



## **IBM INFORMATION INTEGRATION & GOVERNANCE SYMPOSIUM 2012**

*Delivering Trusted Information for Smarter Business Decisions*

# **Improving Customer Experience and Business Performance through Data Warehousing**

**Darren Silvester – Chief Architect – Three UK**

05/01/2012

# The Business Challenge - an explosion of data



2 Billion Internet users in 2011

1.3 Billion RFID tags in 2005

30 Billion RFID tags in 2010



5 Billion Mobile Phones World Wide

Capital market data volumes grew 1,750%, 2003-06



Twitter process 7 Terabytes of data every day



World Data Centre for Climate

- 220 Terabytes of Web data
- 9 Petabytes of additional data

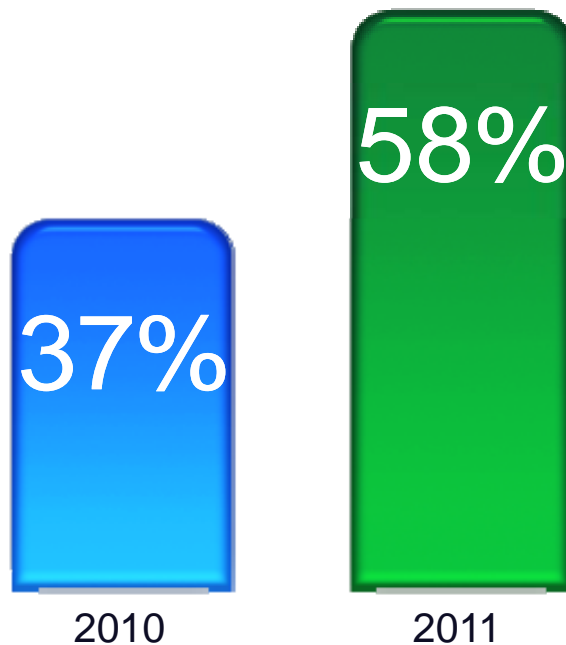


Facebook process 10 Terabytes of data every day



# *Analytics create a competitive advantage and the gap is widening*

More organizations see analytics as competitive advantage



Percentage of respondents who cited a competitive advantage.

And it is...



