

Critical Data in Capable Hands

An Innovation and Collaboration Success Story

Studio for TechLog™

Laura Leung
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All references to dollars, cents or \$ in this presentation are to US currency, unless otherwise stated.

References to "Woodside" may be references to Woodside Petroleum Ltd. or its applicable subsidiaries.

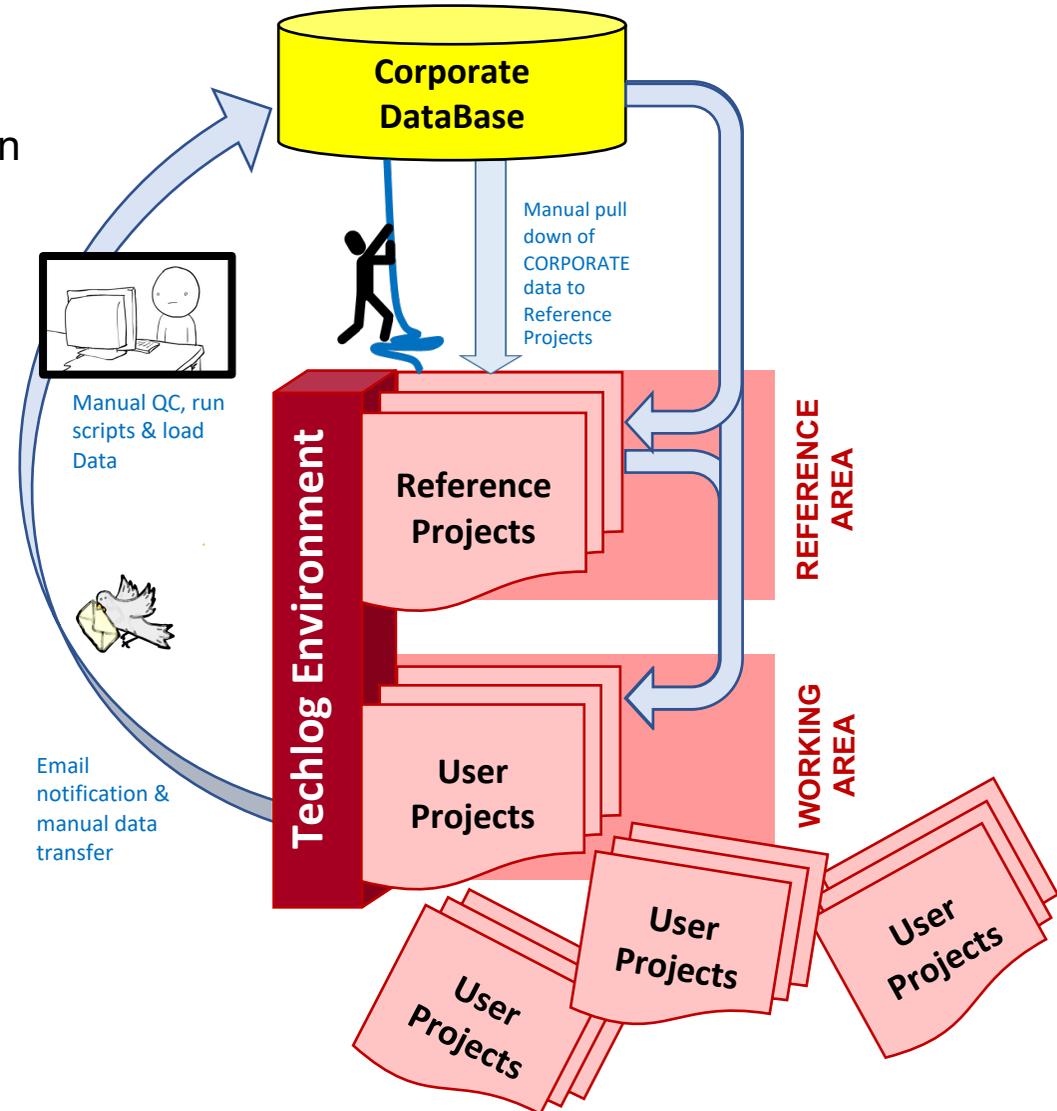
1. Background
2. Design Requirements
3. Corporate Environment
4. Team Selection
5. Communication & Collaboration
6. Studio for Techlog Solution for Woodside
7. Benefits
8. Conclusions



About the Presenter:

Laura Leung is the Petrophysics Wellsite Studies & Operations Manager for Woodside, based in Perth, Australia. After training in Mechanical Engineering and Mathematics at the University of Melbourne, she has accumulated more than 18 years industry experience in both technical Petrophysics and leadership roles. Through her career, Laura has worked on assets across three continents, including a residential posting in Libya. Most recently she has been focussed on technical contract and data management activities. A key highlight has been driving the collaborative efforts to implement Studio for TechLog as a Petrophysical Data Management system within Woodside.

