Using a Big CA(A)T to Tame the Big Data Jungle

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Introduction

- About Griffith University and MBS
- Building the Brief and Resourcing the Project
- Selling the Concept
- The Challenge of Getting the Data
- Practical Learnings from Implementation
- Seeing the Results

Introducing – Griffith University

•5 Campuses – South Bank, Nathan, Mt Gravatt, Logan and Gold Coast

•43,000 Students – Business, Arts Education & Law, Science Engineering Environment & Technology, Health

•300 Degree Programs

•Growth from 2000 to 2010:
- Operating Revenue 156%
- Net Assets 173%

Partnering the Implementation

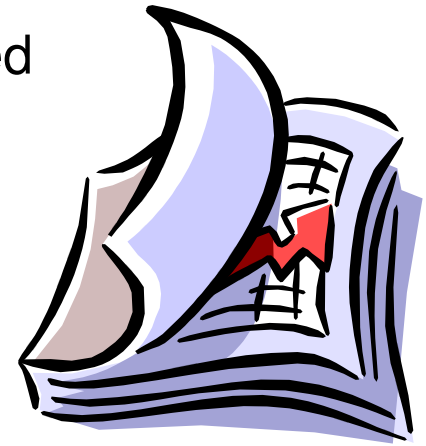
Meta Business Systems

Our focus is on:

- Strategic and operational reporting and analysis
- Continuous Business Process Improvement and Monitoring
- Full QA on large system transitions

The Brief

- External Quality Assessment recommendation in 2007
- Limited skills and resources in house
- Improved data extraction and analysis
  - Access to data on our terms
  - PeopleSoft queries difficult to use
  - Lack of access to PeopleSoft Finance System and reports/data
- Planning & Financial Services already interested
- Sell benefits to HR Management



External Driving Forces

- Financial Accountability Act 2009
- Financial & Performance Management Standard 2009
  - Monitoring & assurance over financial systems

- Chief Finance Officer's Certification
  - Replaced systems appraisals
  - Implementation of internal controls
  - On going effectiveness of internal controls

- Queensland Audit Office Report
  - Fraud Risk Management
  - Data Analytics over Fraud Risks

The Resources

- Salary Savings
- Vendor Quotation
- Software Licensing
- Time for Training
- Unexpected Costs
  - Virtual Server & Support
  - IT Implementation Costs
  - Additional reports
  - Maintenance Costs

Selling the Concept

Getting support and approval

- Pro Vice Chancellor Administration

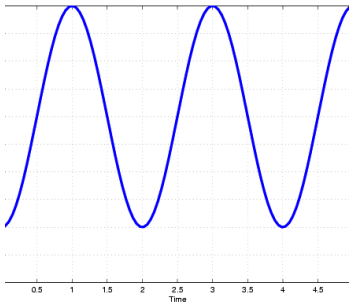
- System Owners – Finance/HR:
  - You want to do what with **MY** data?

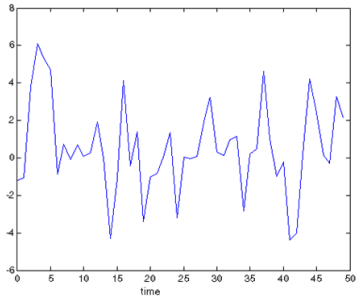
- System Custodians:
  - You want to do **what** with **MY** data and **MY** production system?