IBM IBV/MIT Sloan Management Review Study 2011

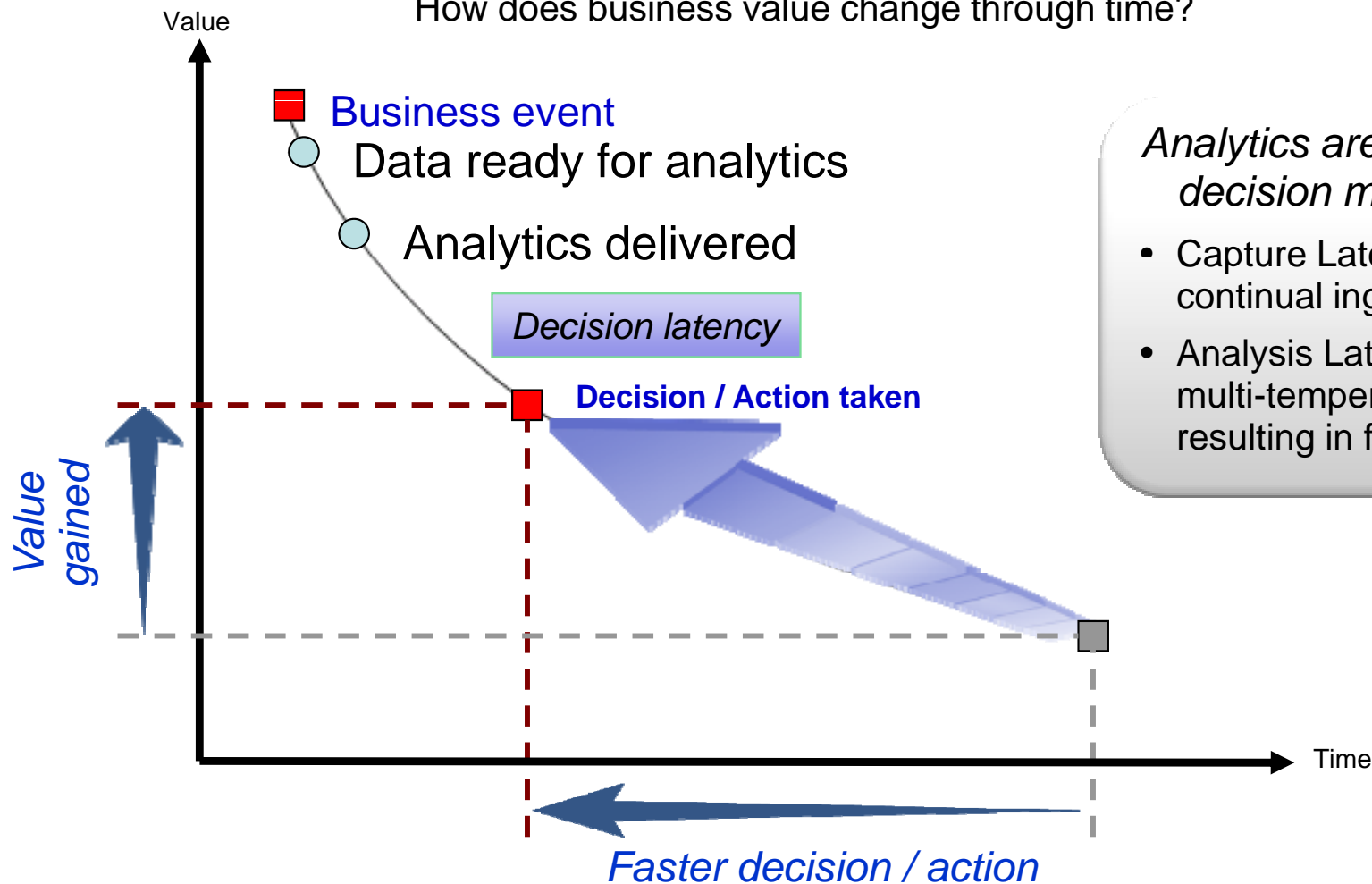


# Real-Time Operational Data Warehousing

## Reducing Latency improving business value of Warehousing

### The Time-Value Curve:

How does business value change through time?



