



Identifiably Irish

Ireland's Domain Registry



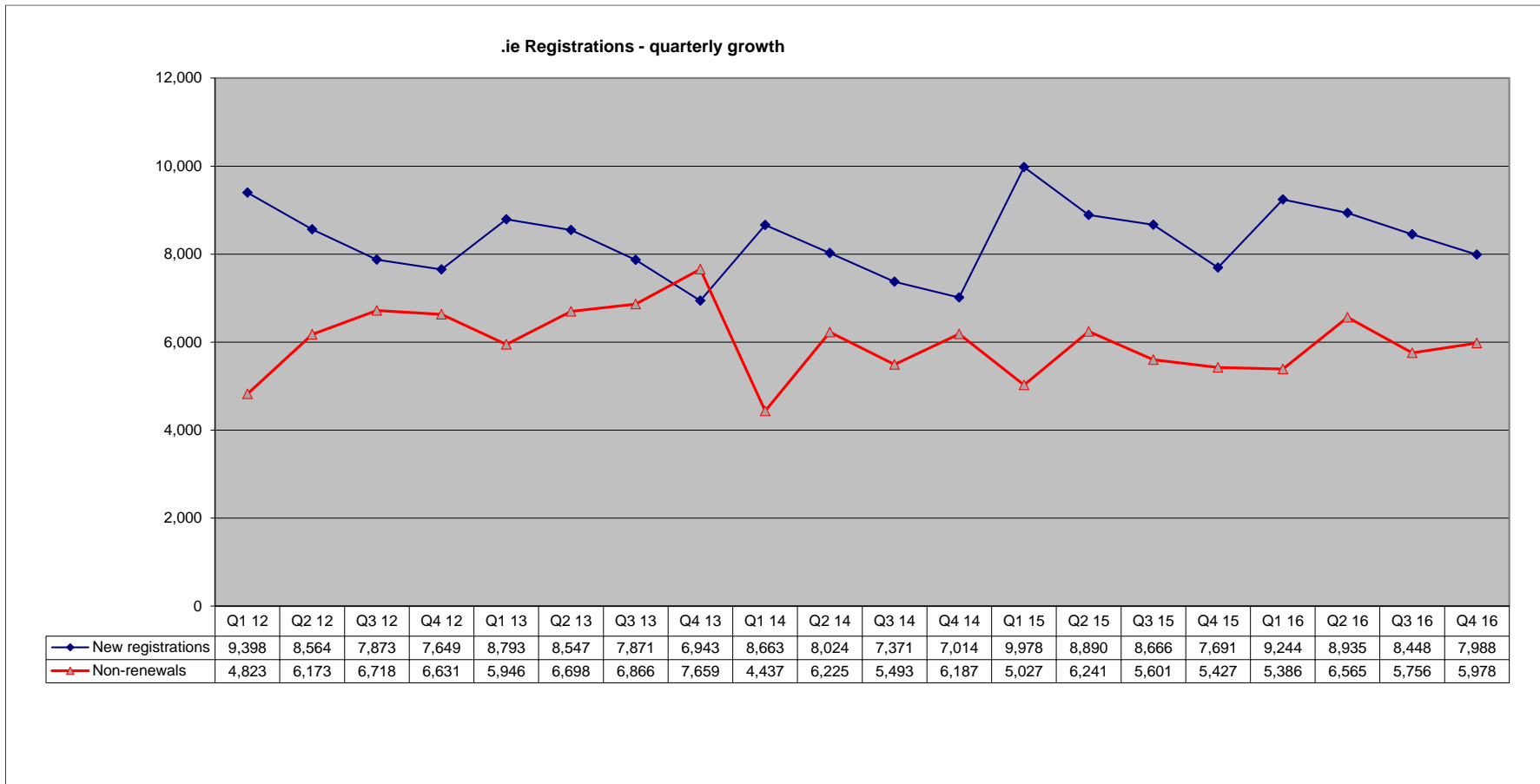
Analytics Showcase event
Talbot Hotel
23 February 2017

Agenda

- Our dot.ie Data & Research
 - domain registration statistics
 - domain usage statistics
 - DNS traffic
 - SMEs data for policymakers and membership-based organisations
- Business Intelligence
 - eCommerce adoption by SMEs
 - Understanding the market size and market shares
 - Predictive analytics – our challenge

5 year summary

New registration growth & non-renewals




- New registrations (blue line) :- Note the Seasonal trends
- Sales Channel is 98% Registrars (mainly Hosting Service Providers)
- IEDR has the data, but Registrars control the customer relationships

