INTELLIGENT BUSINESS STRATEGIES PRESENTS

Mike **Ferguson**

**Data Virtualisation &
the Logical Data Warehouse**
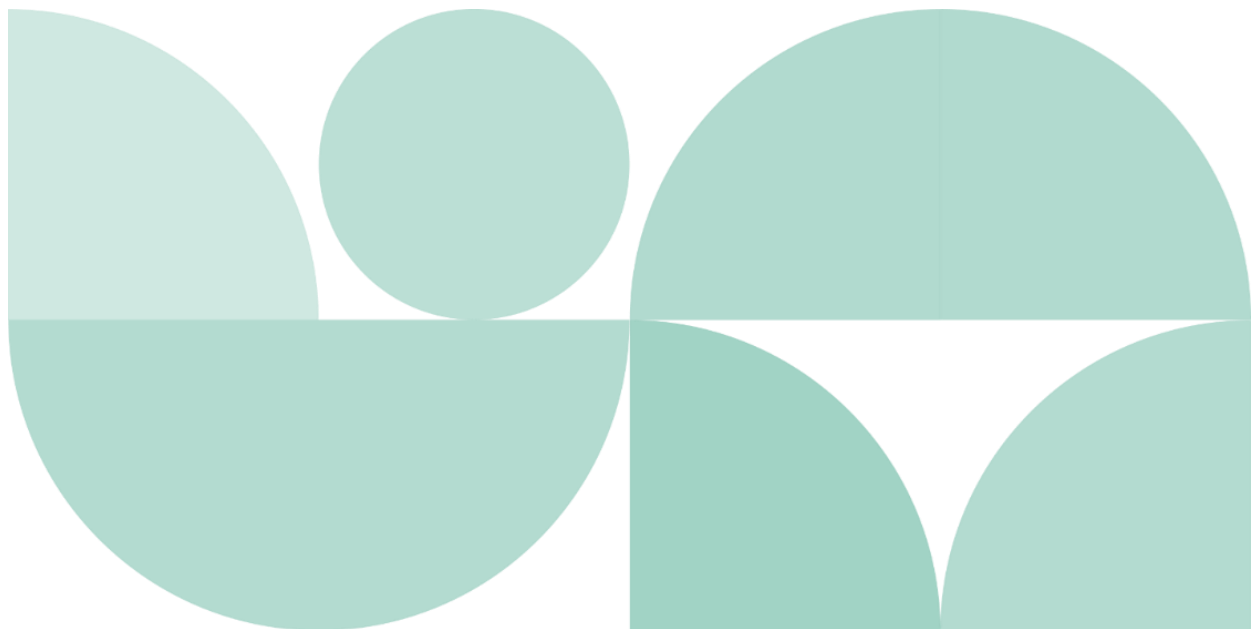
INTRODUCTION

Many companies are now dealing with significant data complexity including cloud and on-premises transaction processing systems as well as multiple data stores in their analytical environment including traditional data warehouses, master data management systems, cloud storage, Hadoop and NoSQL data stores. In the area of analytics, many companies are processing and analysing new data to provide insights in addition to those coming from their data warehouses. In addition, Hadoop is being used to offload data warehouse staging areas and undertake scalable ETL processing to supply data into data warehouses. A key question with all of these applications and data stores, is how do you keep access to data simple and not overwhelm users? Also, how do you integrate new big data insights with existing insights coming from data warehouses? This class looks at how data virtualisation can be used to integrate data for both operational and analytical use. It looks at practical use cases for data virtualisation and at how to simplify access to Hadoop and non-Hadoop analytical systems by using data virtualisation to create a logical data warehouse. It shows how to design an architecture that allows business analysts and 'citizen data scientists' to leverage analytics in Spark, Hadoop, data warehouses and data marts from within self-service visual discovery tools without having to integrate all the data themselves.

