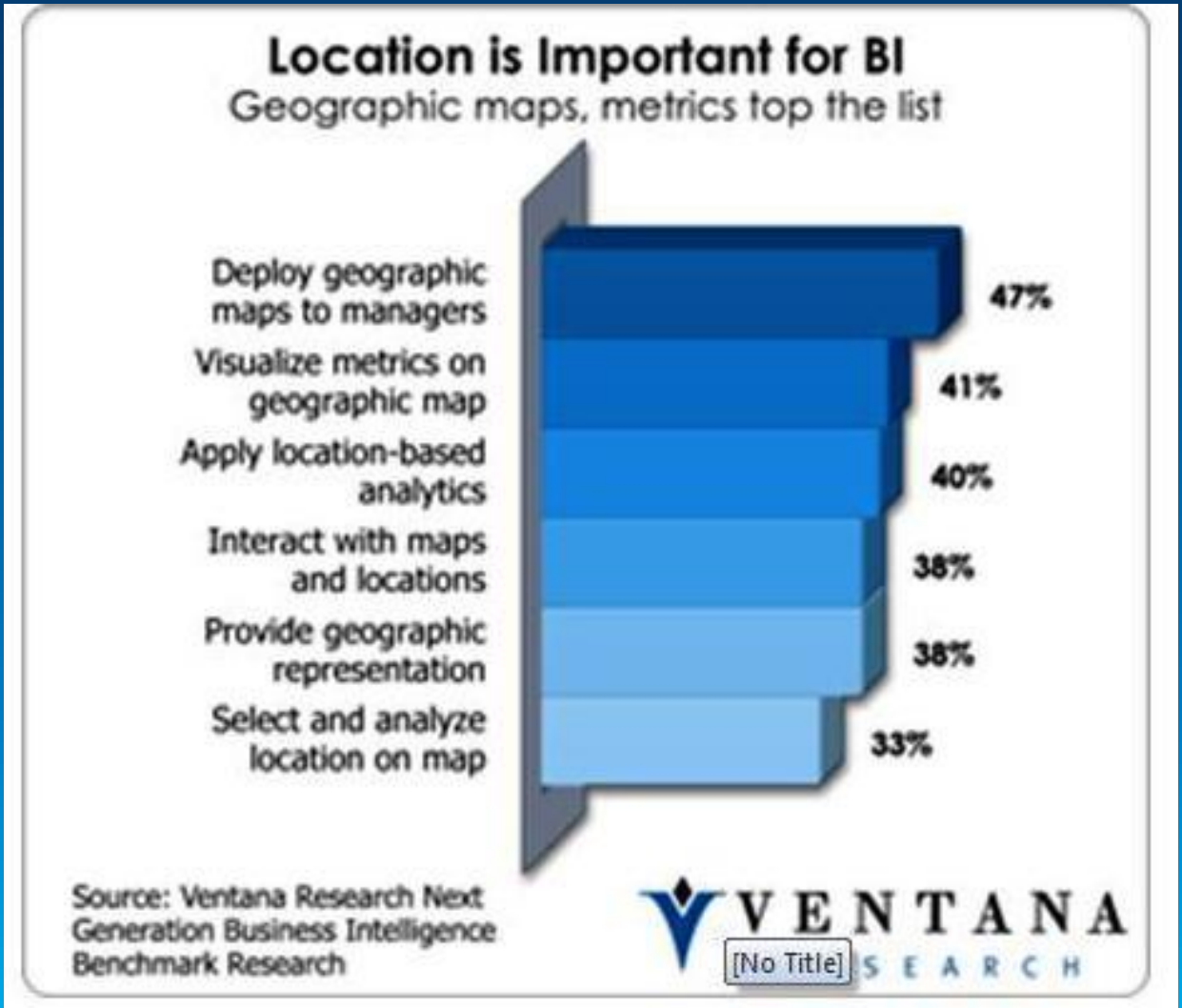
Financial service industry 5,000,000 trade events *per second* (= Velocity);

Data formats range from
- structured
  - traditional files
- unstructured
  - video
  - audio
  - imagery
  - email
  - web logs, and
  - *anything you can think of* (= Variety)

What about the other V – Business Value?