Registration growth

Demand Drivers


Figure 7, Final Model



Prepared for CENTR
March 14, 2013

**Exploring the Role of Registry Policies
on Marketing, Registrar Relations and Security
in Shaping Demand for Domains
in CENTR Registries**

By Dr. Matthew Zook,
ZookNIC Inc.
zook@zooknic.com

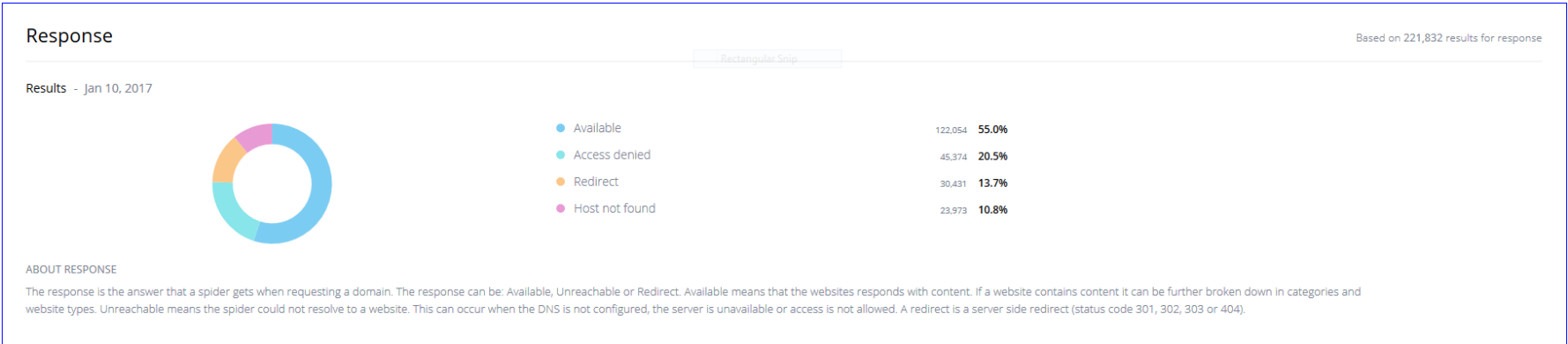



New Domains (log)			
Num. of Obs.		1189	
F		233.98	
Adj. R ²		0.788	
Variable	Coef. (B)	t	
<i>Socio-Economic</i>			
Population	0.0059	6.25	**
GDP	0.0004	6.58	**
Internet Hosts	5.43E-08	6.75	**
<i>Pricing</i>			
Price	-0.1319	-10.58	*
<i>Marketing</i>			
Major Marketing Campaign	0.1917	3.17	**
Free/Low-cost Campaign	0.0319	0.71	
<i>Transactions Costs</i>			
Accepts Credit Cards	0.1690	3.36	**
Completely digital transfers	0.3191	4.95	**
<i>Relations with Registrars & Registrants</i>			
Deposits required from Registrars	-0.4406	-7.78	**
Warehousing is allowed	-0.0760	-1.78	
Domain removal for false information	0.3319	5.46	**
Verification of registrants' contact information	-0.0192	-0.37	
<i>Domain Security</i>			
DNSSEC is in place	0.4484	7.89	**
Constant	11.14	8.72	

* 95 % significance
** 99 % significance

Dot ie Domains

Domain usage data



Available	122,054	55.0%
Access denied	45,374	20.5%
Redirect	30,431	13.7%
Host not found	23,973	10.8%



Content	68,995	56.5%
Low content	32,155	26.3%
Placeholder	8,200	6.7%
Business	5,493	4.5%
Framed	3,770	3.1%
eCommerce	3,155	2.6%
Blbg	234	0.2%
Empty	25	0.0%
Forum	12	0.0%
Parking	10	0.0%

- Demand for domains is 'derived', so usage is NB
- Web Crawler service (under Contract)
- Limitations, with only 55% "coverage"
- We combine this info with the Db
- Provides actionable insights for Registrars (upsell)

- Domain lookup service
- Free, but rate-limited & AUP
- Data Privacy issues...
- No postal or email addresses
- <https://www.iedr.ie/>

Find your .ie domain name

You can see your whois result below:

