



Data Quality? Don't Waste your Time



Nigel Turner

Head of Information Management Practice, BT Design

nigel.h.turner@bt.com

Dave Evans

Lead Data Management Consultant, BT Design







Data Quality – 8 Myths & Misconceptions

- 1. Data Quality matters to a business
- 2. Data Quality problems keep CEOs awake at night
- 3. Data Quality is an IT issue
- 4. Data architectures have value to a business
- 5. Metadata matters to a business
- 6. 100% data accuracy is a feasible aim in business
- 7. Businesses want 100% data quality
- 8. Businesses need 100% data quality

















Myths & Misconceptions – Don't Waste Your Time

- DQ is not seen as a business survival issue
- DQ experts do not win hearts and minds in organisations
- DQ champions struggle to win business support
- DQ specialists do not sell the importance of DQ in a language that connects to the business world
- And many researchers miss the point misplaced focus
- The real challenge...
 - DQ professionals: convincing industry to take DQ seriously
 - DQ researchers: supporting DQ professionals in this challenge







Data Quality – the Business Realities

- Data Quality is a business transformation challenge
- Holistic approaches are needed, encompassing:
 - > People
 - > Systems
 - Processes
 - Technology
- Proving the benefits of DQ enhancement is the primary challenge
- Return on investment is king!!
- Results are achievable, but it's a long haul
- Businesses need us!!









From Acorns





to Oak Trees . . .

- BT's DQ initiative started in 1997. Response to:
 - Slow deployment of new products and services
 - Desire to gain complete view of customers
 - Efforts to reduce business & IT costs
- DQ improvement team created:
 - Investigated DQ 'hot spots
 - Specified common approach and tool set
 - Kick started initial projects
- DQ in BT today:
 - Over 70 internal DQ improvement projects completed
 - DQ improvement team of 50+
 - DQ solutions to other companies, e.g. UK MoD, HBOS, Unilever

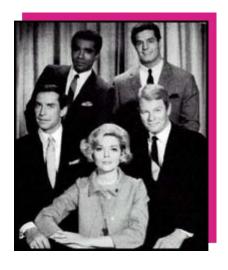






BT's DQ Challenges

- Provide accurate, complete and reliable information
- Improve core data in 700+ operational systems data quality problems were widespread
- Ensure new systems stack contains high quality data
- Accelerate migration to new systems stack data migration recognised as challenge
- Support e-enablement of processes you can only automate process if data is accurate
- Ensure all assets recorded accurately an asset is only an asset if you know it's an asset!
- Comply with new EU & US data legislation







Organising for Change

- Organising the Business
 - Business champion in Group CIO team
 - Champions in all lines of business
 - IM Forum created . . . Focus on Data Quality
 - Prioritising potential DQ projects
- Organising the IT Department
 - Created a Centre of Excellence (CoE) for DQ
 - Head of CoE member of IM Forum
 - DQ Consultancy established to bridge Business & IT functions
 - Drive to establish common methods and tools







Gartner's Maturity Model



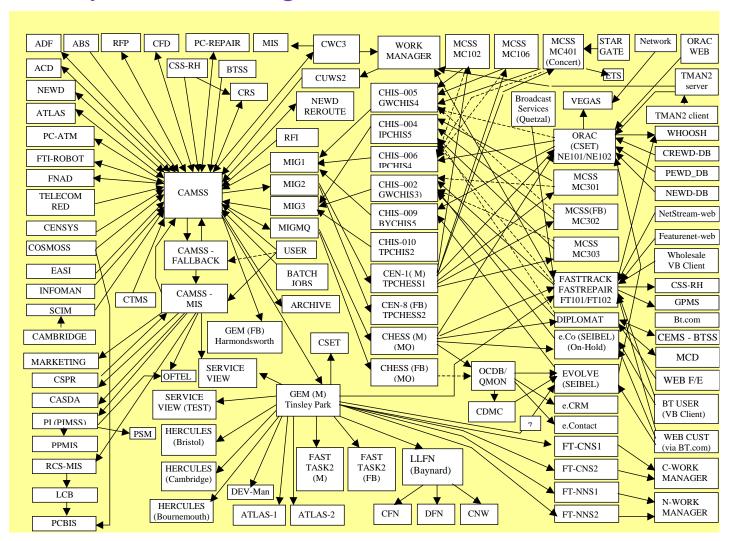
Strategic Planning Assumption: Through 2010, more than 75% of organizations will not get beyond Levels 1 and 2 in their data quality maturity (0.8 probability). Strategic Planning Assumption: Through 2012, less than 10% of organizations will achieve Level 5 data quality maturity (0.8 probability). Andreas Bitterer - Gartner Feb 2007







