MUCH ADO ABOUT NOTHING: ICANN'S NEW GTLDS

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On October 23, 2013, the president of the Generic Domain Division of the Internet Corporation of Assigned Names and Numbers ("ICANN") announced "the biggest change to the Internet since its inception."¹ After eight years of research, forty-seven different requests for public comments, nearly 2,500 public comments, fifty-five advisory documents, and seven versions of the New gTLD Applicant Guidebook, ICANN began its highly anticipated generic top-level domain ("gTLD") rollout with four new non-Latin language scripts.² According to ICANN, the creation of new gTLDs will "pav[e] the way for increased consumer choice by facilitating competition among registry service providers."³

Internet Protocol ("IP") addresses serve as the directory for companies, organizations, and other entities on the Internet.⁴ Those IP addresses are randomly generated numbers that are difficult for users to remember. The domain name system ("DNS") solves this problem by replacing the numbers with alphanumeric domain names that are usually made up of common words or phrases. Instead of a user being forced to remember the series of numbers to link him to the particular computer that he intends to access, he must only remember the domain name.⁵ A domain name—for example, *www.google.com*—is organized by labels or levels, which are divided by periods.⁶ The rightmost label—for example, *.com*—is the top-level domain, which is

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^{1.} Press Release, Internet Corp. for Assigned Names and Numbers, First New Generic Top-Level Domains Delegated (Oct. 23, 2013), *available at* http://www.icann.org/en/news/press/releases/release-23oct13-en.

^{2.} Id.

^{3.} Frequently Asked Questions, ICANN: NEW GENERIC TOP-LEVEL DOMAINS, http:// newgtlds.icann.org/en/applicants/customer-service/faqs/faqs-en (last visited Jan. 26, 2014) [hereinafter Frequently Asked Questions].

^{4.} See Glossary, INTERNET CORP. FOR ASSIGNED NAMES & NUMBERS, http:// www.icann.org/en/about/learning/glossary (last visited Jan. 26, 2014) [hereinafter Glossary].

^{5.} *See id.*

^{6.} See Christopher G. Clark, The Truth in Domain Names Act of 2003 and a Preventative Measure to Combat Typosquatting, 89 CORNELL L. REV. 1476, 1483 (2004).

the highest level of domain on the Internet.⁷ Each label to the left of the toplevel domain—for example, *google*—represents a subdivision or a subdomain.⁸

At the apex of the DNS is a set of thirteen root servers, which lists the IP addresses of the computers containing the zone files.⁹ Below these servers are computers that hold the top-level domain zone files; these computers list the IP addresses of the name servers for each second-level domain name that the computer controls.¹⁰ If a user looks for a specific IP address, then his computer sends the request to the local DNS servers for its location.¹¹ If the local servers cannot find the location, they transfer the query up the line.¹² Therefore, the ability to modify the root zone files in the root servers is a huge power, because if the file is modified, the IP address cannot be found.¹³

Many commentators have advocated the introduction of substantially more gTLDs in order to combat the allegedly anticompetitive policies of ICANN.¹⁴ Previously, ICANN had limited the number of gTLDs and thereby created an artificial scarcity, particularly under the gTLD .*com*.¹⁵ New companies were thus prevented from entering the marketplace because most domains have already been registered.¹⁶

Critics like Professors Froomkin and Lemley have suggested that the limited number of gTLDs owned by the registrar VeriSign, and essentially controlled by ICANN, may actually violate antitrust law.¹⁷ Professors

866

16. A. Michael Froomkin, *Wrong Turn in Cyberspace: Using ICANN to Route Around the APA and the Constitution*, 50 DUKE L.J. 17, 22 (2000) (internal citation omitted) ("In particular, as attractive domain names in .com began to become scarce, disputes over attractive names became increasingly common" (internal citation omitted)).

17. See A. Michael Froomkin & Mark A. Lemley, *ICANN and Antitrust*, 2003 U. ILL. L. REV. 1, 52–66 (2003); see also Justin T. Lepp, Note, *ICANN's Escape from Antitrust Liability*, 89 WASH. U.L. REV. 931, 938–48 (2012). See generally Paul J. Cambria, Jr., ICANN, *The ".xxx"*

^{7.} Id.

^{8.} In this case, google would be the second-level domain name.

^{9.} See Jonathan Weinberg, ICANN and the Problem of Legitimacy, 50 DUKE L.J. 187, 197 (2000).

^{10.} See id.

^{11.} See id.

^{12.} See id.

^{13.} The simplest analogy to the root servers would be a global post office. An individual would post a letter and add an address to it, which is similar to an IP address. If it were a local address in a small town, the local post office would be able to find it without any problems. However, if this were a letter being sent from Berkeley, California to Kiev, Ukraine, it would be sent to a large number of post offices that ultimately would be able to identify where to send the letter. However, if the maps used by the post office were modified, the letter would return to the sender because the address was not recognized, similar to an IP address that could not be found because of a modified root zone file.

^{14.} See infra Part III.

^{15.} See infra Part III.

Froomkin and Lemley advised creating more gTLDs to prevent ICANN from controlling a large share of the market.¹⁸ In contrast, Esther Dyson, founding chairwoman of ICANN, stated that the new gTLDs system was similar to "creating a business, like derivatives on Wall Street, that has no value You can charge people for it, but you are contributing nothing to the happiness of humanity."¹⁹

This Note examines ICANN's gTLD policies, focusing on potential anticompetitive effects. It contends that, even though expansion of gTLDs would likely address Professor Froomkin's and Lemley's concerns about centralized control of IP addresses, the domain name scarcity issue either does not exist under the present system or is greatly exaggerated.²⁰ The former limitations on gTLDs did not, therefore, rise to the level of antitrust violations. Moreover, this Note contends that creating more gTLDs will likely produce adverse consequences.²¹ On balance, ICANN's gTLD expansion will likely cause more harm than good, especially since many companies will expend recourses without any tangible results.