% Rights restricted by copyright; http://iedr.ie/index/mnudnssearch/96

% Do not remove this notice

domain: ceadar.ie

descr: Centre for Applied Data Analytics Research

descr: Unincorporated Association

descr: Unincorporated Association Name

admin-c: AQK451-IEDR

tech-c: AAM456-IEDR

registration: 22-February-2013

renewal: 22-February-2019

holder-type: Billable

locked: NO

ren-status: Active

in-zone: 1

nserver: ns1.blacknight.com

nserver: ns2.blacknight.com

nserver: ns3.blacknight.com

nserver: ns4.blacknight.com

source: IEDR

person: Melina Ziegel

nic-hdl: AQK451-IEDR

source: IEDR

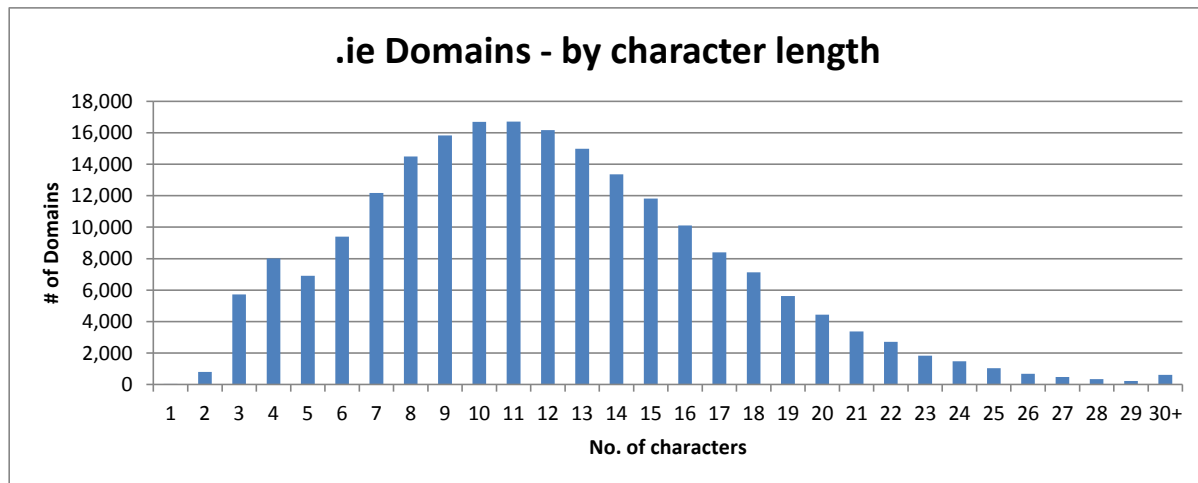
person: Blacknight.ie Hostmaster

nic-hdl: AAM456-IEDR

source: IEDR

Data & Information sharing

Annual Report & Review – shares domain data



As at 31 Dec 2016

Category of Domain Names	Class of Registrant									Grand Total	Grand Total %
	Body Corporate (Ltd, PLC, Company)	Sole Trader	Unincorporated Association	Discretionary Applicant	Natural Person	Statutory Body	School/Educational Institution	Constitutional Body			
Discretionary Name	51,462	19,575	6,738	11,132	4,780	2,859	1,430	58	98,034	44.19%	
Corporate Name	50,853		1		1				50,855	22.92%	
Registered Business Name	11,268	31,145	4,088						46,501	20.96%	
Unincorporated Association Name			8,515						8,515	3.84%	
Registered Trade Mark Name	6,758	238	74		102	14	12	5	7,203	3.25%	
Personal Name					5,282				5,282	2.38%	
School/Educational Institution Name							2,343		2,343	1.06%	
State Agency Name						1,092		32	1,124	0.51%	
Personal Trading Name		1,005							1,005	0.45%	
Publication Name	479	101	56			72	27	66	801	0.36%	
Politician's Name					208				208	0.09%	
Grand Total	120,820	52,064	19,472	11,132	10,373	4,037	3,812	161	221,871	100.00%	
	54.5%	23.5%	8.8%	5.0%	4.7%	1.8%	1.7%	0.1%	100.0%		

