ENABLING DATA DRIVEN DECISIONS WITH REALTIME INTELLIGENCE

Adrian Loong
BI Manager

Ryan Newsome
Reporting Developer
Note re data used in this presentation

Please note that all data displayed in the dashboards is used to demonstrate Alteryx and Tableau’s capability and is placeholder data, not actual amaysim data.
Introduction

About amaysim

amaysim is an Australian mobile virtual network operator established in November 2010.

About us

Adrian Loong – BI Manager at amaysim

- Responsible for analytics strategy and execution across Finance, Retail Sales, Marketing and HR

- Expertise:
  - Decision support / Management consulting for senior execs
  - Visualisation, Financial analytics, Budgeting & Forecasting
  - CPA

Ryan Newsome – Reporting Developer at amaysim

- Responsible for reporting and analysis requirements with Finance and Marketing stakeholders

- Expertise:
  - SQL server - SSIS/SSRS
  - AWS Redshift
  - Alteryx
Strategy - Data driven decisions in real time

1. Knowledge is power
2. Smart management = happy customers & happy shareholders
3. Get a real competitive edge - stop looking back and start predicting the future
How amaysim has benefited from their analytics program

**Workforce Productivity**
- We have a tight analytics team covering wide span of functions (Finance, Marketing – Customer Retention & Acquisition, Sales – Retail and Online, HR)
- By enabling line of business users to quickly build on a baseline of analytics, they can easily solve their own specific business problems quickly and do not have to wait on Business intelligence teams

**Reduced time to insight**
- We are able to get the data we need faster. Projects that would have taken 2-3 weeks are now down to a day

**Data driven decision making**
- Line of business users are able to get direct access to their own data in an easy visualisation enabling them to able to solve problems faster.
- People can look at the data, do some discovery, and then arrive at an answer
Agenda

Business challenges

Executive buy-in and funding

Best of Breed products – Redshift, Alteryx and Tableau

Learnings from using Alteryx
amaysim have a wide variety of data sources and a lot of data being generated daily.

Over 10 billion rows of data with nearly 20 million rows added daily.

Wide variety of data sources

A lot of data being generated daily
Competition is intense in the mobile phone sector.
We only have a small team covering a wide span of functions

- Finance
- Retail Sales
- HR
- Customer acquisition and retentio
Traditional tools are unable to keep up with speed and velocity of business demands, tools like Alteryx enable analysis within hours.

Traditional BI: Keep calm and please wait

Analysis at the speed of business

We need tools that empower us analyse at the speed of thought
Agenda

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Learnings from using Alteryx
How do you get buy-in and engage the business?

Use Alteryx to address current pain points via doing short proof of concepts

**Current Pain Points**
- No “single” source of truth for Execs
- No current and consistent data definitions
- Unable to extract raw XML from Call data files easily to establish a balance sheet position
- Business users do not have a holistic end to end view of the entire amaysim business.
- Certain users (eg: Marketing) have resorted to using their own analytics software
- Unable to extract raw XML from Call data files easily
- Different data definitions between Optus and amaysim
- Identify opportunities to improve commissions processes
Alteryx is an intuitive workflow for data blending and advanced analytics, including spatial and predictive analytics in a simple and easy to use drag and drop interface.

3 in 1 product
- Data preparation
- Spatial analytics
- Predictive analytics
Download Alteryx trial, spend a few hours going through online and product tutorials which are easy to follow.

Alteryx has great tutorials online and within the tools.
Start small, deliver continuously

- My first Alteryx workflow to extract XML, phrase it and combine data for audit
- Start small (1 designer license), prove value and extend outwards
- Iterate quickly & deliver continuously to get management buy-in
Do things that drive top line or bottom line performance

CASE STUDY: REVENUE ASSURANCE

- Historically amaysim receives Call data record files from Optus which gets pre-processed before loading to internal IT applications.
- Alteryx was used to perform independent revenue assurance on XML files to verify integrity of revenue accounts.
### Celebrate success: Keep building and iterating

<table>
<thead>
<tr>
<th>Where we started</th>
<th>Where we are now</th>
<th>Where we will be</th>
</tr>
</thead>
</table>
| Existing tools require analysts to have “coding” experience | Using ‘Best’ of Breed products  
  - Visualisation: Tableau  
  - Data blending: Alteryx  
  - Warehousing: Redshift | Self serve analytics for all business users  
  - Real time P&L with slice and dice with visualisation  
  - Assurance over logic processing (Audit, Commissions) |
| Few disparate analysts using SQL to deliver analytical solutions | Using Alteryx & Tableau to deliver:  
  - Revenue assurance  
  - Sim Sales  
  - Customer disconnections & churn  
  - Port-outs by carrier  
  - CDR analysis | Advanced predictive analytics  
  - Churn propensity  
  - Customer behaviour |
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Learnings from using Alteryx
BI stack
Alteryx fits perfectly into our technology stack

Time to load
Reliability of Data
Query performance

Source Data
- ECC
- CRM
- CSC
- Google analytics
- Sales POS
- The list goes on...

