



The Institute of  
Internal Auditors  
Indonesia

# 2014 ACIIA CONFERENCE BALI, INDONESIA

**ASIAN CONFEDERATION OF INSTITUTE OF INTERNAL AUDITORS**

**The Stones Hotel - Legian, Bali**

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Organized by:



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# **Analytics in Action**

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**Te Puni Kōkiri**  
REALISING MĀORI POTENTIAL



# Learning Objectives

- Background
- Types of Analytics
- Case Studies
- Internal Controls
- Tools and Resources
- Summary



# Background



**6 Regions**  
**52 Offices**  
**1800 – 3200 Staff**  
**Budget NZ\$390m**  
**Assets NZ\$5.4b**  
**1.5 Auditors**



### Kermadecs



### Sub Antartics Islands





# What business are **you** in?

- You need to understand your business
- You need to understand your risks
- You need to understand your risk appetite



# Analytics





# Quick Poll

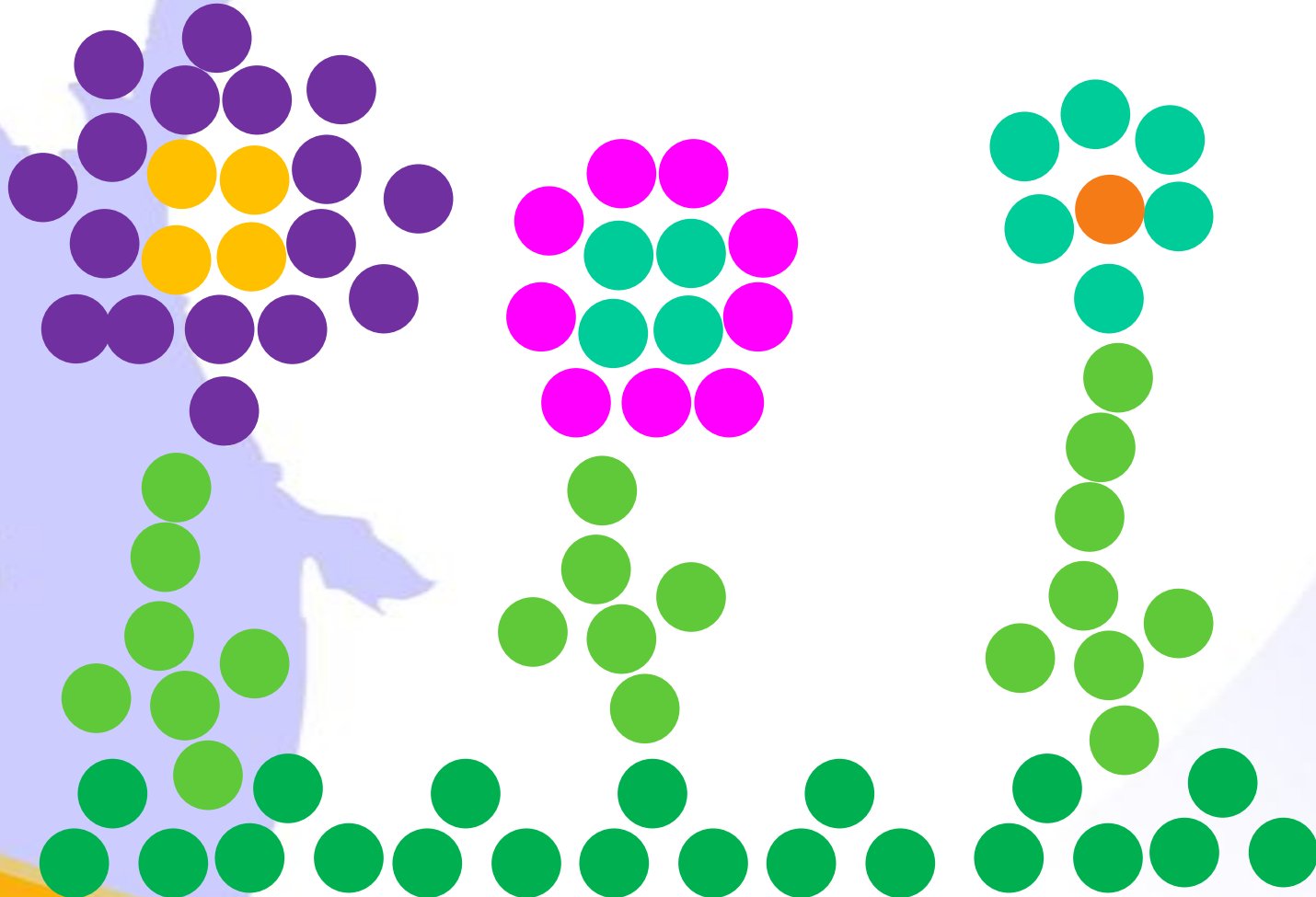
Does your organisation use data analytics in fraud prevention and/or detection?

Yes

No



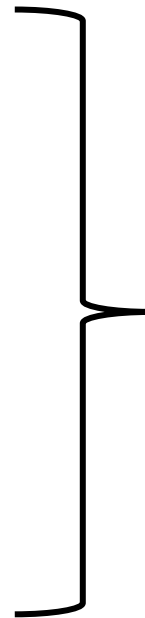
# Data vs. Information



# Data Analytics

(Traditional rules based)

- Collect
- Transform
- Mine
- Analyse
- Report



Informed  
Decisions



# Text Analytics

(Non-traditional)