Part I of this Note summarizes the Internet's relatively short but tumultuous history with a focus on ICANN and the domain name system, and then discusses the current state of events in the new gTLD regime. Part II addresses the possible antitrust problems embedded in the gTLD system. Part III analyzes the economic effects of adding new gTLDs to the current regime. Part IV advises business owners in the wake of the new gTLD regime.

I. BACKGROUND

A. THE INTERNET

The Internet consists of a network of interconnected computer systems that sends and receives information. The modern Internet actually began with the "packet switching" research funded by the United States

Debate, and Antitrust: The Adult Internet Industry's Next Challenge, 23 STAN. L. & POL'Y REV. 101, 102 (2012) (arguing that ICANN's overarching control over gTLDs and collusion with the ICM Registry "curtail[ed] a particular segment of protected market activity," which constituted a violation of the Sherman Act).

^{18.} Froomkin & Lemley, supra note 17, at 52.

^{19.} Natasha Singer, *When You Can't Tell the Suffixes Without a Scorecard*, N.Y. TIMES, Aug. 18, 2013, at BU3.

^{20.} See infra Part III.

^{21.} Infra Part III.

Department of Defense in the 1960s.²² The National Science Foundation ("NSF"), a federal agency that advances research and education in all the non-medical fields of science and engineering, provided funding to find more powerful technology and connect multiple networks of computers.²³ In 1990, when the Internet had grown beyond its humble origins as a relatively small network of computers, NSF contracted with a for-profit organization called Network Solutions, Inc. ("NSI") to control the DNS.²⁴ In 1992, the United States granted the NSF exclusive control of the root domain system²⁵ of computers, and the contractor, NSI, began charging fees to register domain names on the root server.²⁶ Soon after, other companies established a network of alternative servers to provide a competing registry with NSI's key root server.²⁷

By 1994, there were disputes between the engineers at the NSF and the managers at NSI over the large number of domain names that NSI was granting.²⁸ Tired of the disputes, the Department of Commerce issued a White Paper suggesting that certain individuals from the private sector take charge of the DNS.²⁹ In response, a group of scientists led by Dr. Jon Postel created ICANN.³⁰ Henceforth, the U.S. Department of Commerce charged ICANN with controlling all policy in the future of the DNS.³¹. Nevertheless,

26. See Weinberg, supra note 9, at 200-01.

27. See Rogue Domains Revolt, CNET (Mar. 4, 1997, 4:15 PM), http://news.cnet.com/Rogue-domains-revolt/2100-1023_3-275957.html.

28. See Zach Tomaszewski, The Domain Name System: At the Root of It (May 8, 2001) (unpublished student paper, University of Hawaii), available at http://www2.hawaii.edu/~ztomasze/dnspaper.html.

29. Management of Internet Names and Addresses, 63 Fed. Reg 31,741, 31,744 (June 10, 1998). See also Froomkin & Lemley, *supra* note 17, at 10.

^{22.} See Christopher M. Bruner, States, Markets, and Gatekeepers: Public-Private Regulatory Regimes in an Era of Economic Globalization, 30 MICH. J. INT'L L. 125, 149 (2008).

^{23.} See Weinberg, supra note 9, at 193.

^{24.} See Bruner, supra note 22, at 153–54.

^{25.} NSF was only granted exclusive use of the key root server. Normally, users send their DNS queries to the name server that references the key root zone. However, that is not necessary. Instead, users can require that their computers go to completely separate root servers which reference a completely different set of domains. *See* Weinberg, *supra* note 10, at 198. Using a Harry Potter/postal service analogy, this would be similar to sending a letter to Diagon Alley. If an individual uses the right postal system (for example, one comprised entirely of owls), the letter will get to the right recipient. However, the standard postal service will not know what to make of the address. *Owl Post*, HARRY POTTER WIKIA, http://harrypotter.wikia.com/wiki/Owl_post (last visited Jan. 26, 2014).

^{30.} See Froomkin & Lemley, supra note 17, at 10.

^{31.} See id. at 8–9.

the U.S. government still maintains a large amount of control over the DNS. 32

The goals of ICANN in managing the DNS are to preserve the operational stability of the Internet, to promote competition, to develop policies to ensure bottom-up coordination amongst entities, and to ensure that there is a broad representation of the global Internet community.³³ ICANN operates the Internet Assigned Numbers Authority ("IANA")³⁴ and is in charge of delegating the management of top-level domains to third-party organizations called "registry operators," each of which in turn operates the authoritative domain name database for its respective top-level Domain ("TLD").³⁵ VeriSign, for example, operates the gTLD of *.com*, so all domain names that end with *.com* must register with VeriSign.³⁶

Because of the sheer number of domain names, the registry operators contract with organizations called registrars, such as *godaddy.com* or *namecheap.com*.³⁷ Those registrars sell domain names to consumers, and there are hundreds of registrars for each registry operator.³⁸ Although the registrar operators wield a large amount of power by controlling which registrars enter the market, ICANN has a significant amount of control over the domain name market place because it is able to choose the small amount of registry operators, and it has the power to disqualify a registrar.³⁹

^{32.} The pact between the United States and ICANN, called the Affirmation of Commitment, provides for periodic reviews of ICANN's activities by the Governmental Advisory Activity and other members of the ICANN community. *See infra* Section II.A.2. Whether or not an entity other than the U.S. government should control the DNS (which is an international system) is the subject of much debate. *See* Philip S. Corwin, *ICANN@15: Born in the USA—But Will It Stay?*, CIRCLEID (Nov. 15, 2013), http://www.circleid.com/pdf/ICANN_at_15_Born_in_the_USA_But_will_it_Stay.pdf.

