

# Domain Usage statistics at .nz

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# Passive Data Collection

- All transactions related to the register
- Whois queries
- DNS queries for 4 out of 7 nameservers

Soon to be 6 out of 7

It could be 7 out of 7

3+ years

# Active Data Collection

- Monthly zone scan  
General DNS Health + presence of specific records
- HTTPS scan  
Active server + certificate information
- Content scan  
Ad-hoc, a few in the past year

# Other data feeds

- Shadowserver and OpenPhish  
Fed into our Registrar Portal, so they know if any of their domains is listed.  
Leads to a better namespace

# Data we generate

- Zone scan
  - Physical location of servers
  - Domains with v4/v6 DNS/mail/web servers
  - Use of anycast providers
  - Use of cloud mail providers
- HTTPS scan
  - Usage of deprecated cypher suites
  - Most relevant CA
- Domain word decomposition
  - Turn “aucklandaccountants.nz” into “Auckland” and “accountants”
  - Word trends on registration, alternative domain suggestions

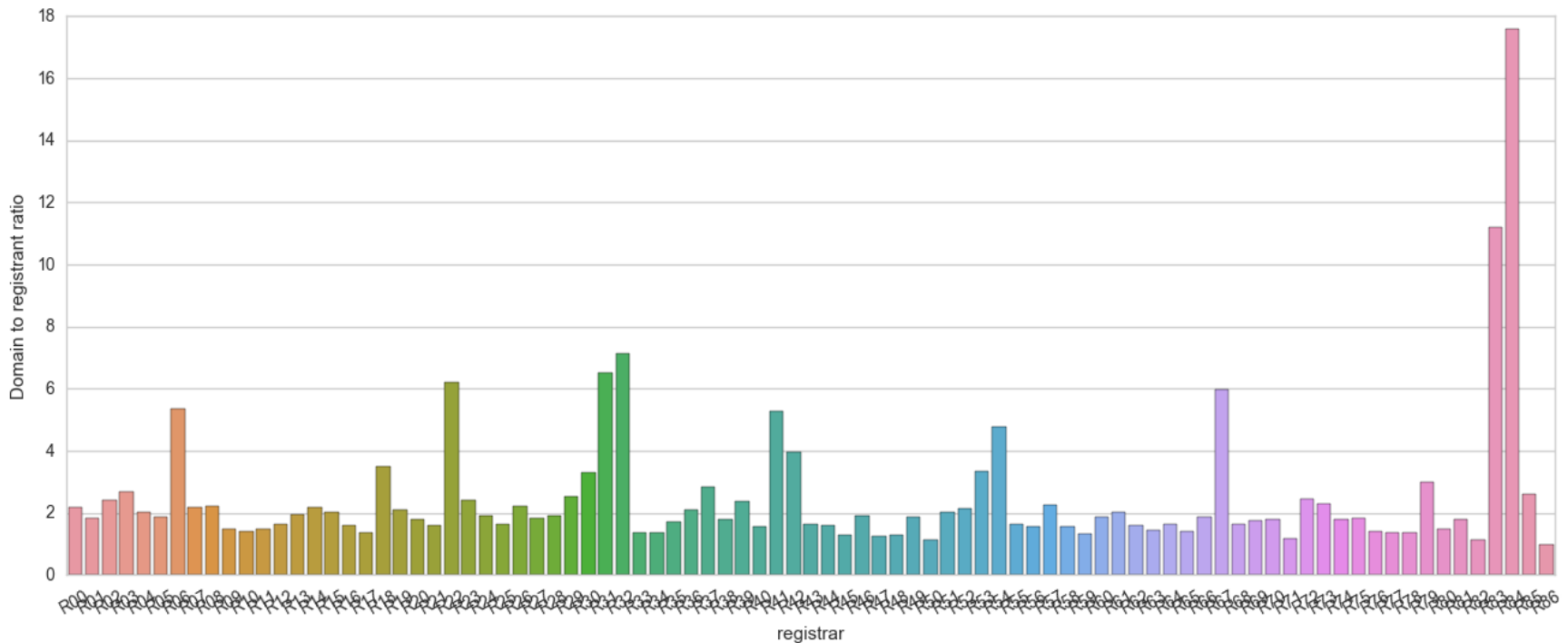
# Data we generate

- Content scan
  - Number of parked domains
  - Use of different CMS
  - Use of social media platform
  - Domain classification
    - Business or Not for profit
    - Business Classification
    - Not for profit classification
- Registrant Classification
  - From registration data + hand curated names + machine learning

# A few data points

- 8% of .nz domains are parked pages
- 9% of .nz domains are broken (don't resolve)
- 44.8% have a secure web site
- 85.7% publish an address for a website
- Over 80% of active domains in the register get queried in a day

# Preliminary data points





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- At the registrar level, number of domains per registrant varies between 2.0 and 17.5
- There are registrars where 100% of their domains are registered by People or Organizations
- 89.5% of domains are registered by organizations.
- 51% of .nz sites don't have usable content (parked, little content, fail to resolve, etc)
- 45% are marked as Business. 3.4% as Non for profit

# Preliminary data points

- Business classification

Business Code	Description	% of business domains	% of register
M	Professional, Scientific and Technical Services	29.26	13.29
G	Retail Trade	20.48	9.30
Q	Health Care	10.37	4.71
E	Construction	7.54	3.42
H	Accommodation and Food Services	5.69	2.58
R	Arts and Recreation	5.34	2.43
C	Manufacturing	4.62	2.10
S	Other Services	4.34	2.00

# Long term objectives

- All discoverable elements from a domain turn into features
  - For Business Intelligence – Insights and trends
  - For Predictive models
    - Which factors influence a domain to stay in the register

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