# ICANN GLOBAL CONSUMER RESEARCH WAVE 2

**JUNE 2016** 



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- 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 gTLD landscape, as well as measure factors such as consumer 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
  - Global domain name **registrants**, who were interviewed and will be reported separately

This report focuses on the 2016 (wave 2) results among the Consumer Segment.

# **METHODOLOGY**

#### Qualifying criteria

- Adults 18+; Teens 15-17 (added in 2016 (wave 2))
- 5+ hours spent per week on Internet
- Demographically projectable to each region's online population representing 75% of global users

Total of **5,452 Consumers**, representing **Asia**, **Europe**, **Africa**, **North America**, **and South America**. Drawn from **24 countries**, administered in 18 languages

- Countries: China, India, Indonesia, Japan, Philippines, Russia, South Korea, Vietnam, France, Germany, Italy, Poland, Spain, Turkey, United Kingdom, Egypt, Nigeria, South Africa, Canada, Mexico, United States, Argentina, Brazil, Colombia
- Languages: English, Spanish, Portuguese (Brazil), Simplified Chinese, French, German, Italian, Japanese, Korean, Russian, Arabic, Vietnamese, Tagalog, Turkish, Polish, Latam Spanish, 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 in marked that that letter
- Green and red circles denote where a region is significantly higher or lower than the Total
- Arrows denote significant differences 2016 vs 2015.



ONLINE SURVEY

April 12-May 2

2016



SURVEY
COMMISSIONED BY
ICANN AND
CONDUCTED

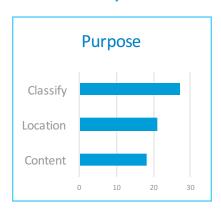
**BY NIELSEN** 

# **EXECUTIVE SUMMARY**

# THE DOMAIN SYSTEM PROVIDES STRUCTURE, INTENT

#### The domain system provides structure

When asked why websites have different extensions, 1 in 5 are unsure, but the majority of responses focus on providing some form of structure-to classify by the type of site, the purpose, the location or region affiliated with or to give an indication of the content that site contains.



As time has gone by, demand for Web pages increases. Out of concern, more must be created. (LAC) Better structure, recognizability/assigning companies to fields of activity. (EUR)

So that more people or companies can create their own pages for their businesses or services. (LAC)

# New gTLDs are expected to continue this function, as well as meet demand

And when asked why the new gTLDs were created, for many, its to further the same goals and improve the structure. But other common themes relate to improving credibility and meeting demand.

Because of the demand on the Internet and sites and to make sure of their credibility (Africa)

# For legacy gTLDs, an upward trend

Awareness and visitation rates have grown wave-over-wave for all three tiers of legacy gTLDs.

# New gTLDs show less movement

Among the reference set of new gTLDs that were shown in both waves, average awareness has only ticked up slightly and reported visitation has actually decreased. However, the new gTLDs added in this wave have higher average awareness and visitation that the reference set.

# New gTLDs stronger outside of NA and EUR

We see strong regional differences for the new gTLDs—awareness of any new gTLD in AP, Africa and LAC is as much as 20 points higher than in the US and FUR.

LEGACY TLDS	2015	2016	
AVERAGE AWARENESS (%)			
High	79%	89%	(76%-99% across regions)
Moderate	36%	43%	(20%-64% across regions)
Low	9%	13%	(5%-12% across regions)
Geographically Targeted TLDs	86%	88%	(51%-99% across country)
AVERAGE VISITATION (%)			
High	71%	81%	(63%-97% across regions)
Moderate	22%	27%	(11%-44% across regions)
Low	4%	7%	(2%-32% across regions)
Geographically Targeted TLDs	81%	81%	(29%-98% across country)

**High** .com, .net, .org **Moderate**: .info, .biz

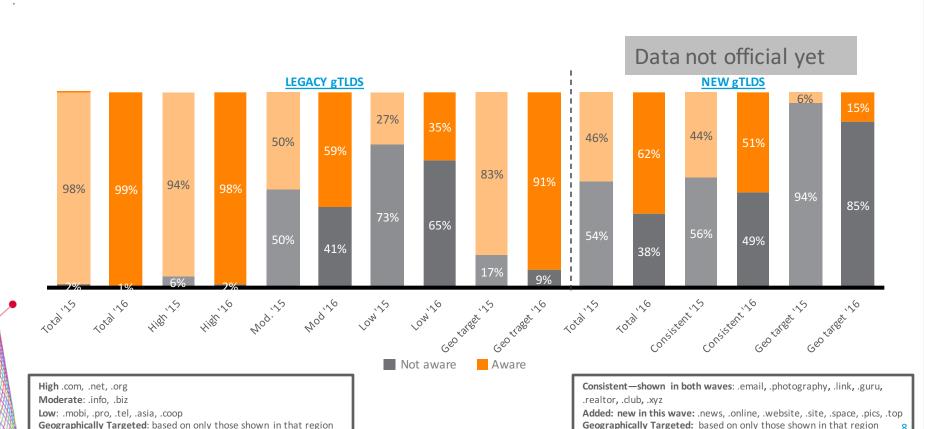
Low: .mobi, .pro, .tel, .asia, .coop

Geographically Targeted: based on only those shown in that region

NEW TLDS	2015	2016	
AVERAGE AWARENESS (%)			
Consistent gTLDs	14%	16%	(2%-39% across regions)
Added gTLDs	NA	20%	(7%-37% across regions)
Geographically Targeted gTLDs  AVERAGE VISITATION (%)	10%	13%	(1%-34% across country)
Generic Extensions	15%	12%	(2%-37% across regions)
Added gTLDs	NA	15%	(2%-34% across regions)
Geographically Targeted gTLDs	12%	9%	(1%-23% across country)

Consistent—shown in both waves: .email, .photography, .link, .guru, .realtor, .club, .xyz

Added: new in this wave: .news, .online, .website, .site, .space, .pics, .top Geographically Targeted: based on only those shown in that region Awareness of any of the legacy gTLDs has increased over the last year and awareness of consistent new gTLDs is also up.



# TRUST IN gTLDS AND RESTRICTIONS

#### Trust levels are stable

And the new set of gTLDS added this wave have higher trust levels than the reference set, showing trust can vary based on interpretation.

gTLDS TRUST	2015	2016	
AVERAGE TRUST (T2B%)			
Legacy Extensions	90%	91%	(80%-98% across regions)
ccTLDs/IDNs	94%	95%	(75%-99% across country)
New gTLD Consistent	49%	45%	(17%-67% across regions)
New gTLD Added	NA	52%	(24%-79% across regions)
ccTLDs/IDNs	53%	52%	(14%-76% across country)

Legacy: .com, .net, .org

Consistent—shown in both waves: .email, .photography, .link, .guru,

.realtor, .club, .xyz

Added: new in this wave: .news, .online, .website, .site, .space, .pics, .top (for restriction question, .Bank, .Pharmacy, .Builder)

Geographically Targeted: based on only those shown in that region

#### Restrictions are increasingly expected

The percentage of consumers who say that registering of domain names should be unrestricted has decreased and a clear majority feel that there should be at least some level of restrictions on who can register—for both new and old gTLDs. Restrictions include credentials, location and consistent use.

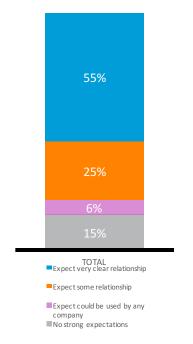
RESTRICTIONS	2015	2016
% SOME OR STRICT		
Legacy Extensions	63%	72%
ccTLDs/IDNs	62%	70%
New gTLD Consistent	67%	73%
New gTLD Added	NA	82%
ccTLDs/IDNs	67%	77%

Restrictions increase 70% trust, 2016

**56%** 2015

#### And domains should reflect the intent of the gTLDs

While slightly weaker in Europe and AP, there is none-the-less a strong sense that the website should have a clear relationship to the gTLD under which it is registered.



#### Overall, trust of the industry relative to other tech companies has improved

Trust is highest compared to ISPs. The most common justification for this trust is that it is in the industry's own best interest to protect their reputation. Trust is also a key theme when people talk about the domain system in general. Positive associations with the domain system have increased since 2015.

#### Comfort levels with online activities are high

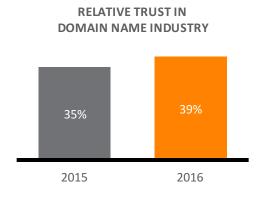
Respondents tend to report at east being "somewhat" comfortable doing a wide range of activities online. The lowest comfort level is around putting personal information about family or activities on social media sites.

#### And fear is not driving a change in online behavior

There is no significant rise in the percentage of people who have limited their online behavior out of fear, and in fact the level of action taken to protect against abusive behaviors in general is largely the same as last year.

#### However, comfort level is lower with new gTLDs; higher for ccTLDs.

When we examine types of information a site may request, we see wide acceptance of inputting email, and then progressively less for data like financial information or health care info. Typically, comfort for these tasks is on par for .com vs the respondents' ccTLD (especially if localized language); substantially lower for a new gTLD.







#### **COMFORT LEVELS**

(% Very/somewhat)

92% Info Search

76% Banking

63% Social Media

#### Teens are more similar than dissimilar on most metrics

By and large, we don't see dramatically different results for teens compared to adult internet users. A detailed recap of statistically significant variations is found later in the report.

#### Awareness tips toward newer gTLDs, lower visitation of less common legacy gTLDs

For legacy gTLDs like .net, .org and .biz, teens slow slightly lower awareness and visitation rates; .biz is the most affected with a 12 point drop in awareness and a 9 point drop in visitation. Trust is also lower for .net, .org, .pro and .coop—about 4 percentage points. However when we look at the new gTLDs, there is a general pattern for increased awareness among teens.

#### Mores apps and wikis, less reliance on gTLDs

As would be expected, teens are more likely to use smartphones to surf (increase of 6 points), see the value in using apps, to have used QR codes and URL shorteners and to get information from an online encyclopedia than use more traditional search methods. Perhaps as a result, teens are more likely (8 points) to say that they don't pay attention to the domain extension.

#### Less likely to expect restrictions and enforcement

Teens are more likely to advocate no restrictions on registration by about 5 percentage points (leaving the strong majority still in favor of restrictions.) The pattern is seen with both new and legacy gTLDs. More pronounced, they are less likely to believe restrictions will be enforced by a margins of 7 to 14 points, depending on the nature of the restriction.

#### Teen comfort levels tend to be lower

There is a general pattern that teens are less comfortable with online behaviors (especially online banking—where they may just lack experience). The exception is for social media, where teens are more comfortable entering information about friends and family than are adults (71% to 63%). However, when it comes to abusive behaviors like spam, malware and phishing attacks, teens tend to be less aware, concerned or fearful than the adults.

# UNDERSTANDING OF AND EXPERIENCE WITH LEGACY gTLDS

This section focuses on legacy gTLDs, exploring consumer perceptions in the established domain extension space; also creating a base of knowledge for reference in interpretation of findings relative to the new gTLDs and understanding DNS changes.

- Traditional extensions maintain strong position

  When we look at the legacy extensions, we see the same pattern as in last year's wave--.com, .org and .net have strong awareness while the other legacy gTLDs are much less well know. However, awareness and visitation show a steady increase across the board, and the top three legacy gTLDs are widely considered to be trustworthy.
- Country gTLDs also stay strong
  Consistent with last years wave, the country code gTLDS also maintain their strong position, especially outside of the United States. Most have broad awareness and are seen as trustworthy by 9 in 10.
- While trust and related behaviors are stable, expectations for restrictions increase
  While there is no increase in distrust about the legacy gTLD:

While there is no increase in distrust about the legacy gTLDs, there is a growing expectation that at least *some* restrictions should be placed on who can register domains names using these gTLDs—the percentage who said there should be no restrictions drops an average of 8.5 percentage points across legacy gTLDs. And, the presence of restrictions is even more likely to improve trust compared to a year ago.

Familiarity breeds trust

When asked what makes these gTLDs trustworthy, the top responses focus around it being a recognizable or well known gTLD or being from a groups, agency or place of origin that inspires trust.

- The purpose is to convey intent
  When asked why there are different gTLDs at all, the reasons provided focus on communicating something specific—type of entity behind the site, country of origin, intended content/purpose.
- 6 Views about the domain name system continue to be largely positive

However, more negative sentiments that the system is confusing or technical, while still the least common terms associated with the domain structure, are on the rise.

Awareness beyond the common legacy extensions - .com, .net, and .org - is relatively low; half or less of consumers across all regions. Compared to last year, however, awareness is improved across the board.

TOTAL AWARENESS BY **DOMAIN EXTENSION** 











	10	otal		(A)		(B)		(C)		(D)		(E)
1	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
Aware of any below I	98%	99% 🔨	98%	99%	99%	100% ACE 🔨	97%	99% 🛧	98%	100% ACE 🔨	98%	99% 🔨
.com	89%	95% 🔨	92%	96% C 🔨	90%	95% 🔨	89%	94%	91%	99% ABCE 🔨	88%	96% C
.net I	77%	88% 🛧	85%	94% CE <b>↑</b>	82%	92% CE <b>↑</b>	80%	86%	78%E	93% CE 🏠	73%	87%
.org I	71%	83% 🔨	89%	95% CE <b>↑</b>	80%	94% CE <b>1</b>	79%	85% E 🔨	76%	93% CE 🔨	61%	76%
.info I	41%	50% 🔨	33%	37%	44%	52% A 🔨	48%	53% A 🔨	50%	64% ABCE 🔨	40%	52% A <b>↑</b>
.biz	31%	36%	33%	36% B	18%	20%	36%	38% B	41%	53% ABCE 1	29%	36% B <b>↑</b>
.mobi	14%	18% 🔨	8%	11%	9%	14%	12%	14%	40%	49% ABCE 1	14%	18% ABC
.pro I	10%	13% 🔨	5%	6%	8%	10% A	8%	10% A	3%	9% A	13%	18% ABCD
.tel	9%	14% 🔨	8%	9%	12%	11%	8%	10%	7%	14% AC	10%	17% ABC 🔨
.asia	9%	13%	3%	5%	5%	4%	6%	9% AB 🔨	6%	8% AB	12%	19% ABCD
.coop	5%	8% 1	3%	4%	8%	11% ACD	4%	6% A	2%	6%	6%	11% ACD <b>↑</b>
1							Respo	ondents were shown a list	including a f	fixed set of TLDs and some	argeted to th	ne individual region.

Arrows indicate 2016 significantly higher/lower than 2015 at a 95% confidence level.

By country, awareness of most geographically targeted extensions is quite high and many have improved over last year. Only .us (US) and .eu (Spain, UK, France, Italy, Germany) report moderate awareness in 2016.

> 2015 2016

#### **HIGH AWARENESS**

#### **MODERATE AWARENESS**

#### **HIGH AWARENESS**

#### **MODERATE AWARENESS**

- .mx (Mexico) .vn (Vietnam)
- .ca (Canada) • .cn (China)
  - .jp (Japan)
- .it (Italy) • .kr (Korea)
- .ph (Philippines) • .tr (Turkey) • .ru (Russia) .es (Spain)
- .pl (Poland) • .id (Indonesia)
- .uk (UK) • .in (India)
- .fr (France)
- .de (Germany) • .co (Colombia)
  - .ar (Argentina)
- .za (South Africa) .br (Brazil)
- .ng (Nigeria)

- .us (United States)
- .eg (Egypt)

- .mx (Mexico) 1 • .vn (Vietnam) 1 .ca (Canada) .cn (China)
  - .jp (Japan)
- .it (Italy) • .kr (Korea) 1
- .tr (Turkey) .ph (Philippines) ↑ • .es (Spain)
- .ru (Russia) • .pl (Poland) 1
- .id (Indonesia) 1
- .uk (UK) • .in (India) 1
- .fr (France)
- .de (Germany) • .co (Colombia)
- .eu (Poland) .ar (Argentina)
- .br (Brazil) 🛧 · .za (South Africa)
- .ng (Nigeria) 1
- .eg (Egypt) 1

- .us (United States)
- .eu (Spain, UK, France, Italy, Germany) (not asked 2015)

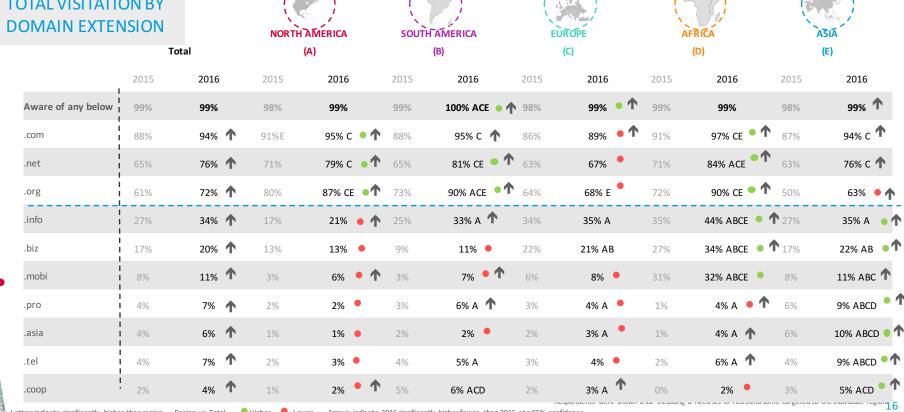
80% or more Aware

### DOMAIN NAME EXTENSIONS VISITED

Similarly, only the three common legacy extensions are highly visited currently. Compared to last year, however, visitation is improved

across the board.