BT: An Early DQ Challenge



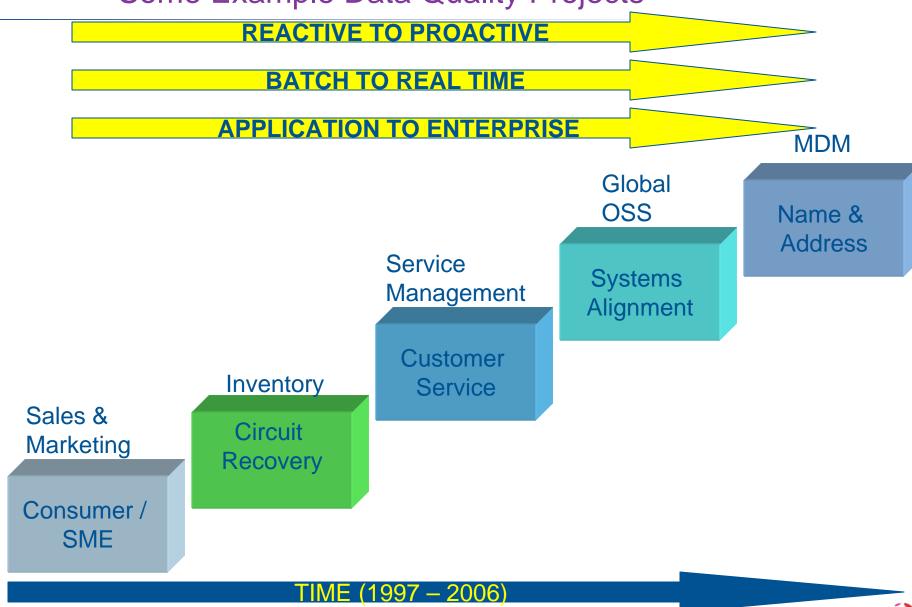




12th International Conference on Information Quality, 2007



Some Example Data Quality Projects







Sources of ROI

- Process improvement...
 - Reduced costs of failure
 - ➤ Less scrap & rework
 - > Enhanced productivity & morale
- ■CAPEX avoidance
- Improved asset utilisation
- Revenue recovery & creation
- Better ROI in IT investments
 - > Reduced in-life costs
 - > Faster deployment of enhancements

