





Competition, Consumer Trust and Consumer Choice Review: Data Workshop

ICANN54 | 21 October 2015

CCT Review: Data Workshop

- CCT Review Overview: Margie Milam, ICANN
- CCT Metrics: Brian Aitchison, ICANN
- Phase 1 Assessment of the Competitive Effects Associated with the New gTLD Program: Greg Rafert, Analysis Group
- Global Registrant Survey: David Dickinson, Nielsen

Note: Q&A to follow each data presentation





CCT Review Overview

IAG-CCT Prep Work

- 66 metrics recommended
- Some data collected: https:// www.icann.org/resources/ reviews/cct/metrics
- Two outside studies commissioned:
 - Consumer/registrant surveys: http:// newgtlds.icann.org/en/ announcements-andmedia/ announcement-2-29may1 5-en and https:// www.icann.org/news/ announcement-2015-09-2 5-en
 - Economic study: https:// www.icann.org/news/ announcement-2-2015-09 -28-en

AoC Mandate

"...examine the extent to which the introduction or expansion of gTLDs has promoted competition, consumer trust and consumer choice, as well as effectiveness of (a) the application and evaluation process, and (b) safeguards put in place to mitigate issues involved in the introduction or expansion."

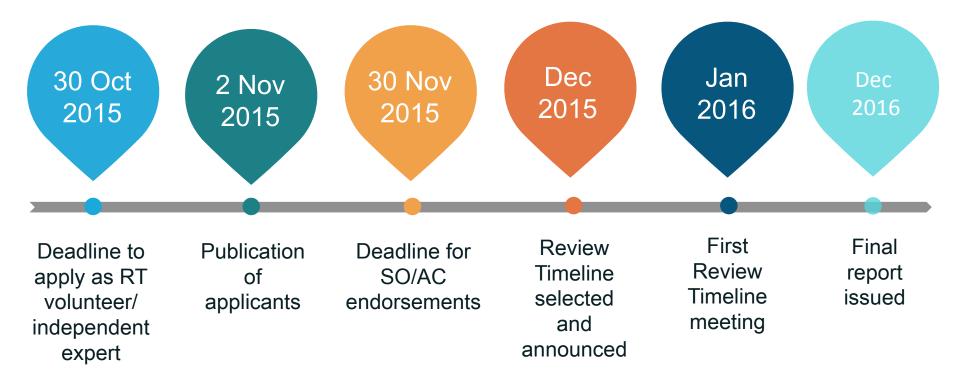


Expected Outputs

- Final report anticipated December 2016
- To include recommendations to Board



CCT Review Timeline

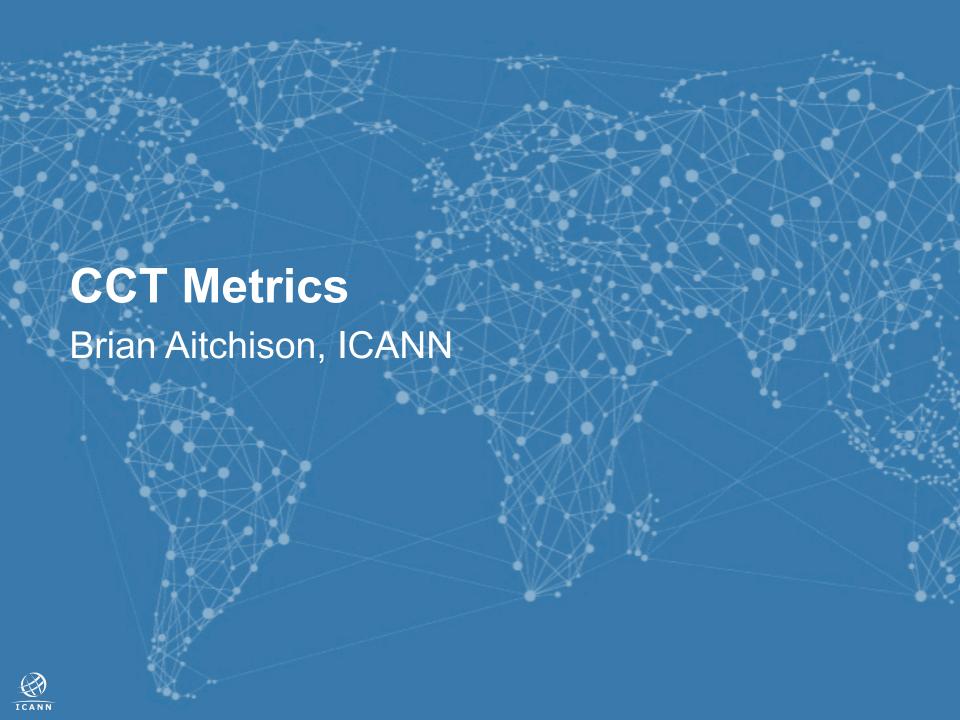




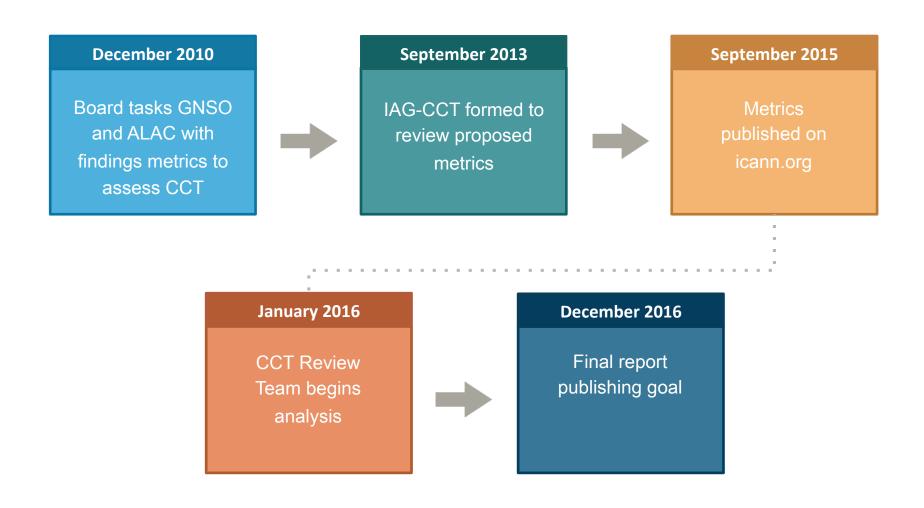
Knowledge and Expertise

- Knowledge of ICANN and its working practices and culture, including the New gTLD Program;
- Familiarity with the multistakeholder model and procedures;
- Expertise in consumer protection matters;
- Understanding of the New gTLD rights application processes and protection mechanisms;
- Expertise in or knowledge of mitigating DNS and potential security threats;
- Experience in evaluating competition and market forces in the gTLD space or in other industries;
- Expertise in quantitative analysis and information systems;
- Expertise in or knowledge of intellectual property rights protection;
- Knowledge of competition, consumer choice and consumer trust in the domain name or other marketplaces; and
- Capacity to draw fact-based conclusions and feasible and useful





CCT Metrics: Background





CCT Metrics: Overview

- Metrics gathered from various sources, most publicly available, e.g.
 - gTLD application page: https://gtldresult.icann.org/