# TOTAL VISITATION BY



Higher Lower Arrows indicate 2016 significantly higher/lower than 2015 at a 95% confidence Letters indicate significantly higher than region. Region vs. Total

# GEOGRAPHICALLY TARGETED DOMAIN EXTENSIONS VISITED

Overall, awareness of the geographically targeted extensions is translating to visitation; however, visitation is particularly low for .us (US)

and .eu (in UK and France). Compared to 2015, visitation has improved for about half of the extensions. 2015 2016 LOW HIGH **MODERATE LOW** HIGH **MODERATE VISITATION VISITATION VISITATION VISITATION** VISITATION **VISITATION**  .mx (Mexico) ↑ • .vn (Vietnam) ↑ • .us (United States) • .us (United States) .mx (Mexico) • .vn (Vietnam) • .ph (Philippines) .eu (Poland, Italy, Germany, • .cn (China) 1 • .ca (Canada) • .cn (China) • .id (Indonesia) .ca (Canada) • .eu (UK, France) Spain) • .jp (Japan) 📭 • .jp (Japan) • .eg (Egypt) • .it (Italy) .it (Italy) • .kr (Korea) 🔨 🗥 • .kr (Korea) .tr (Turkey) • .tr (Turkey) • .ph (Philippines) • .ru (Russia) • .es (Spain) .es (Spain) • .ru (Russia) • .in (India) • .pl (Poland) 🔨 • .pl (Poland) • .id (Indonesia) 1 • .uk (UK) • .uk (UK) • .co (Colombia) • .in (India) 1 • .fr (France) • .ar (Argentina) .fr (France) • .br (Brazil) .de (Germany).co (Colombia) .de (Germany) • .ar (Argentina) ↑ • .za (South Africa) .br (Brazil) 🛧 · .za (South Africa) • .ng (Nigeria) 春 • .ng (Nigeria) • .eg (Egypt) 🔨



Respondents were shown a list including a fixed set of TLDs and some targeted to the individual region

As would be expected, the common extensions, such as .com and .org, are highly trusted across all regions.

By country (with one exception), a very high 90% or better trust their ccTLD as well. In the US, it's still very favorable with a high of 76%.

70% or more rated extension Very/Somewhat Trustworthy





#### **General Extensions**

- .com
- .org
- .net

#### Geographically **Targeted Extensions**

- .mx
- .ca
- LUS

#### **SOUTH AMERICA**



#### **General Extensions**

- .com
- .org
- .net

#### Geographically **Targeted Extensions**

- .ar
- .co
- .br

#### **EUROPE**



#### **General Extensions**

- .com
- .org 🕹
- .net

### Geographically

#### **Targeted Extensions** .es

- la.
- .uk
- .de .tr
- . it
- .fr

#### **AFRICA**



#### **General Extensions**

- .com
- .org
- .net
- .info **J**

#### Geographically

#### **Targeted Extensions**

- .ng
- .za
- .eg

#### **ASIA**



#### **General Extensions**

- .com
- .org
- .net

#### Geographically

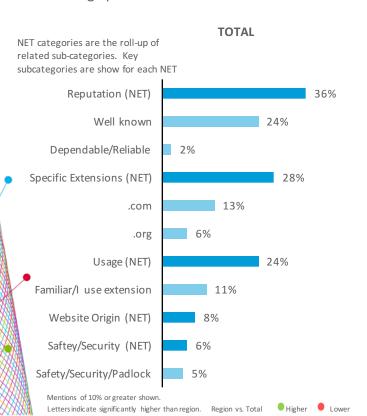
#### **Targeted Extensions**

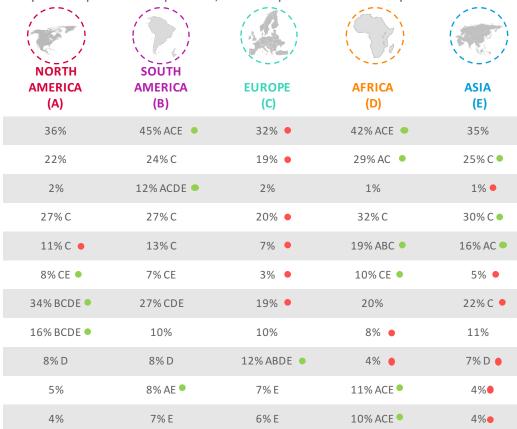
- .id .vn
- .ph .cn 🛧
- .jp .in
- .kr . ru

# WHAT MAKES DOMAIN NAME EXTENSIONS TRUSTWORTHY

When consumers what makes an extension seem trustworthy as an open ended question, their responses focus on reputation

and familiarity with the extension, oftentimes mentioning specific extensions.





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# WHAT MAKES DOMAIN NAME EXTENSIONS TRUSTWORTHY

Safety/Security Reputation **Specific Extension Usage Website Origin** That it's from Domains for the Because it's already an Its extension represents Experience of usage of old extension with a very my country of governments give me influential and these websites. These are origin. (LAC) more security. (Africa) good reputation. (LAC) authoritative agencies official websites of and organizations. (AP) organizations. (AP) They belong to The country of origin, Because it uses the The .org extension domains with a the type of Used it several times latest technology for because it's a government good reputation. organization or entity and never had safety. (AP) domain. The .com (NA) that offers it. (Eur) negative experiences. extension because it's a (Eur) purchased domain. (LAC) Because they are the lts competitiveness, most used by many It originates from The .com extension is reputation and history When it's used on people, so I think there Poland or I know the first one I knew of, give people positive the majority of sites. is greater control of the extension. (Eur) international and the impression. (AP) (LAC) security. (LAC) most famous. (Eur)

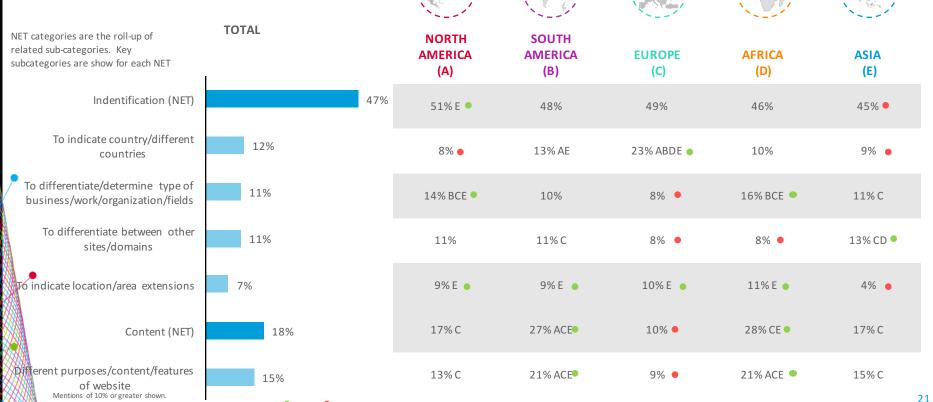
## WHY WEBSITES HAVE DIFFERENT EXTENSIONS

While 1 in 5 consumers don't know why websites have different extensions, many others feel it's to properly identify and classify

the domains or that it identifies it's location or content.

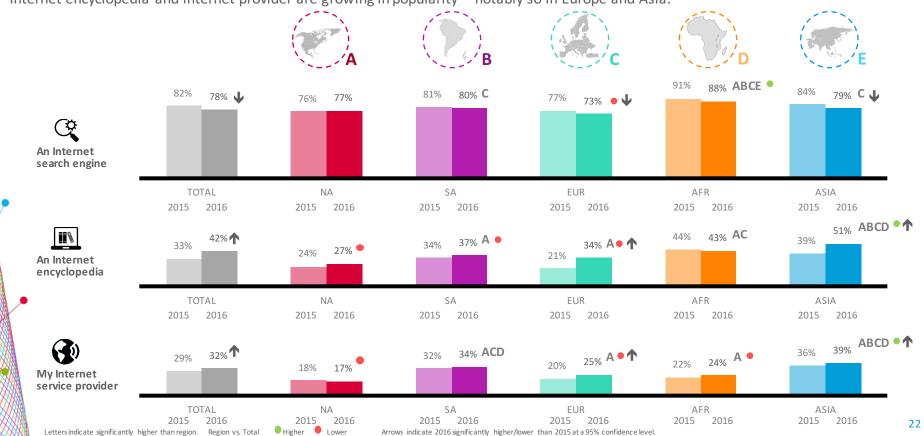
Letters indicate significantly higher than region.

Region vs. Total



# PREFERRED SOURCES FOR MORE INFORMATION

Internet search is by and large the primary means consumers would use to learn more about domain name extensions. But Internet encyclopedia and internet provider are growing in popularity – notably so in Europe and Asia.



Consumers describe the common gTLDs in terms of functionality and trust - Useful, Informative, Practical, Helpful and Trustworthy. Compared to 2015 however, mentions of a couple of the more negative descriptors are on the rise - Technical and Confusing.

Exciting Innovative Useful Innovative People-like-me Trustworthy Overwhelming Informa **Extreme**Technical .Practical Interesting **Cutting-edge** 

# gTLD RESTRICTIONS

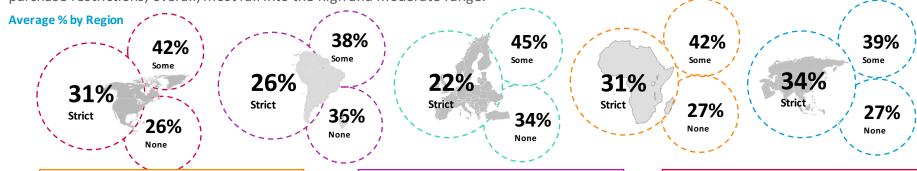
While relatively few feel that strict purchase restrictions are required on these gTLDs, consumer views are changing – fewer say 'no restrictions' while more say 'strict restrictions."

			( F									
Strict purchase	TOTAL	TOTAL	NORTH A	MERICA (A)	SOUTH	AMERICA (B)	EL	JROPE (C)	Al	FRICA (D)	1	ASIA (E)
restrictions should be required	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
.com	19%	28% 🛧	13%	24% C • 🛧	15%	26% C 🔨	13%	19% • 🛧	24%	36% ABCE • 1	24%	30% AC • 🛧
.info	16%	22% 🛧	16%	25% CE • 🔨	15%	24% CE <b>↑</b>	13%	18% • 🛧	18%	29% CE 🍳 夰	16%	20% • 🛧
.net	16%	23% 🔨	12%	23% C	13%	23% C 🔨	10%	18%	21%	30% ABCE • 🕈	18%	24% C • 🔨
.org	25%	34%	26%	40% CE • 🛧	26%	39% CE • 🔨	18%	26%	29%	40% CE • 🛧	26%	33% C 🔨
Some purchase rest should be required	trictions											
.com	40%	40%	38%	41% D	40%	36%	40%	44% BDE •	34%	31%	41%	40% D
.info	49%	51% 🛧	48%	46% •	45%	45% •	48%	52% BD	40%	42%	51%	54% ABD •
.net	47%	49%	44%	48%	42%	45%	45%	51% BD	45%	42%	50%	49% D
.org	44%	43%	40%	37%	39%	32%	44%	48% ABD •	37%	39% B	47%	46% ABD •
No purchase restrict should be required		1										
.com	41%	33% ↓ ¦	49%	35% E <b>↓</b>	45%	37% E ● 🔱	47%	36% E ●↓	42%	34% 🔱	35%	30% • 🔱
.info	36%	28% 🔱	37%	29% 👃	40%	31% E 🔱	39%	30% E 🔱	42%	30% 🔱	32%	26% • 🔱
.net	38%	28% 🔱 ¦	44%	30% E <b>↓</b>	45%	33% E 🍨 🔱	45%	31% E • 🔱	33%	28%	32%	26% • 🔱
.org	31%	23% 🔱 ¦	34%	23% 🛡	35%	29% ADE 🌘 🔱	38%	26% DE 🍑	34%	21% 🔱	27%	21% • 🛡
								Respondents were shown	a list includi	ing a fixed set of TLDs and so	me targeter	d to the individual region. 2

Respondents were shown a list including a fixed set of TLDs and some targeted to the individual re-

# STRICT gTLD RESTRICTIONS REQUIRED

Roughly one quarter of consumers favor strict purchase restrictions on the geo specific gTLDs. Of those who favor strict purchase restrictions, overall, most fall into the high and moderate range.





- .us (United States) • .ph (Philippines)
- .ca (Canada)
- .in (India)
- .vn (Vietnam)
- .tr (Turkey)
- .kr (Korea)

• .cn (China)

- .za (South Africa)
- .ng (Nigeria)

#### **MODERATE**

- · .mx (Mexico)
- .id (Indonesia)
- .jp (Japan)

• .uk (UK)

- .ru (Russia)
- .de (Germany)
- .br (Brazil)
- .eg (Egypt)
  - .co (Colombia) · .ar (Argentina)

**LOW** 

- .pl (Poland)
- .it (Italy)
- .es (Spain)
- .fr (France)

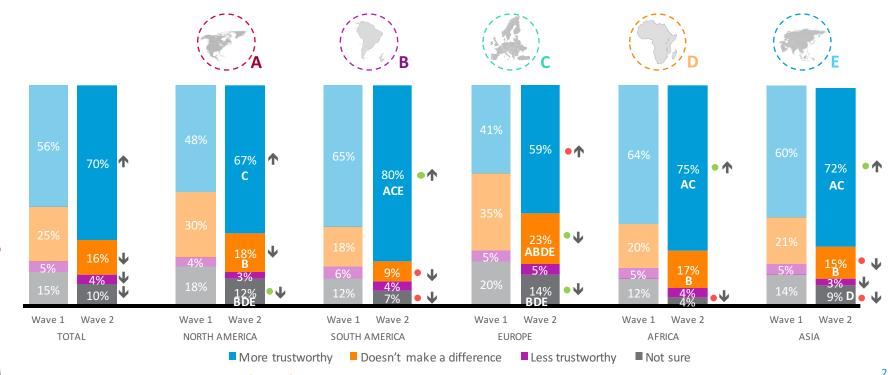
30% or more say Strict restrictions required

20%-29% say Strict restrictions required

Less than 20% say Strict restrictions required

Letters indicate significantly higher than region. Region vs. Total

It is clear that having purchase restrictions or requirements does contribute to a sense of trust around the globe, especially among consumers in South America, Africa, and Asia. And this view is even stronger this year.



Arrows indicate 2016 significantly higher/lower than 2015 at a 95% confidence level.

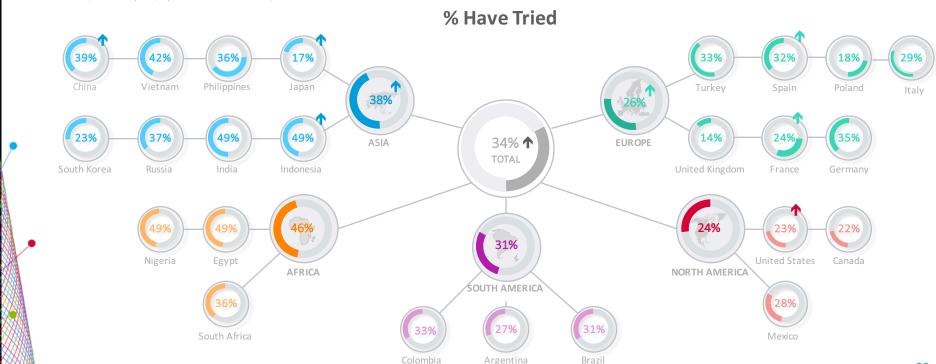
Supporting the consumers' desire for restrictions, 3 in 4 (or more) feel noted requirements below should be enforced.

		A	B	C		E
% Yes	TOTAL	NORTH AMERICA (A)	SOUTH AMERICA (B)	EUROPE (C)	AFRICA (D)	ASIA (E)
Validation that the person or company registering the site meets intended parameters	82% I	85% CE ●	81%	81%	82%	81%
Requirements for validated credentials related to the gTLD	80% I	78% B	72% •	78% B	78% B	82% ABC ●
Requirements for use of the <b>name</b> to be <b>consistent</b> <b>with</b> the <b>meaning</b> of the gTLD	79%   	82% CD •	78%	76% •	76%	80% C
Requirements for local presence within specific city, country, or region for a domain related to that place	76%	75% B	68% •	76% B	74%	77% B •

2

Consumers in Africa are far more likely to have tried to identify the registrant of a website than any other region, Nigeria and Egypt in particular. The practice is least prevalent among North Americans and Europeans.

Compared to last year, consumers are more likely to have tried to verify in few specific areas -- Asia (notably China, Japan, and Indonesia), Europe (Spain and France) and the US.