^{33.} See Memorandum of Understanding Between the U.S. Department of Commerce and Internet Corporation for Assigned Names and Numbers (Nov. 25, 1998), available at http://www.icann.org/general/icann-mou-25nov98.htm.

^{34.} IANA is "responsible for the global coordination of the DNS Root, IP addressing, and other Internet protocol resources." INTERNET ASSIGNED NUMBERS AUTHORITY, https://www.iana.org (last visited Feb. 7, 2014).

^{35.} See Kathleen E. Fuller, ICANN: The Debate over Governing the Internet, 2001 DUKE L. & TECH. REV. 2, 5 (2001). A top-level domain includes both gTLDs (generic top-level domains like .com) and ccTLD's (country code top-level domains like .uk).

^{36.} See .com Registry Agreement, INTERNET CORP. FOR ASSIGNED NAMES & NUMBERS (Dec. 1, 2012), https://www.icann.org/en/about/agreements/registries/com.

^{37.} See Glossary, supra note 4.

^{38.} See id.

^{39.} See Froomkin & Lemley, supra note 17, at 7.

B. GENERIC TOP-LEVEL DOMAINS

By 1984, the U.S. government had established six general-purpose domains: *.com* (for-profit businesses), *.edu* (U.S. education institutions), *.gov* (U.S. government entities), *.mil* (U.S. military), *.org* (non-profit organizations), and *.net* (general umbrellas sites).⁴⁰ Four years later, in response to NATO's request, the TLD *.int* was added for organizations created by a treaty between two nations.⁴¹

In 1995, the head of IANA created an Internet draft that established committees to create new gTLDs.⁴² In 1997, a new organization called the International Ad Hoc Committee recommended seven new gTLDs: *.arts*, *.firm*, *.info*, *.nom*, *.rec*, *.store*, and *.web*.⁴³ However, the gTLDs were abandoned when ICANN was created.⁴⁴ In 2000, ICANN received proposals for new gTLDs, and between 2001 and 2004, seven gTLDs were activated: *.biz* (generic TLD to provide relief for *.com*), *.info* (open TLD), *.museum* (verified legitimate museum), *.name* (individuals or fictional characters), *.coop* (cooperatives), *.pro* (licensed or certified professionals), and *.aero* (air-travel related entities).⁴⁵

In 2004, ICANN allowed applications for more top-level domains and eventually approved *.asia* (entities based in Asia, Australia, or the Pacific), *.cat* (Catalan-related site), *.jobs* (established companies with jobs to advertise), *.mobi* (mobile devices), *.post* (postal administrations), *.tel* (contact information of the DNS), and *.travel* (travel related entity).⁴⁶ In 2011, *.xxx* (pornographic)

^{40.} Despite their original purpose, .com, .net, and .org are now open for use for any purpose. See Chris Hoffman, The Difference Between .com, .net, .org and Why We're About to See Many More Top-Level Domains, HOW-TO GEEK (Oct. 15, 2012), http://www.howtogeek.com/ 126670/the-difference-between-.com-.net-.org-and-why-were-about-to-see-many-more-top-level-domains.

^{41.} See Rodney A. Myer, Comment, Domains Without Borders: Reconciling Domain Name Dispute Resolution Policies and Trademark Rights Between the United States and the Nations of the European Union, 20 PENN ST. INT'L L. REV. 415, 417 (2002).

^{42.} J. POSTEL, INTERNET ENG'G TASK FORCE, NEW REGISTRIES AND THE DELEGATION OF INTERNATIONAL TOP-LEVEL DOMAINS (June 1996), *available at* http://tools.ietf.org/html/draft-postel-iana-itld-admin-01. An Internet draft is a working document of the Internet Engineering Task Force. *Id.*

^{43.} See Ira S. Nathenson, Comment, Showdown at the Domain Name Corral: Property Rights and Personal Jurisdiction over Squatters, Poachers and Other Parasites, 58 U. PITT. L. REV. 911, 983 (1997).

^{44.} See Barbara A. Solomon, Domain Name Disputes: New Developments and Open Issues, 91 TRADEMARK REP. 833, 834 (2001).

^{45.} See id.

^{46.} *ICANN-Accredited Registrars*, INTERNET CORP. FOR ASSIGNED NAMES & NUMBERS, http://www.icann.org/registrar-reports/accredited-list.html (last visited Jan. 26, 2013).

was finally approved despite ICANN's initial rejection.⁴⁷ All of the TLDs established after 2003 are sponsored TLDs, which means that a specific community sponsors the domains and that registrants of each domain must be registered members of that community.⁴⁸

On June 26, 2008, ICANN announced that it would begin an unprecedented process for naming gTLDs in order to introduce more of them into practice.⁴⁹ In June 2011, ICANN launched the new program with the goals of "enhancing competition and consumer choice, and enabling the benefits of innovation via the introduction of new gTLDs, including both new ASCII and internationalized domain name (IDN) top-level domains."⁵⁰ When the application window opened on January 12, 2012, ICANN had collected almost two thousand applications for new gTLDs.⁵¹ Applications are processed and evaluated in a random order determined by lottery.⁵² The ICANN staff processes the applications, and expert, independent third-party evaluators appraise them.⁵³ In March 2013, ICANN began releasing the results of its initial evaluation.⁵⁴ Those applications that pass the initial screening and have no objections are eligible to proceed to contracting.⁵⁵

ICANN has explained that creating a new gTLD will allow the operators of the gTLD to increase control by setting the rules and prices for those registering the gTLD, and to create an ongoing revenue stream since customers will be renewing their domain names.⁵⁷ ICANN has also

^{47.} See Nafees Uddin, Stymieing Controversy Over Generic Top-Level Domains (gTLDs) and Other Internet Governance Decisions with Content Neutrality, 11 SEATTLE J. SOC. JUST. 813, 836–37 (2013). For more information about the xxx TLD history, see *infra* notes 107–108 and accompanying text.