 - Arbitration provider databases for rights protection metrics
 - Trademark Clearinghouse database
 - ICANN and IANA databases (internal)
- Some metrics incorporated from other efforts i.e.
 - Consumer survey of New gTLD marketplace (Nielsen)
 - Registrant survey of New gTLD marketplace (Nielsen)
 - Economic study New gTLD competitive landscape (Analysis Group)
- Goal: to build a data set to inform work of CCT Review Team



CCT Metrics: Categories

- Metrics by category
 - Compliance
 - Registries
 - Registrars
 - Domain Name Registrations
 - Domain Name Navigation
 - Rights Protection Mechanisms
- Page now available:

https://www.icann.org/resources/reviews/cct/metrics



1.8: Registry and Registrar General Complaints*

| | 2012 | 2013 | 2014 |
|-------------------------|--------|--------|--------|
| Number of Complaints | 48,711 | 26,188 | 39,869 |

Sources: ICANN Compliance databases and dashboards

Baseline: 2012-2013

CCT Review Category: Consumer Trust



^{*} Number of general complaints submitted to ICANN regarding both registries and registrars. Includes information about registrars, WHOIS information, IP address issues, spam/viruses, and website content

3.2 Quantity of gTLDs

| Baseline Quantity of Legacy gTLDs* | Total Quantity of Delegated gTLDs Post October 2013 |
|------------------------------------|---|
| 18 | 738 |

Source: IANA Root Zone Database and gTLD Applications

CCT Review Category: Competition



^{*} Total number of gTLDs before and after expansion of DNS as a result of the New gTLD Program

^{*} This metric considers the following as 'legacy' gTLDs: '.com' '.net' '.org' '.aero' '.asia' '.museum' '.xxx' '.pro' '.cat' '.mobi' '.jobs' '.coop' '.name' '.biz' '.info' '.tel' '.travel' '.post'

3.6 gTLD Operators by Legacy vs. "New Entrants"*

| "Legacy"* Registry Operators | "New Entrants" |
|------------------------------|----------------|
| 12 | 718 |

Source: gTLD Applications

CCT Review Category: Competition

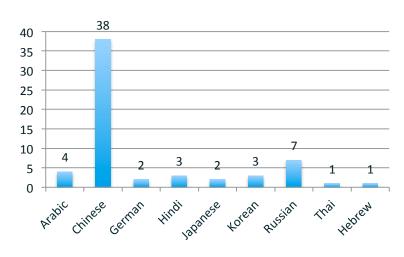


^{*} Number of legacy operators running new gTLD registries vs. unique new gTLD registries

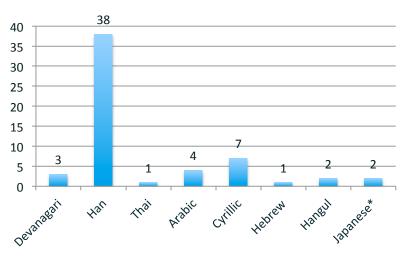
^{*} This metric considers the following as 'legacy' gTLDs: '.com' '.net' '.org' '.aero' '.asia' '.museum' '.xxx' '.pro' '.cat' '.mobi' '.jobs' '.coop' '.name' '.biz' '.info' '.tel' '.travel' '.post'

2.4 IDN TLDs

Language Type



Script Type (Latin = 677)



