Project Optimization for Subsurface Information Management (case study)

PETRONA

25th October 2012

Damla Abd Aziz Senior Manager Subsurface Information Management PETRONAS Carigali Sdn. Bhd.

- Background
- Optimization approach
- Application and Integration
- Lesson Learn



PETRONAS

*Source: PETRONAS Group Financial Results Announcement, Year-To-Date and Quarter 2 Ended 30 June 2012

- Multiple G&G Interpretation since last 20 years (1990 2010), i.e.
 OpenWorks, Charisma, IESX, Kingdom and VoxelGeo.
- G&G software applications were acquired at individual asset or project team.
- Multiple project databases were established and configured based on each application and team requirements.

PETRONA

• Standardization exercise was embarked in mid 2009.

Background

Kev issue of non optimization

- Multiple application
 - Need to master many application for same functionalities

PETRONA

- Multiple training requirement and support require
- Multiple databases
 - Data duplication and cause of confusion
 - More disk space require
- Inefficient project handover (e.g. exploration to development phase)
 - Time consuming
 - Data losses and inconsistency- (i.e. earth model, graphic, knowledge)
- Administration
 - Multiple contract and legal requirements ; increase administration time
 - High software maintenance cost

*Source: PETRONAS Group Financial Results Announcement, Year-To-Date and Quarter 2 Ended 30 June 2012

Pre-Optimization Application Portfolio



PETRONAS

*Source: PETRONAS Group Financial Results Announcement, Year-To-Date and Quarter 2 Ended 30 June 2012



PETRONAS

IT Infrastructure and Project Data Base



General Principle

- Focus on total cost of ownership
- <u>Integrated suites</u> rather than point solutions



Benefit Principle

- Facilitates seamless expert collaboration
- Eliminate gaps and redundancies
- Achieve consistency of outputs and information
- Economies of scale and effective contract management
- Optimized resources , training and support

Current Optimization Application Portfolio



Optimization Integration Model





People

- User acceptance on the new application portfolio
- Get user commitment

Project Data

- Data migration strategy
- Data consistency

Internal Capability

• Internal resource and capability is very crucial

Lesson Learn

Main Challenges





- Focus on the most common application used
- Select solution which give a very minimal interruption to the operation.

- Early buy-in from users community
- Firm on the implementation date , do not to compromise for any delay or extension.
- Strategic plan for data migration (i.e. detail and clear activities for data migration)

Lesson Learn

Feed back from user



THANK YOU