



IBM Software

Information On Demand 2010 Comes To You

Unlock the True Value of Your Information

IBM Software

Information OnDemand **2010**
Comes To You

Why you should be getting excited about Business Analytics

Chris Williams

Unlock the True Value of Your Information

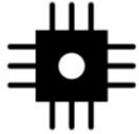
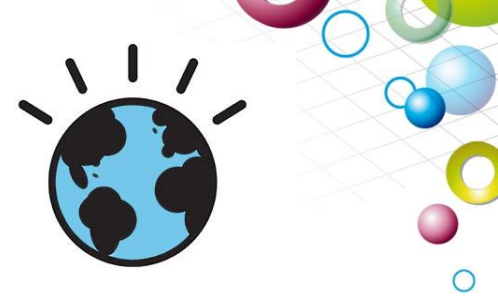
Agenda

- A bit about me
- Business Analytics – what is it?
- Business Analytics Patterns & Architectures
- The three “A”s in Analytics
- What’s in it for you?

A bit about me...

- Working in “IT” for 20 years - Too much “T” not enough “I”
- Became interested in how businesses can get better value from their information assets
- Been in IBM since 2001 working with clients on data warehousing, business intelligence and advanced analytics
- Business Analytics is making the whole area more mainstream
- Technology meets demand
- Hence – I am excited!

Smarter Planet



Our world is becoming

INSTRUMENTED



Our world is becoming

INTERCONNECTED

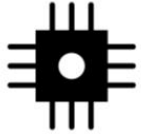
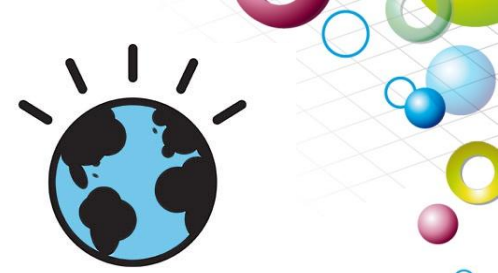


Virtually all things, processes and ways
of working are becoming

INTELLIGENT



Smarter Planet



Our world is becoming

INSTRUMENTED

MORE DATA



Our world is becoming

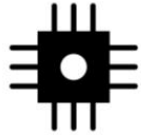
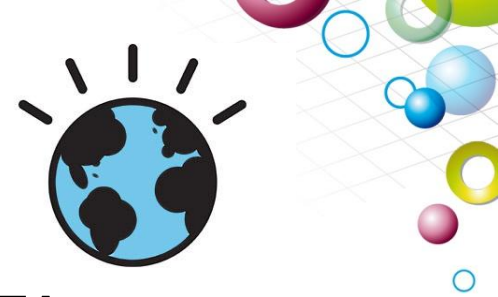
INTERCONNECTED