IT ETL
- CDC used for real
time data replication
- Slower to build
- More reliable

Data Warehouse
- Redshift selected for
reliability, processing
power and scalability

Business ETL
- Alteryx desktop selected
and deployed
- Gives our business the
agility we need
- Business driven rather than
IT driven
- Ability to do predictive
analytics

Visualizer & Reporting
- Tableau desktop & Server
selected and deployed
- Self serve BI
- Business dashboarding
- Ability to do predictive
analytics
Redshift gives us the speed and robustness to store and analyse vast volumes of data. Alteryx fuels Tableau visualisation, allowing us to quickly iterate and gain insights in Tableau.

1. Tableau can be used to directly visualise and analyse big data directly from Redshift.
2. Alteryx can be used to blend data which is not in the Redshift database.
3. Alteryx can apply and validate more complex business rules before visualizing outputs in Tableau.
4. Continuously iterate between Alteryx and Tableau when discovering more data.
Tableau is excellent for collaboration – We use Tableau server to share dashboards & insights and Tableau desktop is used extensively for slicing and dicing.
Agenda

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Best of Breed products – Redshift, Alteryx and Tableau

Learnings from using Alteryx
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<td><strong>Agility</strong></td>
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<tr>
<td>✓ Deliver insights fast</td>
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<td>✓ Respond to change</td>
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<tr>
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<td>✓ Step by step approach</td>
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<td><strong>Empathy</strong></td>
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<tr>
<td>✓ Collaborate</td>
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<tr>
<td>✓ Share Knowledge</td>
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<td><strong>Reliability</strong></td>
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<td>✓ Full visibility</td>
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<td>✓ Trust in insights</td>
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</table>
Agility – Getting answers faster

Deliver insights fast

✓ Desired output with no/less code
✓ Self serve
✓ Little training required
✓ Answers fast
Agility – Enabling us to stay competitive

Respond to change

- Crunch and dissect billions of rows
- Fast delivery
- Actions from insights
- Stay competitive
Simplicity – Easy to follow

Step by step approach

- Easy to follow
- Quick data blending
Simplicity – Making things simple

Keeps complexities simple

- Compartmentalise
- Document
- Handover
- Not just 1 person
Simplicity

Range of purposes

- Custom SQL
- Direct to .tde
Empathy – Building collaborative across business teams

 Collaboration

- Within the analytics team
- Business teams including Finance and Marketing
Empathy – Driving a culture of knowledge sharing

Knowledge sharing

✓ Understand others’ workflows
✓ Share process knowledge
✓ Recycle
✓ Save weeks of effort
✓ Continuous support

http://static1.squarespace.com/static/51c83491e4b067b933b00e3/t/54b888598366fd00e3/a/54b8885a8366fd00e3/a
Reliability – Transparency into data issues

Full visibility

✓ Complete in depth visibility
✓ Trace data inconsistencies
✓ View / reutilise discarded data
Reliability – Inspiring confidence in insights

Trust in insights
# Enabling business success

## Three Key Areas

<table>
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<tbody>
<tr>
<td>• Answer an important business question - Establish the value of Alteryx &amp; Tableau early on by showcasing critical business issues in dashboard</td>
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<td>• Keep the message simple and direct</td>
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<td>• Go beyond dash boarding to engage business leaders on portfolio observations</td>
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<tr>
<td>• Combine Redshift (Database), Alteryx (Data blending) and Tableau for Visualisation</td>
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<td>• Tableau is excellent for collaboration – We use Tableau server to share dashboards &amp; insights and Tableau desktop is used extensively for slice and dicing</td>
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<td>• Democratise the Opportunity - Gather people of interest together from Sales, product, marketing</td>
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<td>• Make it relevant to different stakeholders - Include everyone &amp; break down silos</td>
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<tr>
<td>• Celebrate success - Keep people involved and excited</td>
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## Three ingredients to enable business success

1. **Executive buy-in and funding**

2. **Best of Breed products – Redshift, Alteryx and Tableau**

3. **Learnings from using Alteryx**
Thank you!