- Strategic & technical decision taken in 2011 to change Woodside's Petrophysics software solution to TechLog
 - Improved technical options
 - Alignment with other key subsurface software platforms
- Challenges:
 - Required a change in Woodside's way of working
 - Attempted to manage with process ...
- **Unsuccessful!**
 - **No "One Well" capability!**
 - Manual data transfer & QC
 - Email notifications for loading / transfer requests
 - Manual synchronisation with corporate database
 - Limited assurance gateways
 - No visibility / control of user projects



Evolving the Requirements

User Imperatives



Design Requirements

+	Internal architecture
	• Data hierarchy
	• Metadata capture
	• Repository structure
+	Connections & interfaces
	• Corporate database synchronization
	• User project connectivity
+	Governance
	• Documented processes
	• Audit trail
	• Access control

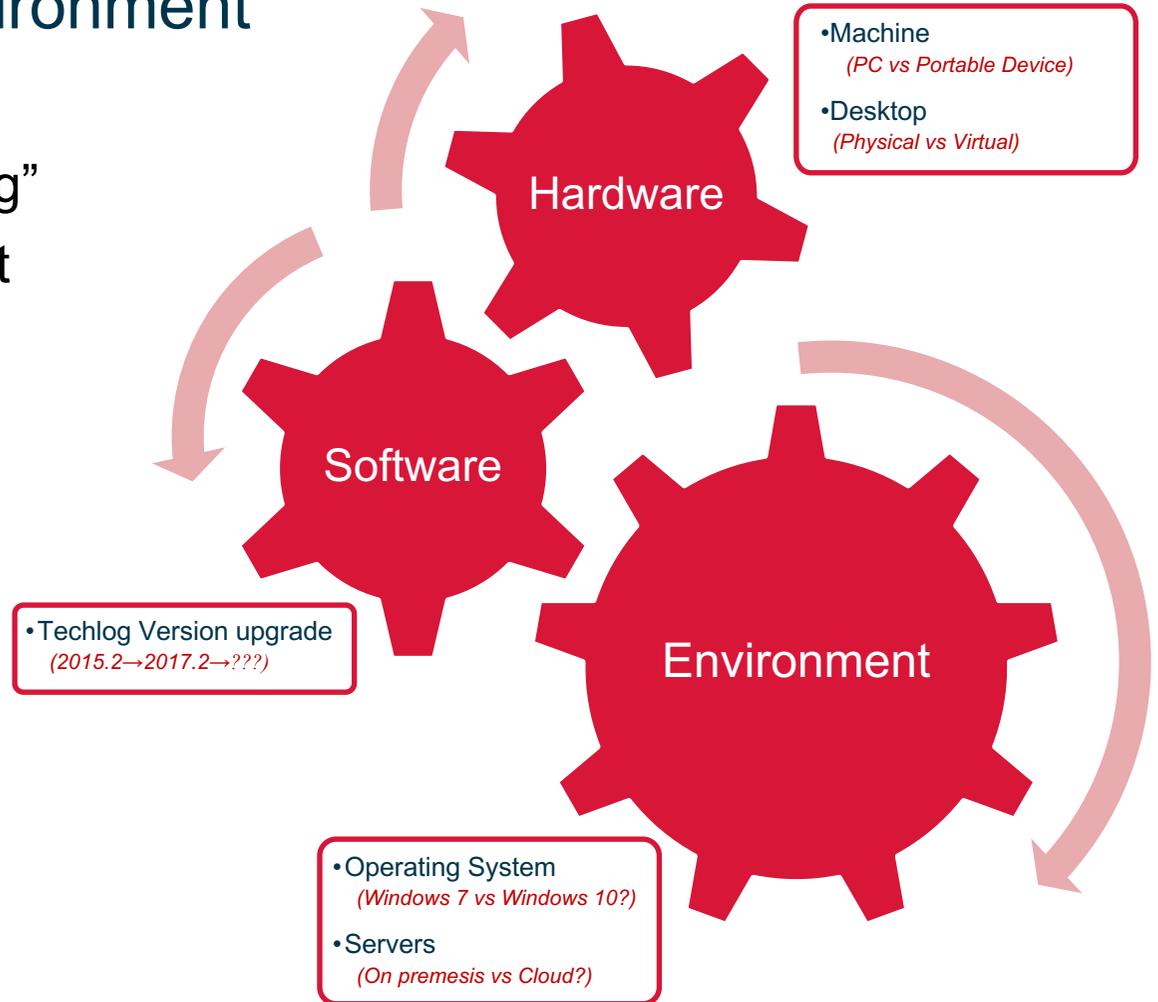
Enabling Innovations



- Woodside-Specific workflow development
 - Dataset promotion & update protocols
- Joint development of Inner Logix (ILX) Connectors
 - Direct connection between Corporate Database and Studio for Techlog Repositories