Business
Intelligence
Analytics
Information
Performance
Applications
Governance
Cloud
Social
Big
Operations
Media
Operational
Predictive
Chain
Data
Location
Supply
Customer
Computing
Collaboration
Capital
Sales
Management
Finance
Human

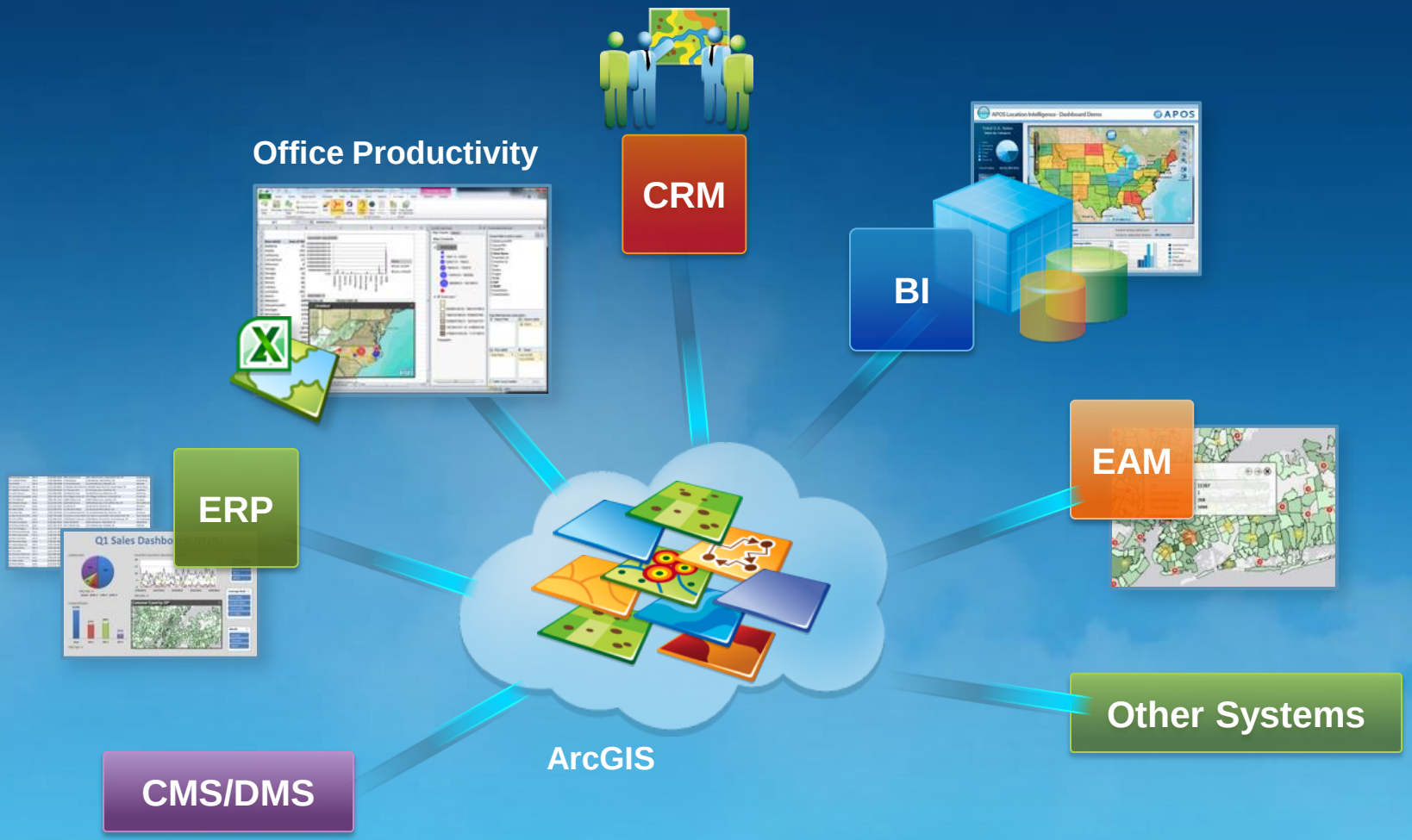

Big Data Capabilities Not Available
Organizations need more analytics capabilities
What-if analysis for forecasting
44%
Predictive Analytics
41%
Visualization
37%
Share or review in dashboard
29%
Search for Data
20%
Data Integration
14%
Source: Ventana Research The Challenge of Big Data Benchmark Research
VENTANA RESEARCH