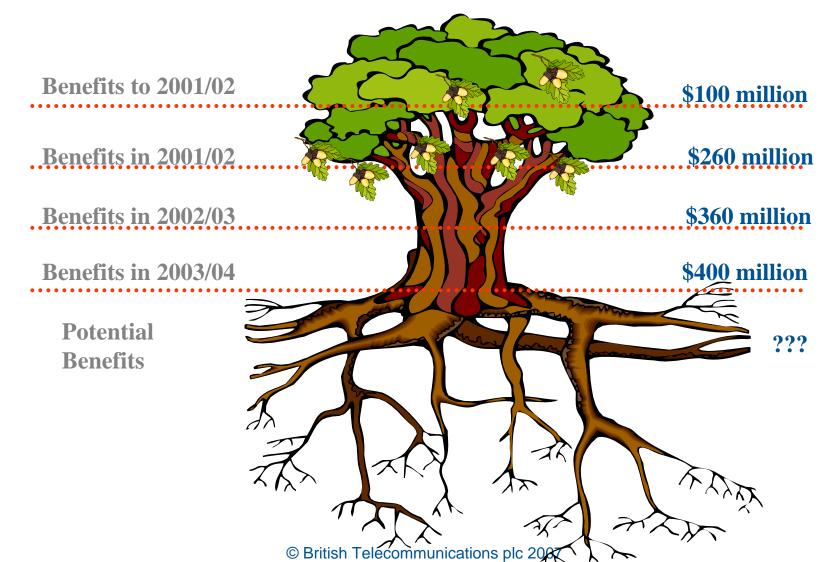








Data Quality: the bottom line benefits in BT

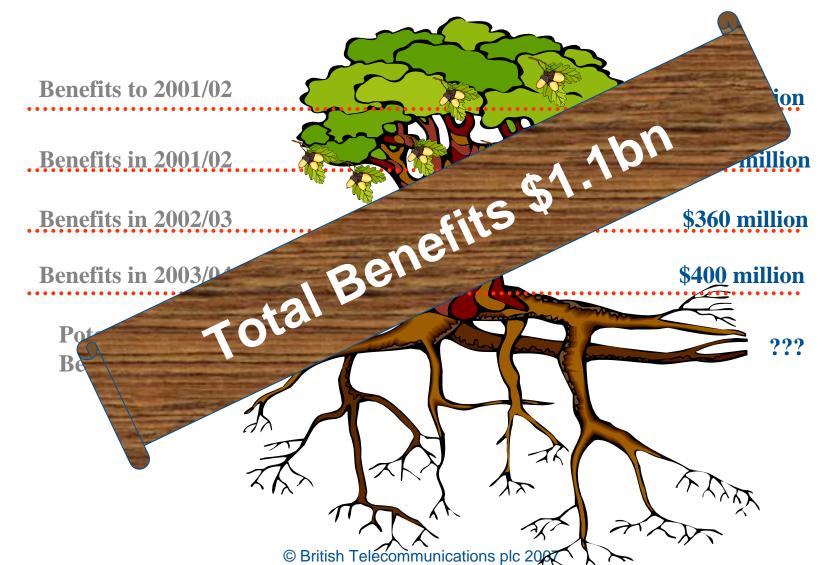








Data Quality: the bottom line benefits in BT











Principles & Approach

Dave Evans



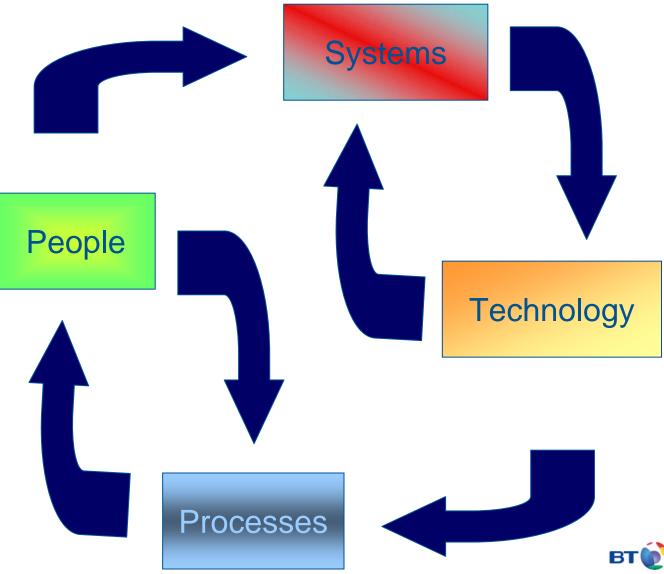




People, Systems, Technology and Processes are all driving each other!



And don't forget the regulator!