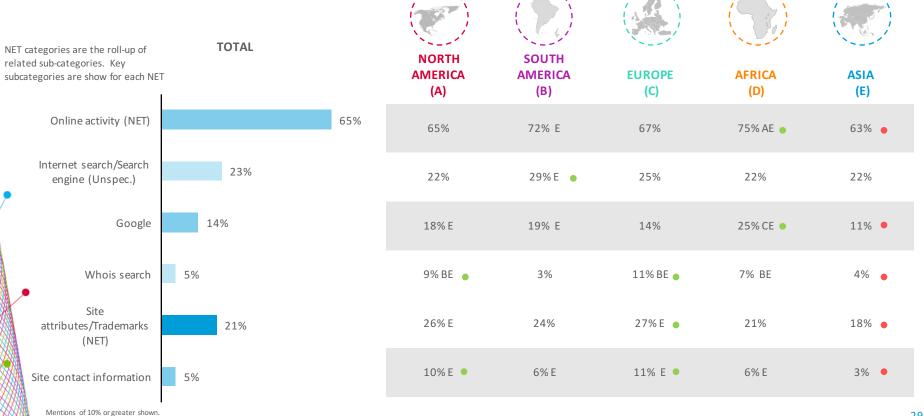


# SOURCES USED TO IDENTIFY WEBSITE CREATORS

Among those who tried to identify a website, the vast majority of consumers search online for more info via Internet or Google

searches among many others.

Letters indicate significantly higher than region. Region vs. Total



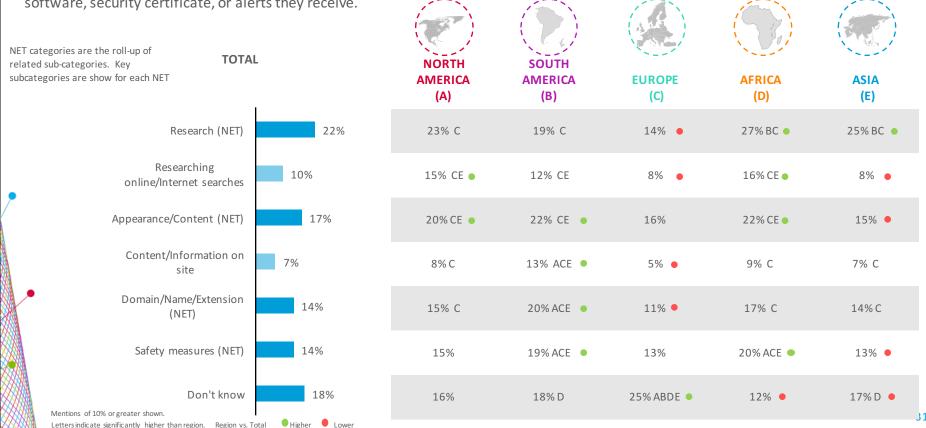
29

#### **Online Activity Site Attributes/Trademarks** By looking at internet By using a Google search, Searching for trademarks or copyright. search information to for example using the key Using tools available on Google Go to "contact us" or find out who hosts the words "Who is the creator Analytics and informative pages about "about us" pages. site. (LAC) of Google site?". (AP) registration, hosting and domains. (Eur) (Africa) By doing research using By looking at the website Telephone contact and via a search site or Internet 1. Contact form provided on information or, as necessary, by a reliable site I've already the website. 2. Telephone encyclopedia. (AP) going to find the information accessed by asking about line that appears on it through various Google internet the site. (LAC) (provided that the call is searches. (Eur) local). (LAC) By consulting the WHOIS The address in the registry and seeing in what address bar, the contact Investigating on and I asked their social name the domain is tracking through the details on the media contact person. registered. (Eur) search engine. (NA) website.(Eur) (Africa)

# HOW WEBSITE LEGITIMACY IS DETERMINED

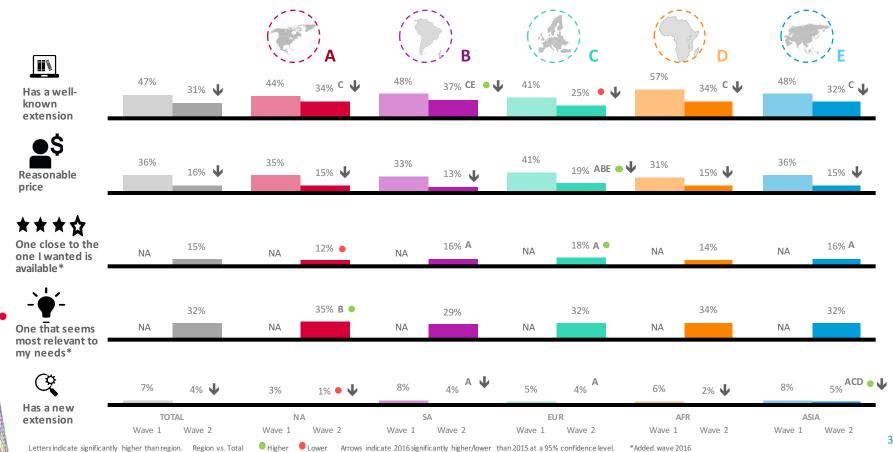
While 1 in 5 consumers say they don't know hot to determine if a website is legitimate; others say they can tell by doing research, seeing it's appearance or content, by it's domain name/extension, or safety measures in place such as antivirus

software, security certificate, or alerts they receive.



#### Research **Appearance/Content Domain/Name/Extension Safety Measures** You can see this from its Hook for the I research other content and appearance. By the domain and extension safety certificate. sources outside the Legitimate sites are often more used on it and, if this is not (Africa) internet. (LAC) presentable and look as if they sufficient, I use search forums. were made by professionals.(AP) I will first research, both the website and the By the domain Install software that company, to see By looking at its extension and the judges site safety on whether they can be appearance, domain, etc. domain name. (Eur) the computer I use. trusted. (AP) (AP) (AP) Research on the By the coherent and By the type of domain that Internet and reviews. The safety key on true content with is linked, .com, .net. (LAC) (NA) the link (Africa) regard to the site's owner. (LAC)

Having a well-known extension and one that seems most relevant are the main factors across the board in determining which gTLD to purchase. Compared to last year, consumers were less likely to cite having a well-known extension or price.



# UNDERSTANDING OF AND EXPERIENCE WITH NEW gTLDS

This section is focused on consumer perceptions and experience with newer TLDs. In addition to exploring levels of awareness and visitation, intent to visit and what affects this willingness.

1 Awareness slowly improving; visitation not following suit

For those new gTLDs that appeared in both waves of the survey, awareness has increased slightly. The pace is slow, only an average of two percentage points. However, given the targeted nature of many new gTLDs, widespread awareness may be less likely.

New gTLDs gaining awareness more quickly outside of NA and EU

It can also vary by country within region--among the countries in the European region, the UK is particularly weak for the new gTLDs This also fits with sentiments within some regions that the origin structure did not sufficiently meet the needs of the global internet.

3 Meaningful relationships—and enforcement—are expected

In thinking about new gTLDs, consumers expect that the content of the site closely match the implied meaning of the domain name. And, compared to the questions in last wave about restrictions, there is an expectation of at least some level of enforcement will be made to ensure this alignment.

4 Not as strong as .com, but making inroads

When asked about the likelihood of viewing a website with a .com extension or a new gTLD, the .com versions consistently get higher scores, but the new gTLDs are acceptable to the majority.

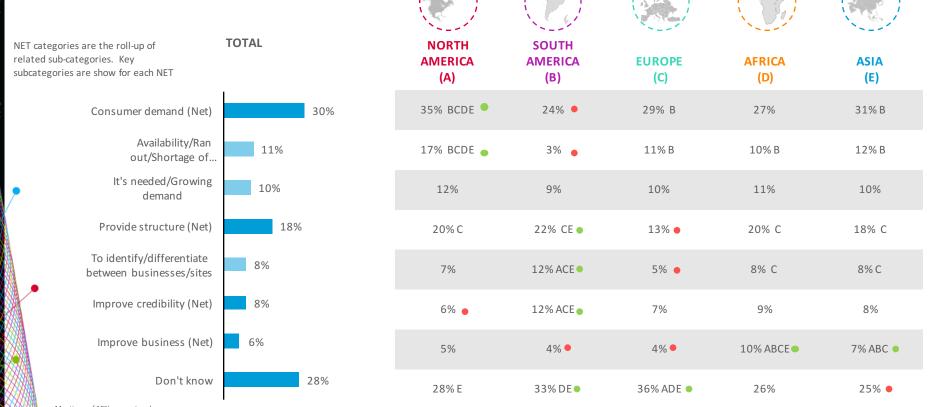
5 Familiarity is the issue more than trust

Preference for traditional extensions appears to be driven more by the positive effect of familiarity, not distrust of the new gTLDs. And, the actual effect may be somewhat overstated as people increasing use search engine results to guild them and may not actually pay that much attention to the gTLD.

# WHY NEW gTLDS HAVE BEEN CREATED

Nearly a third of consumers don't have an explanation for why new gTLDs have been created. Others realize it's about consumer

demand and providing structure to the Internet.



Mentions of 10% or greater shown.

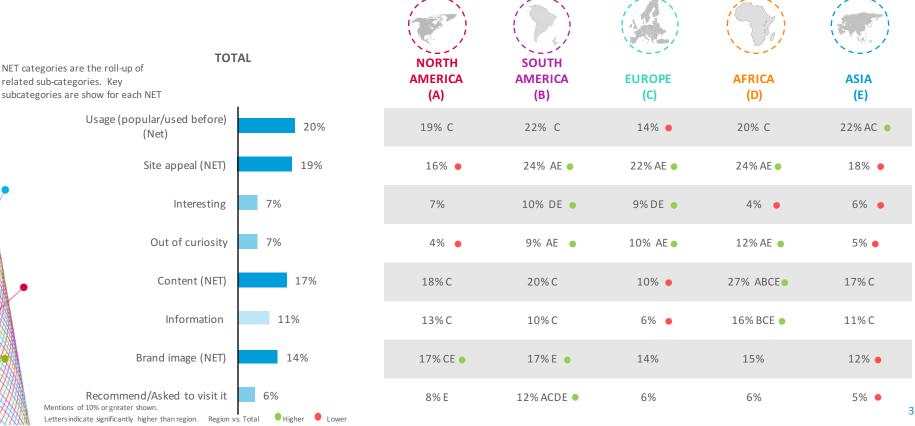
Letters indicate significantly higher than region. Region vs. Total

36

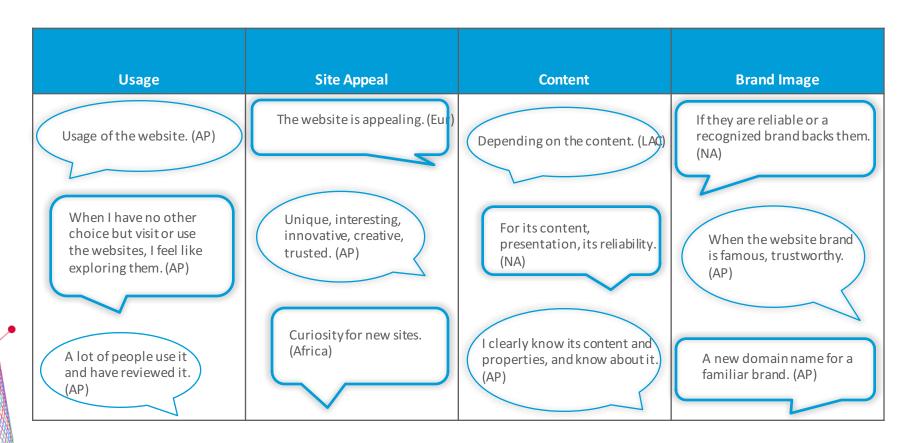
#### **Consumer Demand Provide Structure Improve Credibility Improve Business** Better structure. Because demand can't be So that more people or recognizability/assigning fulfilled with only the companies can create their companies to fields of activity. American controlled domain own pages for their businesses (Eur) names we've had up until or services. (LAC) To raise the degree of now. (AP) credibility. (AP) Diversification of the structure and situation of As time has gone by, The continuous the Internet. (AP) demand for Web pages development of business increases. Out of and industry demand. Because of the concern, more must be (AP) demand on the created. (LAC) Internet and sites and To revise the structure of to make sure of their current global Internet use at Because of the credibility (Africa) Because there is demand and increased demand on a deep level, will have a it's a business. I don't think websites. (Africa) major influence on global it's due to saturation. (NA) Internet development. (AP)

# CRITERIA FOR VISITING WEBSITES WITH UNKNOWN EXTENSION

Consumers say they visit websites with unknown extensions based on usage (popular domain name or used site previously), site appeal or interest, and brand image (e.g., reputable, good reviews, recommendations).



# CRITERIA FOR VISITING WEBSITES WITH UNKNOWN EXTENSION



## REASONS FOR AVOIDING UNFAMILIAR DOMAIN EXTENSIONS

Concerns for security dominate the reasons for avoiding unfamiliar domain name extensions, followed by lack of familiarity or

previous usage.



40

## REASONS FOR AVOIDING UNFAMILIAR DOMAIN EXTENSIONS

**Brand Image** Security **Usage** Content **Site Appeal** If the website's content Unfamiliar to me, lack of Computer security The type of images is not relevant to me, For unfamiliarity, appeal and security. (Eur) software alerts me of that it presents. and I'm not interested distrust. (LAC) risks. (AP) (NA) in that content. (AP) Because it looks The fear that a website Data security if the If there is content questionable to me or the may not be legitimate I don't actively use them. site does not have a extension or even the title without an access and that I may be (AP) of the website does not double asymmetric source and if there is robbed of my valuable look right to me in its cryptography, for no information that personal information. color, form, presentation, example. (Eur) adds to intellectual spelling, similarity to other (AP) growth. (LAC) websites that are more appealing and better I think I'd be written, and above all, For precaution. It may I feel that foreign concerned because it's Immoral content: safer. Furthermore I think contain a virus or pages sites have a reports about its users not familiar. (AP) that it is better to get that I don't want to see dangerous image. information beforehand on without consent; (NA) an unknown extension (AP) damages. (Africa) before using it. (Eur)

AWARENESS OF NEW gTLDS
For those new gTLDs measured in both waves, awareness is up slightly for most. While improved over last year, awareness is lowest in North America and Europe.

Among the new gTLDs added to the list this year, .news and .online have the highest level of awareness.

### **TOTAL AWARENESS BY NEW DOMAIN EXTENSION**











	Total		NORTH AM	ERICA	SOUTH A		EURC (C)		AFR (D		AS (E	
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
Aware of any in both years**	46%	52% 🛧	29%	38% • ↑	54%	59% ACD •	33%	45% A • 🔨	48%	52% AC	53%	58% ACD
.news*	NA	33%	NA	22%	NA	34% AC	NA	25%	NA	39% AC	NA	37% AC
.email	28%	32%	16%	22%	39%	39% ACDE •	22%	29% A 🔨	31%	31% A	32%	34% AC
.online*	NA	30%	NA	17%	NA	37% ACE •	NA	31% A	NA	36% A	NA	31% A
.link	24%	27%	14%	16%	35%	36% ACE	13%	17%	31%	31% AC	28%	31% AC
.website*	NA	21%	NA	15%	NA	39% ACDE	NA	20% A	NA	24% A	NA	20% A
.site*	NA	20%	NA	13%	NA	29% ACE	NA	13%	NA	25% AC	NA	22% AC
.club	13%	16% 🔨	5%	6%	11%	14% AC	7%	9% A	12%	13% AC	17%	21% ABCD • 1

\*Added 2016 \*\*2016 Awareness based on gTLDs shown in 2015

Respondents were shown a list including a fixed set of TLDs and some targeted to the individual

# AWARENESS OF NEW gTLDS (CONT'D)

#### **TOTAL AWARENESS BY NEW DOMAIN EXTENSION**











Total (A) (B) (C) (D)		(E)
2015 <b>2016</b> 2015 <b>2016</b> 2015 <b>2016</b> 2015 <b>2016</b> 2015 <b>2016</b> 2015	2015	2016
.space* NA 15% NA 11% ● NA 23% ACDE ● NA 12% ● NA 18% AC	NA	15% AC
.guru 11% <b>12% <sup>↑</sup></b> 6% <b>8% •</b> 15% <b>14%</b> AC 4% <b>7% • ↑</b> 15% <b>17%</b> ACE •	13%	13% AC •
.pics* NA 11% NA 8% ● NA 10% NA 7% ● NA 15% ABC ●	NA	13% AC
.photography 9% 11% 3% 6% • ↑ 12% 15% AC • 6% 9% A • ↑ 9% 11% A	11%	12% AC
.top* NA 11% NA 2% ● NA 8% A ● NA 7% A ● NA 5% A ●	NA	16% ABCD •
.realtor 6% 6% 7% 8% BC ● 5% 2% ● ↓ 2% 2% ● 4% 5% BC	7%	7% BC •
.xyz 5% 9% 2% 3% 5% 5% A 2% 7% A 1 4% 9% AB 1	7%	12% ABC • 1

By country, awareness varies widely. US and Canada are driving the lower North America numbers, UK is notably low in Europe, and Japan is lowest of any country in the Asia region.