Location is Important for BI
Geographic maps, metrics top the list
Deploy geographic maps to managers
47%
Visualize metrics on geographic map
41%
Apply location-based analytics
40%
Interact with maps and locations
38%
Provide geographic representation
38%
Select and analyze location on map
33%
Source: Ventana Research Next Generation Business Intelligence Benchmark Research
VENTANA
SEARCH
[No Title]

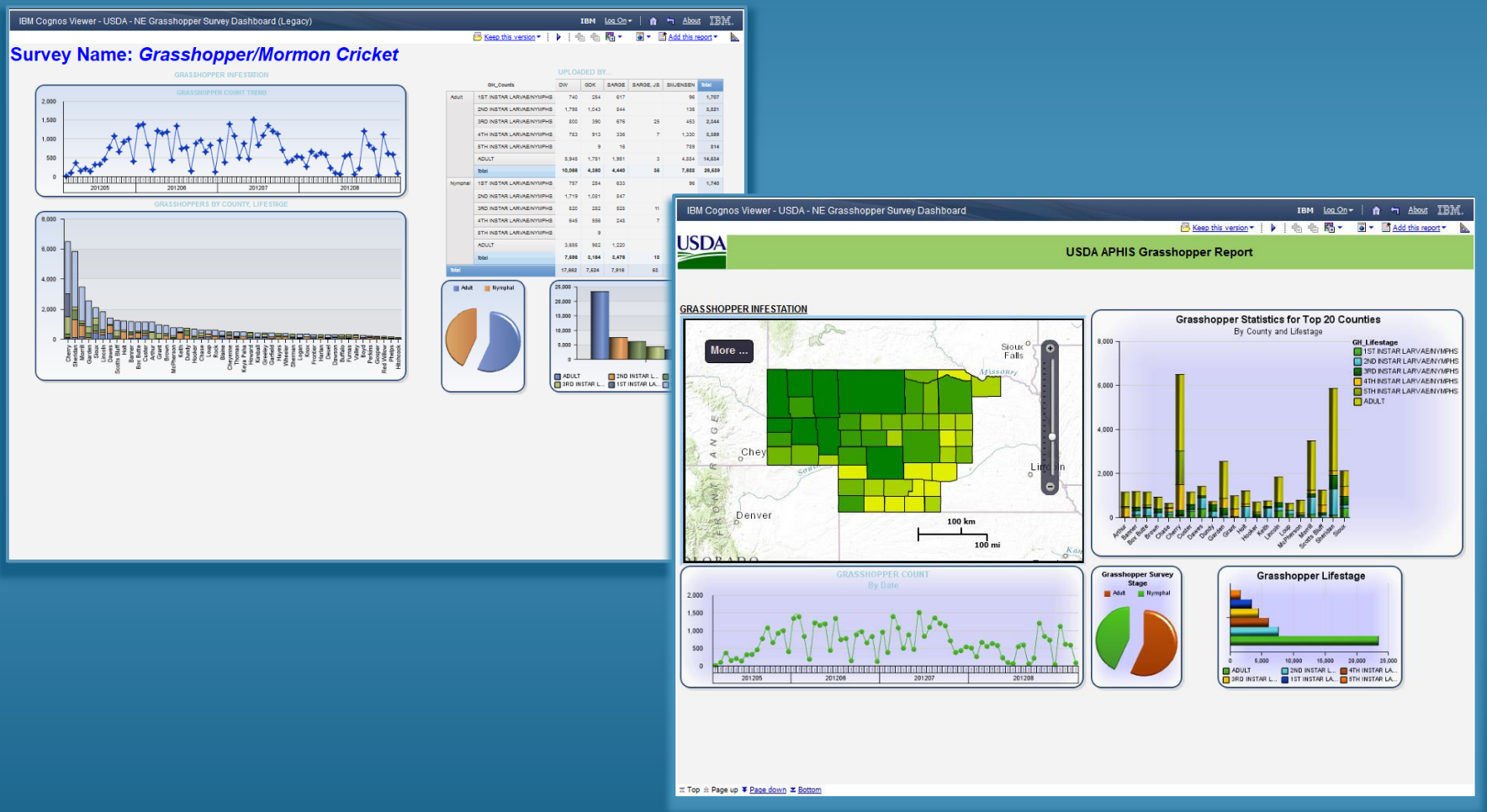
Market Drivers

Gemaal:
Naam
Gemaal Poppekinderen
Code
KGM127
Functie
afvoergemaal
Max capaciteit m3/min
360
Opmerking
Zoomen naar
Insurance Customers