*Analytics are delivered to decision makers faster*

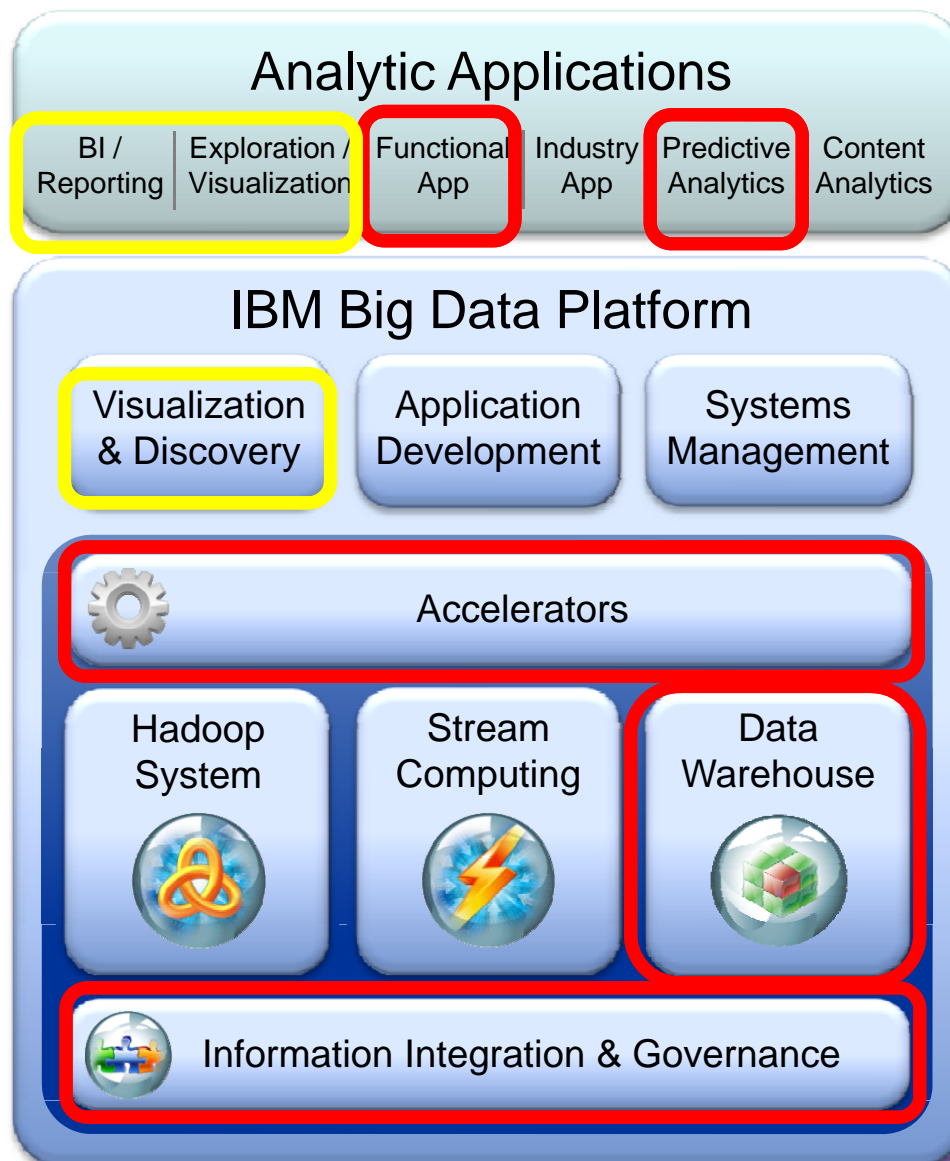
- Capture Latency is reduced by continual ingest
- Analysis Latency is reduced by multi-temperature data storage resulting in faster data access