Awareness of the new geographically targeted TLDs (.wang, .nyc, etc) is universally low; below 8% in all cases.

AWARENESS	TOTAL	NA	US	CA	MX	SA	co	AR	BR	EUR	IT	TR	ES	PL	UK	FR	DE	AFR	NG	ZA	EG	ASIA	CN	VN	PH	JP	KR	RU	IN	ID
Aware of any below**	52%	38%	38%	30%	70%	59%	82%	57%	53%	45%	53%	66%	55%	48%	22%	38%	50%	52%	56%	39%	58%	58%	62%	62%	56%	37%	53%	67%	57%	70%
.news*	33%	22%	16%	22%	35%	34%	47%	30%	32%	25%	30%	36%	33%	32%	9%	20%	30%	39%	45%	36%	30%	37%	34%	44%	48%	17%	26%	45%	42%	59%
.email	32%	22%	14%	14%	49%	39%	57%	30%	37%	29%	43%	54%	42%	35%	7%	28%	25%	31%	28%	23%	45%	34%	38%	31%	27%	19%	28%	42%	34%	35%
.online*	30%	17%	9%	10%	43%	37%	57%	31%	32%	31%	26%	42%	36%	36%	7%	28%	45%	36%	40%	26%	38%	31%	28%	44%	31%	13%	24%	41%	38%	39%
.link	27%	16%	7%	10%	46%	36%	60%	32%	31%	17%	23%	39%	25%	21%	4%	13%	14%	31%	31%	20%	41%	31%	34%	32%	32%	19%	37%	31%	28%	41%
.website*	21%	15%	7%	8%	43%	39%	52%	29%	39%	20%	27%	40%	34%	26%	4%	20%	12%	24%	22%	21%	32%	20%	18%	27%	20%	10%	20%	14%	27%	34%
.site*	20%	13%	7%	9%	31%	29%	40%	22%	28%	13%	12%	33%	22%	10%	3%	17%	9%	25%	28%	17%	28%	22%	19%	39%	21%	10%	20%	18%	28%	38%
.club	16%	6%	4%	3%	15%	14%	17%	14%	13%	9%	10%	21%	9%	12%	2%	12%	6%	13%	16%	8%	13%	21%	27%	29%	14%	11%	18%	26%	17%	23%
.space*	15%	11%	5%	7%	29%	23%	46%	22%	17%	12%	17%	22%	18%	14%	2%	15%	8%	18%	26%	9%	10%	15%	17%	14%	16%	4%	12%	18%	18%	18%
.guru	12%	8%	6%	5%	17%	14%	38%	16%	7%	7%	8%	13%	10%	5%	5%	4%	9%	17%	28%	8%	5%	13%	8%	12%	21%	3%	7%	16%	26%	14%
.pics*	11%	8%	7%	4%	14%	10%	14%	12%	8%	7%	13%	11%	8%	7%	4%	7%	7%	15%	16%	14%	11%	13%	11%	9%	13%	5%	8%	9%	22%	14%
.photography	11%	6%	4%	3%	13%	15%	22%	6%	15%	9%	9%	20%	11%	17%	4%	6%	5%	11%	13%	9%	9%	12%	11%	13%	11%	5%	11%	13%	16%	21%
.top*	11%	2%	1%	2%	5%	8%	16%	2%	7%	7%	4%	12%	5%	17%	2%	6%	6%	5%	4%	2%	8%	16%	25%	14%	7%	9%	10%	20%	9%	10%
.xyz	9%	3%	2%	4%	3%	5%	9%	2%	5%	7%	4%	16%	6%	12%	7%	5%	4%	9%	10%	8%	6%	12%	11%	17%	11%	12%	9%	12%	11%	19%
.realtor	6%	8%	10%	12%	2%	2%	6%	1%	1%	2%	2%	6%	3%	0%	2%	2%	1%	5%	7%	6%	2%	7%	6%	4%	9%	2%	3%	5%	12%	4%

<sup>\*</sup>Added 2016 \*\*Significance 2015 vs. 2016 unable to be shown due to additional TLDs added in 2016 Respondents were shown a list including a fixed set of TLDs and some targeted to the individual region.

# AWARENESS OF NEW gTLDS – GEOGRAPHIC EXTENSIONS

Awareness of the geographically targeted, city gTLDs is quite low – particularly in North America – with the vast majority less than 20% awareness. A few standouts (20% or greater) in the other regions include .bogota, .lstanbul, .berlin, .cairo, toyko and .seoul. Further, comparing where possible to last year, awareness of 2 of China's 4 IDNs declined.

#### **NORTH AMERICA**



#### Geographically **Targeted Extensions**

- .nyc (9%) (6%)
- .toronto (8%)
- .guadalajara (7%)

#### **SOUTH AMERICA**



#### Geographically **Targeted Extensions**

- .bogota (24%)
- .rio (7%)
- .cordoba (4%)

#### **EUROPE**



#### Geographically **Targeted Extensions**

- .istanbul (34%)
- .berlin (23%) (18%)
- .madrid (16%)
- .warszawa (15%)
- .london (12%) (16%)
- .paris (12%)
- .roma (6%)
- .ovh (2%) (1%)

#### **AFRICA**



#### Geographically **Targeted Extensions**

- .cairo (20%)
- .capetown (16%)
- .abuia (8%)

#### **ASIA**



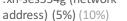
#### Geographically **Targeted Extensions**

- .toyko (23%)
- .seoul (20%)
- .hanoi (19%)
- .mockba (18%)
- .jakarta (14%)
- .delhi (12%)
- .wang (12%) (11%)
- .manilla (11%)
- .foshan (9%)
- .xn 55qx5d(company)



.xn-ses554g (network





7 in 10 consumers who are aware of at least one new gTLD say they have visited one of them. LAC and AP lead on visitation; North America and Europe are more moderate.

Compared to last year, visitation levels are down for .email and .link across nearly all regions.

# VISITATION BY NEW DOMAIN EXTENSION











DOWN AND EXTEN			NORTH A	MEDICA	COLITI	I AMERICA		UROPE		AFRICA		ASIA
	Tota	I	NORTH A		30011	(B)		(C)		(D)		(E)
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
Visited of any below**	65%	50% 🔱	55%	41% • 🔱	70%	54% AC • 🔱	49%	42% • 🔱	63%	48% 🔱	70%	54% AC • 🔱
.news*	NA	29%	NA	19%	NA	25%	NA	21%	NA	33% ABC	NA	33% ABC
.email	38%	28% 🔱	29%	22%	46%	37% ACDE	33%	26%	36%	27% ♥	39%	29% A
.online*	NA	24%	NA	16%	NA	34% ACDE	NA	23% A	NA	25% A	NA	24% A
link	26%	20% 🛡	24%	14%	34%	25% AC • 🗸	14%	13%	30%	23% AC	27%	22% AC • 🗸
.website*	NA	17%	NA	13%	NA	30% ACDE	NA	15%	NA	21% ACE	NA	16%
.site*	NA	14%	NA	10%	NA	21% ACE	NA	9%	NA	19% ACE	NA	14% AC

\*Added 2016 \*\*2016 Visitation based on gTLDs shown in 2015

12%

10%

Respondents were shown a list including a fixed set of TLDs and some targeted to the individual region.

15%

.club

# NEW gTLDS VISITED (CONT'D)

#### **VISITATION BY NEW DOMAIN EXTENSION**











	To	Total		NORTH AMERICA (A)		I AMERICA (B)		IROPE (C)		FRICA (D)	,	ASIA (E)
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
.space*	NA	8%	NA	7%	NA	13% ACE •	NA	7%	NA	11%	NA	8%
.guru	10%	8% ₩	4%	5%	14%	9% AC	4%	5%	14%	12% AC	11%	8% AC <b>Ψ</b>
.pics*	NA	7%	NA	4%	NA	5%	NA	4%	NA	7%	NA	8% ABC
.photography	9%	7% <b>↓</b>	3%	6%	8%	8% D	8%	7% D	8%	3%	10%	8% D
.top*	NA	7%	NA	2%	NA	3%	NA	4% A	NA	2%	NA	10% ABCD
.realtor	5%	3%	7%	5% BC	6%	1%	2%	2%	2%	4% B	6%	4% BC
.xyz	5%	<b>7</b> %	1%	2%	5%	3%	1%	<b>7</b> 5% A	5%	8% AB	6%	8% ABC

# VISITATION OF NEW gTLDS – BY COUNTRY

As was the case with awareness, by country visitation varies widely and follows the same country-by-country patterns.

Visitation of the new geographically targeted TLDs (.wang, .nyc, etc) is universally low; below 5% in all cases.

VISITATION	TOTAL	NA	US	CA	MX	SA	CO	AR	BR	EUR	IT	TR	ES	PL	UK	FR	DE	AFR	NG	ZA	EG	ASIA	CN	VN	PH	JP	KR	RU	IN	ID
Aware of any below**	50%	41%	34%	34%	52%	54%	60%	39%	57%	42%	50%	63%	43%	51%	35%	40%	29%	48%	43%	40%	64%	54%	61%	51%	41%	30%	54%	53%	51%	689
.news*	29%	19%	16%	19%	23%	25%	28%	20%	25%	21%	21%	26%	27%	25%	14%	20%	17%	33%	40%	29%	23%	33%	30%	44%	44%	14%	28%	32%	37%	509
.email	28%	22%	14%	10%	37%	37%	44%	23%	39%	26%	41%	50%	28%	25%	12%	27%	12%	27%	23%	20%	38%	29%	33%	30%	18%	13%	23%	32%	31%	329
.online*	24%	16%	7%	11%	29%	34%	52%	23%	30%	23%	14%	30%	24%	23%	9%	17%	30%	25%	31%	22%	15%	24%	21%	33%	22%	10%	19%	25%	32%	30%
.link	20%	14%	3%	7%	30%	25%	33%	17%	24%	13%	11%	33%	13%	18%	2%	11%	6%	23%	21%	18%	32%	22%	24%	20%	24%	14%	28%	15%	17%	329
.website*	17%	13%	7%	5%	24%	30%	40%	12%	32%	15%	14%	27%	19%	12%	7%	19%	8%	21%	20%	13%	27%	16%	13%	23%	10%	9%	11%	6%	23%	29%
.site*	14%	10%	5%	8%	16%	21%	22%	18%	21%	9%	5%	21%	9%	7%	7%	15%	3%	19%	20%	13%	20%	14%	12%	27%	14%	6%	15%	6%	15%	289
.club	10%	5%	5%	3%	7%	9%	10%	6%	9%	5%	4%	14%	3%	2%	0%	7%	3%	8%	10%	7%	5%	14%	19%	14%	7%	9%	13%	16%	9%	129
.space*	8%	7%	3%	3%	14%	13%	25%	8%	10%	7%	14%	14%	4%	7%	5%	8%	3%	11%	13%	9%	8%	8%	9%	6%	9%	3%	10%	7%	8%	10%
.guru	8%	5%	3%	4%	8%	9%	21%	9%	4%	5%	4%	9%	3%	4%	5%	3%	5%	12%	19%	4%	3%	8%	6%	4%	13%	2%	5%	7%	17%	7%
.photography	7%	6%	5%	3%	8%	8%	7%	3%	10%	7%	5%	13%	7%	14%	9%	3%	4%	3%	2%	7%	2%	8%	6%	9%	5%	3%	9%	8%	12%	8%
.top*	7%	2%	1%	1%	3%	3%	2%	0%	4%	4%	4%	7%	3%	7%	2%	5%	2%	2%	2%	2%	0%	10%	17%	7%	5%	8%	5%	8%	5%	6%
.xyz	7%	2%	1%	7%	1%	3%	2%	0%	4%	5%	2%	10%	6%	7%	7%	5%	3%	8%	7%	9%	9%	8%	9%	13%	6%	7%	6%	4%	6%	20%
.pics*	7%	4%	3%	1%	6%	5%	6%	3%	5%	4%	9%	7%	4%	4%	0%	4%	2%	7%	7%	7%	5%	8%	8%	3%	2%	6%	5%	3%	15%	7%
.realtor	3%	5%	7%	12%	1%	1%	0%	0%	1%	2%	4%	1%	0%	0%	5%	3%	1%	4%	4%	7%	3%	4%	4%	3%	6%	1%	1%	1%	6%	3%

<sup>\*</sup>Added 2016 \*\*Significance 2015 vs. 2016 unable to be shown due to additional TLDs added in 2016 Respondents were shown a list including a fixed set of TLDs and some targeted to the individual region.

Very similar to awareness, visitation of the geographically targeted gTLDs is quite low – particularly in North America – with the all but one (.Istanbul) less than 20% awareness.

Further, comparing where possible to last year, visitation of 3 of China's 4 IDNs declined.

#### **NORTH AMERICA**



#### Geographically **Targeted Extensions**

- .nyc (9%) (8%)
- .toronto (5%)
- .guadalajara (3%)

#### **SOUTH AMERICA**



#### Geographically **Targeted Extensions**

- .bogota (17%)
- .rio (5%)
- .cordoba (2%)

#### **EUROPE**



#### Geographically **Targeted Extensions**

- .istanbul (23%)
- .london (16%) (16%)
- .madrid (15%)
- .warszawa (11%)
- .paris (9%)
- .berlin (9%) (6%)
- .roma (5%)
- .ovh (1%) (0%)

#### **AFRICA**



#### Geographically **Targeted Extensions**

- .cairo (17%)
- .capetown (7%)
- .abuja (7%)

#### **ASIA**

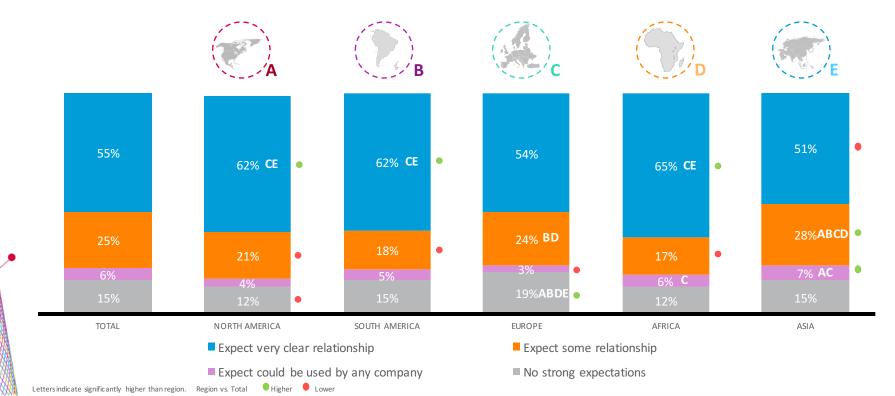


#### Geographically **Targeted Extensions**

- .seoul (18%)
- .toyko (16%)
- .hanoi (10%)
- .jakarta (10%)
- .mockba (9%)
- .delhi (8%)
- .wang (8%) (12%)
- .foshan (6%)
- .manilla (4%)
- .xn 55qx5d (company ↓ (3%) (10%)
- .xn-ses554g (network
- address) (3%) (12%)



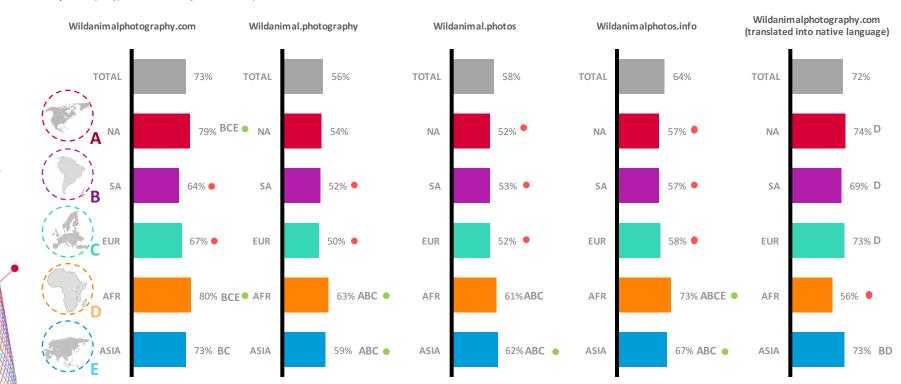
More than half of consumers expect a very clear relationship between the content of the website and its extension. 8 in 10 expect very clear or some relationship between the two. This expectation is slightly weaker in Europe and Asia.



Consumers are more likely to visit the .com versions (English or native language) of a wildlife photography website – notably so in North America and Africa over the other regions.

