Placing subsea data at your fingertips

Alan H Smith
Luchelan Limited
SUBSEA Expo 2017
Agenda

• Introduction
• Data Handling
• Example 1 - MultiClient seismic data
• Example 2 – pipeline survey data
• Conclusions
Time used for finding data

Data Scientists work profile
2015

- Time spent on ETL: 8%
- Time spent data cleaning: 12%
- Machine learning / Stats: 12%
- Basic Expl Data Anal: 16%
- Creating visuals: 11%
- Presenting: 9%
- Time spent in meetings: 15%
- Training: 4%
- Coffee etc: 6%
- Holidays: 7%
- Training: 4%
- Time spent on ETL: 8%
- Time spent data cleaning: 12%
- Machine learning / Stats: 12%
- Basic Expl Data Anal: 16%
- Creating visuals: 11%
- Presenting: 9%
- Time spent in meetings: 15%
- Training: 4%
- Coffee etc: 6%
- Holidays: 7%
- Training: 4%
- Time spent on ETL: 8%
- Time spent data cleaning: 12%
- Machine learning / Stats: 12%
- Basic Expl Data Anal: 16%
- Creating visuals: 11%
- Presenting: 9%
- Time spent in meetings: 15%
- Training: 4%
- Coffee etc: 6%
- Holidays: 7%
- Training: 4%
- Time spent on ETL: 8%
- Time spent data cleaning: 12%
- Machine learning / Stats: 12%
- Basic Expl Data Anal: 16%
- Creating visuals: 11%
- Presenting: 9%
- Time spent in meetings: 15%
- Training: 4%
- Coffee etc: 6%
- Holidays: 7%
- Training: 4%
- Time spent on ETL: 8%
- Time spent data cleaning: 12%
- Machine learning / Stats: 12%
- Basic Expl Data Anal: 16%
- Creating visuals: 11%
- Presenting: 9%
- Time spent in meetings: 15%

1991

Lawyer, C.L. Oil & Gas Journal, 4 November 1991

Based on “Time spent on Data Science”, O’Reilly 2016
Agenda

• Introduction
• Data Handling
• Example 1 - MultiClient seismic data
• Example 2 – pipeline survey data
• Conclusions
Data Storage
Data Delivery
Ensuring availability

10Gb

PGS Houston

PGS London

Ovation Houston

Ovation London

Client

asperea

Client
Agenda

• Introduction
• Data Handling
• Case Study 1 - MultiClient seismic data
• Example 2 – pipeline survey data
• Conclusions
Multi client seismic management

Old

New

Final products

Field & Interim products
**Multiclient complications**

What are they getting?
- Prestack (options)
- Stack
- Migration
- Velocities
- ...

All need cutting to correct coordinates

**Historic**
- Manual handling
- Manual intervention

**Now**
- Automatic
- Parallel processing
The impact

Then

OOPS!

Faster – Cheaper – Better
Agenda

• Introduction
• Data Handling
• Example 1 - MultiClient seismic data
• Example 2 – Pipeline survey data
• Conclusions
Video surveys
Multi camera views
Multi camera demo
Multi camera with time lapse
Multi camera – time lapse
Digital Video with GIS and 3D Viewer
Agenda

• Introduction
• Data Handling
• Example 1 - MultiClient seismic data
• Example 2 – Pipeline survey data
• Conclusions
Conclusions

• Managing and delivering data to users, in standard formats actually works and reduces time and effort required to find and use data effectively

• Using video data held within a remote environment is easy – just like using YouTube.

• Delivering from the “cloud” can be done, even for very bulky data

• Cheaper – better – faster
Acknowledgements

PGS

Ovation Data
Total Data Management Solutions

Wish Software
Thanks for your attention

Alan Smith
Luchelan Limited
alan.smith@luchelan.com
+44 7768 063042