^{48.} See Karl M. Manheim & Lawrence B. Solum, An Economic Analysis of Domain Name Policy, 25 HASTINGS COMM. & ENT. L.J. 359, 455 (2003).

^{49.} Biggest Expansion in gTLDs Approved for Implementation, INTERNET CORP. FOR ASSIGNED NAMES & NUMBERS (June 26, 2008), http://www.icann.org/en/news/announcements/announcement-4-26jun08-en.htm.

^{50.} *About the Program*, ICANN: NEW GENERIC TOP-LEVEL DOMAINS, http://newgtlds.icann.org/en/about/program (last visited Jan. 26, 2014).

^{51.} See id.

^{52.} See id.

^{53.} See id.

^{54.} See id.

^{55.} See id.

^{56.} See Frequently Asked Questions, supra note 4. gTLDs are expected to be delegated within one year of signing a registry agreement with ICANN. Id.

^{57.} Benefits and Risks of Operating a New GTLD, ICANN: NEW GENERIC TOP-LEVEL DOMAINS, http://newgtlds.icann.org/en/about/benefits-risks (last visited Jan. 26, 2014) [hereinafter Benefits and Risks].

acknowledged that establishing a new gTLD includes numerous risks.⁵⁸ The applicant must pay \$185,000 for the evaluation fee, pay for ongoing registry operational costs, and "demonstrate sufficient financial depth to keep the registry fully operational for at least three years even if the [applicant's] business plan does not achieve its objectives."⁵⁹ ICANN has recognized that operating a new gTLD could lead to a loss of investment if the string⁶⁰ does not pass the evaluation process due to competition with similar strings.⁶¹

C. DISPUTE RESOLUTION SYSTEM

The creation of large numbers of new gTLDs increases the possibility of disputes, including those in which trademark owners allege that gTLD names infringe on their intellectual property. To address these concerns, ICANN has introduced four possible ways that trademark owners can protect their marks from potentially overlapping gTLDs: "legal rights objection, string confusion objection, community objection, and limited public interest objection."⁶²

First, a company may raise a legal rights objection to a domain name if the company has registered its trademark and thereby owns an intellectual property right to the name.⁶³ Companies must file legal rights objections with the World Intellectual Property Organization ("WIPO") Arbitration and Mediation Center.⁶⁴ WIPO charges an administrative fee of \$2,000 and an \$8,000 fee for the use of a single expert panel, and decides if the objection should be upheld or denied based on an eight-factor non-exclusive test.⁶⁵

^{58.} Id.

^{59.} Id.

^{60.} A string is a sequence of characters comprising an applied-for gTLD. See Glossary, supra note 4.

^{61.} Benefits and Risks, supra note 57.

^{62.} See Brandon Marsh, Note, ICANN'T Help Myself: Beneficial Adjustments to the New Generic Top-Level Domain Name Expansion Process, 95 J. PAT. & TRADEMARK OFF. SOC'Y 195, 206 (2013).

^{63.} See WIPO ARBITRATION & MEDIATION CTR., END REPORT ON LEGAL RIGHTS OBJECTION PROCEDURE 2013, at 7 (Dec. 2013), http://www.wipo.int/export/sites/www/amc/en/docs/lroreport.pdf.

^{64.} See id.

^{65.} See, e.g., Coach, Inc. v. Koko Island, LLC, No. LRO2013-0002 (WIPO Arbitration & Mediation Center Aug. 14, 2013), available at http://www.wipo.int/export/ sites/www/amc/en/domains/lro/docs/lro2013-0002.pdf. The eight factors are: (1) similarity of the mark, (2) trademark owner's use is bonafide, (3) public recognition of the mark, (4) applicant's intent in applying for the gTLD, (5) applicant's bonafide use of the mark, (6) applicant's IP rights in mark, (7) applicant is commonly known by the mark, and (8) likelihood of confusion. See ICANN, GTLD APPLICANT GUIDEBOOK 3.19 (2012), available at http://newgtlds.icann.org/en/applicants/agb [hereinafter GUIDEBOOK]. For

Second, if a company possesses either a confusingly similar pre-existing top-level domain or applied for the same or similar gTLD in the same application period, it can file a string confusion objection with the International Centre for Dispute Resolution ("ICDR").⁶⁶ The ICDR charges a \$2,750 filing fee per party, per objection, and if the companies do not reach a settlement before the dispute resolution period, there is also a service fee of \$1,250.⁶⁷

Third, a delineated community can also file an objection with the International Center of Expertise of the International Chamber of Commerce ("ICC") if the domain name is identical to an established community to which the objector belongs.⁶⁸ Finally, a group can file a limited public interest objection if it objects because the gTLD offends generally accepted norms of morality and public order. This type of objection is filed with the ICC.⁶⁹ Both the public interest objection and the community objection require non-refundable filing fees of up to \$5,000.⁷⁰

In all of these instances, the burden of proof lies with the objecting party.⁷¹ If an objection is successful, then the new gTLD will not be given because the application cannot be further reviewed.⁷² For the party applying for a new gTLD, such a determination is final because there is no appeal in the review stage of the process. However, the company seeking a new gTLD can apply again in later rounds.⁷³

II. ANTITRUST ANALYSIS

Before the advent of the new gTLDs, several scholars had contended that ICANN restrained competition in the domain name space by restricting

example, The DirecTV Group objected to Dish DBS's registration of the domain name *.direct*, and the objection was upheld; in contrast Coach, Inc. objected Donuts Inc.'s registration of *.coach*, and the objection was denied. *Legal Rights Objections Under ICANN's New gTLD Program*, WIPO, http://www.wipo.int/amc/en/domains/lro (last visited Feb. 7, 2014.)