- Project proposal and brief from MBS detailing:
  - How the data and systems would be impacted
  - List of proposed reports and reconciliations

The Concept

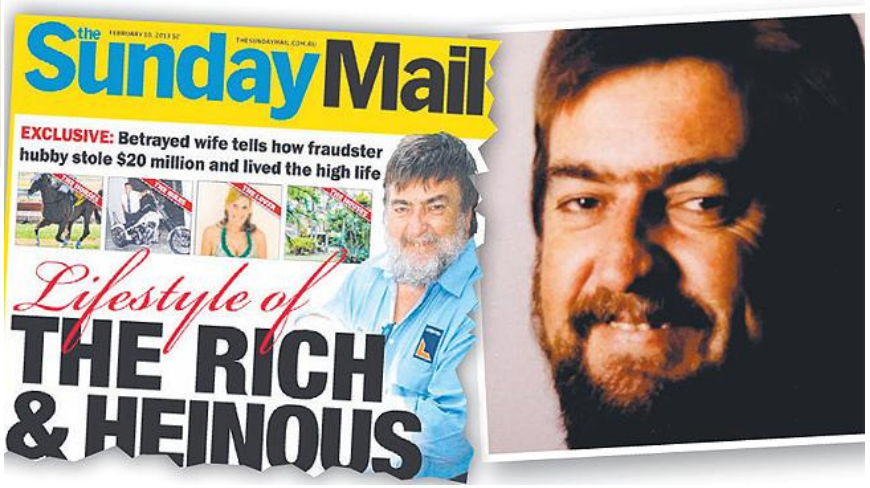
- Continuous





The Concept

- Continuous
- Large amounts of Data



The Concept

- Continuous
- Large amounts of Data
- Integrated Datasets

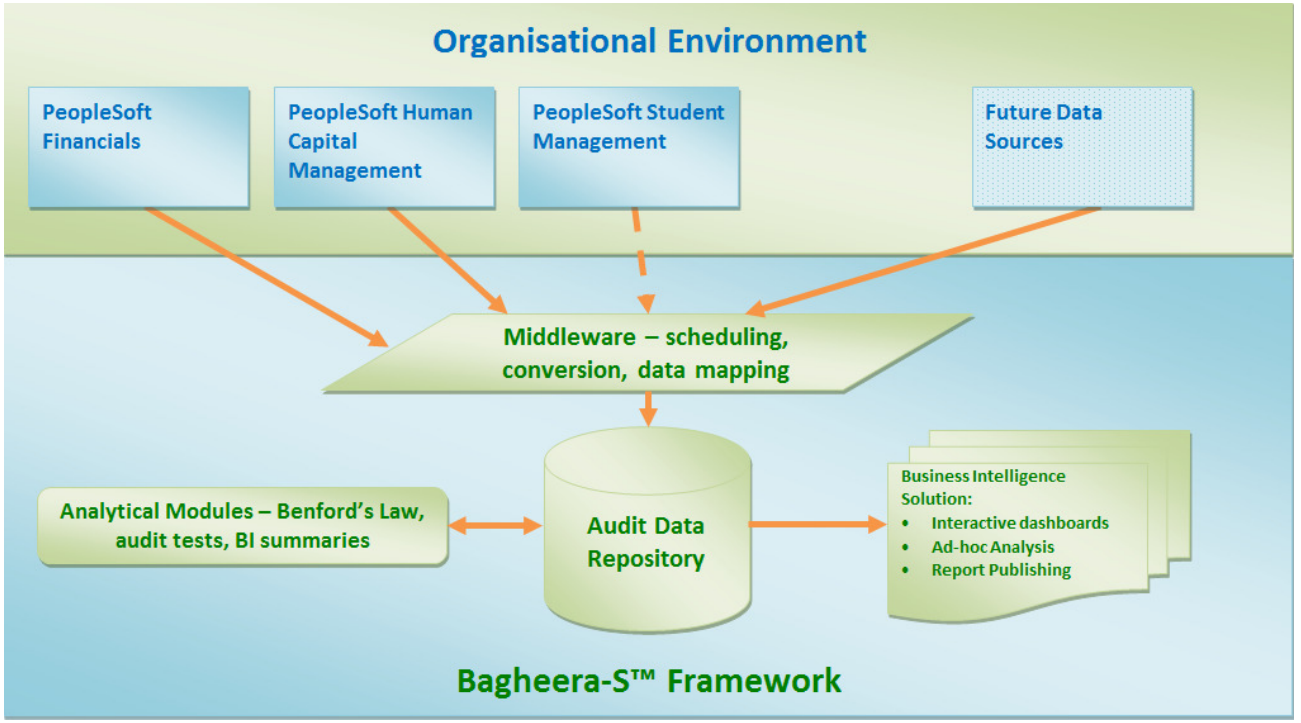
The Concept

- Continuous
- Large amounts of Data
- Integrated Datasets
- Protecting the Source System