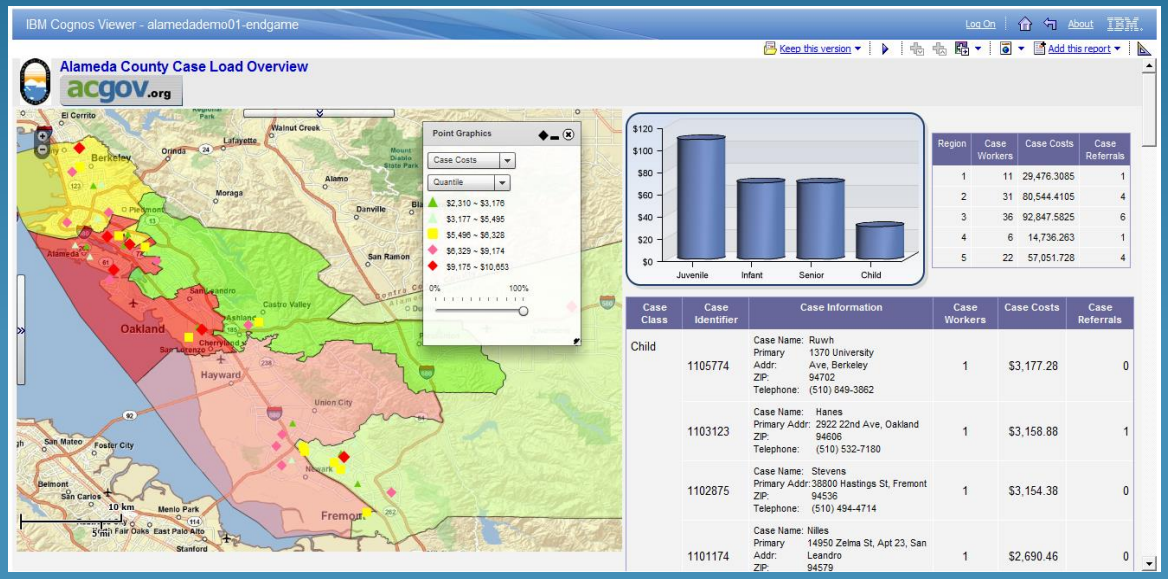
Location Analytics



Location is Fundamental to All Aspects of Business…



Alameda County Social Services



Tabular data and charts not conveying information effectively to users

- Want to map-enable their IBM Cognos BI Social Services reports
- Want to track by cost and other attributes.

Data sets

- social worker case loads by region and by type of case
- child versus elderly versus adolescent

Result

- Thematic shading for metrics - case costs, cases, case workers, and referrals
- Symbolization of points - cases tied to these metrics
- Ease of building the report