Virtually all things, processes and ways
of working are becoming

INTELLIGENT

Smarter Planet



Our world is becoming

INSTRUMENTED

MORE DATA



Our world is becoming

INTERCONNECTED

MORE QUICKLY

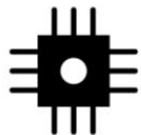


Virtually all things, processes and ways
of working are becoming

INTELLIGENT



Smarter Planet



Our world is becoming

INSTRUMENTED

MORE DATA



Our world is becoming

INTERCONNECTED

MORE QUICKLY



Virtually all things, processes and ways
of working are becoming

INTELLIGENT

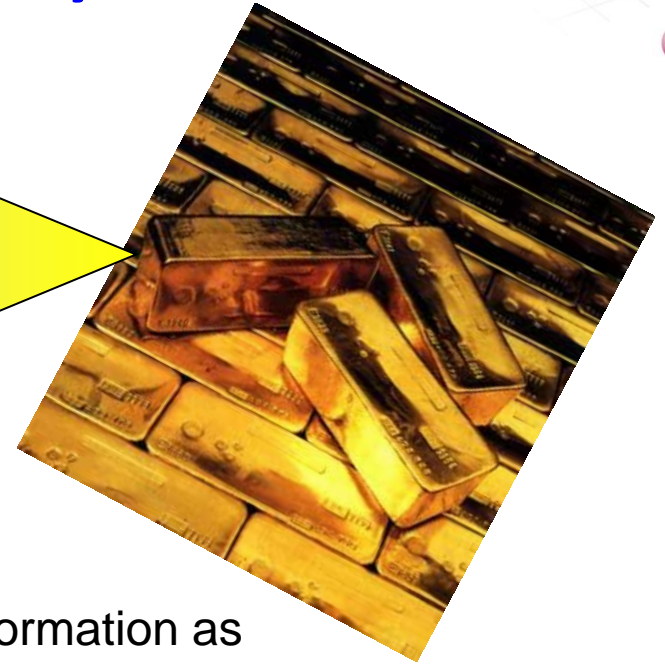
MORE POSSIBILITIES



Data Alchemy

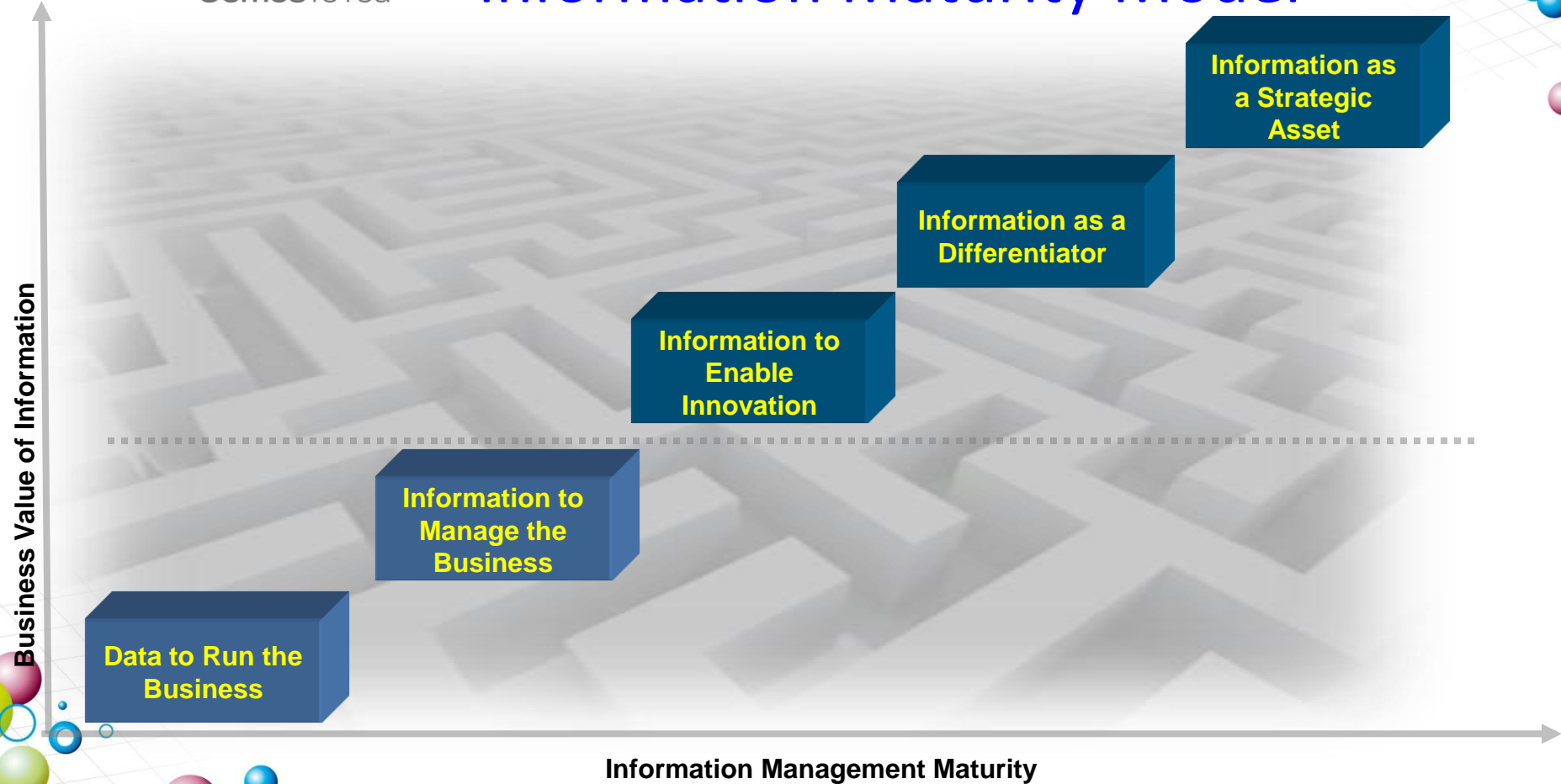


Data to run
the business



Information as
a strategic
Asset

Information Maturity Model

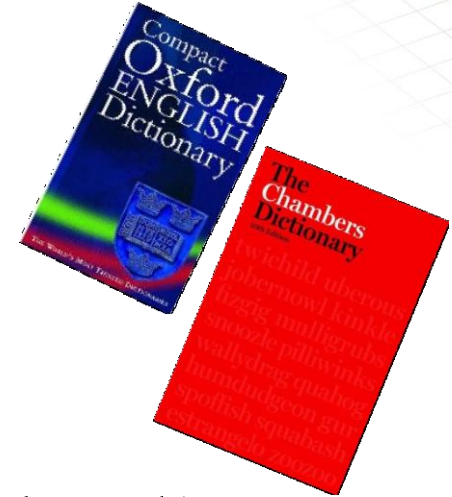


What is the role of **Business Analytics** in all this?

