NOMINET
Registry Services
The Art of Enchantment
What we do

NOMINET Registry Services

NOMINET is a TOP 10 GLOBAL REGISTRY SERVICE PROVIDER

mmx.co .blog

SUPPORTING 3.75M REGISTRANTS
IN 250 COUNTRIES

OVER 2,500 MEMBERS

OVER 20,000 REGISTRATIONS OF CYMBAL AND JAZZLES SINCE 2016 - NEW RANKINGS AMONG THE TOP 10 EUROPEAN GEOGRAPHIC TLDs

1 of 3 EMERGENCY BACK-UP REGISTRY OPERATORS EMBRACE IN THE WORLD
- TRUSTED TO RESCUE FAILING DOMAIN NAMESPACES
INFRASTRUCTURES

MANAGES AND RUNS OVER 12M DOMIN NAMES THAT END IN .UK

theUK.DOMAIN

MONITORING OVER 3 BILLION DNS QUERIES SEEN EVERY DAY ON THE .UK ZONE

NOMINET CYBER SECURITY

LAUNCHED GROUND-BREAKING NETWORK ANALYTICS TOOLS IN 2015 HELPING TO OPTIMIZE NETWORKS AND KEEP UK SAFE AND SECURE

SINCE 2008, NOMINET HAS DONATED £44M HELPING MORE THAN 100M PEOPLE THROUGH TECH FOR GOOD PROJECTS

HELPING ADDRESS THE UK’S DIGITAL SKILLS GAP WITH 3 INITIATIVES

AWARDED FUNDING IN 2017 TO DEVELOP SECURE DATA EXCHANGE FOR THE LEGAL AND SAFE USE OF AUTONOMOUS VEHICLES

DRIVEN

THE FIRST COMPANY TO QUALIFY A TV WHITE SPACE (TVWS) GEO-LOCATION DATABASE IN THE UK, NOW CONNECTING RURAL COMMUNITIES TO BROADBAND

DEVELOPED SUITE OF 8 IOT TOOLS TO SUPPORT THE GROWING 'INTERNET OF THINGS'

73% OF UK CONSUMERS WHEN SHOPPING ONLINE FOR A PRODUCT OR SERVICE PREFER TO CLICK FIRST ON A WEBSITE ENDING IN .UK

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.UK Market share in the UK

- .uk: 58%
- .com: 30%
- Other: 12%
Our challenges in .UK

- Increasingly competitive domain market
  - Maturing market

- Policies and Process not aligned with gTLDs

- Understanding what is in our registry
  - Capturing and utilising data

- Rights period
  - Second-level .uk rights expire in June 2019
Registrars want alignment
Registrar challenges

• Registrars now support many hundreds of TLDs

• Differences from gTLDs add confusion to end user support

• Differences in technical processes add complexity for them
  • Non-standard EPP (or other registration processes)
  • Non-standard lifecycles

• Differences in administrative processes add time and cost
  • Processing Invoices
  • Processing Payments
.UK standardisation

- Review of .UK to identify technical and policies differences from gTLDs

- Long term desire to move towards standards where relevant
  - Transfer process (Push vs Pull)
  - Renewal cycle (Positive renewals vs Auto-renewals)
  - Standard EPP and extensions

- Retain distinct national identity where relevant
  - Dispute Resolution Process vs UDRP
CYMRU/.WALES & Registry Services

**Clients**

- .cymru / .wales already standardised

- Makes it simple for Registrars to add new TLDs on the platform
  - Nominet (.cymru / .wales)

- KKWT (.blog)

- MMX (.vip / .work / .london, etc)
  - Differences supported
    - Chinese national requirements
    - .law validation of registrant
UK domain categorisation – aims

• Develop a richer understanding of the register and registrants through:
  1. Industry categorisation
  2. Attrition analysis

• Provide value to registrars – actionable intelligence
  • Categorisation of business-owned .UK domains by industry

• Drive registrations and renewals
Phase 1 - industry categorisation

- Categorise web sites not registry data
- Create a training data set for the model of accurately categorised web sites
- Build a categorisation model using mathematical algorithms
Development of training set

At least **40,000** domain names required

Development of custom tool to allow users to categorise domain names

- Business, organisation or individual?
- Is the business selling goods?
- B2B, B2C or both?
- Industry category
- Confidence level

Project reviewed **50,997** websites classifying **43,326** unique domains

Accuracy increased over time from **83%** to **88%**

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Results when applied to the registry
Whole Registry

Of 10 million domains we have been able to classify 3 million business-owned domains by industry.
What we have learned

• Existing data and categories are insufficient:
  • SIC/NACE categories
  • ONS (UK) data
  • Registry data

• Creating in-house training data for modelling is efficient and worth doing

• Outside-in approach gives good model accuracy

• We are working with other European registries to standardise how we all categorise domains – providing more useful data to help registrars
Next Steps

- Share results - monthly updates now available to our registrars
- Improve parking detection algorithm
- Detect personal pages
- Refine model - improve precision
- Rerun exercise every two years to keep training data accurate
- Repeat with a finer categorisation of certain industries
Practical Applications: Geo-Location Data

We are extracting postcodes from HTML to better understand the locational distribution of UK businesses.

Missing postcodes are populated from registry data (which tend to be less accurate).

The distribution of the first set of domains are shown on the map.
Practical Applications: Geo-Location Data

Domains in London (a subset): example visualisation
Summary
Summary

- Keep it Simple
- Standardise where possible
- Add value to registrars through data and analysis
Questions

• Questions

• Contact

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