*NB: Japanese = Han + Hiragana + Katakana

Source: IANA Root Zone Database and gTLD Applications

CCT Review Category: Consumer Choice



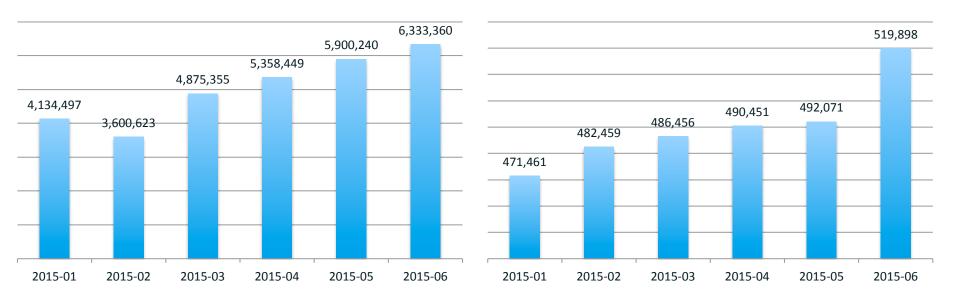
^{*} Number of Internationalized Domain Name (IDN) top-level domains (TLDs) delegated into the Internet's root zone

2.6: Registrations in IDN TLDs as Compared to Total Number of Registrations in New gTLDs

(To June 2015 only for demonstration purposes)

Total Number of New gTLD Registrations

Total Number of Registrations in IDN gTLDs



Source: Registries' latest submitted BRDA file by the end of each month, where available CCT Review Category: Consumer Choice





Phase 1: Assessment of the Competitive Effects Associated with the New gTLD Program

Greg Rafert, Analysis Group





Phase I Summary of Results

Assessment of the Competitive Effects Associated with ICANN's New gTLD Program

Prepared for: ICANN October 21, 2015

Study Goals & Who We Are

– Study goals:

- Understand competitive effects of ICANN's New gTLD Program on the marketplace for domain names.
- Analyze competition in the past, present, and future.
- Primary goal in Phase I is to establish baseline measurements.

– Our team includes:

- Catherine Tucker, Mark Hyman Jr. Career Development Professor and Associate Professor of Management Science, Sloan School of Management, Massachusetts Institute of Technology.
- Greg Rafert, Vice President, Analysis Group, a firm specialized in economics, health care analytics, and strategy consulting for Fortune 500 companies, global health care corporations, government agencies and law firms.

Our Approach

- Registrars and registries may compete on price and non-price factors. These non-price factors include strategies to differentiate themselves, e.g., changes in product quality, product offerings, and ancillary products.
- Data requests were made of registries and registrars based on a carefully constructed sample of over 100 new gTLDs and 14 legacy TLDs.
 - New gTLDs chosen based on current total and recent registrations and expected customer overlap with high registration volume gTLDs.
 - Each of ICANN's regions are represented in the set of gTLDs.
- Given the paucity of available transaction-level data, we rely on registry provided wholesale price data, publicly available registrar list prices for 1 year registrations and add-on offerings, and historical registration volume obtained from monthly transaction reports.

Study Limitations

- Fully analyzing the competitive effects of the New gTLD Program requires a rich set of data to answer many important questions.
 For example, one important question we are not able to answer is to what extent do consumers view new gTLDs as substitutes for legacy TLDs, and how willing are consumers to substitute within the set of new gTLDs?
- The ideal dataset to investigate these questions would contain individual transactions from both primary and secondary markets.
 Unfortunately, sufficient transaction-level data were not provided by registrars.
- Lastly, it is important to keep in mind the historical and current differences between legacy TLDs and new gTLDs. Specifically, many legacy TLDs had historical price caps, as well as different start-up costs compared to new gTLDs, both of which may be influencing their current prices relative to new gTLDs.

Summary of Data Collected

| | | Legacy | New | All |
|-----------------------------|--|--------|-------|-------|
| | | TLDs | gTLDs | TLDs |
| Total in Sample | | 14 | 109 | 123 |
| Sunrise Prices | Number of TLDs with Available Data | 5 | 82 | 87 |
| | Percent of Total Registrations | 0.0% | 11.6% | 0.3% |
| April 2015 Wholesale | Number of TLDs with Available Data | 10 | 78 | 89 |
| Prices | Percent of Total Registrations | 99.6% | 68.7% | 98.9% |
| April 2015 Retail Prices | Number of TLDs with Available Data | 14 | 108 | 122 |
| | Average Number of Offering Registrars Across TLDs | 20 | 22 | 21 |
| | Collected Registrars' Percent of TLD Registrations | 55.7% | 62.8% | 55.9% |
| Registration | TLDs With Historical | 14 | 109 | 123 |
| Volume Data | Registration Data | | | |

- [1] Percent of Total Registrations for Sunrise Prices reports the sunrise volume data for TLDs with pricing information in our sample as a fraction of all April registration volume for our full sample of TLDs.
- [2] Percent of Total Registrations for April 2015 Wholesale Prices reports the wholesale volume data for TLDs with pricing information in our sample as a fraction of all April registration volume for our full sample of TLDs.
- \cite{Model} Average Number of Offering Registrars Across TLDs reports, on average, legacy TLDs were offered by 20 registrars.
- [4] Collected Registrars' Percent of TLD Registrations reports the retail volume data for TLDs with pricing information in our sample as a fraction of all April registration volume for our full sample of TLDs.

Regional Distribution of Registries Majority Located in the EUR, NA, and AP Regions

| | Number of |
|---------------------|------------|
| Region | Registries |
| Africa (AF) | 2 |
| Asia Pacific (AP) | 36 |
| Europe (EUR) | 65 |
| Latin America (LAC) | 4 |
| North America (NA) | 46 |

Source:

[1] ICANN list of registries available at https://www.icann.org/resources/pages/listing-2012-02-25-en

Summary of Phase I Results

- Our principal findings are as follows:
 - Registration shares across registries and registrars are more dispersed within new gTLD registrations compared to legacy TLD registrations.
 - New gTLD wholesale prices are, on average, higher than those for legacy TLDs.
 - New gTLDs have higher levels of both wholesale and retail price dispersion compared to legacy TLDs.
 - When add-on products offered by registrars are considered, such as email and web
 hosting, the cost of registering a domain name is a relatively small part of the total
 cost of creating a website.
- In comparing legacy TLDs to new gTLDs, we note that price dispersion or higher prices alone are not indicative of high or low levels of competition. These features could be present for a number of reasons, including TLD differentiation resulting from intrinsic value, service differentiation, and/or the fact that legacy TLDs are subject to wholesale price caps.