The Concept

- Continuous
- Large amounts of Data
- Integrated Datasets
- Protecting the Source System
- Ease of Use

The Concept - Continued



The Data

(Oh Boy, Getting the Data)

- Virtual machine for internal audit use organised by IT
- Copy of copy of production data
- Finance System Upgrade Project
- HR Patching Project
- Changing data table structures
- Getting attention from busy IT and Finance staff

The Data

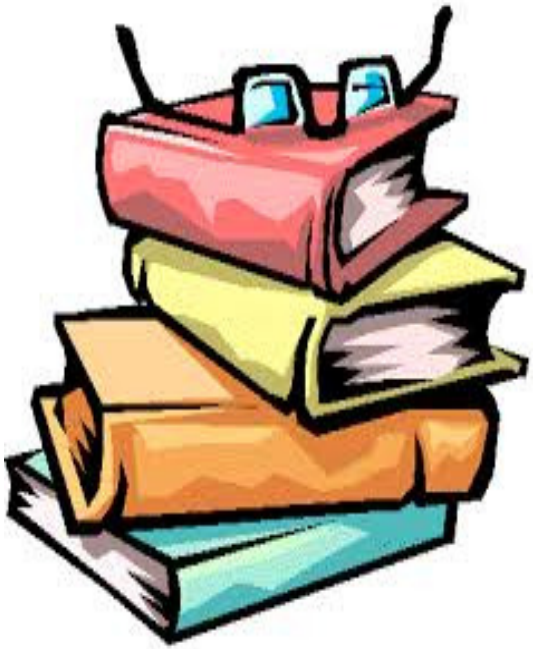
(Oh Boy, Getting the Data)

The Lessons

- Overestimate time to complete the project/get the data
- Consider the lifecycle costs – support, licensing
- Many different parts of IT involved
- Many IT things went completely over CAE's head

The Lessons

- Be mindful of other Projects
  - Finance and HR systems
  - Business Intelligence
- Getting buy in from operational staff who will use the system not easy
- Operational staff will get excited when you show them the results
- Audit Committee will be interested too!!



Case Studies

Duplicate Vendors

- PeopleSoft duplicate vendor report matches on ABN only
- Match on BSB and bank account
- Large number of possible duplicate vendors
- Remove partner combinations – husband/wife
- Employee vendor and supplier vendor

Case Studies

Duplicate Vendors

- Lack of data entry protocols
  - Use of acronyms
  - Middle names
  - Asian names
  - Trading names vs company names
  - Nick names
  - Branches
- Duplicate payments & errors in travel advance acquittals
- Many duplicate vendors created

Case Studies

Duplicate Employees

- Controls in PeopleSoft do not identify errors
- Matching between tax file numbers
- Processing errors
  - Duplicated TFN
  - First & middle name reversed
  - Spelling errors
  - Asian names

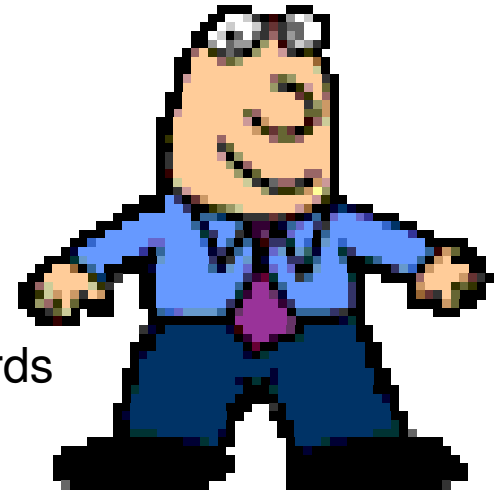
Case Studies

Employee/Vendor Bank Accounts

- No reports between HR/Finance to match between data sets
- Matching between BSB and bank account
- Investigated employment conditions and nature of payments to vendor
- Casual employees paid through accounts payable
  - Avoidance of PAYG by employees
  - Payroll tax obligations
  - Health & safety complications

