

INFO90002

***Insight into
Data Analytics***

May 2019

Guest Lecturer – Alex Sirgiovanni



Agenda

Unlocking the potential of data

- About Me
- About PwC
- PwC Forensics
- The Value of Data
- The Data Lifecycle
- Industry Use Case



1.

About Me

Alex Sirgiovanni

<https://www.linkedin.com/in/alexsirgiovanni>

Education

- Bachelor of Information Technology (2012-2014)

Time at PwC

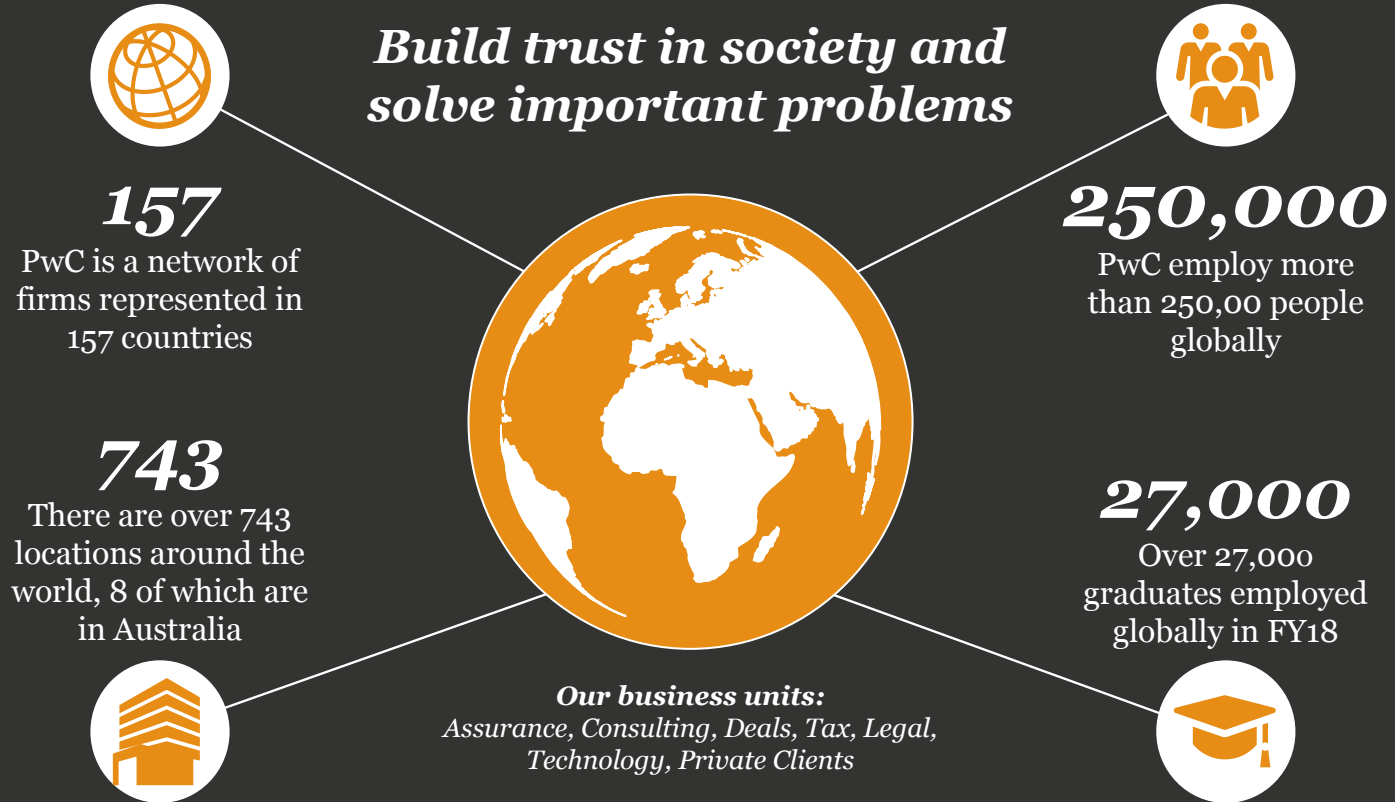
- Associate (Mar 2015 - June 2016)
- Senior Associate (July 2016 - January 2019)
- > • Manager (February 2019 - Current)

Experience @ PwC

- Workflow management
- Remediation programs
- Forensic investigations
- Job management
- Recruitment