Data is collected at the point of registration

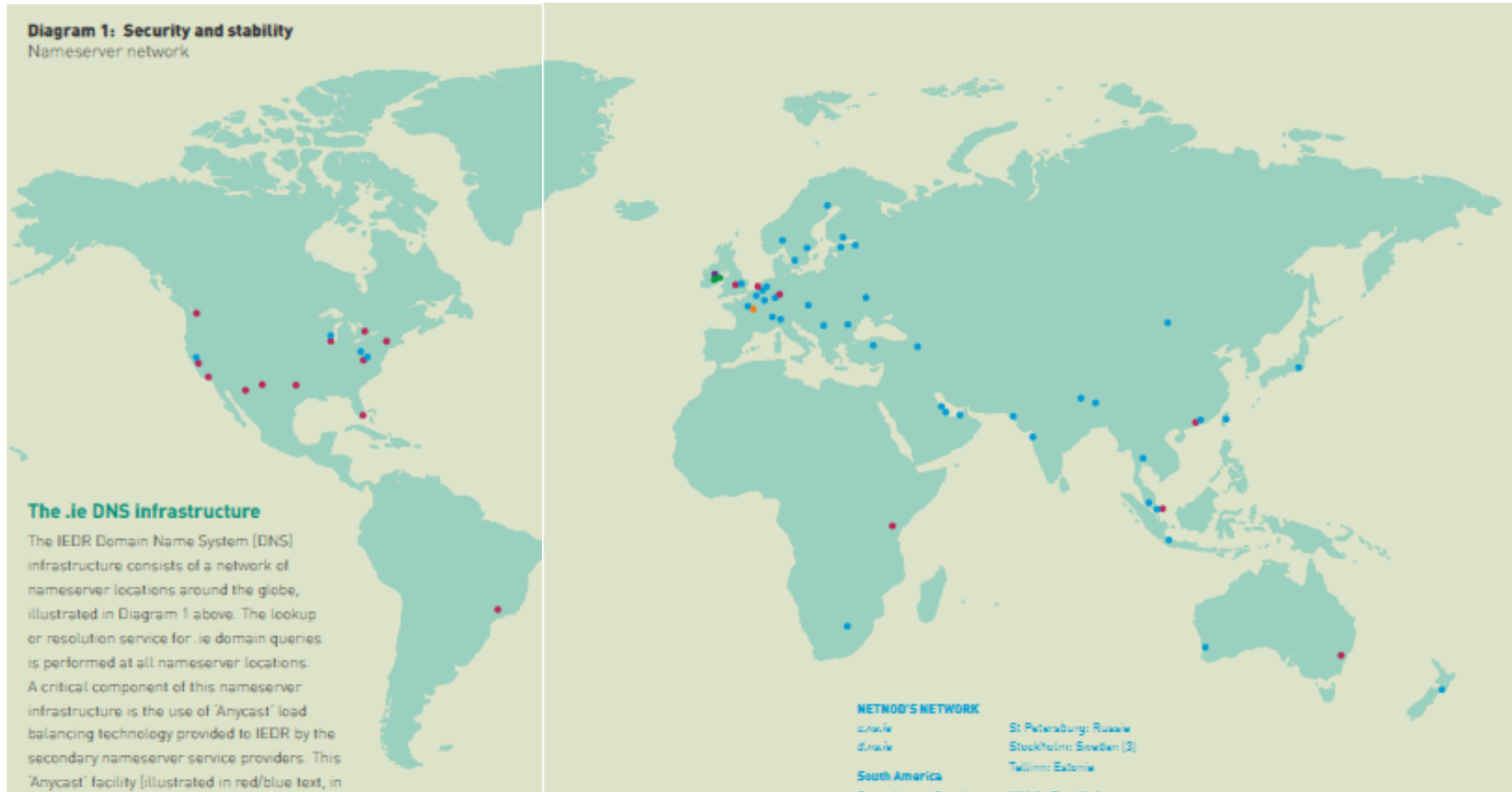
... No information is collected on CSO Industry Sectors

43.88%

77.9%

Data & Information sharing

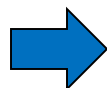
Annual Report & Review - shares DNS info



- Primary name servers in Ireland
- Secondary name servers – geographic spread globally
- DNS data accumulation is difficult, inconclusive (cached locally – TTL differs)
- Role of hosting service providers (Registrars) – know the most-visited sites