Planning in a dynamic environment

- Physical office relocation triggering “new ways of working”
- Evolving technical environment
 - Numerous moving pieces
 - Concurrent
 - Interrelated
 - Unclear timelines
- Proactive & Agile planning
 - Retain flexibility
 - Avoid re-work
 - Manage business priorities
- Active Engagement & Stakeholder Management



Building the RIGHT team

- **Woodside Subsurface**

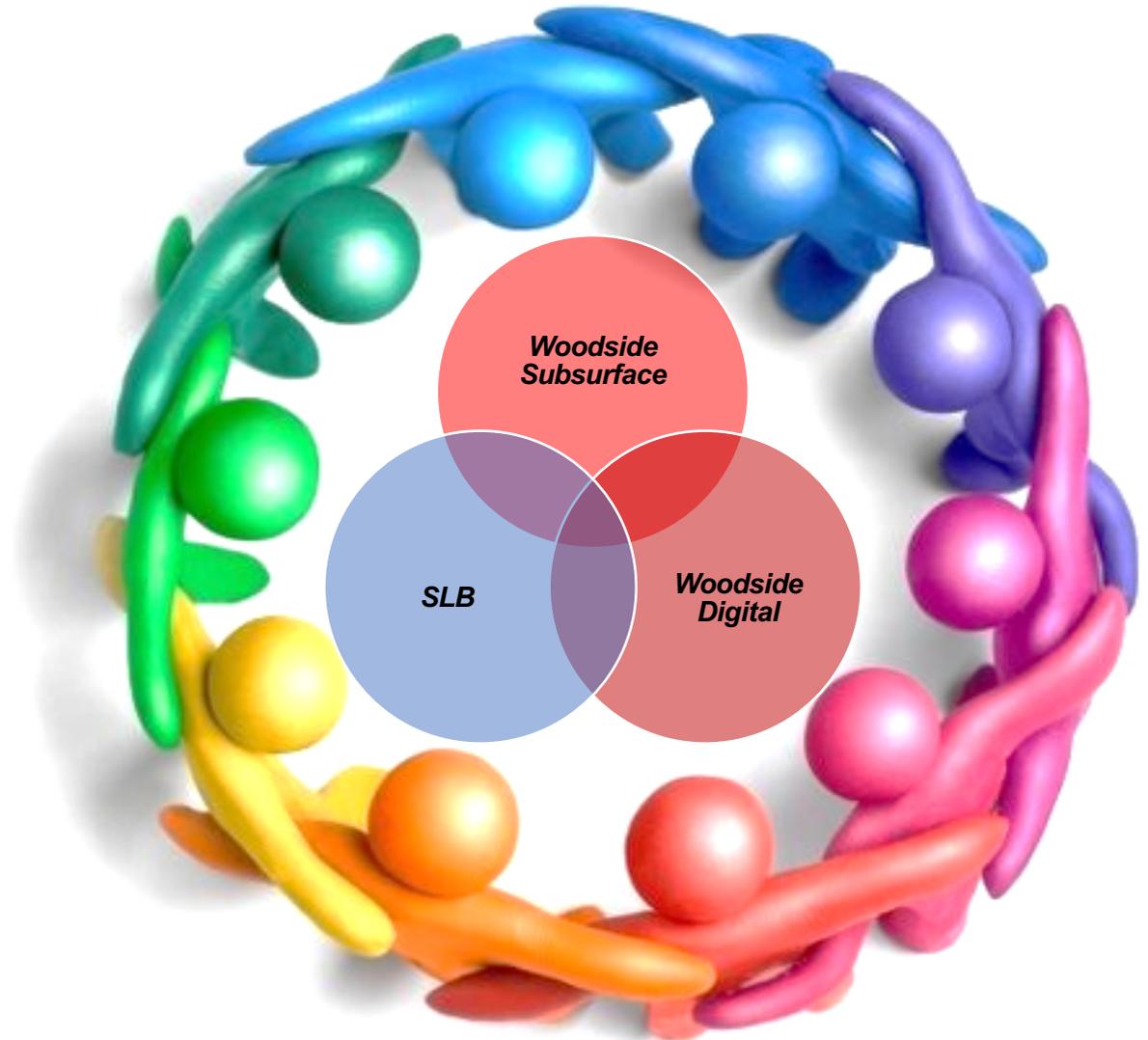
- Petrophysics
- Geoscience
- Exploration
- Management Endorsement