**Top 2 Box** (Very/Somewhat likely to visit sites )

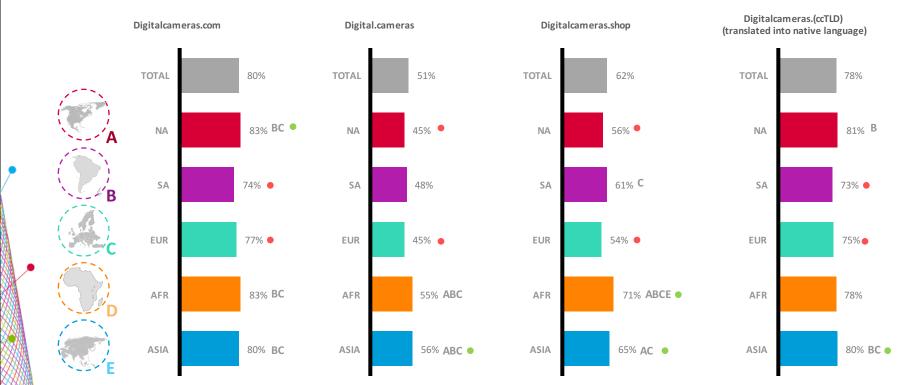
Letters indicate significantly higher than region. Region vs. Total



This preference for .com holds true for versions of the digital photography ecommerce websites. Africa and Asia appear more open to new gTLDs. However, translating the website name and using the ccTLD instead of .com provides results very close to .com

**Top 2 Box** (Very/Somewhat likely to visit sites )

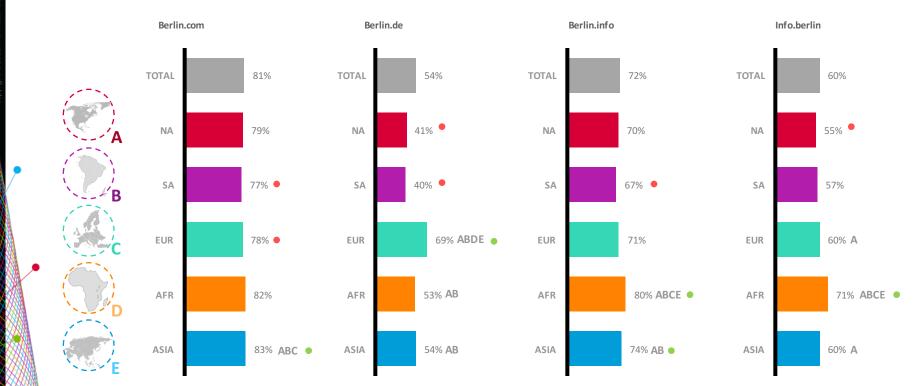
Letters indicate significantly higher than region. Region vs. Total



Consumers who would want to look for information on Berlin, Germany, would also be more inclined to visit the .com version of the website – followed by the .info version of the site. The ccTLD is more like to be visited from within Europe.

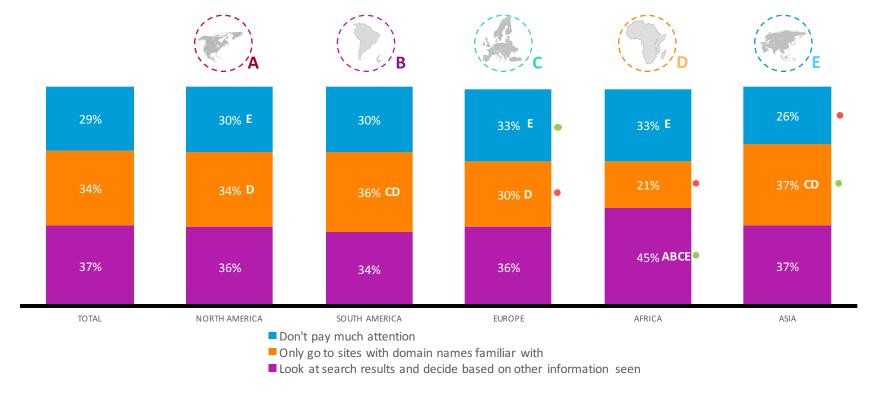
**Top 2 Box** (Very/Somewhat likely to visit sites )

Letters indicate significantly higher than region. Region vs. Total



Letters indicate significantly higher than region. Region vs. Total

Results are mixed as to how much attention consumers would pay to a domain extension – but overall, around 2/3rds do not restrict themselves to familiar domains. Search results can have a sizeable impact.



Trust perceptions of the new gTLDs are divided, with about half of consumers reporting high levels of trust in most of the new gTLDs. In all regions, .news is seen as the most trustworthy.

The majority of the new geographically targeted gTLDs, particularly those in Africa, are seen as trustworthy by about half of consumers as well.

#### 50% or more rated extension Very/Somewhat Trustworthy

#### **NORTH AMERICA**



#### **General Extensions**

- .news
- .photography
- .email
- .realtor

#### Geographically **Targeted Extensions** .toronto

#### SOUTH **AMERICA**



#### **General Extensions**

- .online .news
- .link **J** .email site
- .website

#### Geographically **Targeted Extensions** .bogota

#### **EUROPE**



#### **General Extensions**

- .website .news .online .photography 1
- .email

#### Geographically **Targeted Extensions**

- .berlin
- .madrid
- istanbul
- .london
- .warszawa

#### **AFRICA**



#### **General Extensions**

- .photography 1 .news .online . pics
- .email site
- .link .space
- .website

#### Geographically **Targeted Extensions**

- .capetown
- .cairo
- .abuia

#### **ASIA**



#### **General Extensions**

- .photography 1 .news
- .email site
- .online .club
- .link .pics
- .website .space

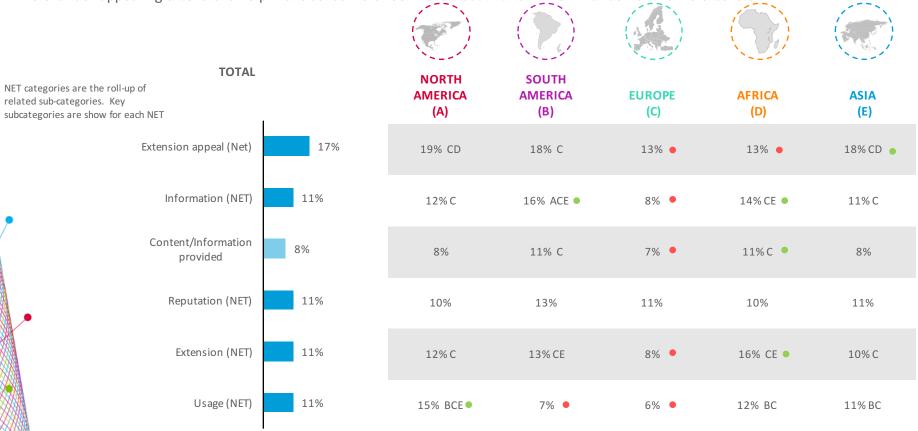
## Geographically

## **Targeted Extensions**

- .Foshan .iakarta .mockba
- .seoul
- .hanoi .delhi

## WHAT MAKES UNFAMILIAR EXTENSIONS FEEL TRUSTWORTHY

Relevant or appealing extensions help make consumers feel more trust with an unfamiliar domain name extension.



Mentions of 10% or greater shown.

Letters indicate significantly higher than region. Region vs. Total

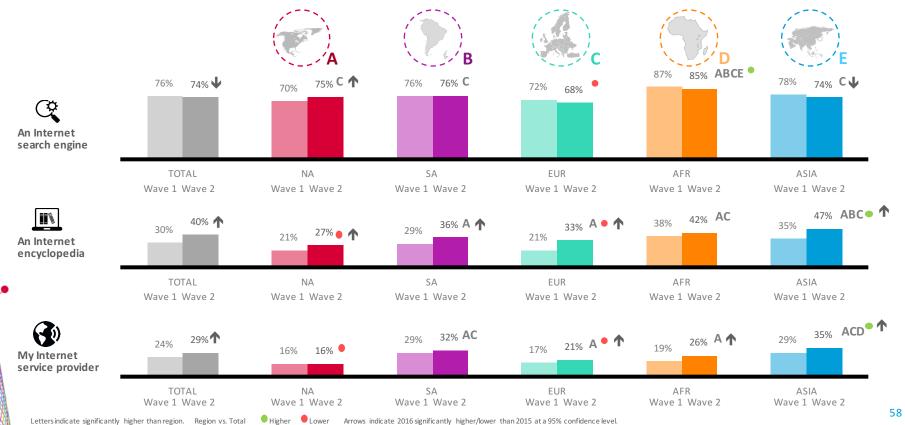
56

# WHAT MAKES UNFAMILIAR EXTENSION FEEL TRUSTWORTHY

Extension Appeal	Information	Reputation	Extension	Usage
Matching of the extension and the subject of the website. (AP)	The information at the start of the page. (LAC)	A good reputation from the site. (LAC)	The domain extension name is a bit trustworthy; more easily identified when the format is convenient. (AP)	Site usage, the people. (AP)
Popularity of this extension. (AP)	The information contained in the search engine description. (NA)	If I look it up on the Internet and it didn't have a bad reputation. (AP)	The English letters and numbers before the extension. (AP)	Volume of usage. (AP)
Suitability of the extension to the website objective. (Eur)	The provided content; a good content usually takes away my discomfort about the domain. (AP)	Its reputation, the images on the website, the number of visitors. (Eur)	The extension being composed of a abbreviation of the domain. (Eur)	User visits, likes, site quality, interesting products or services. (LAC)

# PREFERRED SOURCES FOR MORE INFORMATION ON NEW gTLDS

Internet search remains the dominant method for online populations to locate information about new gTLDs, although internet encyclopedias and ISPs gain ground this year – particularly in Asia.



The majority of consumers see the new gTLDs as informative, useful, practical and helpful. Compared to 2015, use of these top descriptors has increased.

Negative descriptors – overwhelming, extreme and confusing – are much less likely than positive ones to be used as adjectives and 2016 results are stable to 2015.

**Technical** Interesting Innovative Confusing Cutting-ed Trustworthy Helpfu For-people-like-me Overwhelming Useful

# **NEW gTLD RESTRICTIONS**

Roughly half of consumers favor light purchase restrictions on the new gTLDs, but preference on strict purchase requirements is on the rise while there are fewer who feel there should be no restrictions. The geo-specific gTLDs (not shown) follow this pattern of roughly half favorable to light restrictions.

Both LAC and North America are generally more prone to favor <u>strict</u> restriction (with North America more likely to favor strict restrictions on sites like .realtor, .bank, .pharmacy and .builder).

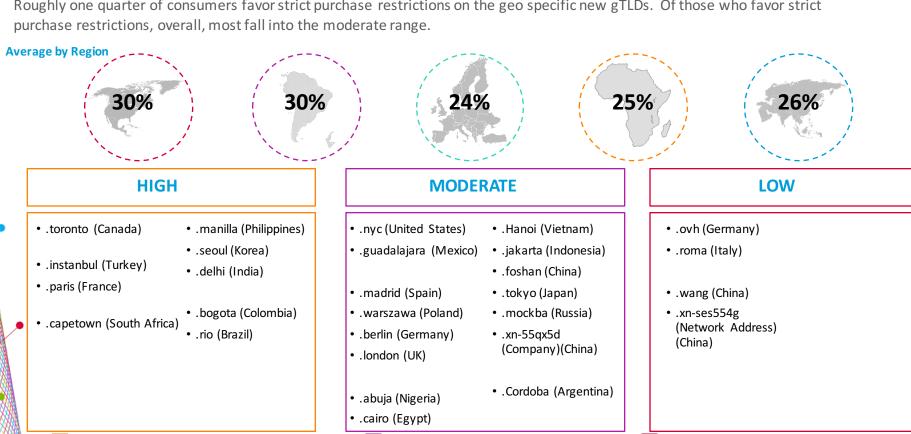
Strict purchase restrictions should be required	TOTAL WAVE 1	TOTAL WAVE 2
.email	20%	29% 🔨
link	18%	22% 🏠
.club	18%	23% 🏠
.guru	18%	22% 🏠
.photography	18%	22% 🛧
realtor	19%	27%
.xyz	18%	21% 🔨
.bank	NA	50%
.pharmacy	NA	42%
.builder	NA	28%

Some purchase restrictions should be required	TOTAL WAVE 1	TOTAL WAVE 2
.email	48%	46%
.link	49%	50%
.club	50%	53% 🔨
.guru	48%	49%
.photography	50%	53% 🔨
.realtor	49%	49%
.xyz	46%	44%
.bank	NA	36%
.pharmacy	NA	41%
.builder	NA	50%

No purchase restrictions should be required	TOTAL WAVE 1	TOTAL WAVE 2
email	32%	24% 🔱
ink	33%	28% 🔱
club	32%	25% 🔱
guru	34%	30% 🔱
photography	32%	24% 🔱
ealtor	32%	24% 🔱
ζγz	37%	35%
pank	NA	14%
pharmacy	NA	18%
puilder	NA	21%

# **NEW gTLD RESTRICTIONS**

Roughly one quarter of consumers favor strict purchase restrictions on the geo specific new gTLDs. Of those who favor strict



30% or more say Strict restrictions required

20%-29% say Strict restrictions required

# TRUST AND EXPERIENCE WITH THE DOMAIN NAME SYSTEM

This section explores findings related to perceptions of the domain name system compared to other technology based industries.

- Overall, trust levels have improved since 2015
  The global total has improved against all of the 5 reference industries, wave over wave by and average of just over 4 percentage points. Ratings from Africa and South America are the most stable, only showing improvement against ISPs.
- Trust in the domain name system is highest relative to ISPs

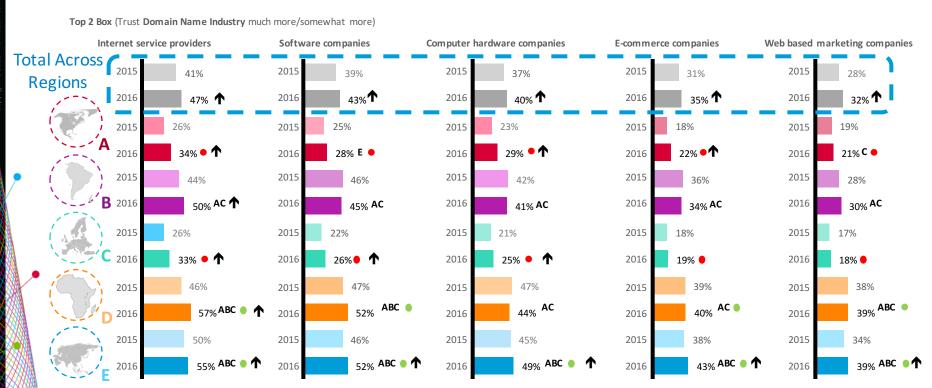
The relative levels of trust compared to other industries is very similar to last wave. Near 50% trust the domain name system more than ISPs, while e-Commerce and web based marketing companies are closer with one in three trusting the domain name system more.

Trust in restriction reinforcement relatively strong Globally 70% feel either high to moderate levels of trust that restrictions will actually be enforced.

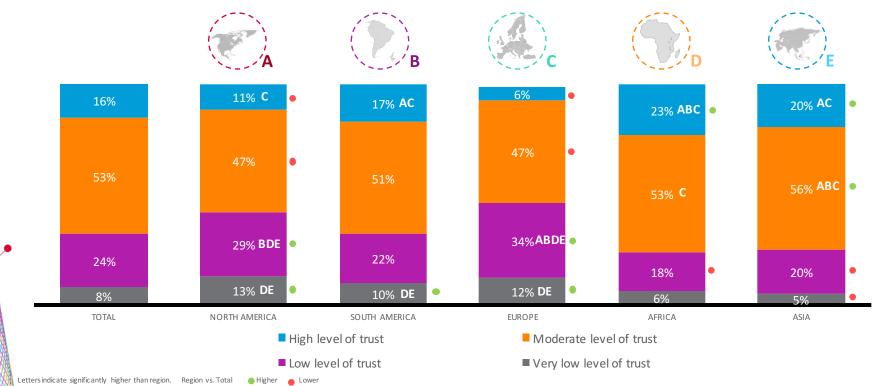
# TRUST IN THE DOMAIN NAME INDUSTRY VS. OTHER INDUSTRIES

Overall, trust among Consumers for the Domain Name industry is improved vs. 2015.

Africa and Asia, more so than the other regions, say they trust the Domain Name industry.



7 in 10 consumers feel high to moderate levels of trust that the restrictions will actually be enforced, although somewhat tempered in Europe and North America.



## WHY TRUST DOMAIN NAME INDUSTRY MORE THAN OTHERS

Reputation is the number one reason why consumers trust the domain name industry more than other industries. **TOTAL NORTH SOUTH** NET categories are the roll-up of **AFRICA** related sub-categories. Key **AMERICA AMERICA EUROPE ASIA** subcategories are show for each NET (B) (D) (E) (A) (C) 40% E 46% E 42%F 41% 35% Reputation (NET) 38% Knowledgeable/Area of 13% E 14% E 15% E • 13% E 8% 11% expertise/It's their business 11% 11% 13% 10% 20% ABCD • 16% Extension appeal (NET)

10%

12% C

8%

12% C

Mentions of 10% or greater shown.