Data & Information sharing

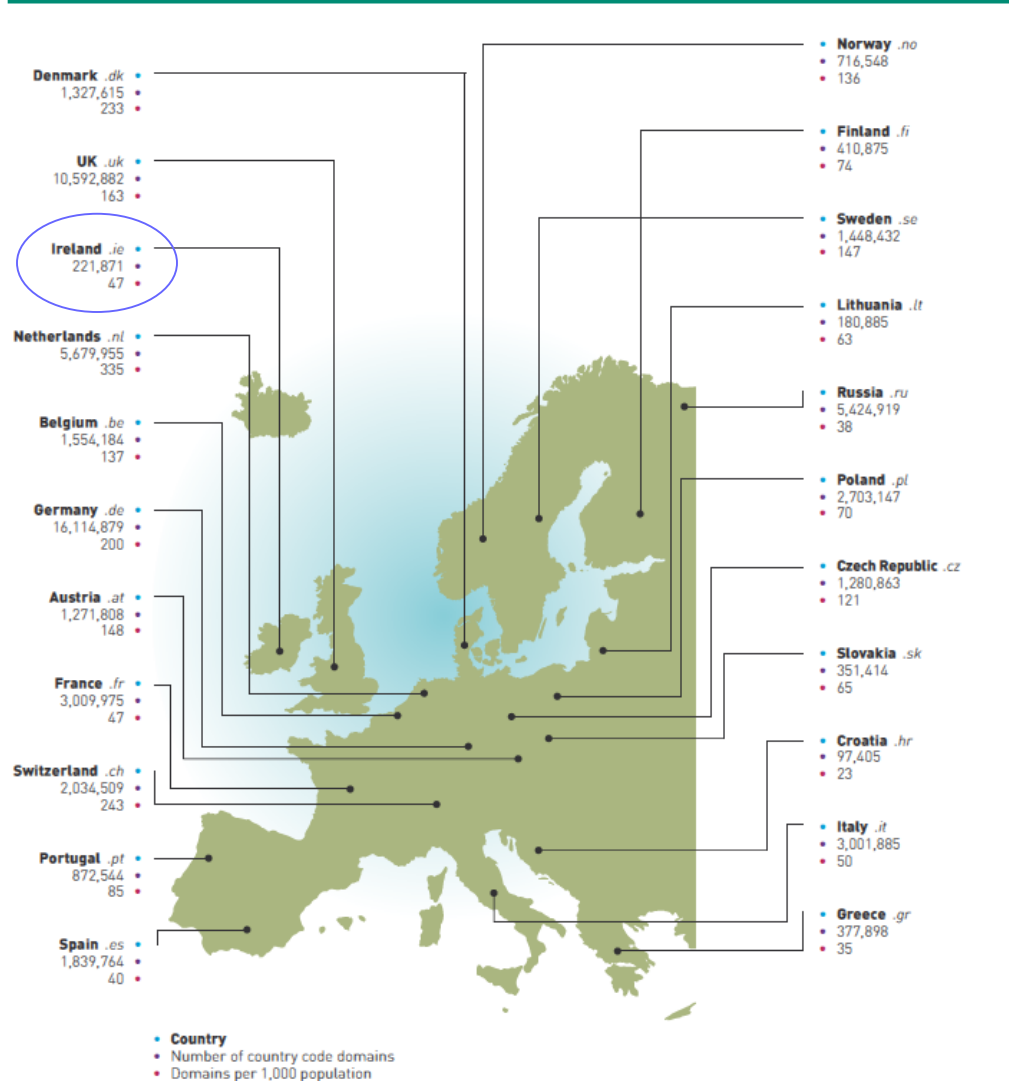
Annual Report & Review



- Comparative information
- # of national ccTLD domains
- # per 1,000 of population
- Note:- .nl (335) & .dk (233)
- .ie (47) ~ France, Italy, Spain