- **Woodside Digital**

- Applications Support
- Data Management

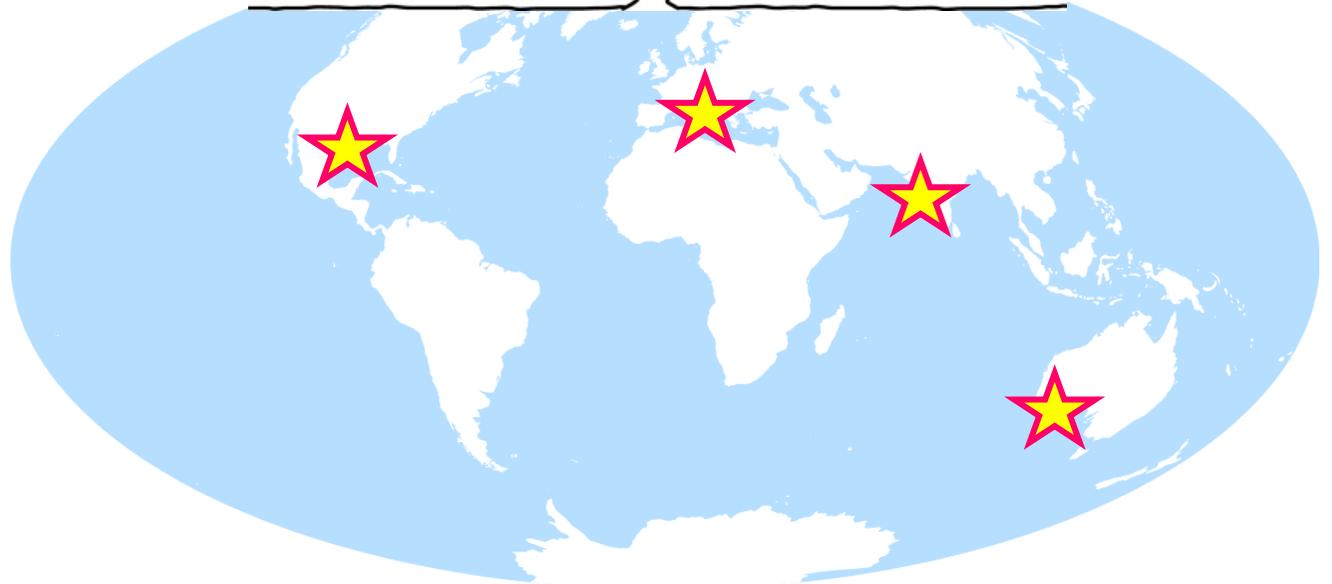
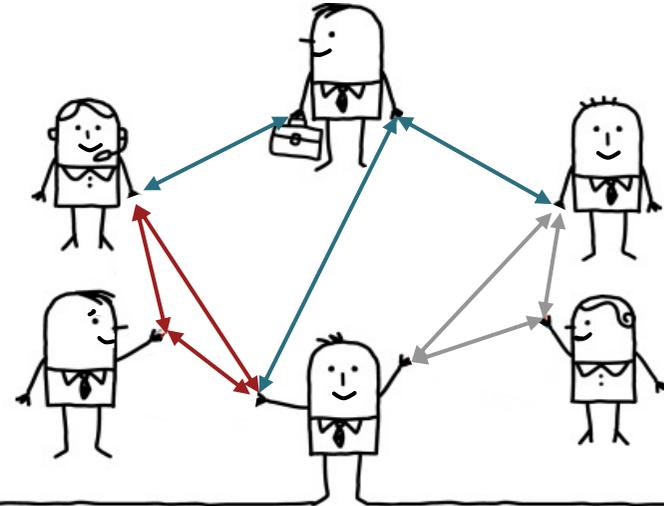
- **SLB Technical Expertise Onsite**