Letters indicate significantly higher than region. Region vs. Total

Usage (NET)

12%

Higher Lower

66

13% C

# WHY TRUST DOMAIN NAME INDUSTRY MORE THAN OTHERS

#### Reputation **Extension Appeal Usage** This extension is highly Because normally they are big Because they come famous. (AP) companies, so their reputation and from trusted domain ethics are injured if they do something usage. (AP) bad. They also have a bigger team to resolve problems. (Eur) Because there is a correlation between the extension and the information they provide. (AP) Because they care about Easy to use. (AP) their reputation. (Africa) For their seriousness and Because they have to be It is their business so they the quantity of users that responsible for the extensions protect their name and use the domain names they supply. (LAC) reputation. (AP) sector. (LAC)

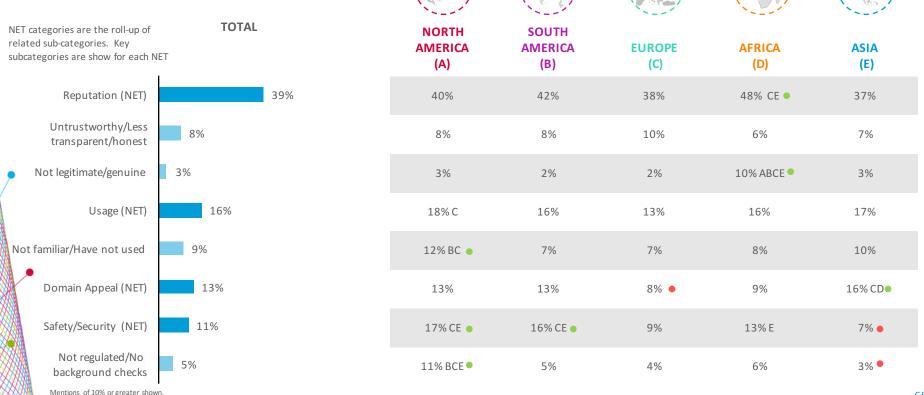
## WHY TRUST DOMAIN NAME INDUSTRY LESS THAN OTHERS

Reputation (including less transparent or honest) along with usage and unfamiliarly are the top reasons cited for why consumers

trust the domain industry less.

Letters indicate significantly higher than region. Region vs. Total

Higher Lower



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# **REACHING THE INTENDED WEBSITE**

This section focuses on general Internet behaviors, such as device usage, preference for accessing websites, and experience with URL shorteners and OR codes.

Navigation has not changed appreciably

For general navigation, we see an expected, gradual trend toward mobile devices, especially outside of NA and Europe. Beyond this, the dominant method for locating a web resource remains the search engine—little has changed here. Use of QR codes is up slightly, but frequency of use is still low.

But there are different pathways depending on the situation

It is when we look at specific activities on the web vs general information seeking that we see differences in behaviors. Apps, for example, are seen as the safest when people are looking to access personal information and often easier as well. Bookmarked sites are seen to be the faster way to get there for any purpose—information, shopping, etc.

Navigation shows some regional differences

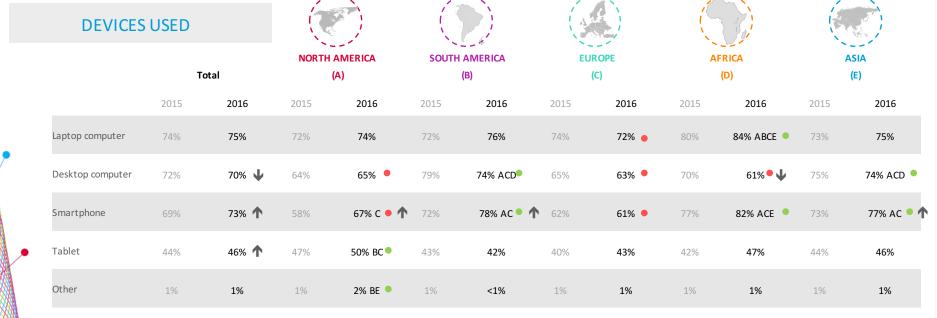
The perceived value of apps is consistently seen to be higher in Africa than other regions. North Americans are most likely to feel that safety is found by typing the name into the browser. Europe is more likely to default to search engines or be unsure which method is safest, fastest or easiest.

URL shortening is an Internet technique in which a URL may be made substantially shorter in length and still direct to the required page.

A **QR code** consists of black dots arranged in a square grid on a white background, which can be read by an imaging device (such as a camera). Reading the QR code with your Smartphone takes you to a website or ad for more information.

Roughly 7 in 10 consumers use laptops, desktops and smartphones to access the Internet, with smartphone (as well as tablet) usage increasing over the last year.

Smartphone use is less prevalent in North America and Europe compared to their regional counterparts.



Letters indicate significantly higher than region. Region vs. Total Higher Lower

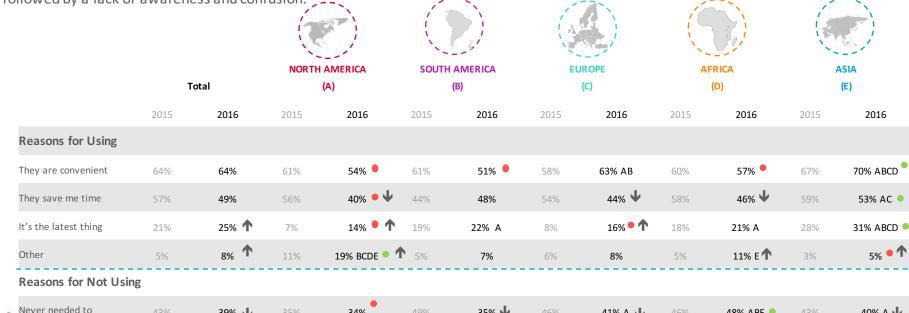
Usage of URL shorteners is consistent with last year and low overall, at least in part due to lack of awareness. Africa reports above average usage, with lower penetration in Europe, who are more inclined to say they have never heard of them.



Arrows indicate 2016 significantly higher/lower than 2015 at a 95% confidence level.

### REASONS FOR USING/NOT USING URL SHORTENER

Convenience and time savings are key benefits to using URL shorteners, while lack of need is the main reason cited for non-use, followed by a lack of awareness and confusion.

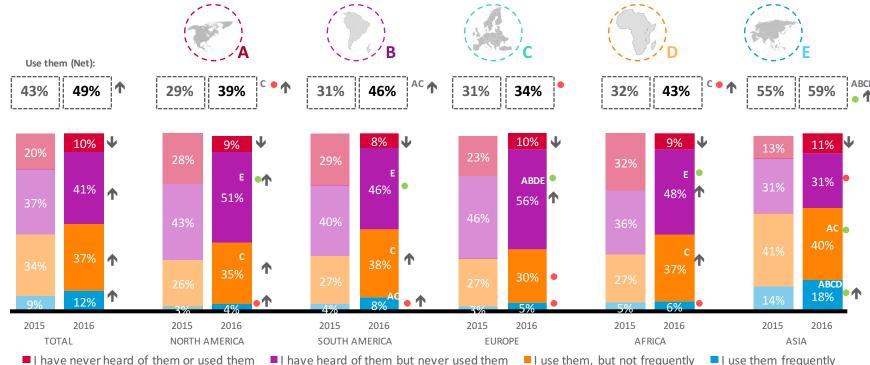


•	Never needed to	43%	39% 🔱	35%	34%	49%	35% 🔱	46%	41% A 🔱	46%	48% ABE •	43%	40% A 🔱
	Never heard of them	35%	30% <b>•</b>	48%	39% BDE	32%	29% D	41%	35% DE	34%	18% • •	29%	26% D
A	Confused about website I'm going to	21%	30%	14%	24%	16%	26%	14%	24%	14%	31%	29%	34% ABC
	Don't trust them	8%	11%	6%	13% C	8%	9%	6%	9%	11% C	10%	9%	12% C
	Don't like them	7%	8%	5%	7%	7%	8%	5%	8%	4%	6%	8%	8%
	Latters indicate significantly bigher than	. rogion	Dogion us Total	Higher A Levisor	Annaus indianta 2016	aignifia anth.	hiahar/lauran shan 2015 as	a OFO/ a antida	na a lavral				

While QR code usage is low, it appears to be on the rise, with all regions increasing this year versus last except Europe.

Consumers in Asia, particularly China, Vietnam, Japan and South Korea, are far more prone to the practice than the remaining

regions.



A **QR code** consists of black dots arranged in a square grid on a white background, which can be read by an imaging device (such as a camera). Reading the QR code with your Smartphone takes you to a website or ad for more information.

Letters indicate significantly higher than region. Region vs. Total Higher Lower Arrows indicate 2016 significantly higher/lower than 2015 at a 95% confidence level.

#### REASONS FOR USING/NOT USING QR CODES

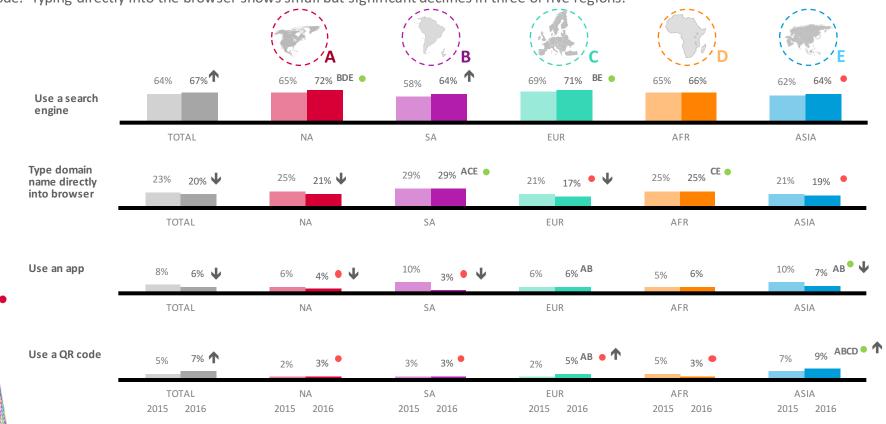
Similar to last year using QR codes is seen as a convenient time saver, but about a third of consumers are drawn to the novelty.

Those that have not used QR codes see no need to do so.



Letters indicate significantly higher than region.

Overall, the preferred way to find a website was and remains using a search engine. Few consumers prefer to use an app or QR code. Typing directly into the browser shows small but significant declines in three of five regions.



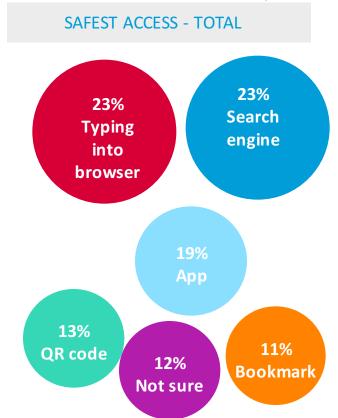
■ Lower Arrows indicate 2016 significantly higher/lower than 2015 at a 95% confidence level.

Consumers feel the **safest** ways to navigate to a website is either typing into browser or using a search engine.

At the regional level, North America and South America are more likely to type into browser while Africa and Asia more likely to

use an app or QR code.

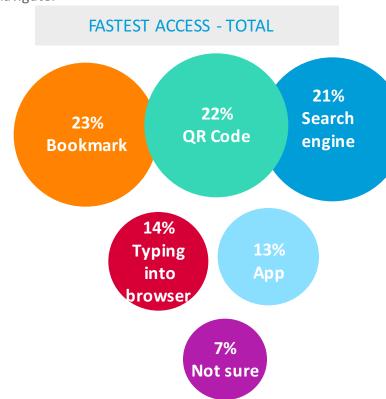
	NORTH AMERICA (A)	SOUTH AMERICA (B)	EUROPE (C)	AFRICA (D)	ASIA (E)
Typing domain name into a browser	27% DE ●	22%	24%	21%	22%
Finding via an Internet search engine	23%	19% •	26% B ●	22%	23% B
Using an app	18% C	21% C	13%	24% AC •	20% C •
Accessing via a QR code	8% ●	16% AC ●	9%	15% AC	14% AC
Accessing via a bookmark	 	10%	11%	10%	12%
Not sure	15% DE ●	12% DE	17% BDE ●	8% •	9% •



Letters indicate significantly higher than region. Region vs. Total

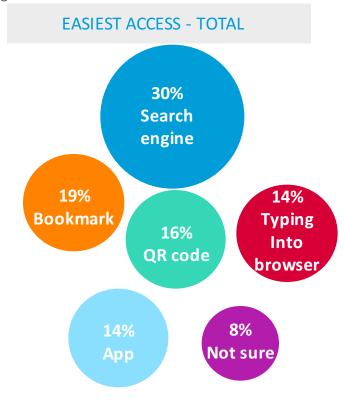
But the **fastest** way to navigate to a website is via a bookmark, QR code, or search engine. At the regional level, Asia is more likely to feel QR codes are the fastest way to navigate.





And the **easiest** way to access a website is, by far, via search engine. At the region level, Asia more likely to feel QR codes are also the easiest way to navigate.

	NORTH AMERICA (A)	SOUTH AMERICA (B)	EUROPE (C)	AFRICA (D)	ASIA (E)
Finding via an Internet search engine	I I I 28% I	31%	32%	30%	29%
Accessing via a bookmark	I I I 19% C I	17%	15% •	18%	21% BC •
Accessing via a QR code	1 1 13% •	12% •	13% •	12% •	18% ABCD •
Typing domain name into a browser	10% •	18% ACE ●	12%	18% AC	14% A
Using an app	I I I 16% E ● I	15% E	14%	18% E •	12%
Not sure	I I I 12% BDE •	7%	14% BDE ●	4%	6%



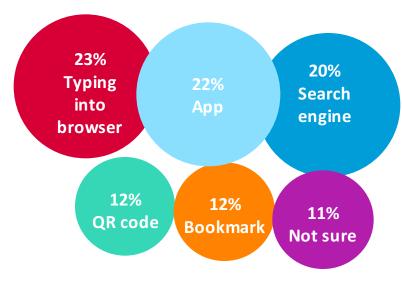
#### SAFEST WEBSITE ACCESS WHEN BUYING OVER THE INTERNET

When considering buying things over the internet, consumers feel the safest ways to access are via typing into browser, using an app, or using a search engine. Compared to general way to access a website – using an app pops into top tier of safest ways

when buying is taken into account.

;	NORTH	SOUTH			
	AMERICA (A)	AMERICA (B)	EUROPE (C)	AFRICA (D)	ASIA (E)
Typing domain name into a browser	29% BCDE ●	21%	25% E	21%	21% •
Using an app	19% •	26% AC •	17% •	29% ACE ●	23% AC •
Finding via an Internet search engine	18%	18%	22% AD •	16%	20%
Accessing via a QR code	7%	14% AC	7% •	15% AC	14% AC •
Accessing via a bookmark	1 	11%	12%	10%	13% •
Not sure	1 1 1 16% BDE ● 1	10%	17% BDE •	9%	9% •

**SAFEST ACCESS - TOTAL** 

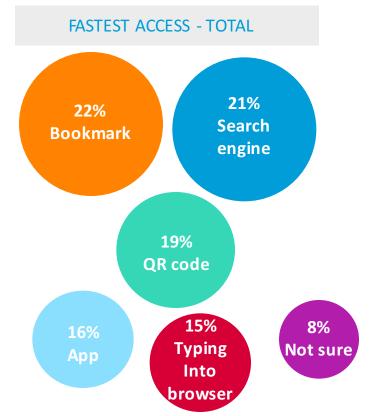


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The **fastest** way to access a website when **buying over the internet**, is a bookmark or search engine, followed by QR codes.

	NORTH AMERICA (A)	SOUTH AMERICA (B)	EUROPE (C)	AFRICA (D)	ASIA (E)
Accessing via a bookmark	23% D	23% D	21%	16% •	22% D
Finding via an Internet search engine	19%	23%	21%	26% ACE ●	21%
Accessing via a QR code	12% •	12%	16% AB	15% •	23% ABCD •
Using an app	16%	15%	16%	20% E	15%
Typing domain name into a browser	17%	19% CE •	14%	17%	14% •
Not sure	12% BDE •	7% E	13% BDE •	6%	5%

Letters indicate significantly higher than region. Region vs. Total Higher

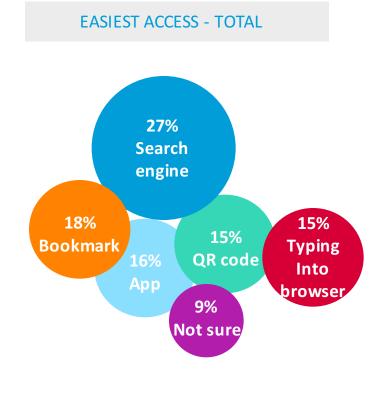


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#### EASIEST WEBSITE ACCESS WHEN BUYING OVER THE INTERNET

As was the case with general access to a website, the **easiest** way to access a website **when buying** over the internet is, again, search engine.