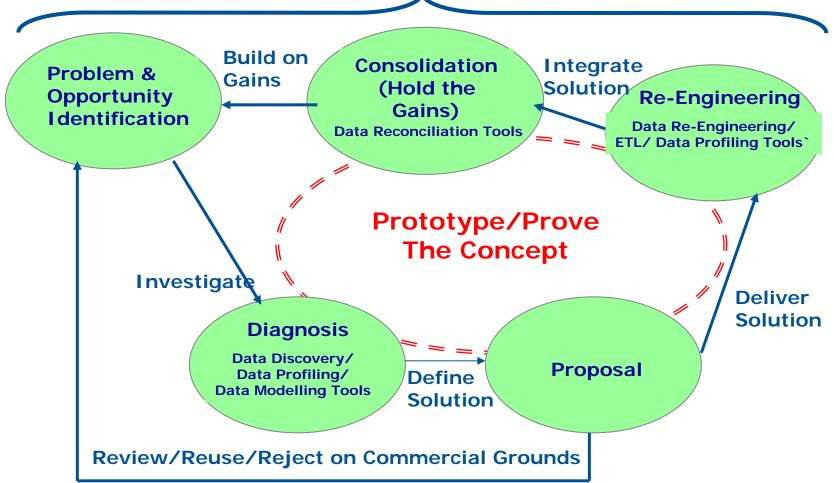






BT's DQ Methodology approach

Client Involvement Track Benefits

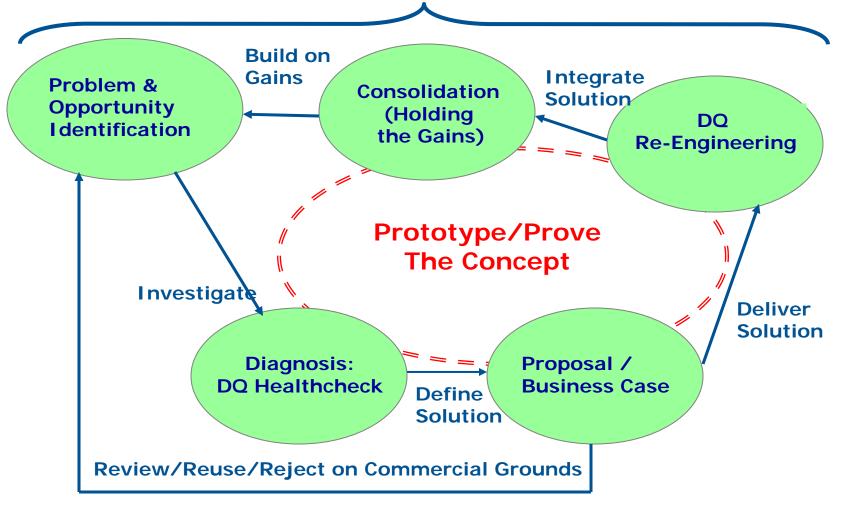
















12th International Conference on Information Quality, 2007

Problem & Opportunity Identification



Work with business & IT people – listen to their complaints and suggestions



- Interviews
- Workshops
- Ideas schemes
- Focus groups
- Talk business language
- Relate problems to key business objectives
- Identify the pain holders! Identify champions!
 - Same people?
- Expect some denial and even rejection
 - Don't get downhearted
 - Persevere!
 - Look elsewhere





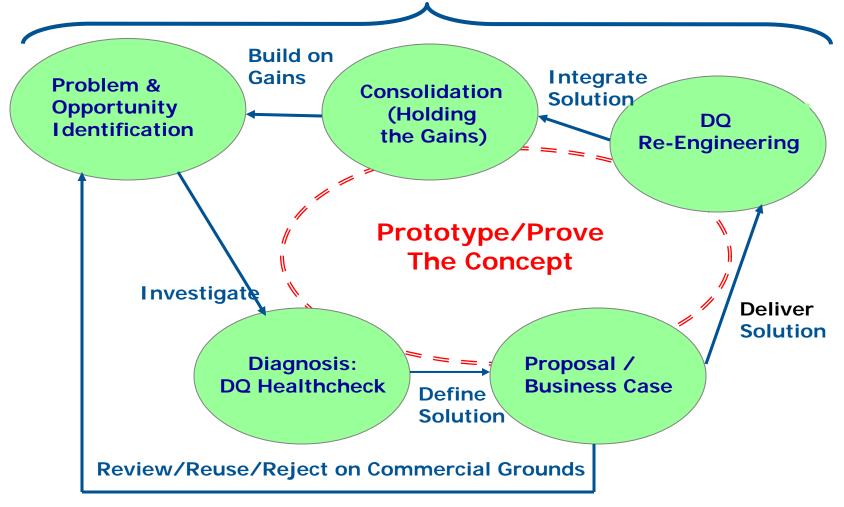






BT's DQ Methodology C

Client Involvement Track Benefits











Diagnosis: DQ Healthcheck

- Find out how bad the situation *really* is
 - Don't rely on people's memories
 - Don't trust the documentation
 - It's probably worse than they think it is
- Profile your data!!
 - Use a best of breed tool
 - Don't write SQL, C++, Excel etc.
- Quantify the business impact
 - Work with the Business
 - Produce first cut estimates
 - Reject opportunities with no indication of business bender