- Pattern
- Frequency
- Concept
- Linkages
- Key word association

Based on  
what you  
already  
know



# Visual Analytics

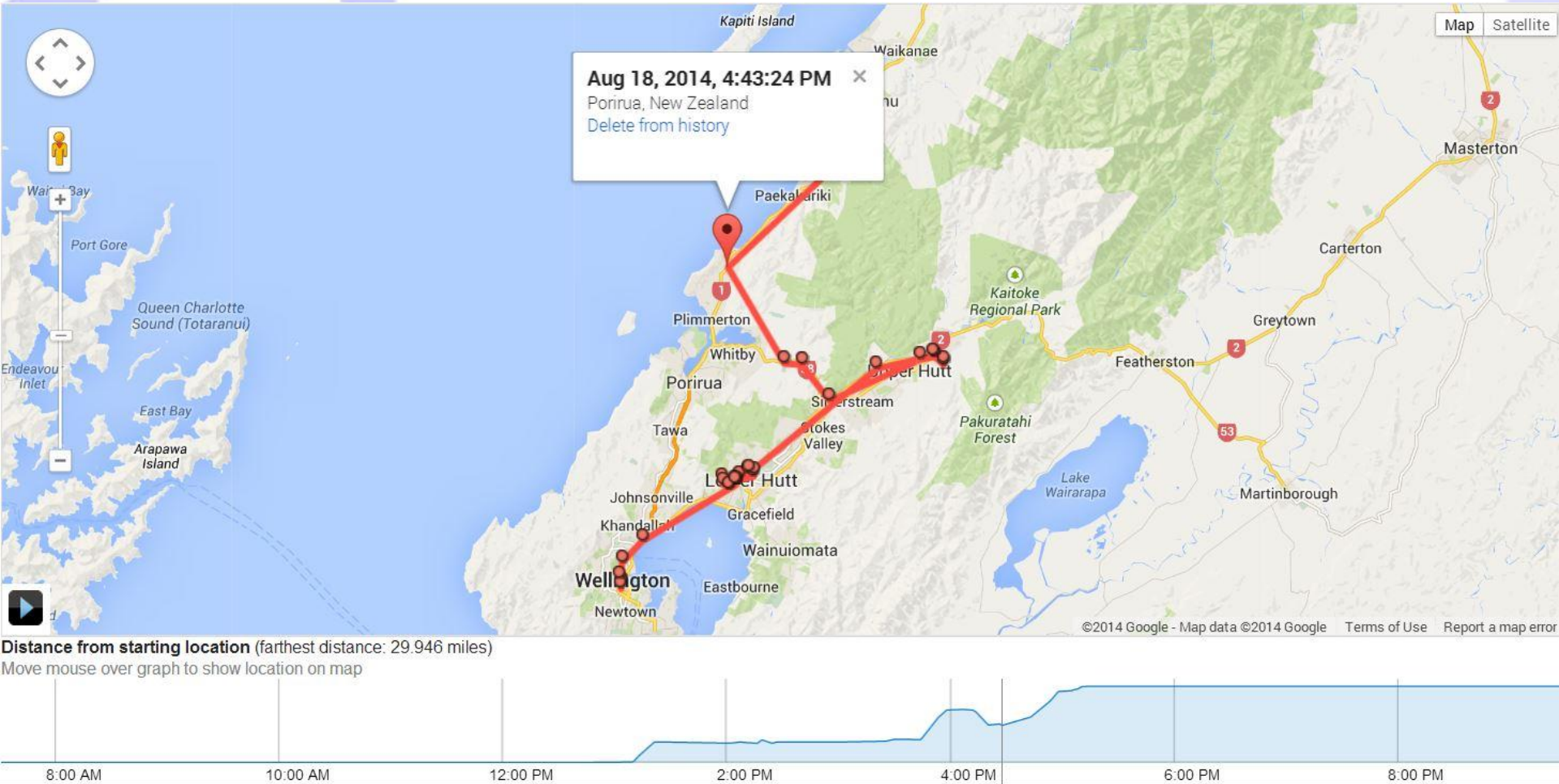
(Non-traditional)

- Coordinate mapping
- Relationship
- Linkages
- Pattern
- Proximity analysis

Based on  
what you  
already  
know



# Visual Analytics (Non-traditional)



<https://maps.google.co.id/locationhistory>

# Internal Controls

- Internal controls are only as good as the people who administer them. Many organisations claim to have sound control frameworks but in reality very few do.
- A proactive framework requires proactive people; and lots of thinking to identify “what could” and not “what is”.
- Most people are reactive, that is human nature.  
To many organisations, to identify “what could” is seen as a waste of resource (time and money).
- End result ? – Too much reliance is placed on trust, hope, culture and people.



# Tools and Resources

- Search engines  
[dogpile](#), [webcrawler](#), [duckduckgo](#), [alhea](#)
- Public records for addresses and phone numbers
- Digital footprint
- Birth, death and marriage registrar
- Reverse look ups (phone & addresses)
- PPSR (personal property security registrar)  
Indonesian equivalent?





# Tools and Resources

- Google Earth (2D, 3D and Aerial)
- Physical address search



Is this a real business address?



# Tools and Resources

- Social media (LinkedIn, Facebook, Twitter, etc.)  
#3 Twitter country in the world! More tweets from Jakarta than from Tokyo, London and New York.  
#4 Facebook population in the world!
- Online news sites  
[Detik.com](http://Detik.com), [Kaskus.co.id](http://Kaskus.co.id), [Kompas.com](http://Kompas.com)



# Tools and Resources

What do you search for?

- Topical searches
- Boolean logic
- Refine and narrow searches
- Acronyms, aliases and AKA's
- Try common misspellings
- 5 wives and a husband (5W1H)



# Tools and Resources

How do you search

- Known particulars (e.g. DOB)
- Known events
- Use “AND”, “OR” and “NOT”
- Quotation marks
- Character strings



# Summary

- Understand your business
- Data vs. Information
- Types of analytics
- Case studies
- Limitations of internal control
- How to mine for information



# Questions?

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