OVERVIEW

As more and more data becomes available to people and applications inside the enterprise the challenge of integrating data is becoming more complex. Data is now distributed across multiple on-premises and cloud-based applications as well as new high value data becoming available in external data sources. This makes data harder to access and integrate. This 1-day seminar looks to address this issue by introducing Data Virtualisation and why this technology is now a key component of any information architecture. It discusses what Data Virtualisation is, how you can use this technology to simplify access to data, how it can be used to increase agility and reduce time to time value and how it can be used to create a logical data warehouse as well as information services.

AUDIENCE

Data Architects, DBAs, BI Professionals, Business Analysts, IT Managers.

LEARNING OBJECTIVES

After attending this seminar you should be able to understand what data virtualisation is, how it works, tools in the marketplace, how data virtualisation changes your data architecture and how it can simplify access to data.

MODULE 1: AN INTRODUCTION TO DATA VIRTUALISATION

This part of the course introduces data virtualisation: how it works, the business benefit that can be realised from using it, and the products that are available on the market.

- What is data virtualisation?
- Why is it needed? What business problems does it solve?
- How data virtualisation works
- Data virtualisation product types
- Major vendors in the data virtualisation marketplace

MODULE 2: IMPLEMENTING DATA VIRTUALISATION

This session continues with a look at how you can implement data virtualisation, including the importance of common data definitions, building layers of virtual tables on top of each other, and how to manage performance and security.

- Business Glossaries and Data Virtualisation
- Why is common metadata important in virtual data views?
- Virtual data models and importing data models from other tools
- Implementing virtual tables
- Mapping physical data to virtual data
- Managing performance
  - o Using data caching and snapshots in a data virtualisation deployment
  - o Using data virtualisation with in-memory computing
  - o Using multiple instances of data virtualisation servers
  - o Distributed data virtualisation configurations
- Layering virtual tables to simplify access and reduce complexity
- Managing data security using data virtualisation

MODULE 3: POPULAR DATA VIRTUALISATION USE CASES TO MAXIMISE BUSINESS VALUE

- Using data virtualisation in data warehousing
  - o Virtual ODSs
  - o Virtual Data Marts
  - o Virtual data sources
- Data virtualisation Patterns for integrating BI and Planning
- Using data virtualisation in MDM
- Building an information services layer using data virtualisation
- Using data virtualisation with operational systems
- Integrating cloud and on-premise data use in cloud computing
- Using data virtualisation in a big data environment
- Using data virtualisation to create a logical data warehouse architecture
- Using data virtualisation to create virtual data marts, reduce data warehouse cost of ownership and improve agility
- Using data virtualisation in data governance

PRESENTER

Mike Ferguson is Managing Director of Intelligent Business Strategies Limited. As an independent IT industry analyst and consultant, he specialises in BI / analytics and data management. With over 40 years of IT experience, Mike has consulted for dozens of companies on BI/Analytics, data strategy, technology selection, data architecture, and data management. Mike is also conference chairman of Big Data LDN, the fastest growing data and analytics conference in Europe and a member of the EDM Council CDMC Executive Advisory Board. He has spoken at events all over the world and written numerous articles. Formerly he was a principal and co-founder of Codd and Date Europe Limited – the inventors of the Relational Model, a Chief Architect at Teradata on the Teradata DBMS. He teaches popular master classes in:

- Big Data Architecture & Technology
- Building a Competitive Data Strategy for A Data-Driven Enterprise
- Data Catalogs – Governing and Provisioning Data in a Data Driven Enterprise
- Data Virtualisation & the Logical Data Warehouse
- Data Warehouse Modernisation
- Embedded Analytics, Intelligent Apps & AI Automation
- How to Govern Data Across a Distributed Data Landscape
- Migrating your Data Warehouse to the Cloud
- Modern Data Architecture
- Practical Guidelines for Implementing a Data Mesh (Data Catalog, Data Fabric, Data Products, Data Marketplace)
- Real-Time Analytics

ONSITE TRAINING

All training can be given as onsite education, tailored to your company's requirements. For further details please contact us at training@intelligentbusiness.biz