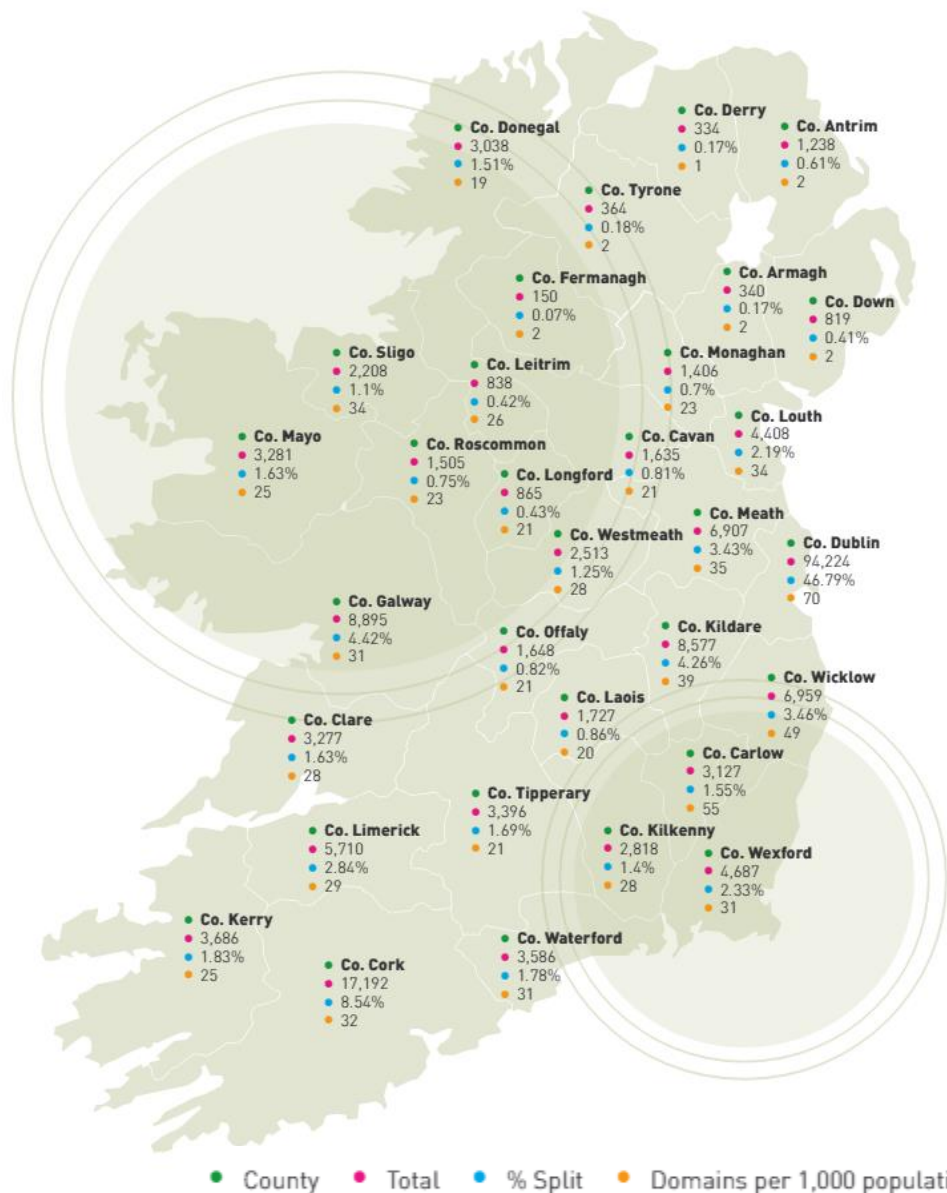
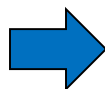
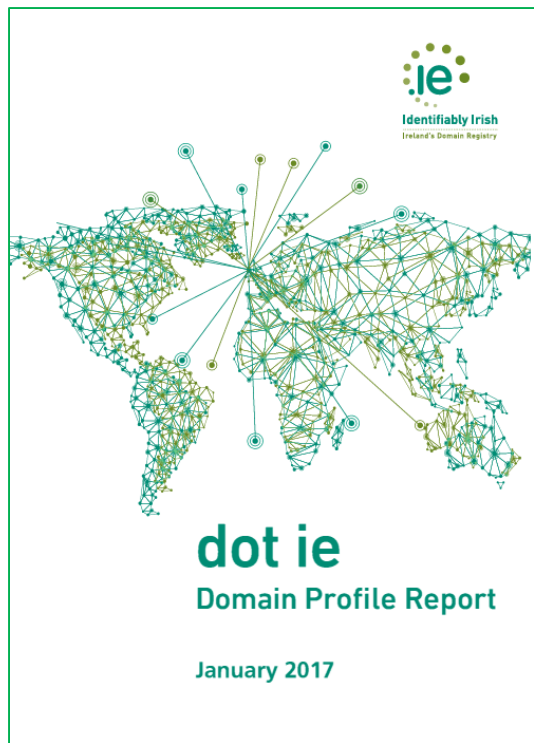
Analysis of European domain market size

Breakdown of international domain market size by country and per 1,000 population



Data & Information sharing

Domain Profile Report



- Profile Report is issued 2x p.a.
- Policy makers & local agencies
- A 'leading indicator' of digital activity
- Appetite from media

Data & Information sharing

Domain Profile Report

THE IRISH TIMES

3 February 2017

Almost 35,000 new '.ie' web domains registered in Ireland

More than seven out of ten new registrations came from businesses



Decrease in Internet domain names registered in Donegal

THERE has been a slight decrease in the number of new registrations in Donegal last year for new registrations

Longford .ie domain registrations down by 30.5%

450 .ie domains registered in Westmeath

Cork's 3,000 website registrations with .ie domain indicates business confidence

ALMOST 3,000 Irish websites and sole traders have registered their domains with the .ie extension