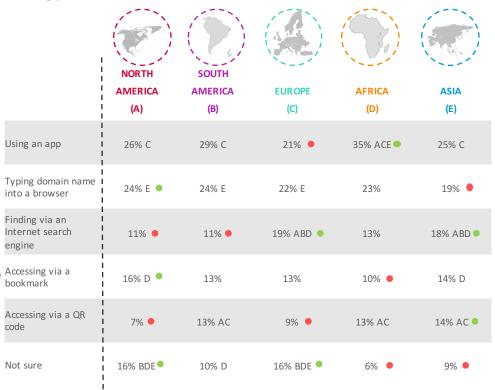
	NORTH AMERICA (A)	SOUTH AMERICA (B)	EUROPE (C)	AFRICA (D)	ASIA (E)
Finding via an Internet search engine	24% •	31% A	29% A	28%	27%
Accessing via a bookmark	20% C	18% C	13% •	16%	19% C ●
Using an app	17%	13%	14%	24% ABCE •	15%
Accessing via a QR code	11% •	10%	12% •	11%	18% ABCD •
Typing domain name into a browser	13%	18% AE●	15%	14%	15%
Not sure	15% BDE •	20% E	16% BDE ●	6%	6% •



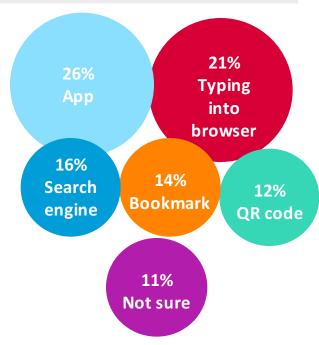
#### SAFEST WEBSITE ACCESS WHEN ACCESSING PERSONAL INFO

When accessing personal info, consumers feel the safest ways to are via an app, followed by typing into browser. Compared to general way to access a website or accessing a website when buying — using an app pops into the lead as the safest ways when

accessing personal info.







#### FASTEST WEBSITE ACCESS WHEN ACCESSING PERSONAL INFO

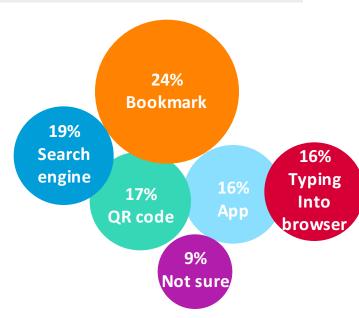
When accessing personal info, consumers feel the fastest way to access is via a bookmark.

Compared to general way to access a website or accessing a website when buying — search engine and QR code drop a bit as the

fastest ways when accessing personal info.

	NORTH	SOUTH			
	AMERICA (A)	AMERICA (B)	EUROPE (C)	AFRICA (D)	ASIA (E)
Accessing via a bookmark	27% CE ●	23%	22%	23%	23%
Finding via an Internet search engine	17%	20%	20%	21%	18%
Accessing via a QR code	10%	13%	14% A ●	12%	22% ABCD •
Using an app	17%	16%	16%	21% CE	15%
Typing domain name into a browser	1   14% 	20% ACE •	15%	17%	15%
Not sure	I I I 14% BDE●	8%	14% BDE ●	6% •	6% •

#### **FASTEST ACCESS - TOTAL**

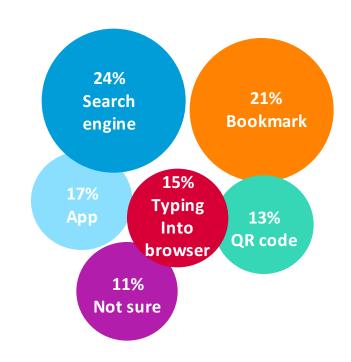


#### EASIEST WEBSITE ACCESS WHEN ACCESSING PERSONAL INFO

When accessing personal info, consumers feel the easiest way to access a website either by search engine or by bookmark. Bookmark plays a bigger role in ease when it comes to personal info (although this is tempered a bit in Europe).

	NORTH AMERICA (A)	SOUTH AMERICA (B)	EUROPE (C)	AFRICA (D)	ASIA (E)
Finding via an Internet search engine	19% •	27% A	26% A	23%	24% A
Accessing via a bookmark	23%	21%	19% •	20%	22% C
Using an app	19% CE ●	16%	15%	23% BCE ●	15%
Typing domain name into a browser	14%	16%	15%	19% AE •	14%
Accessing via a QR code	9% <b>•</b>	8% •	10%	9% •	16% ABCD •
Not sure	16% BDE •	12% DE	15% DE •	6%	8% •

#### **EASIEST ACCESS - TOTAL**



# ABUSIVE INTERNET BEHAVIOR AND CYBER CRIME

This section focuses on awareness, experience with, and perceptions with regard to protection against abusive Internet behavior.

Reported fear levels seem relatively stable
While question wording was altered to focus on familiarity rather
than just awareness of abuses, preventing direct trending, the
results for measures like personal impact and fear are very similar
to what was seen in the last wave, showing no strong increase nor

decline.

online banking and health.

- Social media is the biggest perceived risk
  Respondents are generally at least "somewhat comfortable" doing
  a wide range of tasks and providing various types of information
  online. They are most likely to be nervous about providing
  personal information over social media—one in three globally
  express strong discomfort. About one in four worry about banking
  on online medical information. Respondents in Africa are especially
  concerned about social media (nearly half) but less worried about
- However, consumers are less comfortable providing personal information to a site using a new gTLD

Compared to .com or their ccTLD, comfort levels are much lower for the new gTLDs. Acceptance is lowest in Europe and the US, highest in Asia.

Bad behavior is still viewed as the law's responsibility

When asked who they would report and improperly run site to, responses center on various types of government regulatory bodies or law enforcement agencies, similar to last wave.

Taking steps to protect oneself online shows little change

In fact, for Phishing, there is an actual decrease in preventative measures. And we see no strong trend to support that users are stopping internet commerce or otherwise modifying their online behavior.

6 AV software is still expected to do more than it probably can

While we see decreases in the purchase (not necessarily use) of AV software to protect against some abuses, it is still the dominant response.

#### HOW COMFORTABLE WITH ONLINE BEHAVIORS

Consumers are most comfortable with searching for info or shopping online. Interestingly, consumers are least comfortable with using social media to talk about activities/family. Personal safety may be playing a role in consumers' reservations.

Searching for information	TOTAL	NORTH AMERICA (A)	SOUTH AMERICA (B)	EUROPE (C)	AFRICA (D)	ASIA (E)
Very comfortable	55%	66% CE	70% CE	49%	66% CE	50%
Somewhat comfortable	36%	29% B	18%	39% ABD	27% B	42% ABD
Not at all/not very comfortable	8%	4%	12% ADE	12% ADE	7%	8% A
Shopping online						
Very comfortable	40%	39% C	39%	34%	36%	43% ABCD
Somewhat comfortable	45%	1 46% B	40%	49% BE	47% B	43%
Not at all/not very comfortable	15%	15%	22% ACE	17% E	17%	13%
Banking online		1 !				
Very comfortable	36%	39% C	37%	33%	40% C	36%
Somewhat comfortable	40%	38% B	28%	39% B	39% B	43% AB
Not at all/not very comfortable	24%	23%	35% ACDE	27% DE	22%	21%
Accessing medical info		! !				
Very comfortable	28%	29% C	35% ACE	23%	37% ACE	27% C
Somewhat comfortable	47%	43% B	34%	45% B	44% B	52% ABCD
Not at all/not very comfortable	25%	28% DE	31% DE	32% DE	19%	21%
Using social media to talk al	oout activities,	family				
Very comfortable	26%	31% CDE	36% CDE	22%	24%	25%
Somewhat comfortable	37%	33% B	27%	39% ABD	31%	40% ABD
Not at all/not very comfortable	37%	36%	37%	39%	45% ABCE	35%

Letters indicate significantly higher than region. Region vs. Total

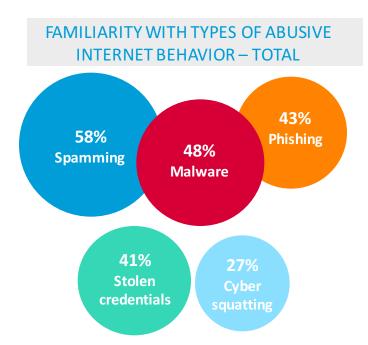
HOW COMFORTABLE WITH DOING ACTIVITIES ON WEBSITE Consumers are most comfortable providing personal info to either country-specific gTLDs or .com websites. For the new gTLDs, consumers tended to say 'not very comfortable' (versus not at all comfortable).

% Very/	Inputting email address	TOTAL	NORTH AMERICA (A)	SOUTH AMERICA (B)	EUROPE (C)	AFRICA (D)	ASIA (E)
% very/ Somewhat	Country specific gTLD	93%	93%	92%	92%	91%	94% D
Comfortable	.com	92%	92% C	91% C	87%	93% C	94% ABC
	New gTLD	48%	42% C	47% C	37%	50% AC	54% ABC
	Inputting home address						
	Country specific gTLD	84%	87% CD	82%	81%	80%	86% BCD
	.com	83%	82% C	82% C	75%	83% C	87% ABCD
	New gTLD	44%	1 1 37%	41% C	33%	44% AC	50% ABCD
	Inputting telephone number		! 				
	Country specific gTLD	75%	72% C	73% C	66%	77% C	79% ABC
	.com	75%	71% C	73% C	62%	81% ABC	81% ABC
	New gTLD	40%	33% C	37% C	28%	45% ABC	47% ABC
<b>,</b>	Inputting financial information						
	Country specific gTLD	62%	60%	57%	58%	56%	66% ABCD
	.com	62%	62% C	58% C	52%	62% C	67% ABC
	New gTLD	36%	27%	32% AC	24%	38% ABC	44% ABCD
XXXI	Inputting ID number		! 				
<b>M</b> •	Country specific gTLD	61%	1 54% I	58%	53%	64% AC	65% ABC
	.com	59%	47%	59% AC	48%	67% ABC	66% ABC
XXXII	New gTLD	34%	20%	31% AC	23%	36% AC	43% ABCD
XXXIII.	Inputting healthcare information		 				
	Country specific gTLD	70%	64% C	69% C	56%	74% AC	75% ABC
	.com	68%	60% C	68% AC	53%	75% ABC	75% ABC
<b>XXXXII</b>	New gTLD	40%	28%	38% AC	25%	46% ABC	49% ABC

#### FAMILIARITY WITH TYPES OF ABUSIVE INTERNET BEHAVIOR

Roughly half of consumers are attuned to most abusive Internet behavior, with the exception of cyber squatting, which is more familiar in Africa and Asia (excluding Japan and South Korea).

% Extremely/ Very Familiar	NORTH AMERICA (A)	SOUTH AMERICA (B)	EUROPE (C)	AFRICA (D)	ASIA (E)
Spamming	62% CE	57% C	52%	67% BCE ●	58% C
Malware	49% C	45%	42% •	60% ABCE •	49% C
Phishing	45% B	32%	40% B	56% ABCE •	44% BC
Stolen credentials	42% BC	35%	35%	55% ABCE	42% BC
Cyber squatting	20%	19%	21%	35% ABC	31% ABC



Consumers generally consider organized groups and individuals equally to blame for Internet abuse. North America consumers are more likely than other regions to think individuals are to blame.

Phishing	TOTAL	NORTH AMERICA (A)	SOUTH AMERICA (B)	EUROPE (C)	AFRICA (D)	ASIA (E)
Organized groups (Net)	66%	65% BD	54%	69% BD	51% •	69% BD •
Individuals (Net)	51%	61% BCDE	53% D	48%	42%	50% D
Don't know	15%	17% E	18% E	17% E	27% ABCE	12% •
Spamming		!				
Organized groups (Net)	64%	66% BD	52% •	66% BD	50%●	67% BD
Individuals (Net)	51%	58% BCDE	49%	48%	49%	52%
Don't know	15%	1 17% E	18% E	18% E •	20% E 📍	12%
Cyber squatting		l I				
Organized groups (Net)	62%	61% BD	47%	65% BD	52%	65% BD
Individuals (Net)	48%	55% BCDE	46%	45%	38%	48% D
Don't know	18%	20% E	25% E 🔵	20% E	27% CE •	14%
Stolen credentials		i I				
Organized groups (Net)	65%	65% BD	53% •	68% BD	54%●	68% BD
Individuals (Net)	51%	62% BCDE 🌘	50% D	50% D	41%	51% D
Don't know	15%	16% E	18% E	18% E	25% ABCE •	12%
Malware		1				
Organized groups (Net)	66%	66% BD	54%	68% BD	55%	68% BD •
Individuals (Net)	50%	57% BCDE	46%	49% D	40%	49% D
Don't know	16%	18% E	21% E 🔵	18% E	24% ACE	13%

Letters indicate significantly higher than region. Region vs. Total Higher Lower

Spamming, malware, and phishing are seen as the most common Internet abuses. Generally, abusive behavior is seen as less common in Europe and Asia.

Spamming	TOTAL	NORTH AMERICA (A)	SOUTH AMERICA (B)	EUROPE (C)	AFRICA (D)	ASIA (E)
Very common	72%	79% CE	80% CE 🔵	70%	77% CE	68%
Somewhat common	20%	15% B ●	10% •	18% B	16% B	24% ABCD
Not at all/not very common	4%	2%●	4% A	4% A	5% A	5% A •
Malware		 				
Very common	59%	67% CE	63% CE	54%	68% CE •	56%
Somewhat common	29%	I I 26% ●	21%	31% ABD	21%	32% ABD
Not at all/not very common	7%	2%	6% A	7% A	7% A	8% A
Phishing		 				
Very common	51%	62% BCE	48%	51%	60% BCE •	48%
Somewhat common	34%	1 1	32% D	31% D	24%	38% ACD •
Not at all/not very common	9%	5%	10% A	10% A	9% A	9% A
Stolen Credentials		 				
Very common	43%	53% CE ●	47% CE	38%	53% CE	40% <sup>•</sup>
Somewhat common	38%	35%●	33% ●	38%	33%	41% ABD •
Not at all/not very common	12%	7% •	11% A	15% AD	10%	14% AD
Cyber Squatting		I !				
Very common	34%	40% CE	40% CE	31%	48% CE	31%
Somewhat common	42%	I I 39% B	30%	38%	37%	46% ABCD
Not at all/not very common	16%	11%	16% D	19% AD	8%	17% AD

Around 7 in 10 say they have been impacted by spamming, and over half by malware.

Spamming	TOTAL	NORTH AMERICA (A)	SOUTH AMERICA (B)	EUROPE (C)	AFRICA (D)	ASIA (E)
Yes	70%	70% C	82% ACDE •	65%	73% C	68%
No	23%	22% B	13% •	26% AB	22% B	24% B
Not sure	8%	I I 8%	5%	9% B	6%	7%
Malware						
Yes	57%	59% C	63% CDE	49%	53%	58% C
No	32%	29%	24%	38% ABE	33% B	32% B
Not sure	11%	12%	12%	13% E	14%	10% •
Phishing		i				
Yes	31%	31%	29%	29%	28%	33% C •
No	55%	53%	54%	58%	57%	54%
Not sure	14%	16% E	17% E	13%	15%	12%
Stolen Credentials		I I				
Yes	20%	17%	17%	13%	18%	25% ABCD •
No	66%	72% E •	70% E	73% E	70% E	60% •
Not sure	14%	12%	13%	14%	13%	15% A
Cyber Squatting		I I				
Yes	17%	10%	18% AC	9% •	18% AC	20% AC
No	67%	71% BE	61%	72% BE •	66%	66%
Not sure	16%	19% E	21% E •	19% E	17%	15%
ers indicate significantly higher than region.	Region vs. Total	Higher Lower				

#### FEAR OF BEING IMPACTED BY ABUSIVE INTERNET BEHAVIOR

Consumer fear is greatest around stolen credentials and malware, followed by phishing. North America exhibits muted fear compared to the other regions.

Chalan Cuadantiala						
Stolen Credentials	TOTAL	I NORTH AMERICA (A)	SOUTH AMERICA (B)	EUROPE (C)	AFRICA (D)	ASIA (E)
Very Scared	52%	48%	61% ACE •	49%	54%	53% A
Somewhat Scared	35%	35% B	27% •	34% B	33%	36% B
Not Very/Not at all Scared	13%	17% E	12%	16% E 🔍	12%	12%
Phishing		I I				
Very Scared	40%	28%	50% ACD	35% A 🔍	38% A	44% ACD
Somewhat Scared	39%	1 1 39%	33%	40% B	40%	40% B
Not Very/Not at all Scared	21%	33% BCDE •	17%	25% BE	22% E	16%
Malware		i				
Very Scared	40%	29% •	43% AC	35% A •	40% A	44% AC
Somewhat Scared	42%	45% B	38%	45% B	42%	41%
Not Very/Not at all Scared	18%	25% BCDE •	19%	20% E	19%	15% •
Cyber Squatting		!				
Very Scared	28%	25%	39% ACE •	25%	33% AC	28%
Somewhat Scared	39%	32%	40%	37%	40% A	40% A •
Not Very/Not at all Scared	33%	43% BDE	22%	37% BDE •	27%	32% B
Spamming		I I				
Very Scared	22%	13%	21% A	17%	24% AC	26% ABC
Somewhat Scared	38%	33%	31%	38% B	33%	42% ABD
Not Very/Not at all Scared	40%	54% CDE	48% E	46% E	42% E	32%
ers indicate significantly higher than region.	Region vs. Total	Higher Lower				

#### MEASURES TAKEN TO AVOID PHISHING

Less than half of consumers report purchasing antivirus software to avoid phishing, and prevalence of doing so is down in 2016. Further only about a quarter are changing Internet habits in an attempt to protect themselves against phishing – and again this is down in 2016. Nearly one-quarter report doing nothing –most prevalent in North America, South America, and Europe.