Registration Shares Across Registries Higher Dispersion Within New gTLDs

| Registry | Share of All Registrations | Share of Legacy Registrations | Share of New gTLD Registrations |
|---|-------------------------------|-------------------------------------|---------------------------------------|
| VeriSign | 85.0% | 86.9% | 0.0% |
| Public Interest Registry | 6.6% | 6.8% | 0.2% |
| Afilias | 4.0% | 4.1% | 1.1% |
| NeuStar, Inc | 1.6% | 1.7% | 0.0% |
| Donuts | 0.7% | 0.0% | 30.0% |
| XYZ.COM, LLC | 0.5% | 0.0% | 21.3% |
| DotAsia Organisation | 0.2% | 0.2% | 0.0% |
| Uniregistry, Corp. | 0.1% | 0.0% | 4.7% |
| dotBERLIN GmbH & Co. KG | 0.1% | 0.0% | 4.5% |
| .Club Domains | 0.1% | 0.0% | 4.2% |
| Telnic | 0.1% | 0.1% | 0.0% |
| Registry Services Corporation dba RegistryPro | 0.1% | 0.1% | 0.0% |
| Rightside | 0.1% | 0.0% | 3.6% |
| TLD Registry Limited | 0.1% | 0.0% | 3.2% |
| China Internet Network Information Center | 0.1% | 0.0% | 3.0% |
| All Others | 0.7% | 0.2% | 24.1% |

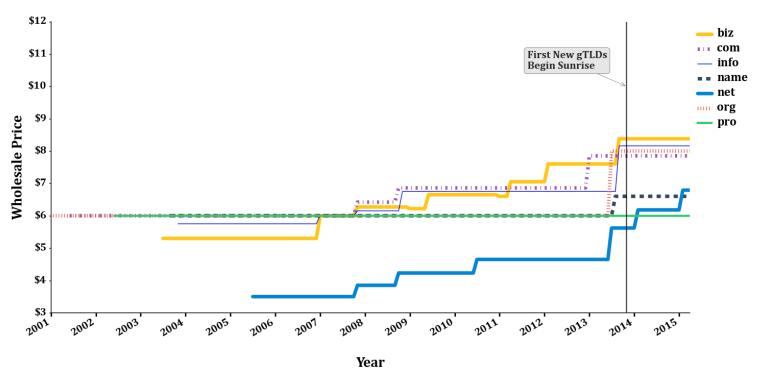
- [1] Registration volumes are collected from monthly transaction reports provided to ICANN by operating registries.
- [2] Each TLD's registration volume was assigned to a registry operator as specified in the registry agreement with ICANN.
- [3] Each TLD was then linked to a parent company registry, the total domains for each of its associated TLDs was summed, and registration shares were calculated based on these sums for all registries.
- [4] Registries shown are the top 15 as ranked by share of all registrations.

Registration Shares Across Registrars Higher Dispersion Within New gTLDs

| | | C) C | CI CN |
|-------------------------------------|---------------|---------------|---------------|
| | G1 | | Share of New |
| | Share of All | Legacy | gTLD |
| Registrar | Registrations | Registrations | Registrations |
| Go Daddy, LLC | 31.9% | 32.3% | 14.6% |
| eNom Inc | 7.4% | 7.5% | 5.9% |
| Tucows | 5.3% | 5.4% | 2.1% |
| Network Solutions | 5.0% | 4.8% | 12.0% |
| 1&1 Internet AG | 3.8% | 3.8% | 4.3% |
| Public Domain Registry | 3.0% | 3.0% | 0.9% |
| Wild West Domains | 2.4% | 2.4% | 0.4% |
| GMO Internet, Inc. | 2.4% | 2.3% | 5.1% |
| Register.com | 1.8% | 1.8% | 0.3% |
| HiChina Zhicheng Technology Limited | 1.6% | 1.6% | 0.4% |
| FastDomain | 1.5% | 1.6% | 0.0% |
| Melbourne IT Ltd | 1.5% | 1.5% | 0.1% |
| Domain.com, LLC | 1.3% | 1.4% | 0.0% |
| Xin Net Technology Corporation | 1.3% | 1.2% | 6.0% |
| OVH | 1.2% | 1.2% | 1.9% |
| All Others | 28.6% | 28.2% | 46.1% |

- [1] Registration volumes are collected from monthly transaction reports provided to ICANN by operating registries
- [2] Within a TLD, registration volumes were assigned to distinct registrars. Reported registrar names vary across TLDs in the monthly transaction reports due to differences in spelling and abbreviations and we manually linked each reported registrar to a standardized registrar name.
- [3] Registration volumes within a registrar were then summed, and registration shares were calculated based on these sums for all registrars.
- $\left[4\right]$ Registrars shown are the top 15 as ranked by share of all registrations.