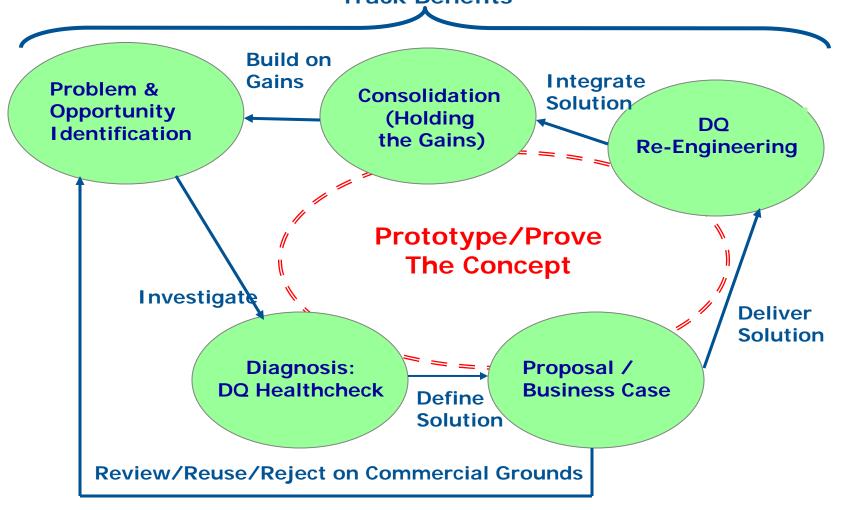








BT's DQ Methodology Client Involvement Track Benefits







12th International Conference on Information Quality, 2007

Business Case and Proposal

- Be aware of your organisation's DQ maturity
 - Wise owl or naïve donkey??
 - Start small
 - Under promise, over deliver
- Only progress opportunities that show indicative positive ROI
- Prioritise potential projects
 - Quantifiable ROI
 - Regulatory & legal impact
 - > Brand & reputation damage
 - Benefits/cost ratio
- Produce Business Case
 - Gather more evidence to validate the case
 - Include 'do nothing' option





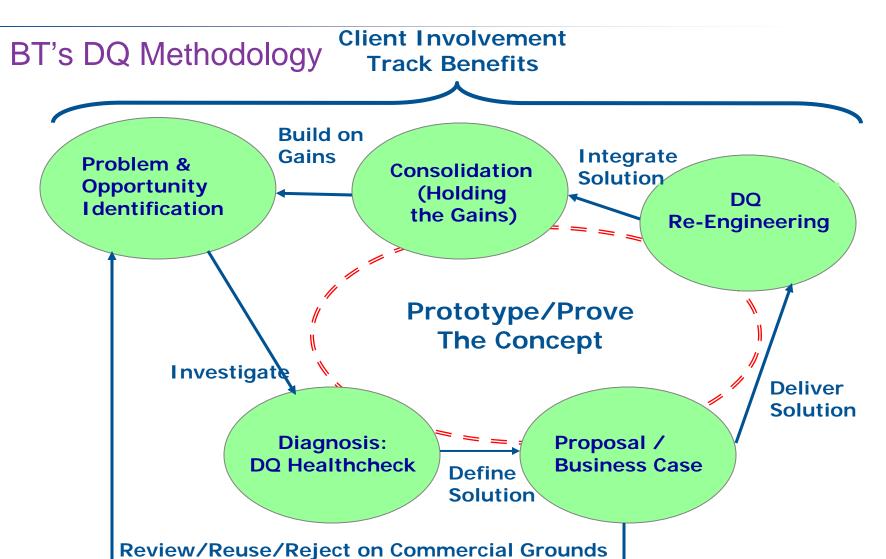
















12th International Conference on Information Quality, 2007

DQ Re-engineering

■ Design & Implement the Transformation

- > People, Systems, Processes, Technology
- Business led, IT supported

■ Standardisation

- All systems use the same version of the same data
- Enabler for further initiatives

■ Don't build one off solutions

- ➤ Think agile & re-use
- Remember it's an iterative approach

■ Consider the future

- You might not be doing it now.....
- ➤ But you will be soon!