Location Analytics – Nutrino Study

Nutrino energy drink want to expand to the east coast

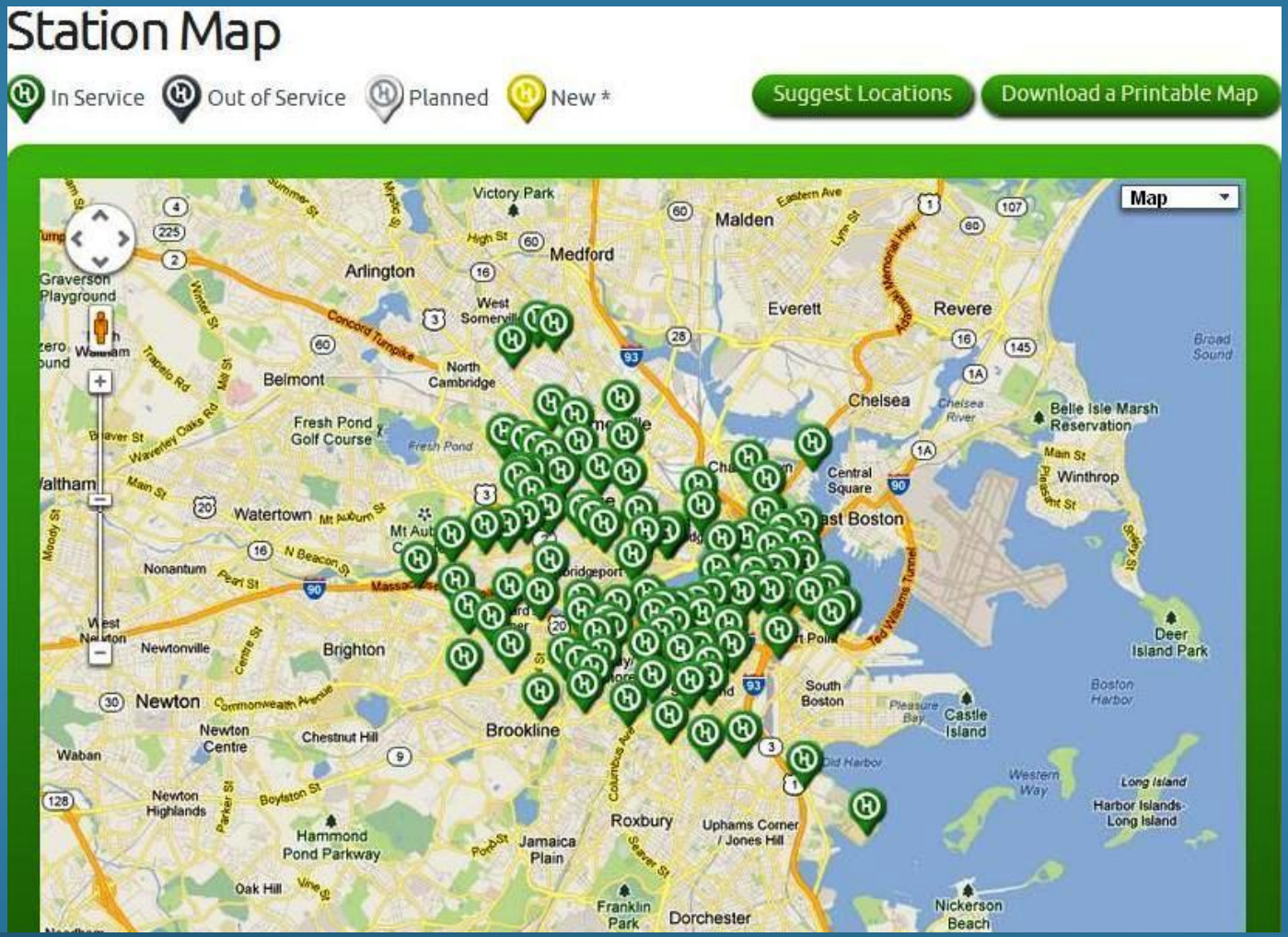
How

- Boston marketing campaign
- Target Boston Hubway bike sharing system – active lifestyle
- Send teams to the bike stations to give away drinks to riders.

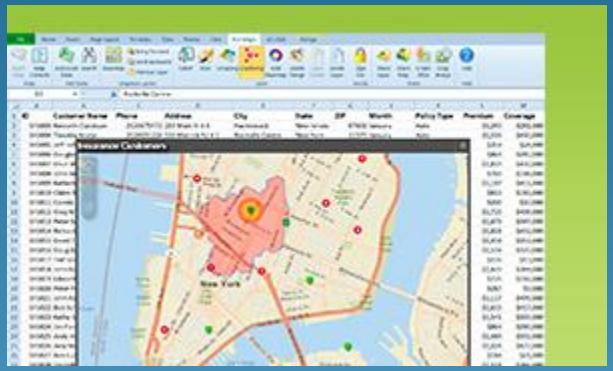
Challenge

- Large system of hubway stations
- Nutrino has limited resources
- Which Hubway stations to focus on?

Boston Hubway Map (from web)



Nutrino Campaign Workflow



Find the Right Stations – Productivity

Esri Maps for Office – .xls

sort, add map and share via AGOL

Find Stores to Stock Nutrino - CRM

Esri Maps for Dynamics

show store account locations from CRM

existing store accounts and

store prospects close to top bike locations

Review campaign effectiveness – BI

Esri Maps for Microstrategy

Nutrino Demo

Demo

Big Data includes Spatial Data
Location Analytics deliver Value from Big Data

Benefits

Map Your Data

Map-driven Analytics

A World Atlas of Geographic Context

Work Smarter and Work Together

Enterprise Class Solution

Understanding our world.