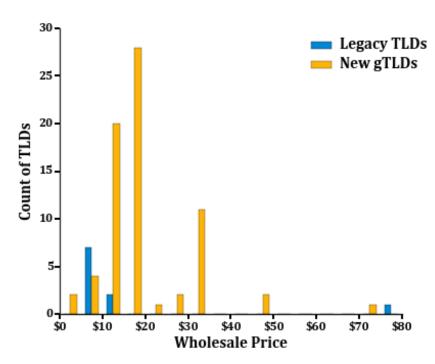
Minor wholesale price differentiation among most legacy TLDs over the last 15 years



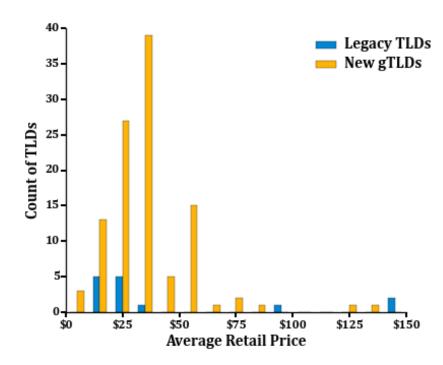
- [1] .travel is omitted as an outlier.
- [2] Available data from price change correspondences indicates that the wholesale price for .travel is \$80, and has never changed.
- [3] Sufficient price information for other legacy TLDs is unavailable.

Wholesale and Retail Prices (April 2015)

More Price Dispersion Within New gTLDs



Note: Wholesale prices are as of April 2015.



Note: Wholesale prices are as of April 2015.

Distribution of Add-on Features

| Add-On Category | Observations | Mean | Median | Minimum | Maximum |
|-----------------|--------------|------------|----------|----------|------------|
| Server | 18 | \$1,311.47 | \$674.11 | \$14.95 | \$8,154.60 |
| Email | 26 | \$264.29 | \$112.32 | \$0.00 | \$1,943.23 |
| Hosting | 31 | \$265.13 | \$188.04 | \$12.00 | \$1,650.94 |
| eCommerce | 6 | \$265.15 | \$194.30 | \$103.56 | \$494.88 |
| SSL | 16 | \$223.32 | \$206.21 | \$16.99 | \$553.67 |
| Website Builder | 13 | \$171.15 | \$123.88 | \$0.00 | \$637.80 |
| DNS | 7 | \$44.95 | \$5.00 | \$0.00 | \$246.76 |
| Privacy | 16 | \$51.81 | \$23.24 | \$0.00 | \$299.98 |
| Forwarding | 4 | \$1.63 | \$0.00 | \$0.00 | \$6.51 |

- [1] Price data are as of April 2015 and reflect the cost of one-year of service.
- [2] Add-on prices were manually searched on registrar websites and grouped into categories based on frequent website headings for add-on services. For example, the category server includes services such as: Virtual Server, Server Rent, Linux Servers, and Cloud Server.

Next Steps

Phase II

- The Phase II Assessment will allow for a deeper analysis of the potential competitive effects associated with ICANN's New gTLD Program.
- It will include an examination of changes in prices and registration volumes for TLDs in our existing sample, as well as additional gTLDs introduced over the next year.
- In the coming year, we will continue to reach out to registrars and other secondary market facilitators for historical, transaction-level data. Such data would allow for more thorough examination of competition, including substitution by consumers across new gTLDs and legacy TLDs and the extent to which differentiation occurs on the part of registrars and registries.

Contacts

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Global Registrant Survey David Dickinson, Nielsen



ICANN

background

- ICANN's New gTLD Program was developed as part of a community-driven policy development process that spanned several years and aims to enhance competition and consumer choice for both registrants and Internet users.
- To assess the current TLD landscape, as well as measure factors such as awareness, experience, choice, and trust with new gTLDs and the domain name system in general, audience tracking research was implemented among two groups:
 - Global online consumer end-users (including prospective registrants)
 - Global domain name registrants

This report focuses on wave 1 results among the Registrant Segment. Wave 1 results among the Consumer Segment were published in May 2015. A second comparison wave will be conducted in approximately a year's time and will provide a set of comparison data.

METHODOLOGY

Qualifying criteria

- Adults 18+
- Registered a domain name
- Primary decision maker

Total of **3357** Registrants, representing Asia, Europe, Africa, North America, and South America. Drawn from **24** countries, administered in 17 languages

- Countries: United States, Canada, Mexico, Argentina, Brazil, Colombia, France, Germany, Italy, Poland, Spain, Turkey, United Kingdom, Egypt, Nigeria, South Africa, China, India, Indonesia, Japan, Philippines, Russia, South Korea, Vietnam
- Languages: English, Spanish, Portuguese (Brazil), Simplified Chinese, French, German, Italian, Japanese, Korean, Russian, Arabic, Vietnamese, Tagalog, Turkish, Polish, British English, Bahasa

Significance testing is performed at a 95% confidence level throughout this report:

- Letters denote where a region is significantly higher than the region whose column is marked with that letter
- Green and red circles denote where a region is significantly higher or lower than the Total



ONLINE SURVEY
February 19-May 15,
2015 (ICANN Sample)
August 5-13, 2015
(Nielsen Sample)