^{66.} *Objection and Dispute Resolution*, ICANN: NEW GENERIC TOP-LEVEL DOMAINS, http://newgtlds.icann.org/en/program-status/odr (last visited Jan. 26, 2014).

^{67.} INT'L CTR. FOR DISPUTE RESOLUTION, FEES AND COSTS FOR STRING CONFUSION OBJECTIONS (May 2012), *available at* http://newgtlds.icann.org/en/program-status/odr.

^{68.} GUIDEBOOK, *supra* note 65, at 3.7–3.8.

^{69.} Introduction to ICANN New gTLD Dispute Resolution, INT'L CHAMBER OF COMMERCE, http://www.iccwbo.org/products-and-services/arbitration-and-adr/expertise/introduction-to-icann-new-gtld-dispute-resolution (last visited Jan. 26, 2014).

^{70.} GUIDEBOOK, *supra* note 65, at 1.45.

^{71.} Id. at 3.18.

^{72.} Id. at 3.9.

^{73.} Id. at 3.25.

the number of generic top-level domains.⁷⁴ First, there was no competition between companies for the registry function in the existing gTLDs.⁷⁵ This lack of competition allowed a limited number of companies (chosen by ICANN) to maintain control over the DNS and led to a number of lawsuits.⁷⁶ Second, consumers had a limited choice for domain names. According to this line of argument, the limited number of gTLDs created an artificial scarcity of domain names.77 It is possible that these types of arguments inspired the creation of new gTLDs to combat the antitrust concerns.78

Section II.A discusses the federal antitrust section under which critics have accused ICANN of hindering competition. Section II.B considers ICANN's liability under Section 2 of the Sherman Act as it relates to registries and the gTLD market. Section II.C analyzes ICANN's liability under Section 1 of the Sherman Act as it relates to the contracts signed between ICANN and the registries, especially VeriSign.

А. ANTITRUST LAW

1. The Sherman Act

The Sherman Act⁷⁹ seeks to protect consumers from arrangements that would unfairly restrain competition.⁸⁰ Under Section 1 of the Act, "[e]very contract, combination ..., or conspiracy, in restraint of trade or commerce ..., is declared to be illegal."81 Courts have struck down horizontal

874

^{74.} See Froomkin & Lemley, supra note 17, at 52; see also Lily Blue, Note, Internet and Domain Name Governance: Antitrust Litigation and ICANN, 19 BERKELEY TECH. L.J. 387, 393 (2004) ("Critics have noted that some of ICANN's policies seemingly hinder competition, especially in providing new registries and new gTLDs in the domain name market."); Brandon Marsh, supra note 62, at 219 ("ICANN has decided to implement the new gTLD expansion as a way to increase innovation within the DNS and decrease the domain name scarcity currently occurring in .com."); Lepp, supra note 17, at 947 ("[T]he New gTLD Program represents a substantial step toward increasing competition in the domain name market.").

^{75.} Jay P. Kesan & Rajiv C. Shah, Fool Us Once Shame on You-Fool Us Twice Shame on Us: What We Can Learn from the Privatizations of the Internet Backbone Network and the Domain Name System, 79 WASH. U. L.Q. 89, 198 (2001).

^{76.} See, e.g., Name.space, Inc. v. Internet Corp. for Assigned Names & Numbers, No. CV 12-8676, 2013 WL 2151478 (C.D. Cal. Mar. 4, 2013); Verisign, Inc. v. Internet Corp., No. CV 04-1292, 2004 WL 1945561 (C.D. Cal. May 18, 2004).

^{77.} For a fuller explanation, see generally Froomkin & Lemley, supra note 17.

^{78.} See Frequently Asked Questions, supra note 3.

^{79.} Sherman Act of 1890, ch. 647, 26 Stat. 209 (current version at 15 U.S.C. §§ 1-7 (2012)).

^{80.} See Spectrum Sports, Inc. v. McQuillan, 506 U.S. 447 (1993).

^{81. 15} U.S.C. § 1.

agreements (in which competitors in the same level of the supply chain agree to fix prices or allocate territories amongst themselves), vertical agreements (in which manufacturers and distributors agree to fix prices or divide territories), refusals to deal (in which companies boycott working with competitors), tying agreements (in which a seller of a product conditions the sale on a buyer's promise to buy an unrelated product), and exclusive dealing agreements (in which a supplier agrees to sell all or a significant portion of its output to a specific buyer and vice versa).⁸² Some agreements, such as horizontal price fixing or horizontal territory allocation, are considered per se illegal, and may not be rebutted based on a lack of market power or on effects on competition.⁸³ However, rule-of-reason analysis is used as the default for most other types of agreements, which asks whether the challenged practice promotes or suppresses market competition. The court determines if the violation unreasonably restrains trade and must consider facts particular to that market and the history of the alleged violation.⁸⁴

Whereas Section 1 of the Sherman Act covers agreements amongst multiple parties, Section 2 prohibits anticompetitive conduct of a single party in a particular market: "Every person who shall monopolize, or attempt to monopolize... any part of the trade or commerce ... shall be deemed guilty of a felony."⁸⁵ There are two elements that a plaintiff must prove to establish a Section 2 violation: "(1) the possession of monopoly power in the relevant market and (2) the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident."⁸⁶

Possession of market power in a relevant market is used as a proxy for possession of monopoly power, which is the first prong of the Section 2 analysis.⁸⁷ The relevant market is defined by both a product and a geographic dimension.⁸⁸ In determining the relevant product market, courts have looked at the extent to which the defendant's product is interchangeable in use with "alternative products" and the degree of cross-elasticity of demand⁸⁹ between

^{82.} See Mark A. Lemley & Christopher R. Leslie, Categorical Analysis in Antitrust Jurisprudence, 93 IOWA L. REV. 1207, 1219 (2008).