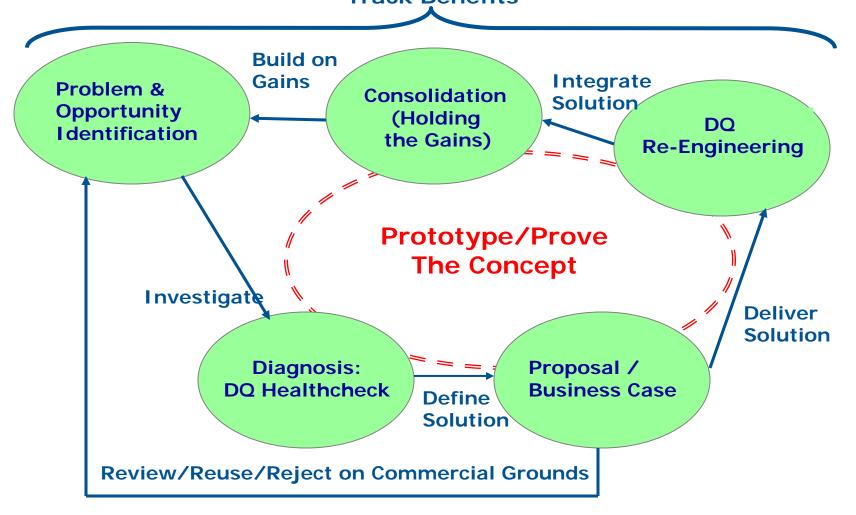








BT's DQ Methodology Client Involvement Track Benefits







12th International Conference on Information Quality, 2007

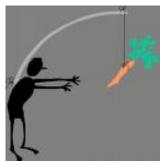
Consolidation – Holding the Gains

- Don't do a DQ Transformation unless.....
 - You can hold the gains
 - Improvement can be measured
- Use the same design
 - Ensure your designs fix it and keep it fixed
 - Whatever tool you use
- Use the same solution
 - If your solution gets it clean make sure it keeps it clean too
 - May involve training, BPR and culture
 - > Remember the metadata
- Now move on to the next most important thing
 - > DQ improvement never ends
 - ➤ It's a holistic problem!
 - Some carrot some stick use both