- Business Analytics **Adds Value** to information by
 - Deriving new information
 - Presenting it in a way that is consumable by a business process and/or person

Definition

- Compact Oxford English Dictionary – no definition
- Chambers 20th Century Dictionary – no definition
- **dictionary.com**



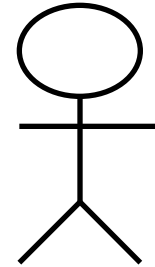
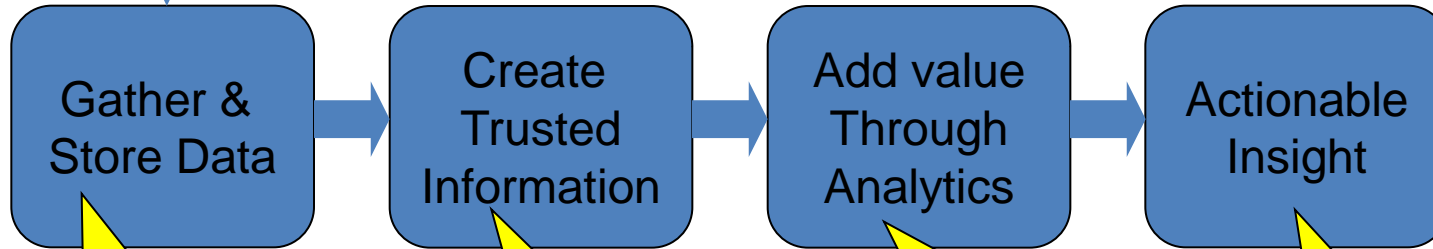
an·a·lyt·ics [an-l-it-iks] noun (used with a singular verb)

Logic. The **science** of logical analysis.

In Business Analytics we apply the “science” to Business Information in order to solve Business Problems

Patterns & Architectures

It's a flow – an information supply chain....



Business Process

The management and governance of structured and unstructured data throughout its lifecycle

Turning data into a consistent, trusted, accurate, single view of the business.

Using simple and advanced techniques to gain extra insight into the behaviour of the business and its customers

Making the results of analysis available to, and consumable by, people and processes

Workflow Management

Rules Management

Modelling & Simulation

Process Execution Design

Services Choreography

Business Processes

Spreadsheets

Portals & Web Apps

Mobile Devices

Business Applications

Collaboration Tools

Composite Applications

Information Services

Presentation Layer

Dashboards

Scorecards

Query

Reporting

Analysis & Visualisation

Budgets Forecasts & Plans

Business Intelligence

Search

Discovery

Predictive

Prescriptive

Content

Multi Dimensional

Classification

Stream Processing

Analytics Capabilities

Data Warehouse

Master Data Management

Data Discovery

Data Cleansing

Data Modelling

Standard Data Models

Glossary Management

Data Mapping

Meta Data Management

Data Integration

Trusted Information

Content Crawling & Indexing

Database Servers

Lifecycle Management

Data Audit

Data Management Tools

Structured Data Management

Content Management

Records Management

Collection & Classification

Unstructured Data & Content Management

The Three “A”s in Analytics

A A A

The First “A”



The First “A”



Appropriate-
adjective
suitable;
proper*

* Source: Compact
Oxford English Dictionary

Appropriate Analytics

- The challenge is that we have a huge (and growing) variety of techniques to choose from
 - Which techniques do I choose?
 - What happens if apply different combinations?
 - What order do I apply them in?
 - How do I compare one approach with another?

* Source: Compact Oxford English Dictionary



Examples

- Queries with contextual parameters
- Ad hoc queries
- Guided Navigation – slice and dice
- Crawling and indexing
- Semantic techniques
- Search
- Classification – clustering, associations etc
- Prediction – sequences, time series, regression, decision trees
- Statistics

“The nice thing about standards is that there are so many of them to choose from.”

Andrew S Tanenbaum

Possible Clues

- What type of question am I asking?
- What will be the follow up questions? – how do I get to more (or less) detail?
- How do I put the information into context? – what do I compare it with?
- What type of data is it? Numeric, textual, structured, unstructured, combinations?
- Who is the audience – how much interpretation are they capable of?

The Second “A”



The Second “A”



Accurate -
adjective **1** correct
in all
details. **2** capable of
or successful in
reaching the
intended target.*

* Source: Compact
Oxford English Dictionary

Accurate Analytics

- We must be able to **trust** information that we are using to make decisions
- Data Quality -> Fitness for purpose
- How accurate does it need to be?
- How do we measure it?
- Deterministic vs non Deterministic - probability



The Third "A"



The Third "A"



- **Actionable** - adjective ready to go or be put into action; ready for use*

* Source: Dictionary.com

Actionable Analytics

- Analytics is used to drive **decision making** and **take action**
- How do we ensure that the actions we take are
 - Correct?
 - Timely?
 - Compatible with (existing) business processes?

Actionable Insight

- Must be delivered **in context** – within a **business process**
- Must be **consumable**
- Must be based on **business rules**
- Must **minimise** (but not necessarily eliminate) **human intervention**
- Must be part of an overall **end to end** business process
- Must be **repeatable**

What's in it for you?

- Businesses that exploit their information assets **make more money**
- Technology has come of age
- Use your imagination
- How Appropriate, Accurate, Actionable is your information?

Talk to

- Nobody has invested more in Business Analytics and related technology - \$12 Billion
- Analytics is a “Business Machine”
- Dedicated Business Analytics & Optimisation Practice



Thank You

chris.williams@uk.ibm.com





IBM Software

Information On Demand 2010 Comes To You

Unlock the True Value of Your Information