^{83.} See, e.g., United States v. Socony-Vacuum Oil Co., 310 U.S. 150, 223 (1940).

^{84.} See Continental T. V., Inc. v. GTE Sylvania Inc., 433 U.S. 36, 49 (1977).

^{85.} See 15 U.S.C. § 2.

^{86.} United States v. Grinnell Corp., 384 U.S. 563, 570-71 (1966).

^{87.} See T. Harris Young & Assocs., Inc. v. Marquette Elecs., Inc., 931 F.2d 816, 823 (11th Cir. 1991).

^{88.} See id.

^{89.} Cross-elasticity of demand calculates how much the demand for a good will change when the price of another good changes. *See Cross Elasticity of Demand*, INVESTOPEDIA http://www.investopedia.com/terms/c/cross-elasticity-demand.asp (last visited Feb. 7,

the defendant's product and the possible substitutes for it.⁹⁰ If market alternatives to the defendant's product are readily available, the defendant lacks monopoly power and thus has not violated Section 2.⁹¹

2. ICANN's Antitrust Defenses

Before ICANN was established, a number of plaintiffs brought antitrust lawsuits against NSI, ICANN's predecessor, for refusing to add new gTLDs to the root zone file.⁹² The district courts dismissed these claims under the federal instrumentality doctrine, which holds that parties with a contractual agreement with the U.S. government are granted antitrust immunity.⁹³ That argument was denied on appeal, where the Second Circuit and D.C. Circuit ruled that the mere existence of a government contract was not enough to confer absolute immunity from a federal agency (in this case, the Department of Commerce) to a federal contractor.⁹⁴ However, the circuit courts still dismissed the claims on equity grounds because the NSI was acting under explicit terms in its government contract about how properly to administer the DNS.⁹⁵ The circuit courts reasoned that NSI should not be punished for carrying out those terms.⁹⁶

Like NSI, ICANN could also argue that it is a private party acting under government contract should it face antitrust charges. ICANN was created in response to a government White Paper and was later controlled by the Department of Commerce.⁹⁷ Although a 2009 Affirmation of Commitments between ICANN and the Department of Commerce relaxed the Department's authority over ICANN by giving control to the larger stakeholder community, the Department still holds final authority over altering the root zone file.⁹⁸

^{2014).} For example, the demand for butter would increase if the price of margarine increases; those two goods are substitutes.

^{90.} Eastman Kodak Co. v. Image Technical Servs., Inc., 504 U.S. 451, 481-82 (1992).

^{91.} United States v. E. I. du Pont de Nemours & Co., 351 U.S. 377, 391 (1956).

^{92.} See, e.g., Name.Space v. Network Solutions, Inc., 202 F.3d 573, 577 (2d Cir. 2002); Thomas v. Network Solutions, Inc., 176 F.3d 500 (D.C. Cir. 1999). See also Froomkin & Lemley, supra note 17, at 33.

^{93.} See Froomkin & Lemley, supra note 17, at 33.

^{94.} Id.

^{95.} Id.

^{96.} Id.

^{97.} ICANN's power was "derivative of the U.S. government's own authority." See Bruner, supra note 23, at 156. See supra Section I.A.

^{98.} See A. Michael Froomkin, Almost Free: An Analysis of ICANN's 'Affirmation of Commitments,' 9 J. TELECOMM. & HIGH TECH. L. 187, 203 (2011).

However, despite the Department's involvement in ICANN, it is unlikely that a court would find that ICANN is a private party acting under explicit government contract. ICANN has routinely argued that it is an independent non-government entity bound by the needs of the entire world.⁹⁹ Furthermore, the 2009 Affirmation of Commitments has been internationally recognized as terminating the official agreement between ICANN and the Department of Commerce.¹⁰⁰ Recently, at the ICANN 48 Conference in Argentina, ICANN pledged to enter an age of global expansion and break free from the United States' "sphere of influence."¹⁰¹ Therefore, it is unlikely that a court would find that ICANN is a private party acting under continuous government contract, and thus ICANN would not have immunity from antitrust liability.

Finally, ICANN could argue that it is immune from antitrust liability because it is not acting in trade or commerce as required by the Sherman Act.¹⁰² However, ICANN's identity as a nonprofit organization does not immunize it from antitrust liability. Instead, the court must look at the particular transactions in question and analyze them in light of the circumstances.¹⁰³ If the transaction is commercial, then the nonprofit organization is acting in trade and therefore is subject to the Sherman Act.¹⁰⁴ Consequently, it is unlikely that ICANN will be able to argue that ICANN is immune from antitrust liability under this theory.

B. ICANN'S SECTION 2 ANTITRUST VIOLATIONS

This Section addresses ICANN's independent liability for its control of the gTLD market and therefore only analyzes ICANN's actions under Section 2 of the Sherman Act, which polices unilateral conduct.¹⁰⁵ As mentioned in Part I, ICANN controls the number of gTLDs and chooses the registries that maintain those gTLDs. This control has given ICANN monopoly power in the gTLD sphere.¹⁰⁶ Even when companies applied to ICANN for approval of new gTLDs, ICANN had the power to reject the

^{99.} See Froomkin & Lemley, note 17, at 38.

^{100.} Froomkin, *supra* note 98, at 200.

^{101.} See Kiran Malancharuvil, ICANN 48 in Buenos Aires: What Happened and What's Next?, CIRCLEID (Dec. 11, 2013, 12:06 PM), http://www.circleid.com/posts/20131211_icann_48_in_buenos_aires_what_happened_and_whats_next.

^{102.} In fact, ICANN has already argued this. *See* Manwin Licensing Int'l S.A.R.L. v. ICM Registry, LLC, No. CV 11-9514, 2012 WL 3962566, at *5 (C.D. Cal. Aug. 14, 2012).

