# Set the stopwatch: Cubes vs. DMR models

Anu Udawela, Bl Manager – Study Group Ludo Stire, Bl Senior Consultant – Focus























# Agenda

- Introduction
- Study Group and IBM Cognos
- Challenges
- Cubes vs. DMR
- Demo
- What's next?
- Q & A





















# Introduction — Study Group

- One of the largest education providers
- English Language, High Schools, University Foundation Studies, Technical Education, Undergraduate and Postgraduate, University/College Placements





















# Introduction — Study Group

- 3 Operating Divisions
- 4 Countries
- 40 Centres
- 30,000+ Students
- Sales staff in 30+ Countries
- 3000+ Agents





















## Introduction – Focus

- BI, Planning and DW expertise
- Partner of the Year 08 and 09
- 5 years of a successful SG/Focus relationship
- Highly skilled consultants with best practices
- On going support





















# SG and IBM Cognos

- Cognos 8.3 Planning & Bl
- SQL Server 2005
  - DW box located in New-York, USA
  - Development in Sydney
- Wherescape Red ETL
- 140 Cognos users (mostly Analysis Studio with a few Report Viewers)





















# Challenge

- Give something more than a report to manage the business
- Measures
  - New Student Enrolments
  - Student Weeks
  - Billing
- Time period comparison
  - CYTD vs. LYTD reporting challenge





















#### Why DMR

- Almost live data
- Single metadata layer
- Native SQL
- SQL Server Tuning indexes
- SQL Server load balancing





















#### Why not DMR

- Source systems in 3 time zones
- DW is one day late
- No need for real time reporting
- CYTD vs. LYTD = fact table passed twice
- SG not familiar with this technology
- No added business advantage





















#### Why Cubes

- Optimal solution in terms of performance
  - pre-aggregated data are meant to be faster
- CYTD vs. LYTD = two distinct measures
- Save the load of Planning on the DW
- Cube build is fast: 3 main cubes in less than 15mn (250 Mo for NSE cube)





















#### Why not Cubes

- Add another modeling layer (Transformer)
- Security component (custom views) is less flexible than DMR
- More maintenance (cube build and cube swap)





















## DMR vs. Cubes: benchmark

Report	DMR (DEV)	Cube (DEV)	Cube (PROD) *
NSE	4s	4s	22s
Student Week	4s	4s	30s
Billing	5s	5s	13s



\* Actual query execution time is around 4s. Connection to the DW in USA delays the start of the execution process and the report rendering





















## Who's the winner?



Criteria	DMR	Cube
Performance	=	=
Maintenance	+	-
Flexibility/Scalability	+	-
Maturity	-	+

Study Group opted for Cubes since it provides good performance with a proven technology.

But Focus has implemented successful DMR models for large organisations



















# Reports

(Demo Reports)





















## What's next?

- On going support with Focus
- New Cubes (Activity)
- New Reports (Digital Sales)
- Dashboards
- Upgrade to C8.4
- Merging Planning and DW data





















# Q & A



