The Results

- Reports and reconciliations made available to Finance & HR
- CFO Compliance Certificates/Statements
- HR very excited
  - Requested additional reports
  - Push reports out to HR managers & advisors
  - Savings in payroll reconciliation
  - Quicker identification of duplicate employee records
- Finance
  - Requested additional report for contractor reporting
  - Improved vendor management
  - Use of HR leave reports in financial reporting

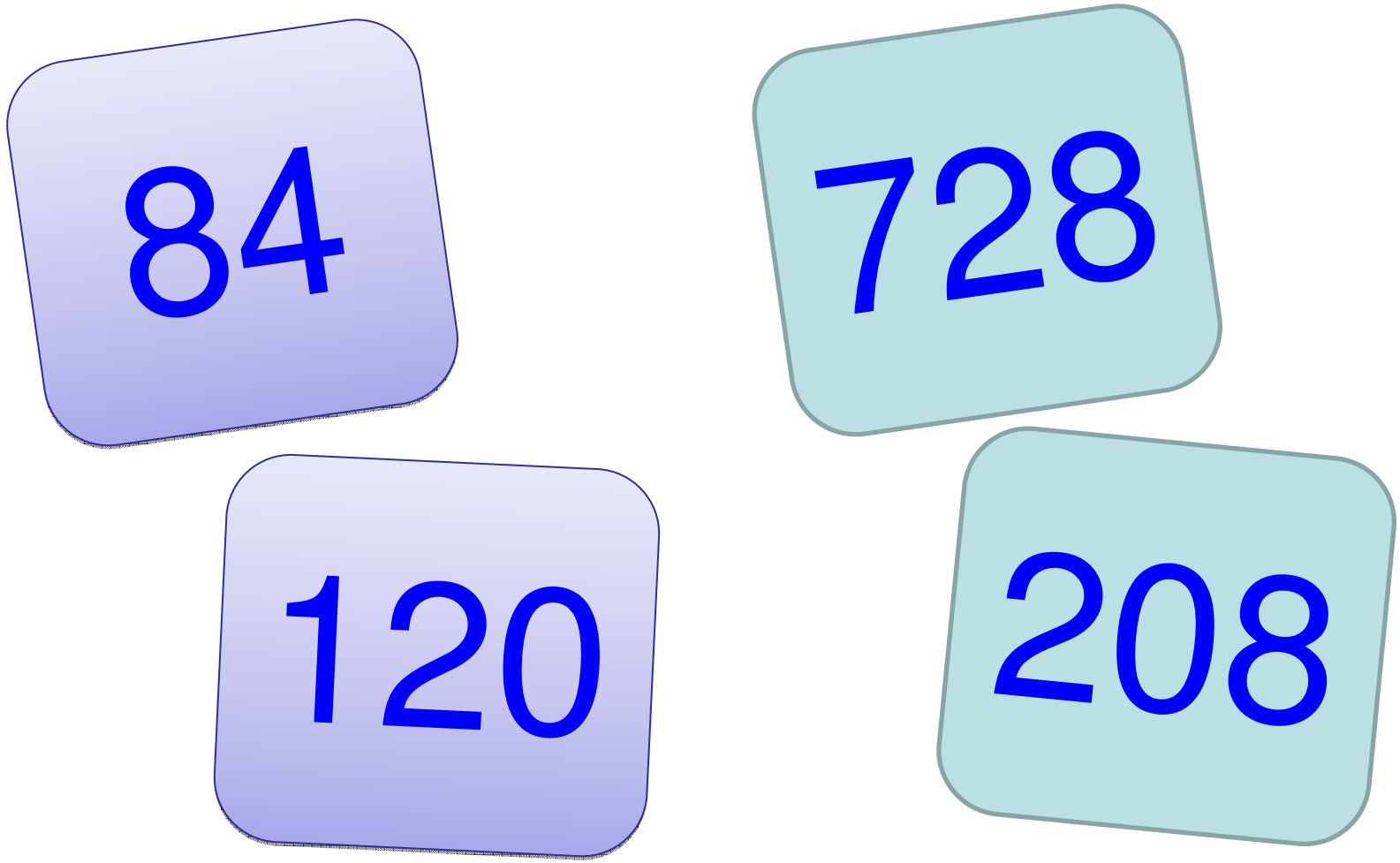


The Results

For Internal Audit:

- Reporting across a range of internal controls:
  - HR - payroll, leave management, duplicate employees
  - Finance – vendor management, accounts receivable, accounts payable, assets
- Use in operational review of business units
- Financial statement testing
- Follow up sample of transaction for testing/review/follow up with management
- Access to data and reports without relying on IT

The Savings