^{103.} *Id.* at *5.

^{104.} Id. at *5-6.

^{105. 15} U.S.C. § 2 (2012).

^{106.} See Blue, supra note 74, at 397.

applications, and ICANN did so with great frequency.¹⁰⁷ ICANN also has contracts with each of its registry operators that all but guarantee a no-bid automatic renewal when their terms expire. A competitive renewal process is only initiated on the rare chance that the registry operator breaches certain terms.¹⁰⁸ With such a limited number of gTLDs and ultimate control over the new gTLDs and their registries, ICANN had the requisite possession of monopoly power in the relevant market.¹⁰⁹

Before the influx of the new gTLDs, the problem with finding ICANN liable under Section 2 came in the second prong: the "willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident."¹¹⁰ It can be argued that ICANN initially obtained a monopoly over gTLDs when the U.S. government awarded it that power in a so-called "historic accident."¹¹¹ ICANN has further suggested that its monopolism in preserving a small number of gTLDs is necessary for Internet stability and protection of trademark holders.¹¹² Critics, however, have argued that the slow process of initiating new gTLDS and registries, despite the lack of research as to the effect of new gTLDs, is indicative of ICANN's willful maintenance of its monopoly power.¹¹³

The new gTLD program, however, refutes these critics' arguments. The new program reveals that ICANN believes the DNS is capable of

110. United States v. Grinnell Corp., 384 U.S. 563, 570-71 (1966).

111. *Id*.

^{107.} Id. For example, in 2000 and 2004, ICM registry applied to ICANN for approval of .xxx, and ICANN rejected the proposal because it found that there was no need for a new gTLD. See Coal. for ICANN Transparency v. VeriSign, Inc., 611 F.3d 495, 500 (9th Cir. 2010). The ICM registry operates the .xxx gTLD for the adult entertainment community. See Rosemary S. Tarlton & Julia D. Kripke, Important Notice for Trademark Owners: Protecting Rights In Light of New Adult-Entertainment Domains, MORRISON FOERSTER (Aug. 22, 2011), http://www.mofo.com/files/uploads/images/110822-adult-entertainment-domains.pdf. After a number of independent reviews, ICANN finally approved the new gTLD and signed an unlimited long-term registry contract with ICM. See Manwin Licensing, 2012 WL 3962566, at *3.

^{108.} See Coal. for ICANN Transparency, 611 F.3d at 500.

^{109.} Courts have also looked at alternate markets to determine market power. The only other market for gTLDs, however, is alternate roots, and there have been many articles published about why alternate roots are not adequate substitutes. *See e.g.*, Blue, *supra* note 74; Froomkin & Lemley, *supra* note 17; Froomkin, *supra* note 16; Marsh, *supra* note 62; Uddin, *supra* note 47.

^{112.} See Edward Brunet, Defending Commerce's Contract Delegation of Power to ICANN, 6 J. SMALL & EMERGING BUS. L. 1, 6 (2002).

^{113.} See Froomkin & Lemley, supra note 17, at 23-24.

maintaining many new gTLDs.¹¹⁴ After 2014, thousands of new gTLDs will be introduced into the domain name system.¹¹⁵ Companies have the opportunity to create and maintain registries for an infinite number of toplevel domains.¹¹⁶ ICANN is not maintaining a monopoly in the gTLD market. Instead of using an opaque registry selection, ICANN allows companies to settle their differences privately in order to choose which company will maintain the registry; only in last resorts does ICANN proceed with a public auction for the gTLD string.¹¹⁷ Companies have the power to object to strings based on a number of criteria, and registrants can respond to the objections.¹¹⁸ As such, it seems ICANN is attempting to loosen its control of the gTLD sphere in response to the second prong of Section 2. Critics of ICANN can still argue that the long process to find adequate funding and create a thorough plan to run the registry hinders competitions among registries. However, the Ninth Circuit has previously held that "a high price alone is not an antitrust violation."119 With its new gTLD scheme, ICANN has likely escaped antitrust liability under Section 2 of the Sherman Act.

C. ICANN'S SECTION 1 ANTITRUST VIOLATIONS

Since there are currently a small number of gTLDs, critics have alleged that ICANN is hindering competition not only among registries, but also among consumers.¹²⁰ Since ICANN has unlimited contracts with registries, critics allege that ICANN is assisting in an agreement amongst registries to restrain trade, which is illegal under Section 1 of the Sherman Act.¹²¹ Consumers have limited choices among existing registries, especially since many of them are not open to the public. As such, they are limited to using registries like VeriSign, which are well known and open to the public.

As of September 2013, fifty-three percent of all registered websites had the gTLD of *.com*, owned by VeriSign. The next highest percentage of websites (5.7 percent) were registered under the TLD of *.net*, which VeriSign

^{114.} Frequently Asked Questions, supra note 3.

^{115.} *Id*.

^{116.} *Id.*

^{117.} GUIDEBOOK, *supra* note 65, at 1.28.

^{118.} Id. at 4.2-4.5.

^{119.} See Coal. for ICANN Transparency v. VeriSign, Inc., 611 F.3d 495, 500 (9th Cir. 2010).

^{120.} Froomkin and Lemley argue that the ICANN DNS registration system for toplevel domains inherently violates Section 1 of the Sherman Act because of the limited number of top-level domain registrars and their overarching control on the market. Froomkin & Lemley, *supra* note 17, at 52–53.