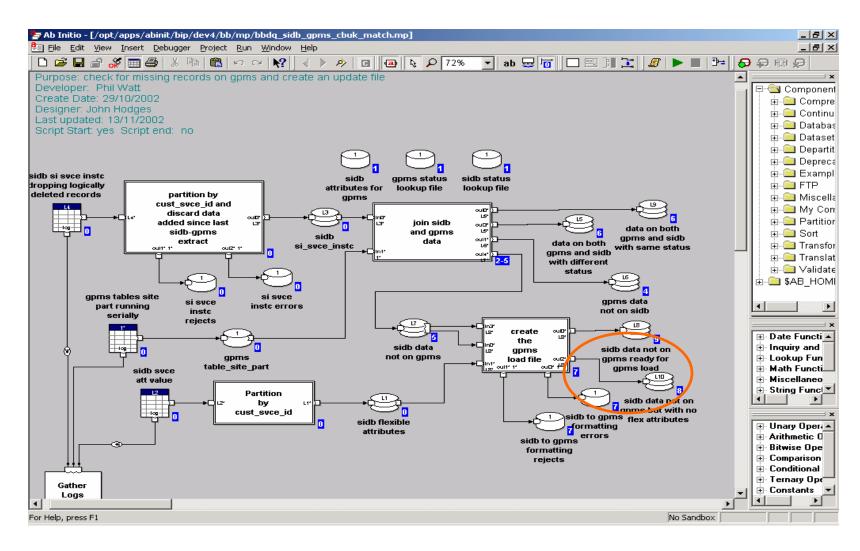








Improve the DQ - cleanse



Quick Win - focus on Service Assurance

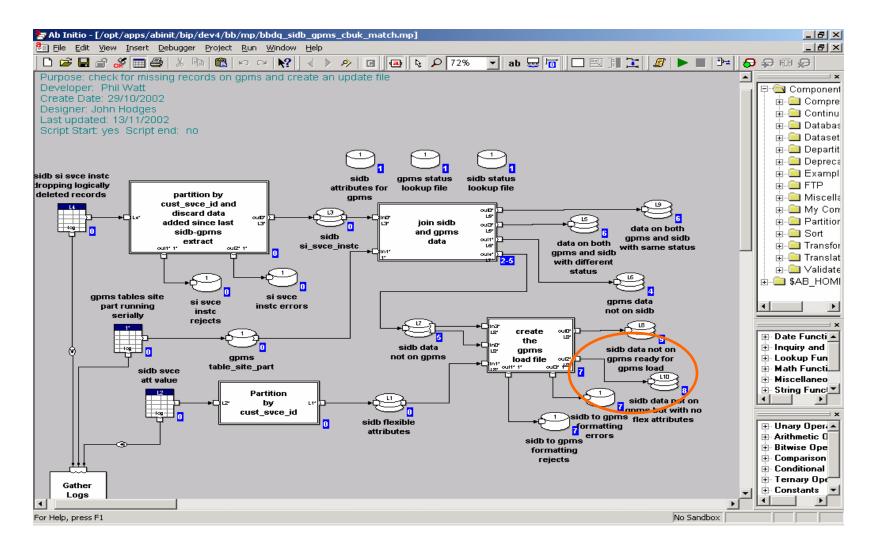








Improve the DQ - holding the gains



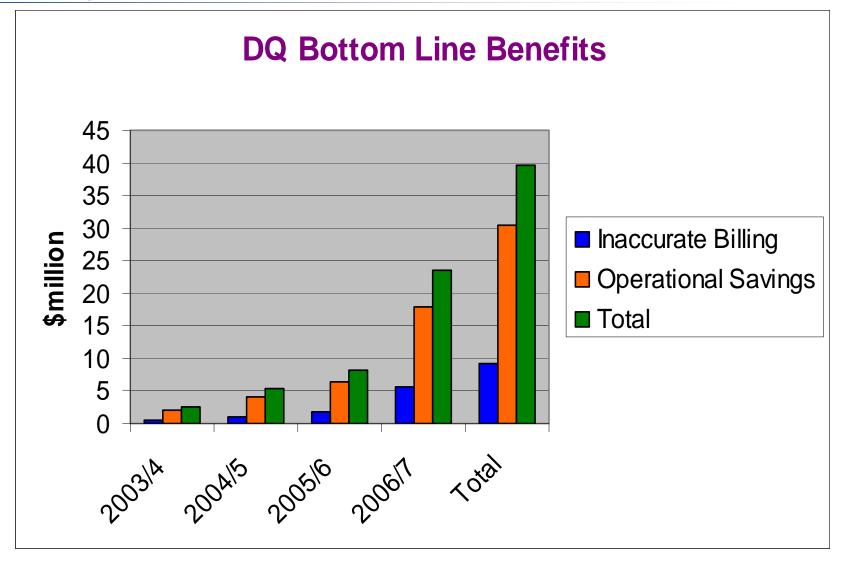
Quick Win - focus on Service Assurance







Improve the DQ – save the \$\$\$!









Lessons Learned

Business Alignment

- Link DQ to strategic objectives
- Know business 'hot spots' & drivers and connect
- Ride on existing initiatives
- Explain DQ problems in the language of the business
- Do stakeholder analysis
- DQ not an end in itself

Complexity

- Recognise that DQ problems are holistic & pervasive
- Each DQ problem is unique
- Analyse e2e business impact
- Aim for improvement not cure
- Recognise DQ improvement is a process not a project

Leadership

- Bad DQ is not bad IT
- DQ must be business led
- Only one measure matters \$\$
- Be confident in achieving ROI
- Let seed corn funds let early successes fund later projects
- Governance find a model that works for you

Communications

- **■** You cannot communicate enough
- Hold conferences & briefings
- Produce success stories & case studies
- Look outside the organisation
- Create a DQ brand







Don't Waste Your Time – Act Now

"If your actions inspire others to dream more, learn more, do more and become more, you are a leader"

John Quincy Adams

"A community is like a ship; everyone ought to be prepared to take the helm"

Henrik Ibsen









Thanks for Listening Any Questions?

Nigel Turner

nigel.h.turner@bt.com



Dave Evans

david.r.evans@bt.com