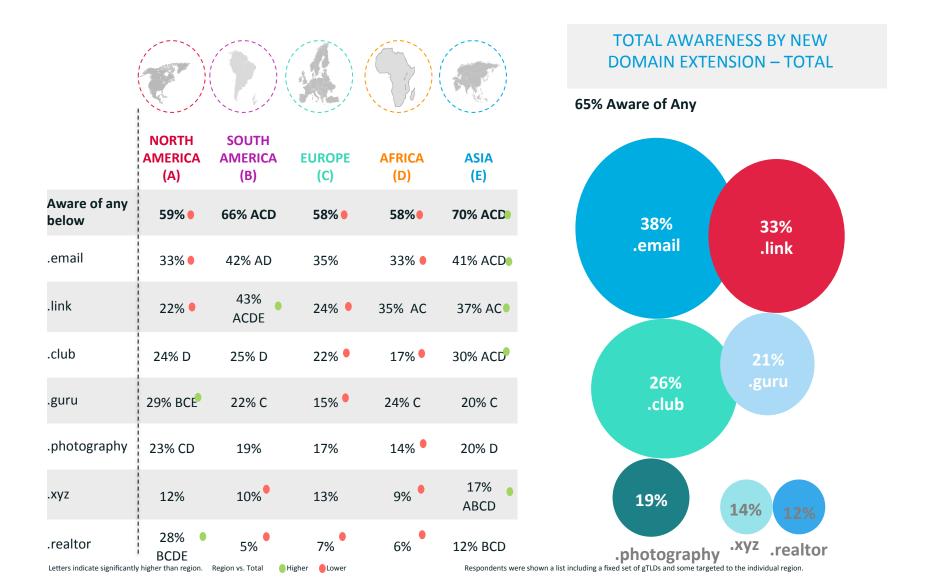
SURVEY
COMMISSIONED BY
ICANN AND
CONDUCTED
BY NIELSEN

SUMMARY OF HIGH LEVEL FINDINGS

Awareness of new gTLDs

Two-thirds of registrants are aware of at least one new gTLD.

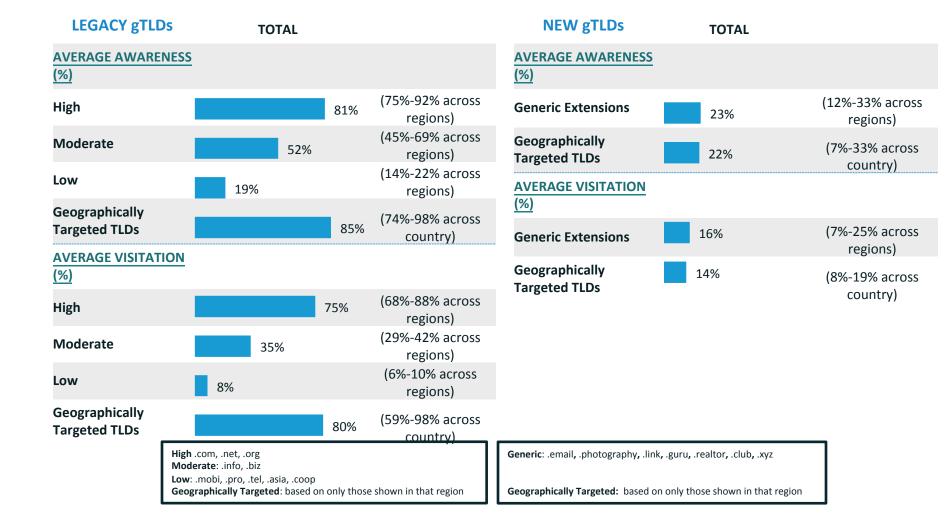
Asia and South America report heightened awareness relative to registrants in North America, Europe, and Africa.



AVERAGE AWARENESS AND VISITATION

The new gTLDs have room to grow with registrants

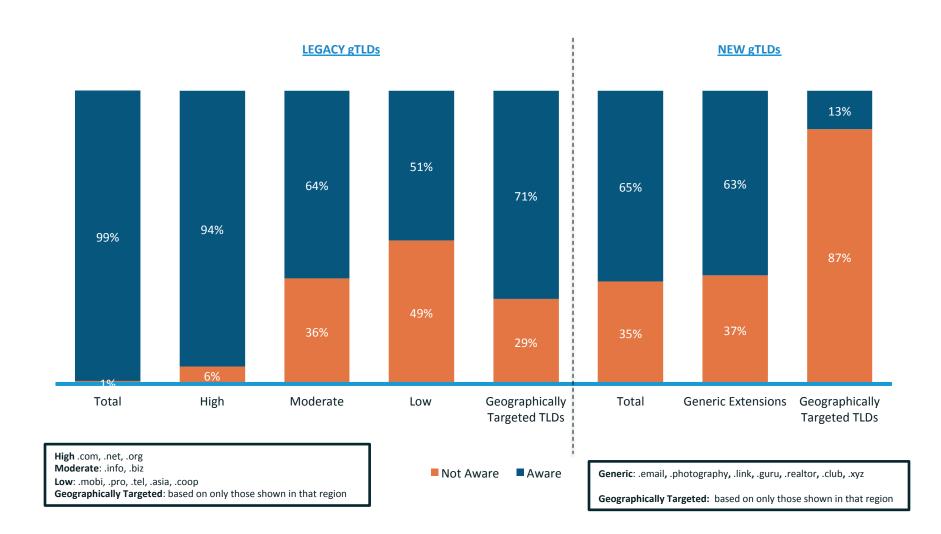
In general, registrants appear to be more engaged and have higher levels of awareness for the less common gTLDs, as compared with consumers in general, but visitation is still relatively low.



Awareness of gTLDs

Traditional extensions clearly lead awareness

Registrant awareness levels of these top gTLDs is very close to the consumer levels.



Awareness of new gTLDs – Consumers vs. registrants

Registrants are significantly more attuned to new gTLDs overall than consumers.

TOTAL AWARENESS BY NEW DOMAIN EXTENSION

Registrant familiarity with newer gTLDs is substantially higher than among consumers Awareness is a full 20 points above consumer levels, indicating the news has spread more quickly to the registrant base – possibly due to the marketing efforts targeting registrants.

