# Business Analytics **Forum**

See The Future Of Decision Making

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# Delivering BI – When Excel isn't enough!

## Michelle Irrgang
## Optus SMB

'yes'

# About Optus SMB (Small & Medium Business)

- Addresses the telecommunication needs of Australia's small and medium business

- Partners with knowledge based experts and product specialists to deliver end-to-end solutions to our customers

- 600+ staff

# SMB Business Intelligence

- 4-5 staff delivering reporting

- 100+ report users

- Weekly and monthly reports

- Delivered via Excel

- Data sourced from a Teradata data warehouse (IDW)

- Data sourced via SQL, SQL server, MS-Access

- No Cognos skills in the team

- SMB Datamart Project just completed

- Ready to embark on a project to deliver Cognos reporting

July 2009

'yes'

# SMB Business Intelligence

Sample Excel Report
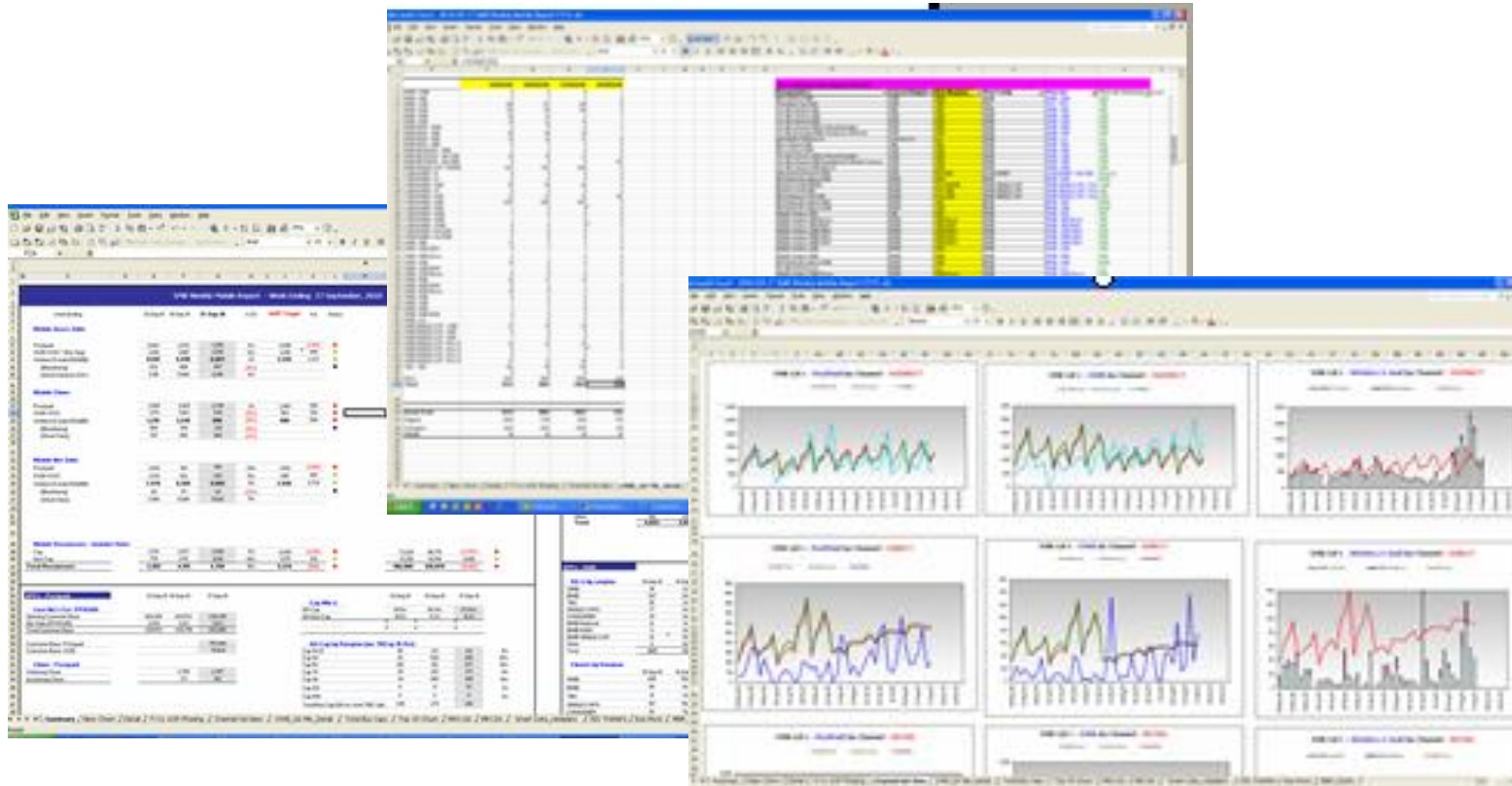


160MB, 43 Sheets, 100+ tables/reports/pivots/graphs

# Optus Business Intelligence Culture

- Cognos (v8.2) used by Consumer, Optus Business and Virgin Mobile divisions (division BI teams)

- Limited cross division BI development

- Vendors generally used to deliver BI projects – engaged by division BI teams

- Very limited knowledge of Cognos in IT

- Production and Development Cognos environments strictly guarded and controlled by IT

- Limited trust between IT and division BI teams

'yes'

# SMB BI – What We Planned to Do

- Engaged vendors for a Cognos project (3 months)

- Start with one cube as a 'proof of concept'

- Scope contained to the delivery of 4 cubes covering 4 subject areas:

  - Daily Mobile Adds and Churns

  - Monthly Mobile Adds and Churns and Customer [

  - Monthly Mobile Revenue

  - Monthly Mobile Usage

- Build up the Cognos skills in the team while project was running via:

  - Training existing staff

  - Hiring in 2 additional permanent staff with Cognos experience

- SMB BI team to then build reports from the delivered cubes

'yes'

# SMB BI – Why Cubes?

- Needed to contain the scope

- Vast majority of reporting was summary data – little transactional reporting

- Extensive analysis capability available to users

- Believed it would deliver the best value – for time and $

- BI Manager's bias (ie. my background – more familiar with cubes)

<p

'yes'

# SMB BI – What Actually Happened

- Vendors used for the Cognos project (6 months)

- No 'proof of concept' cube delivered

- 4 cubes delivered covering 4 subject areas

- Built up the Cognos skills in the team while the project was running via:

  – Training existing staff

  – Hiring in 2 additional permanent staff with Cognos experience

- SMB BI team built small set of reports from one delivered cube

BUT.....