### MEASURES TAKEN TO AVOID PHISHING

Letters indicate significantly higher than region. Region vs. Total

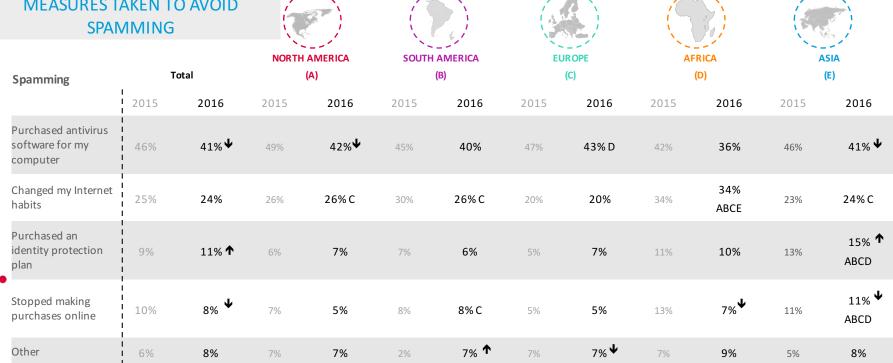
РП	טווחכוו		1,30		1			S France /	1			lin /
Phishing	т	otal		AMERICA (A)		AMERICA (B)		JROPE (C)		RICA (D)		SIA (E)
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
Purchased antivirus software for my computer	50%	44% <b>∀</b>	53%	41% B <b>↓</b>	44%	34% ♥	51%	44% B <b>↓</b>	45%	39%	51%	47% <b>↓</b> ABD
Changed my Interne habits	et i i 29%	24%♥	27%	27% CE	34%	26%♥	25%	22%	37%	27%♥	29%	23% ♥
Purchased an identity protection plan	11%	13% <b>↑</b>	9%	8%	8%	9%	6%	8% <b>↑</b>	11%	11%	14%	17% <b>↑</b> ABCD
Stopped making purchases online	9%	10%	6%	6%	8%	6%	5%	6%	13%	10% ABC	11%	13% <b>↑</b> ABC
Other	5%	6%	8%	7%	2%	6%	6%	7%	6%	7%	4%	6%
None	20%	23% <b>↑</b>	23%	29% <b>↑</b> DE	23%	30% <b>↑</b> DE	25%	28% <b>↑</b> DE	16%	21%	16%	18% ↑

Arrows indicate 2016 significantly higher/lower than 2015 at a 95% confidence level.

#### MEASURES TAKEN TO AVOID SPAMMING

As was the case with phishing, few consumers report purchasing antivirus software in order to avoid spamming. A quarter report changing Internet habits in an attempt to protect themselves against spamming and another quarter report doing nothing.

#### **MEASURES TAKEN TO AVOID SPAMMING**



23%

29%

29% BDE

17%

20%

21%

21%

23%

None

24% **↑** 

25%

28% DE

23%

#### MEASURES TAKEN TO AVOID CYBER SQUATTING

As was the case in 2015, over a third of consumers report taking no action to avoid being affected by cyber squatting.

### MEASURES TAKEN TO AVOID CYBER SQUATTING











	Cyber Squatting	Tot	al	NORTH	H AMERICA (A)	SOUTH	H AMERICA (B)	EU	JR OPE (C)	A	FRICA (D)	1	ASIA (E)
		1 2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
	Purchased antivirus software for my computer	41%	35%♥	40%	34% B <b>♥</b>	42%	29%♥	40%	37% B	42%	31% ♥	42%	36% B ♥
	Changed my Internet habits	1 1 1 18%	19%	18%	19% C	25%	25% ACE	14%	15%	27%	27% ACE	18%	18% C
	Purchased an identity protection plan	10%	11% 🛧	7%	6%	9%	7%	5%	7% <b>↑</b>	12%	13% ABC	12%	15% ABC <b>↑</b>
	Stopped making purchases online	7%	8% ↑	5%	5%	5%	6%	4%	5%	11%	8% AC	8%	11% ABC <b>↑</b>
A	Other	1 1 2%	5%	2%	4%	1%	5%	2%	6%	3%	5%	2%	6% A
A	None	1 1 36% 1	36%	43%	43% BDE	31%	37% DE <b>↑</b>	44%	41% DE	26%	30%	33%	32%

Fewer consumers are taking steps to protect their credentials in 2016, with roughly 4 in 10 reportedly purchasing antivirus software and a quarter changing their Internet habits.

### MEASURES TAKEN TO AVOID STOLEN CREDENTIALS











	Stolen Credentials	To	otal		AMERICA (A)	SOUTH	AMERICA (B)	EU	JR OPE (C)	A	FRICA (D)	,	ASIA (E)
		2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
	Purchased antivirus software for my computer	46%	42% <b>♥</b>	49%	36% ♥	40%	35%	44%	46% ABD	40%	33%	48%	45% ABD
	Changed my Internet habits	1 1 1 24%	25%	27%	29% CE	29%	27% C	23%	21%	28%	32% CE	23%	23%
	Purchased an identity protection plan	1 1 15%	16%	12%	14% C	13%	12%	8%	10%	16%	17% C	19%	20% ABC
	Stopped making purchases online	10%	10%	8%	7%	9%	7%	5%	7%	14%	11% ABC	12%	12% ABC
Å	Other	I I 4%	6%	6%	6%	2%	5%	4%	6%	6%	8%	3%	6%
	None	1 1 1 23%	22%	25%	27% DE	25%	27% DE	29%	26% DE	21%	20%	20%	18%

#### MEASURES TAKEN TO AVOID MALWARE

Six in ten consumers globally say they purchased antivirus software to avoid being affected by malware.

### MEASURES TAKEN TO AVOID MALWARE











	Malware	To	otal	NORTH	AMERICA (A)	SOUTH	H AMERICA (B)		JROPE (C)		RICA (D)	A	SIA (E)
		2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
	Purchased antivirus software for my computer	61%	59%	66%	59% B <b>↓</b>	54%	51%	61%	58% B	64%	66% ABCE	60%	59% B
	Changed my Internet habits	1 1 23%	20%	25%	22% CE	27%	23% CE	20%	18%	25%	18%♥	22%	19% <b>↓</b>
	Purchased an identity protection plan	10%	12%	8%	7%	9%	8%	6%	8%	11%	9%	13%	15% <b>↑</b> ABCD
•	Stopped making purchases online	7%	8% ↑	5%	4%	5%	5%	4%	6% <b>↑</b>	6%	6%	8%	11% <b>↑</b> ABCD
	Other	3%	5%	4%	6%	2%	4%	2%	6%	2%	4%	3%	5%
A	None	18%	17%	19%	19% DE	20%	22% DE	22%	19% DE	15%	13%	16%	14%
AWW.		-											100

#### TAKEN ANY MEASURES TO AVOID ABUSIVE INTERNET BEHAVIORS

Consumers are most likely to take measures to avoid malware, followed by phishing, spamming, and stolen credentials. Consumers are least likely to take measures to avoid cyber squatting.

	TAKEN <u>ANY</u> MEA ABUSIVE INTER												
		Tot	al		AMERICA (A)		AMERICA (B)		ROPE (C)		FRICA (D)		SIA (E)
		2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
	Malware	82%	83%	81%	81%	80%	78%	78%	81%	85%	87% ABC	84%	86% BC
	Phishing	I I 80% I	77% ♥	77%	71% <b>V</b>	77%	70% <b>↓</b>	75%	72%	84%	79% ABC	84%	82% ABC <b>↓</b>
	Spamming	1 1 1 77% 1	76%	75%	72%	77%	77% AC	71%	71%	83%	80% AC	79%	79% AC
•	Stolen Credentials	1 1 1 77% 1	78%	75%	73%	75%	73%	71%	74%	79%	80% ABC	80%	82% ABC
	Cyber Squatting	64%	64%	57%	57%	69%	63% A <b>↓</b>	56%	59%	74%	70% ABC	67%	68% ABC



Many consumers are unsure of how they would report an improperly run site, particularly in North America and Africa. Consumers in South America are more inclined to contact the consumer protection agency or federal police than other regions.

#### PARTY TO REPORT SITE ABUSE TO











	I I TOTAL	NORTH AMERICA (A)	SOUTH AMERICA (B)	EUR OPE (C)	AFRICA (D)	ASIA (E)
Consumer protection agency	31%	28%	39% ACE	28%	34%	31%
Local police	30%	22% D	34% AD	33% AD	16%	32% AD
Website owner/operator	I 24%	18%	20%	19%	26% ABC	29% ABC
National law enforcement/FBI	23%	19%	20% A	23% A	19% A	25% ABD
National intelligence agency/CIA	15%	9% C	15% AC	6%	20% ABC	18% AC
Federal police (non-US only)	1 1 14%	9%	32% ACDE	18% AE	15% AE	10%
ICANN	11%	4%	5%	6%	12% ABC	15% ABC
Private security companies	10%	8%	9% C	5%	13% ABC	12% AC
Interpol	I I 9%	5%	10% AC	6%	12% AC	11% AC
Don't know	31%	44% BCDE	27%	29%	38% BCE	27%

Many consumers are unsure of how they would report an improperly run site, particularly in North America and Africa. Consumers in South America are more inclined to contact the consumer protection agency or federal police than other regions.

#### PARTY TO REPORT SITE ABUSE TO











	I I TOTAL	NORTH AMERICA (A)	SOUTH AMERICA (B)	EUR OPE (C)	AFRICA (D)	ASIA (E)
Consumer protection agency	31%	28%	39% ACE	28%	34%	31%
Website owner/operator	I 24%	18%	20%	19%	26% ABC	29% ABC
CIA/National intelligence agency	I I 14%	5%	15% AC	6%	20% ABC	18% AC
FBI/National law enforcement	1 21%	8%	20% A	23% A	19% A	25% ABD
ICANN	11%	4%	5%	6%	12% ABC	15% ABC
Interpol	9% 1	5%	10% AC	6%	12% AC	11% AC
Local police	I I 30%	22% D	34% AD	33% AD	16%	32% AD
Federal police (non-US only)	14%	9%	32% ACDE	18% AE	15% AE	10%
Private security companies	10%	8%	9% C	5%	13% ABC	12% AC
FBI (US only)	1 1 2%	11%		-		
CIA (US only)	1%	4%	-	-	-	-
Don't know	31%	44% BCDE	27%	29%	38% BCE	27%

### A LOOK AT THE TEENS

### LEGACY gTLDS – ADULTS VS TEENS

Adults more likely than teens to be aware, have visited, and trust some of the legacy gTLDs.

And if more information is needed, teens are more likely to use an internet encyclopedia and less likely to contact a service provider than adults.

Teens less likely to expect restrictions on some of the common gTLDs and also less likely to expect restrictions will be enforced.

In the US teens are more likely to have tried to find out website identity, opposite the pattern in Asia.

1	ADULTS	TEENS
AWARENESS (%)		
.net	88%	85%
.org	83%	77%
.biz	36%	24%
VISITATION (%)		
.net	76%	70%
.org	72%	64%
.biz	20%	11%
TRUSTWORTHY (% Very/Somewhat)		
.net	89%	86%
.org	87%	85%
.pro	43%	39%
.coop	39%	33%
WHERE TO GO FOR MORE INFO(%)		
Internet encyclopedia	42%	49%
Service provider	32%	26%

	ADULTS	TEENS
EXPECTATIONS ON RESTRICTIONS (% None)	1	
.com	33%	37%
.info	28%	34%
.org	23%	27%
NFORCE RESTICTIONS(%)	I I	
Person/company validation	82%	72%
Credential validation	80%	71%
Name consistent w/ meaning	79%	72%
Local presence	76%	62%
TRIED TO FIND IDENTITY OF WEBSITE(%)	1	
US	24%	44%
ASIA	38%	30%
	•	

### NEW gTLDS – ADULTS VS TEENS

Teens are more likely than adults to be aware of many of the new gTLDs (particularly in North America and Europe) but visitation rates are very similar.

However, teens are less likely to pay attention to the extension. Teen trust levels for some gTLDs are higher.

Teens simultaneously describe the new gTLDs as interesting and exciting and overwhelming and confusing.

And again they are less in favor of restrictions—they are more likely than adults to say there should be no strict strict requirements on the majority of the new gTLDs.

	<b>ADULTS</b>	TEENS
AWARENESS (%)	!	
.news	33%	37%
.email	32%	39%
.link	27%	34%
.website	21%	25%
.site	20%	25%
.pics	11%	14%
.top	11%	13%
Not aware of any	38%	32%
VISITATION (%)	 	
.link	20%	25%
.site	14%	17%
Pay attention to extension (%)		
Don't pay attention	29%	37%
TRUSTWORTHY (% Very/Somewhat)	 	
.email	62%	69%
.website	55%	63%
.site	51%	56%

	ADULTS	TEENS
WHERE TO GO FOR MORE INFO(%)	į.	
Internet search	74%	69%
Internet encyclopedia	40%	47%
Service provider	29%	21%
ADJECTIVES FOR COMMON gTLDs (%)	I I	
Interesting	64%	70%
Exciting	47%	52%
Overwhelming	41%	45%
Confusing	39%	45%
LEVEL OF RESTRICTIONS (% No strict)	I I	
.email	24%	28%
.photography	24%	31%
.link	28%	33%
.guru	30%	38%
.realtor	24%	30%
.club	25%	32%
.хуz	35%	41%
.bank	14%	21%
.pharmacy	18%	21%
.builder	21%	27%

#### REACHING THE INTENDED SITE – ADULTS VS TEENS

Teens are more likely than adults to use smartphones to access the internet and to use both shortened urls and QR codes.

Teens are also more likely to feel an app is the safest way to make purchases or access personal info.

Adults tend to be more comfortable with online behaviors like searching, shopping, banking and accessing medical info while teens are, not surprisingly, more comfortable with social media.

Teens may simply lack experience with some of these online behaviors.

		ADULTS	TEENS
)	DEVICE USED TO ACCESS INTERNET (%)		
	Smartphone	73%	79%
	SHORTENED URLS (% TOP 2 BOX)		
	Use them	36%	41%
1	WHY HAVEN'T USED THEM (%)		
	Confusing	30%	25%
	Don't like them	8%	13%
	QR CODES (% TOP 2 BOX)		
	Use them	49%	54%
	WHY HAVEN'T USED THEM (%)		
	Never needed to	66%	59%
	Don't like them	13%	17%
	WHY USED THEM (%)		
	Convenient	66%	58%
	SAFEST WAY TO NAVIGATE TO A WEBS	ITE TO MAKE P	URCHASE (%)
	Арр	22%	29%
	SAFEST WAY TO ACCESS PERSONAL INF	O (%)	
	Арр	26%	33%

	ADULTS	TEENS
COMFORT W/ ONLINE BEHAVIOR (% TOP 2 E	OX)	
Search for info	92%	88%
Shop	85%	80%
Bank	76%	62%
Access medical info	75%	70%
Social media to talk about friends/family	63%	71%
COMFORT W/ ONLINE ACTIVITIES (% TOP 2 I	BOX)	
Email – legacy gTLD	93%	90%
Email – new gTLD	48%	42%
Financial info – new gTLD	36%	43%

## ABUSIVE INTERNET BEHAVIOR AND CYBER CRIME – ADULTS VS TEENS

Adults are more likely than teens to be familiar with abusive internet behavior, to feel the source is more likely to be organized, and to feel it's more common, to have been affected, and to be scared.

Further, adults are more likely to use antivirus as the way to avoid abuse, while teens are more likely to stop making online purchases—however even among teens it is not a prevalent response.

	<b>ADULTS</b>	TEENS
FAMILIARITY (% TOP TWO)	!	
Spamming	58%	53%
Malware	48%	44%
Phishing	43%	35%
SOURCES OF ABUSE (% ORGANIZED)		
Phishing	66%	57%
Malware	66%	58%
Stolen credentials	65%	59%
Spamming	64%	58%
Cyber squatting	62%	52%
HOW COMMON (% TOP 2 BOX)		
Spamming	91%	88%
Malware	88%	81%
Phishing	85%	76%
Stolen credentials	82%	72%
BEEN AFFECTED (%)		
Spamming	70%	64%
Malware	57%	46%
Phishing	31%	24%

	ADULTS	TEENS
HOW SCARED (% TOP 2 BOX)	!	
Stolen credentials	87%	81%
Malware	82%	73%
Phishing	79%	83%
Spamming	60%	50%
MEASURES TO AVOID (% ANTIVIRUS)	! !	
Phishing	44%	34%
Spamming	41%	32%
Cyber squatting	35%	28%
Stolen credentials	42%	32%
Malware	59%	51%
MEASURES TO AVOID (% STOPPED PURCHASING)		
Phishing	10%	13%
Spamming	8%	11%
Cyber squatting	ı ı 8%	12%
Stolen credentials	10%	17%
Malware	! 8%	11%
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