Registrants - 65% Aware of Any

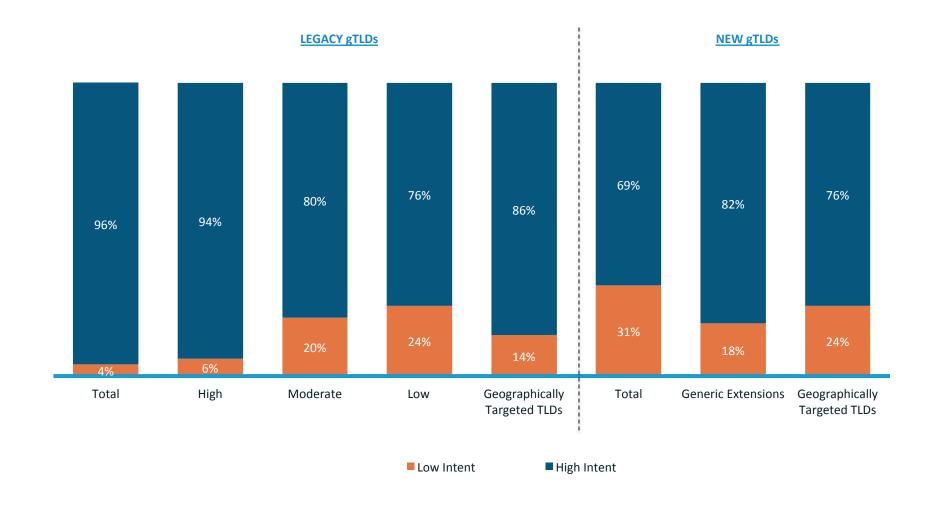
.email 28% 38

Consumers - 46% Aware of Any

Intent to visit among those aware

Awareness generally translates to visitation

When we look at the relationship between awareness and visitation, we see relatively few registrants who are aware of a gTLD but who have low intent to visit it—very similar to consumers—the difference between the two groups appears to be more in awareness—once aware, visitation levels are similar.



Trust in gTLDs

Lack of familiarity appears to limit trust in both audiences

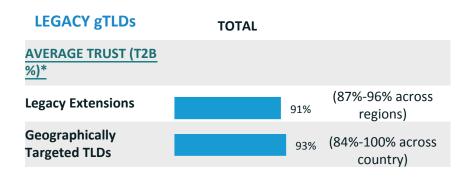
Relative to the top-tier legacy gTLDs, or to the industry in general, the reference set of new gTLDs has relatively lower trust levels and this is consistent between consumers and registrants—the unfamiliar is perceived at least as unproven, translating to less trustworthy.

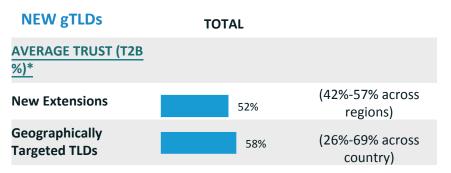
Trust can be improved by having some level of purchase restrictions

Just as we saw with consumers, despite registrants being slightly less likely to favor purchase restrictions, they acknowledge that those restrictions do improve the level of trustworthiness.

But registrants are even more likely than consumers to modify their online behavior

Greater familiarity and awareness not withstanding, more registrants say they alter their online behavior than general online consumers—being more savvy goes hand in hand with a level of caution.





Legacy: .com, .net, .org

New: .email, .photography, .link, .guru, .realtor, .club, .xyz

Geographically Targeted: based on only those shown in that region

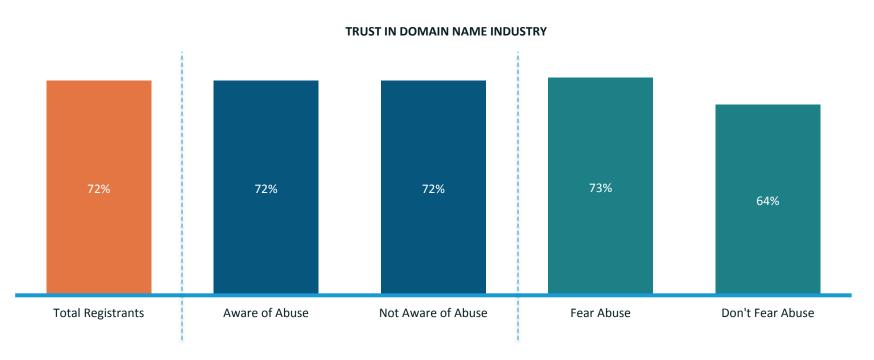
Trust in the domain name industry

Despite having experienced more bad behavior, registrant perspectives mirror consumers

Registrants report more personal experience with online bad-behaviors like phishing, spamming and cybersquatting, however they have less fear about these effects. This is coupled with the acknowledgement that they have altered their online behavior in response to these bad actions.

Nonetheless, fear is still strong

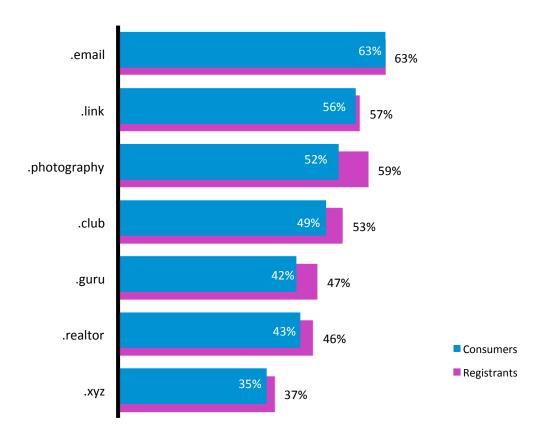
While they have less fear than the general population, the level of fear is still strong, and the best approach to take to avoid problems is not always apparent even to the more savvy registrant group. However, trust in the domain industry remains as high or higher relative to consumers. The responsibility for resolving bad behaviors is generally seen to lie with various types of law enforcement or consumer protection groups.