'yes'

# SMB BI – What Actually Happened

- Each cube delivered ONLY 50 – 80% of our real requirements

- Process for changing cube designs and Teradata SQL scripts was not clearly defined

Subsequently….

- Production cubes continue to be refreshed 'as is'

- No modifications or improvements since implementation

- Limited reports built from the delivered cubes

'yes'

## The DIY Challenge

Part 1 – Could we copy the SQL scripts and cube model (Daily Adds & Churns) and modify it to include missing requirements?

Part 2 – Could we convince IT to allow us to build the cube daily, and then they swap it into production (via an automatic batch script)?
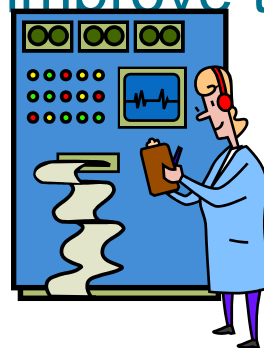
'yes'

# SMB BI – What We Did Next

- Chose Sales as the first subject area

- Built a Sales Summary cube  (based on Daily, Adds & Churn cube)

- Built an initial set of Sales Reports

- Included 'fixed line' products

- Refreshed daily by SMB BI team

- Automatically 'swapped' into Production

- Continue to refine and improve the cube design and reports regularly
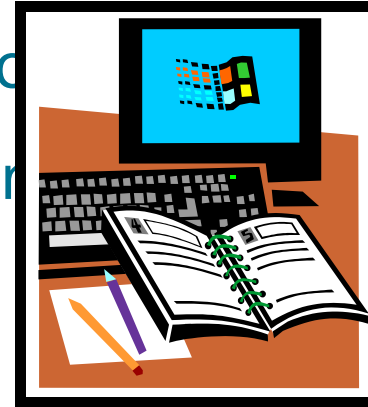
SMB BI Team

IT

SMB Users

'yes'

# SMB BI – Cognos Rollout

- Switched on the new system  1 week before new financial year

- Included 2009/2010 financial year data

- Invited users to logon early and see rep[...]

- Included PDF of basic training instruction[...]

  – How to log on

  – How to navigate menus

  – How to drill down in reports

- Invited users to book in an individual training session with team members

- Stopped producing Excel version of sales reports from day 1

All 5 cubes made available for analysis

'yes'

# SMB BI – Cognos Rollout

# SMB BI – Now

- 2 additional cubes delivered (another 4+ planned)
  - Churn & Customer Base
  - Recontracts
- Sales, Marketing and Commercial reports built
- 150+ users  (40% Analysis users, 60% Consumer users)
- Cognos upgraded to v8.4
- Development Cognos & data warehouse environment in progress
- 'Reusable BI Layer' build in progress by IT
- Started planning for 'dimensionally modelled relational data reporting'
- Good relationship between IT and SMB BI team

October 2010

'yes'

# SMB BI – Lessons Learnt

1. Gain exposure to example Cognos cubes and reports

   – It's hard to design a cube if you haven't seen a cube!

2. Use an iterative approach to development

   – Start with a 'proof of concept' cube – limited dimensions & measures

   – Give the team something to play with – start building reports

   – Easier to test data and totals are correct

   – Not waiting to the end to see if specifications are correct

   – Continually improve and release new versions of the cube

3. Start small – contain scope to 1-2 cubes

4. Pick a set of reports used by a lot of users

5. Turn off old versions of reports

'yes'
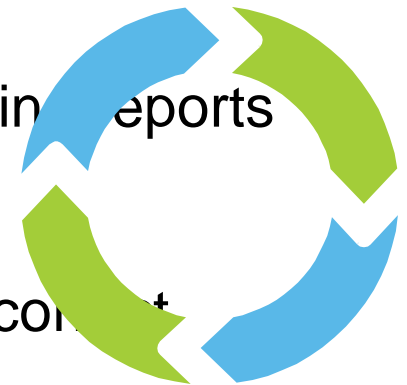
# SMB BI – Lessons Learnt

6. Give the users something new

   – eg. Additional dimensions not reported on before

7. Don't be afraid to change the report designs

   – Don't just create Cognos crosstab reports which look like Excel reports

   – Understand how users are currently using reports – eg. downstream uses

8. Don't over-engineer the cube refresh process

   – Users don't care what it looks like 'underneath the covers'

   – Users care about 'speed of delivery' of new reports

9. Name your reporting system early

   – Our iBIT system is still referred to as the Cognos system

'yes'

# SMB BI – Lessons Learnt

10. Expect varying levels of take-up by users

    – Beware of the Excel Pivot table King/Queen

11. Find and encourage 'business champions'

12. Ensure Cognos Go!Office is installed before implementation

13. Make the time for training users

    – Before delivery, during delivery and ongoing

    – Group training and individual sessions

    – Multiple team members available for individual training sessions

    – Online training course/s if possible

# Questions?

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