395 .ie domains registered in 2016

395 .ie domains were registered in Kilkenny in 2016, according to the latest dot.ie Domain Profile Report, published by the Registrar of Companies

453 .ie domains registered in Donegal in 2016

Domain registrations down 5% on 2015

130 .ie domains registered in Co Leitrim last year

261 .ie domains registered in Roscommon in 2016

261 .ie domains were registered in Roscommon in 2016, according to the latest dot.ie Domain Profile Report, published by the Registrar of Companies

More than five hundred .ie domains registered in Mayo last year

Over 600 'dot.ie' domains registered in Waterford in '16

Large number of .ie domains registered in Westmeath

An impressive 450 .ie domains were registered in Westmeath last year, according to the latest dot.ie Domain Profile Report, published by the Registrar of Companies

.ie registrations up 15% in Co Monaghan

Past year saw Westmeath register 450 .ie domains

Data & Information sharing

SME research:- Digital Health Index



- IEDR engaged Ignite Research
- Digital assets – ownership & usage
- eCommerce adoption by SMEs
- Policy makers responding...?



Stores are dying the death of a thousand clicks

50,000 Irish businesses have little interest in engaging with customers online

SMEs lag behind in online space

CHARLIE TAYLOR

Online presence has never been more important

The secret was business that focuses... Luckily, there are many local com...

Shoppers making a seismic shift

US retail giant Macy's announced this week that it was closing its shop in Dublin as part of a rationalisation of its store network. That was Dublin, Ohio, rather than our own splendid capital, but it is a signal of the seismic shift that is under way in global retail.

force last year following an ex process that allowed it to ren... onerous leases on its Irish sto... HMV is probably the highest j... casualty here of the switch to... Even Dunnes Stores, a long holdout against online shoppi...

A national shame?

The latest report detailing the extent of Irish SMEs with no online t... be more than just a w...

A Break For The Border

One in four small firms lacks know-how or funds to go online

€4.5bn in online sales 'missed'

A second major survey has found that retailers here are foregoing €4.5bn in lost sales

Lack of online presence means Irish SMEs losing out on global business

have a proper... Instead, the Media by Amárach has found that €4.5bn worth of sales was leaking abroad.

Agenda

- Our dot.ie Data & Research
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 - SMEs data for policymakers and membership-based organisations
- **Business Intelligence**
 - eCommerce adoption by SMEs
 - Understanding the market size and market shares
 - Predictive analytics – our challenge

- eCommerce adoption by SMEs
 - Websites usage vs Social Media usage ?
 - Potential to use the FaceBook API ?
- Understanding the market size and market shares
 - future addressable SME market for dot ie
 - .com domains and usage.....(current estimates use extrapolation-based modelling)
- Big Data, IoT, IPv6, voice search & the DNS
 - a discussion for another day....
- Predictive analytics – our challenge
 - To develop a dot ie customised retention prediction model
 - To identify “at-risk” names
 - To identify “valuable” names

- To identify “at-risk” names:-
 - Facilitate Registrars’ portfolio-focused responses
 - Assist with marketing promotional campaigns
 - “at-risk” of non-renewal = f(no website, no email, typo-variant, website not being updated, no e-commerce, no https etc)
 - Generics (cars.ie) are not at-risk for IEDR (because re-registration is highly likely...)

- To identify “valuable” names:-
 - Selling a dot .ie name on the secondary market...
 - Domain activation prospect....
 - Upsell potential (web-builder product, https,
 - “Valuable” = f(Short, memorable, generic (flowers.ie), scarce (only 676 two- letter names), rarity value, re-sellable)