New gtld TRUSTWORTHINESS – Consumers vs. registrants

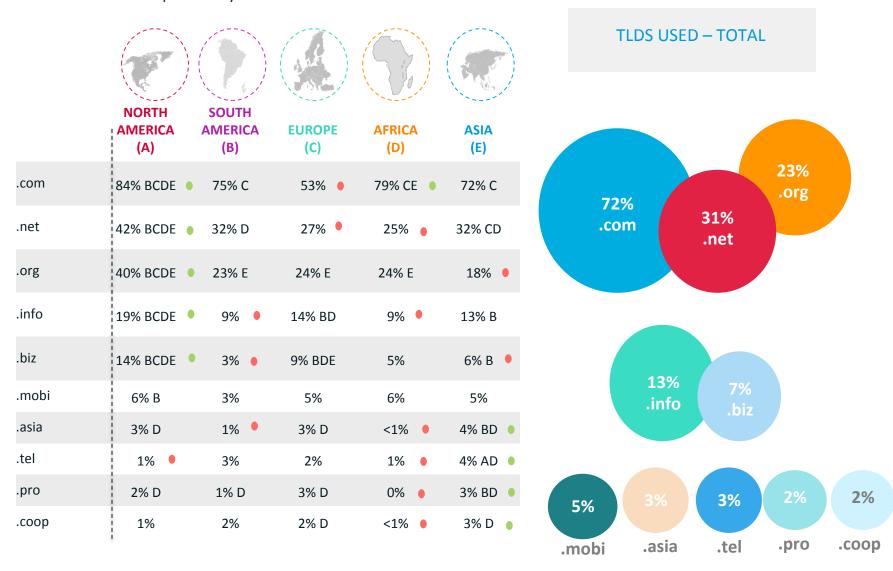
Registrants express slightly higher trust levels with some new gTLDs than consumers.





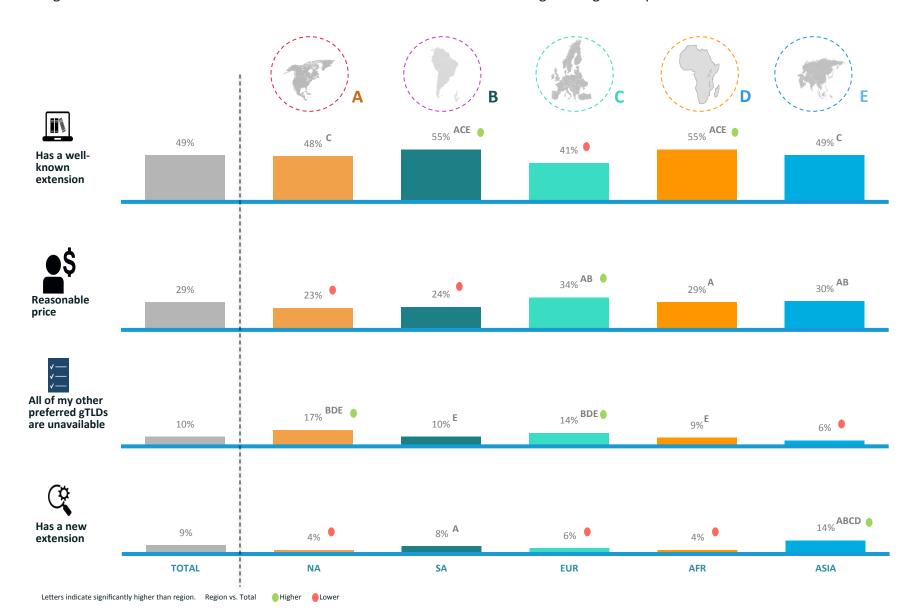
In which gTLDs are domain names currently registered

.com is favored by three quarters of registrants; followed by .net and .org. .info and .biz are used more prevalently in North America than seen elsewhere.



Factors in gTLD purchase

Having a well-known extension is the main factor across the board in determining which gTLD to purchase.



Measures taken to avoid abusive internet behavior – consumers vs. registrants

While consumers are generally reliant on antivirus software for protection, registrants are more likely to change their Internet habits and purchase an identity protection plan to avoid abusive Internet behaviors.

| | Phishing | | Spamming | | Cyber Squatting | | Stolen Credentials | | Malware | |
|---|-----------|-------------|-----------|-------------|-----------------|-------------|--------------------|-------------|-----------|-------------|
| | Consumers | Registrants | Consumers | Registrants | Consumers | Registrants | Consumers | Registrants | Consumers | Registrants |
| Purchased antivirus software for my computer | 50% | 47% | 46% | 45% | 41% | 38% | 46% | 47% | 61% | 63% |
| Changed my Internet habits | 29% | 36% | 25% | 34% | 18% | 26% | 24% | 34% | 23% | 31% |
| Purchased an identity protection plan | 11% | 16% | 9% | 13% | 10% | 15% | 15% | 18% | 10% | 15% |
| Stopped making purchases online | 9% | 10% | 10% | 9% | 7% | 9% | 10% | 12% | 7% | 9% |



AN UNCOMMON SENSE OF THE CONSUMER $^{^{\text{TM}}}$





Engage with ICANN



Thank You and Questions

Reach us at:

Email: engagement@icann.org

Website: icann.org



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