\* Above diagram adapted from TDWI Best Practices Report - Operational Data Warehousing by Philip Russom, 4Q 2010



# IBM Big Data Strategy: Move the Analytics Closer to the Data

Warehousing is a Foundational Element of our Big Data Story



# *Simplicity, Flexibility, Choice*

## *IBM Data Warehouse & Analytics Solutions*

*IBM  
Netezza*



Appliances

Deep Analytics

*IBM  
Smart Analytics System*



Integrated Optimized Systems

Operational Analytics

*IBM  
Warehouse Software*



Custom  
Solutions

*Warehouse Accelerators*

*Information Management Portfolio*

*(Information Server, MDM, Streams, etc)*

Simplicity

*The right mix of simplicity and flexibility*

Flexibility



twitter: Follow @ANZ\_IM or mention #IIGS

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# About Three UK

- Three is a communications company focused on bringing the benefits of the internet to mobile communications.
- We offer attractive pricing and give our customers the widest choice of ways to stay connected.
- To do this we've built an award-winning high-speed data network.
- Three UK is a member of the HWL group of companies, which include 3G operations in Austria, Denmark, Hong Kong, Ireland, Italy, Macau and Sweden.
- 44% of the UK's mobile data goes through Three's Network\*
- The UK's Fastest Growing Mobile Network\*\*

\* Source: Enders Analysis estimate for 12 months to June 2011

\*\* Source: Ofcom's annual Communications Market Report





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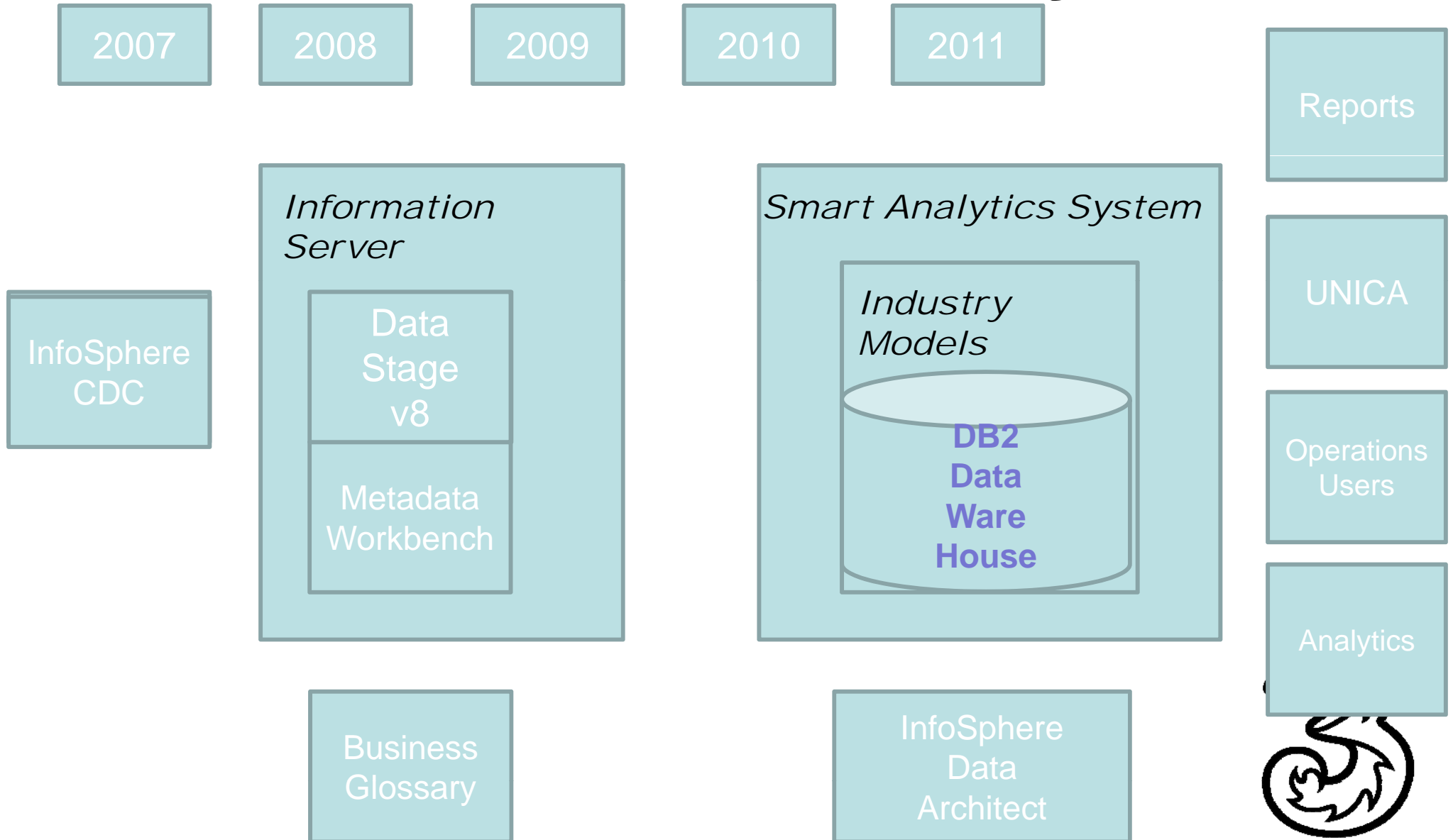
# Three UK Awards