Business Intelligence

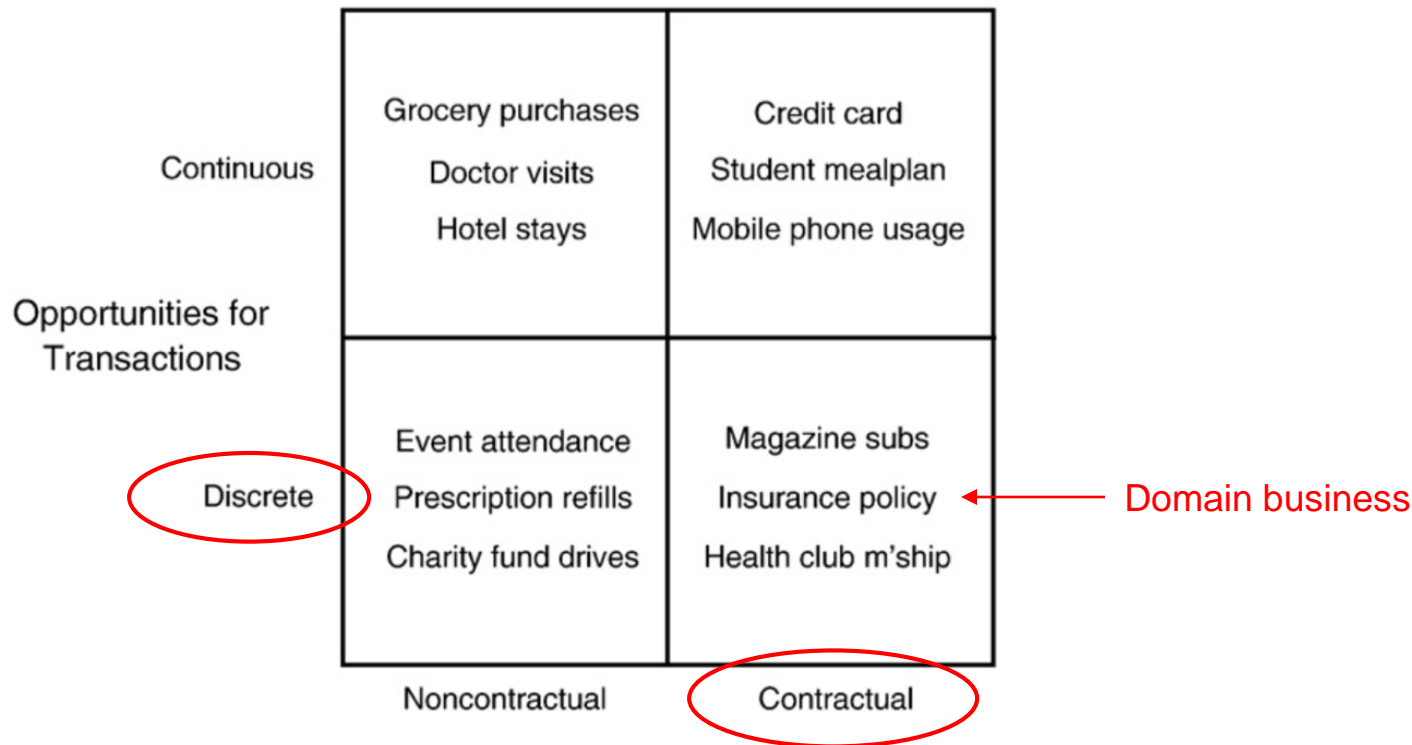
Renewal rates are critical

- Ageing profile of the dot ie database...by year of registration..& future renewal date
- Past experience is (no longer) an indicator of future performance
- Scarcity value and rarity value is diluted – following the advent of 1,200 new gTLDs
- Need for TLD specific, customised Predictive Analytics
- Our Data shows the profile of the database (221,871 names) at end December (e.g. of the 39,398 additions in 2011 - 22,954 have been deleted):-

As at 31 December 2016		DELETIONS AND RETENTIONS BY YEAR OF REGISTRATION														
	Up to 2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	cross tots
(A): New Registrations	19,620	7,742	11,504	15,741	22,590	29,110	34,263	37,055	36,587	39,398	33,484	32,154	31,072	35,225	34,615	19,620 400,540
(B): Deletions/ non-renewals																
Total Deletions:	5,407	4,687	7,064	9,975	14,842	18,925	22,604	23,649	22,236	22,954	17,063	13,343	9,501	5,945	94	198,289
Net remaining for that year (A-B)	14,213	3,055	4,440	5,766	7,748	10,185	11,659	13,406	14,351	16,444	16,421	18,811	21,571	29,280	34,521	221,871
Retention %		39.5%	38.6%	36.6%	34.3%	35.0%	34.0%	36.2%	39.2%	41.7%	49.0%	58.5%	69.4%	83.1%	99.7%	55.4%

this probably won't require original research – other industries' models ?

Figure 1: Customer base classification.



- One retention prediction model for this type is the [shifted-Beta-Geometric \(sBG\) model](#) developed by Peter and Bruce in 2007.
- New Zealand (.nz) is experimenting with this sBG model
- ccTLDs objective is to predict domain retention probability of the registry

- IEDR has (some) data ...
- Needs help with business intelligence & data analytics
- Most pressing (business) need is :-
 - To develop a dot ie customised retention prediction model
 - To identify “at-risk” names
 - To identify “valuable” names
 - To model eCommerce adoption by SMEs (potential to use the FaceBook API)

Q&A ?



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