The Results

Training - ad hoc queries, reporting & dashboards

- Internal Audit
- HR
- IT Business Systems Support
- Finance
  - Accounting & Business Services
  - Business Intelligence

The Future

Further development activities:

•Production of annual financial statements

•Further analysis of existing reports, e.g. leave reports

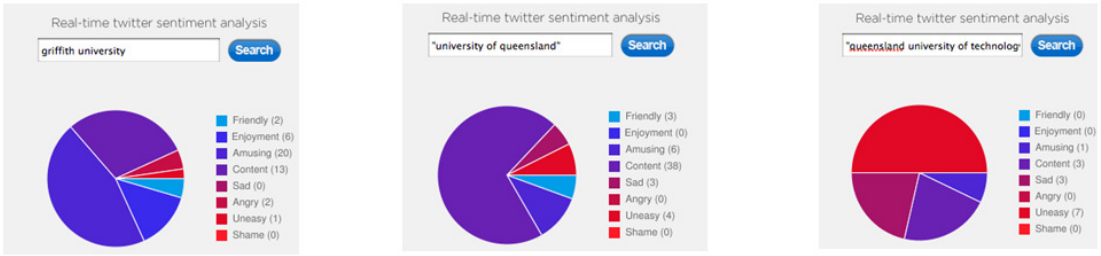
•Production of quarterly financial reports for management

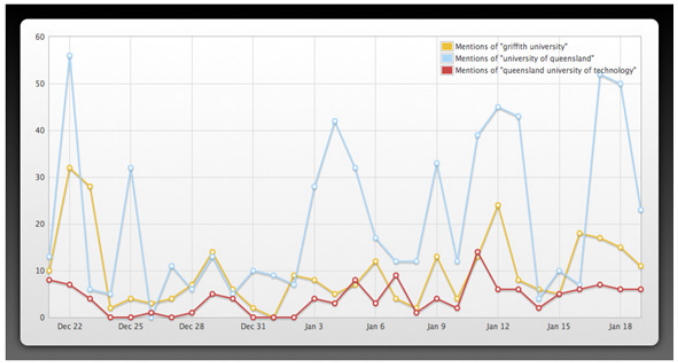
•Exception reports for student fees
- Refunds
- Pricing

The Possibilities

- Student Financial Management System
- External Data Sources

Real Examples of External Source Analytics
(Social Analytics for Griffith, UQ and QUT)





The Conclusion

- CMS has created value for IA and our stakeholders
- Clients will need to talk to their IT people to understand what will be needed
- Clients will need to overestimate the time needed to get the data

Questions?