- **YouGov (leading independent research organisation )**
  - No 1 Network for Mobile Broadband for the 6<sup>th</sup> time (top in 9 out of 11 attributes)
  - No 1 Network for Mobile Internet (top in 6 out of 7 attributes)
  - No 1 Network for Mobile Internet on 3G Tables (top in 8 out of 11 attributes)
- **Mobile Today Awards 2011**
  - [Broadbandgenie.co.uk](http://Broadbandgenie.co.uk) Best Dongle on the Move Award
- **Mobile Industry Awards 2011**
  - Best High Street Retailer
  - Best Mobile Broadband



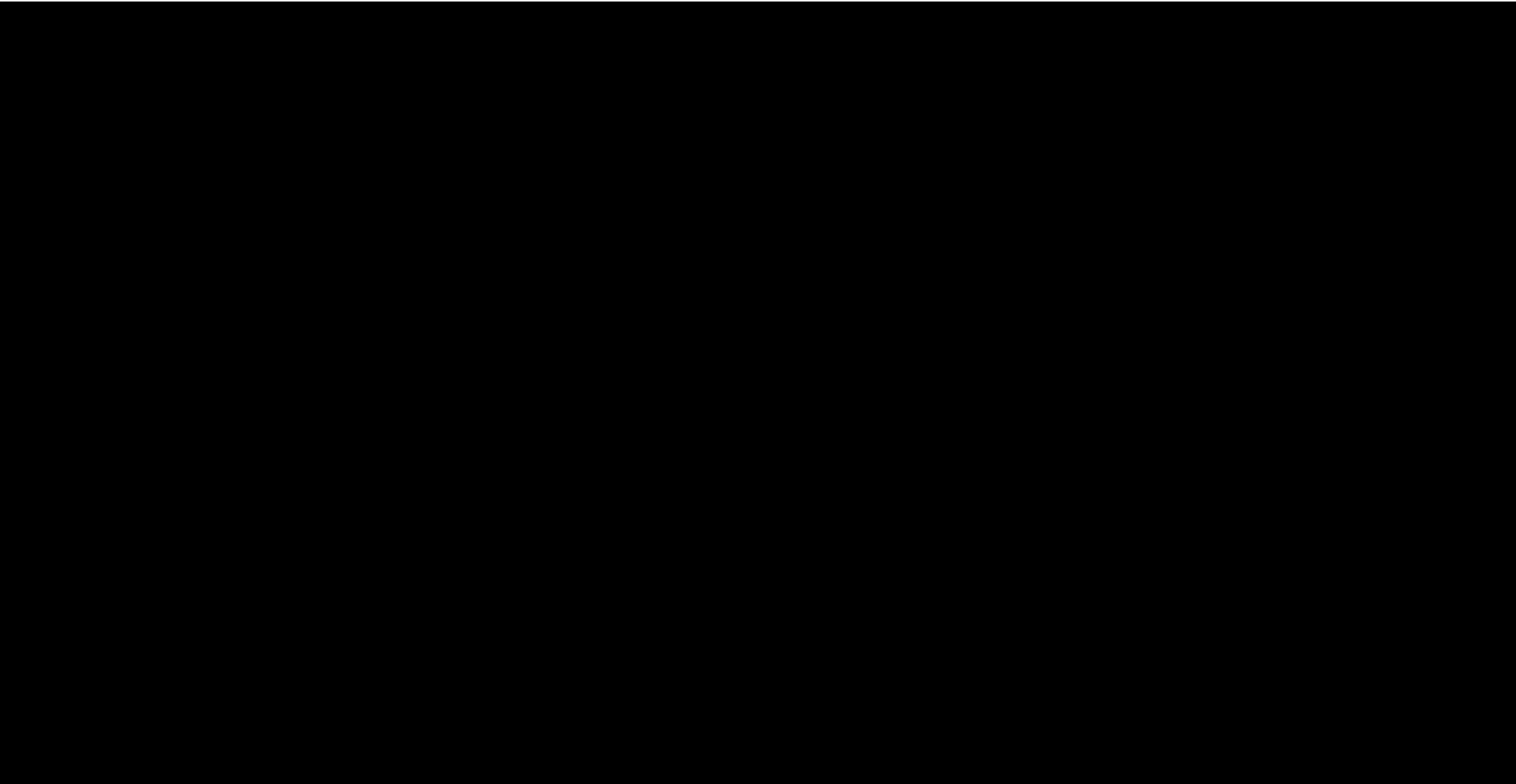


# Three UK IM Journey



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**Bringing you an even  
better network – May 2010**



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# Smarter Analytics Journey

- **The Business Challenge**
- **Requirements**
- **Our Journey to Smart Analytics**
- **Smarter Analytics Available**
- **Smarter Analytics Actions**
- **ROI and Benefits**
- **Further Implementations**



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# The Business Challenge

- **Building The Best Network – Major Programme**
- **Network Intelligence solution required in 3 months**
- **Detailed Reporting and Analytics Required**
  - Understanding of subscriber network experience
  - Network performance
  - Device performance
  - Subscriber behaviour
- **Challenge was set in June 2009**



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# Requirements

- **Smart analytics**
- **Scalable solution**
- **Solution to support access from Operational systems**
- **Sustainable Total Cost of Ownership (TCO)**
- **Flexible solution**
- **Integration with the InfoSphere stack was a key requirement**
  
- **Market Evaluation started in June 2009**



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# Our Journey to Smart Analytics

- **IBM Smart Analytics System was selected – end June 2009**
- **From PO to Live in 3 months (Started August)**
- **New environments (3 Non-production, 1 production)**
- **Multi-skilled team (3 UK and IBM Professional Services)**
- **Performance Certificate**
- **Immediate Business Benefit**
- **Live October 2009**
- **Multiple releases since October 2009**
- **IBM Smart Analytics Platform is the Data Warehousing Platform**



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# Smarter Analytics Available

- **Three UK can now**
  - Understand the network experience (voice and data) by a number of dimensions, e.g
    - **By Subscriber**
    - **By Location**
    - **By Time of Day**
    - **By Device**
    - **By Service being used**
  - Optimisation of current network
  - Subscriber segmentation
  - In-life activity and Churn Analysis
  - Actionable Insights





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# Smart Analytics - Actions

- **What actions have been taken by the business?**
- **Operational Issues for Dropped Calls Fixed**
- **Segmentation – Customer vs Behaviour Driven**
- **Potential Congestion Areas highlighted and upgraded**
- **3000 new sites selected based on Network and Customer Experience**



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# ROI and Benefits

- **Business benefit - delivered during testing**
- **TCO of new solution – far cheaper than upgrading current**
- **On-database analytics possible**
- **Many additional business benefits**
- **Data is available at our fingertips**
- **Efficient Network rollout - targetting high usage sites**
- **Plans - All You Can Eat Data (Unlimited)**



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# Further implementations

- **Further data all available on the same platform**
  - **Subscriber Data**
    - **Product & Billing Data**
    - **Interactions History**
  - **Network Data Services**
  - **Addition of 3000 additional sites (masts) based on Analytics**
- **Next Phases**
  - **Active Data Warehousing**
    - **Smart Campaigning utilising Unica**



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# Questions?

- Any questions?



**Thank you.**



**Three.co.uk**