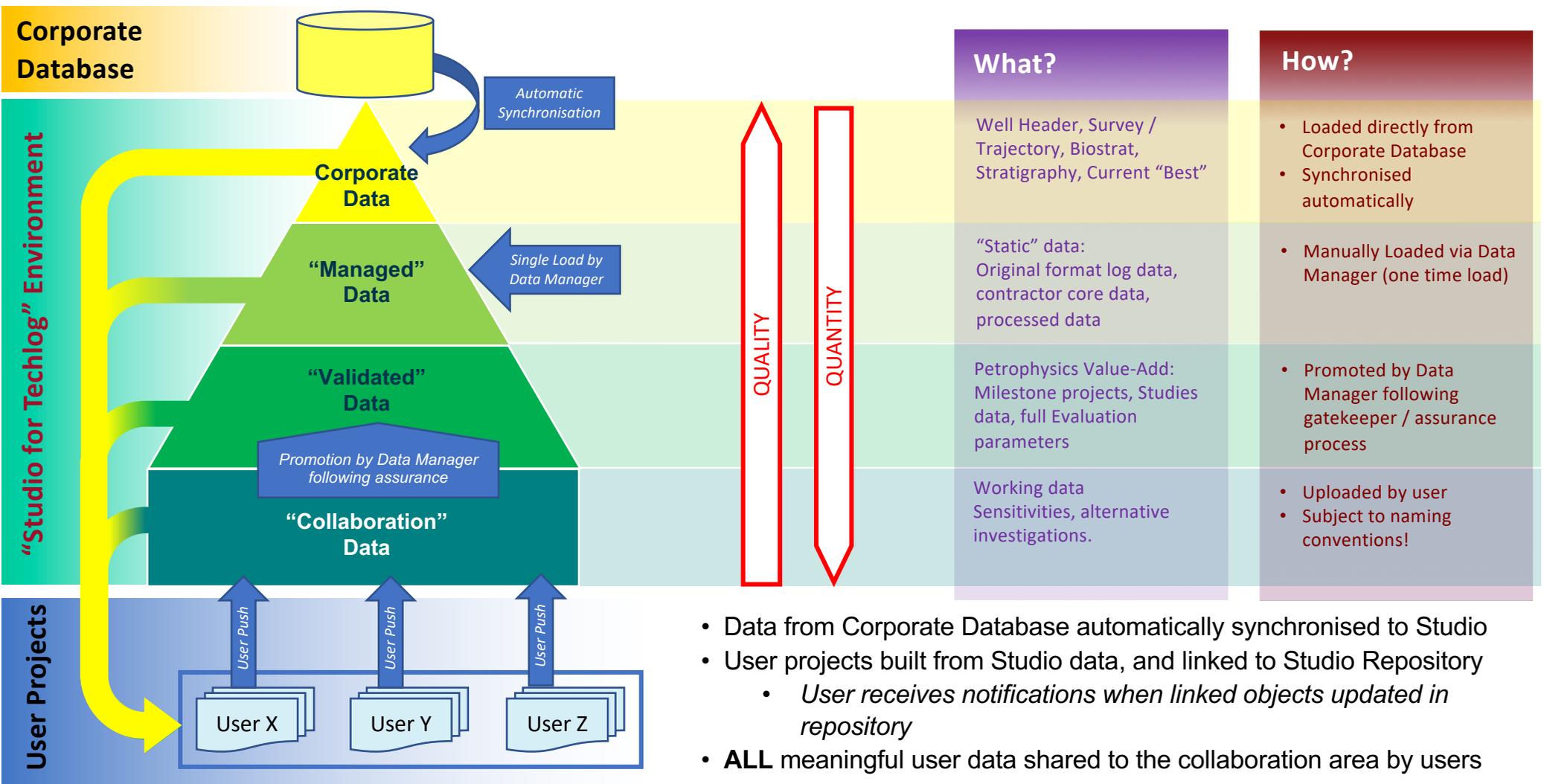
- On site / in house specialists
- Regional centre & office support
- International subject matter experts



Using the RIGHT team

- Stakeholder Engagement
 - Optimising Interfaces
 - Efficient Communication
 - Proactive Change Management
- Remote development (technical connectors)
 - Align activity across multiple (global) sites
 - Delivery on an international scale





Did we achieve our objectives?

Key Objectives



Previous World



Studio for TechLog Solution



Positioned for the future

- Studio for TechLog is LIVE in Woodside

“One Well World” now a reality

- Benefits Realised

- Improved data management through reduction in manual processing
- Increased confidence in information due to embedded assurance & governance processes
 - Reduced study cycle time (up to 80%)
 - Reduced data collation
 - Eliminated data re-validation
- Data management structures used to communicate subsurface uncertainty
- Replicated successful data management template across the business

- Looking Forward

- Framework established for future data integration & workflow collaboration; DELFI



Optimal technical solution delivered via **INNOVATIVE** Woodside-specific workflow & data management process

Effective communication built strong **COLLABORATIVE** working relationships internally and externally for Woodside and Schlumberger

Revolutionary data management leveraged to **ACCELERATE** delivery of technical solutions



We have defined a new way of working....