2. PwC is a Professional Services firm with a Global Network



3. PwC Forensics

Core capabilities

1

Data Analytics

Proactive

- Automated analytics
- Data quality and process review

Reactive

- Data remediation
- E-Discovery
- Forensic imaging

2

Financial Crime

Proactive

- AML/CTF Independent Reviews
- KYC analytics

Reactive

- AML/CTF obligation breach remediation

3

Forensic Accounting

Proactive

- Cost recovery & contract review

Reactive

- Expert witness assignments
- Loss quantification

4

Fraud Control

Proactive

- Framework reviews & risk assessment
- Fraud awareness

Reactive

- Detection programs
- Investigations



4. The Value of Data

77% of executives rated data and analytics as important to their business. Yet there remains a disconnect.



52%

Senior executives say they previously discounted data they didn't understand.



31%

Senior executives say the timeliness of data at their organization is poor or fair.



25%

Senior executives say they lack the skills or expertise to make greater use of data.

5. The Data Lifecycle

How data is used in an engagement



Understanding the problem & preparation

What's the problem?



- When, how and why?
- Size & Impact
- Desired Outcome



Is Data Forensics the solution?



- Business Processes or Data?
- Analytics or not?
- What can we apply?



How do we get the data?



- Physical
- Electronic
- Security

Preparing, loading & checking the data

Before we load the data



- Sense check
- Data quality

Loading the data



- Schema
- Raw vs Prod
- Loader tools

Profile, cleanse & productionise



- Profiling Raw
- Investigate anomalies
- Cleanse & insert to Prod

Discovery & Insight

What value exists in the data?



- Relevance
- Solution within

Can you trust the data?



- Origination
- Integrity
- Cleanliness

Investigating the data



- Identification
- Reasoning
- Value Outcome

What might happen next?



- Predictions
- Inform client

Insight & Delivering value

Providing the clients with answers



- Describe
- Explain
- Provide

Delivering value back to the client

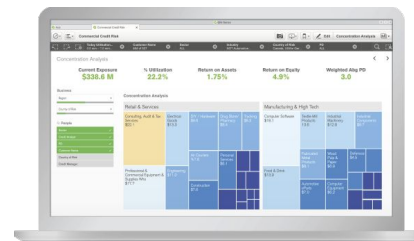


- Approach
- Findings
- Visualise

Continuously delivering value



- Dashboards
- Reporting
- Future use cases



Qlik® Sense



6.

Industry Use Case

Data Quality Remediation

Background

A client identified a data quality issue within one of their key data sources and engaged us to assist in identifying the root cause and implement preventative measures; and to perform a remediation exercise to correct any existing impacted data elements

Data Analyst



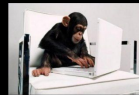
What my friends think I do



What my Mom thinks I do



What my boss thinks I do



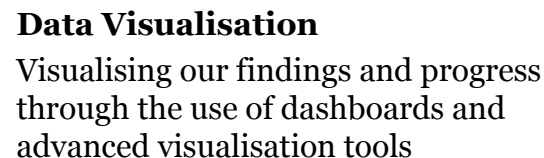
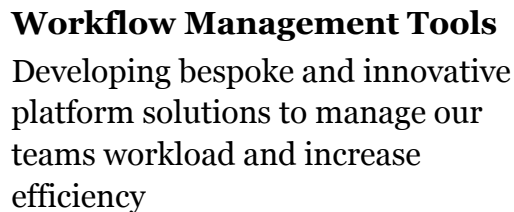
What my customers think I do



What I think I do



What I really do



Limitations & Challenges

Limitations

Our engagement had a number of limitations such as:

- Time constraints
- Available data
- Data quality of other elements
- Engaging with the clients 3rd party providers

Challenges

- Walking in to an existing project
 - Assumed prior working knowledge by the client
- Project team jargon / abbreviations
- Systems access
- Access to SME's (subject matter experts)
- Lack of available documentation
- Poor scripting techniques
- Communicating complex technical findings

Findings & Benefits

Key Findings:

- Lack of source systems controls
- Insufficient staff training
- Identification of problem areas

Client Benefits:

- Improved regulator and internal reporting accuracy
- Optimised customer and loan treatment for a better customer experience
- Revenue uplift



*So - how much attention were you
actually paying*

Quiz Time

Kahoot

Kahoot Link: <https://kahoot.it/>

Top 3 Prize!



Thank you for your
time.

Questions?