^{121.} See 15 U.S.C. § 1 (2012); Froomkin & Lemley, supra note 17, at 52–53.

also owns.¹²² In 2006, the Ninth Circuit found that ICANN awarded VeriSign the contract for *.com* without any bidding.¹²³ As such, one private company is essentially controlling close to sixty percent of the market with collusion from ICANN.¹²⁴

There is no indication that there are any alternative products or possible substitutes to the favorite .com gTLD.¹²⁵ Additionally, unlike in a standard market, where the product is relatively elastic and responds to changes in price, in this system, sellers have little incentive to offer low prices in a market where demand is inelastic.¹²⁶ ICANN has no incentive to discourage or prevent individual registry operators like VeriSign from charging high prices because consumers have nowhere else to turn. In the last few years, the demand for .com has increased, as demonstrated by its growing percentage of use while the prices have stayed stable.¹²⁷

880

124. There is no precise definition of how much market power is sufficient to show a monopoly. In *United States v. Aluminum Co. of America*, 148 F.2d 416, 424 (2d Cir. 1945), Judge Hand said that a market share of ninety percent "is enough to constitute a monopoly; it is doubtful whether sixty or sixty-four percent would be enough; and certainly thirty-three [percent] is not." *Id.* The Supreme Court has endorsed this view. *See* Am. Tobacco Co. v. United States, 221 U.S. 106 (1911). The Fifth Circuit has more recently stated that "monopolization is rarely found when the defendant's share of the relevant market is below 70%." Exxon Corp. v. Berwick Bay Real Estate Partners, 748 F.2d 937, 940 (5th Cir. 1984). The Tenth Circuit has observed that to establish "monopoly power, lower courts generally require a minimum market share of between 70% and 80%." Colo. Interstate Gas Co. v. Natural Gas Pipeline Co. of Am., 885 F.2d 683, 694 n.18 (10th Cir. 1989) (citation omitted). The Third Circuit noted that "a share significantly larger than 55% has been required to establish prima facie market power" and found that a market share between 75–80% of sales is "more than adequate to establish a prima facie case of power." United States v. Dentsply Int'l, Inc., 399 F.3d 181, 188 (3d Cir. 2005).

125. See infra Sections III.B & III.C.

126. An elastic product is one where a change in the price of the good leads to a change in the quantity demanded. In contrast, an inelastic product is one where a change in the price of a good does not cause a change in the quantity demanded. An example of a relatively inelastic product is gasoline because a change in the price of gasoline does not usually change the demand for gasoline. For a more detailed explanation of elasticity, see *Economic Basics: Elasticity*, INVESTOPEDIA http://www.investopedia.com/university/economics/economics4.asp (last visited Feb. 24, 2014).

^{122.} Use of Top-level Domains for Websites, W3TECHS, http://w3techs.com/technologies/overview/top_level_domain/all (last visited Jan. 26, 2014).

^{123.} Coal. for ICANN Transparency, 611 F.3d at 500.

^{127.} Use of *.com* has gone from forty-four percent in 2011, to forty-eight percent in 2012, to fifty-three percent in 2013. *See* SEDO, 2011 ANNUAL DOMAIN MARKET STUDY, 3, 10 (2011), *available at* http://www.sedo.com/fileadmin/documents/pressdownload/Q4_2011_DomainMarketStudy_US.pdf; *see also* SEDO, 2012 ANNUAL DOMAIN MARKET STUDY, 3, 10 (2012), *available at* http://www.sedo.com/fileadmin/documents/pressdownload/Q2_2012_DomainMarketStudy_US.pdf.

ICANN'S NEW GTLDs

However, despite its prima facie appearance of restricting competition, the agreement between VeriSign and ICANN does not actually restrain commerce in the relevant market. Consumers do not choose *.com* due to a conspiracy between VeriSign and ICANN to reduce access to other gTLDs, but rather due to outside pressures to use *.com*.¹²⁸ As such, even the advent of hundreds of new gTLDs would not produce an appreciable or effective increase in competition. Despite its claim, ICANN's new program probably will not increase competition in any meaningful way.¹²⁹

D. POTENTIAL FOR OTHER ANTITRUST VIOLATIONS DUE TO GTLDS

In a hearing to the House of Representatives in 2011, Federal Trade Commission chairman Jon Leibowitz said, "We worry that if ICANN goes broadly and doesn't ensure accuracy, it's going to be exponentially worse. There is going to be a burden on businesses, which will have to defensively register. We see a lot of cost but not a lot of benefit."¹³⁰ Currently, there are a number of worries that big name players will monopolize the Internet. Donuts, Inc.¹³¹ has applied for 307 gTLDs, Neustar has applied for 234, Google has applied for 101, and Amazon has applied for seventy-eight.¹³² John M. Simpson, the director of Consumer Watchdog's Privacy Project, wrote to the chairman of Senate Commerce, Science, and Transportation Committee:

If these applications are granted, large parts of the internet would be privatised. It is one thing to own a domain associated with your brand, but it is a huge problem to take control of generic strings. Both Google and Amazon are already dominant players on the internet. Allowing them further control by buying generic domain

2014]

^{128.} See infra Sections III.B & III.C.

^{129.} See infra Part IV.

^{130.} Oversight of the Antitrust Enforcement: Hearing Before the Subcomm. on Intellectual Prop., Competition, & the Internet of the H. Comm. on the Judiciary, 112th Cong. (2011) (statement of Jon Leibowitz, Chairman, Federal Trade Commission). Leibowitz was worried about ICANN approving too many gTLDs, which would require businesses to defensively register their products. See id.

^{131.} Donuts Inc. was founded specifically for the purpose of applying for and running new gTLDs. *See* Julianne Pepitone, *'Donuts' Startup Lands \$100 Million for Dot-Brand Domains*, CNN MONEY (June 5, 2012, 12:58 PM), http://money.cnn.com/2012/06/05/technology/donuts-domains-funding/index.htm?source=cnn_bin; DONUTS INC., http://www.donuts.co (last visited Feb. 27, 2014).

^{132.} New gTLD Application Status, INTERNET CORP. FOR ASSIGNED NAMES & NUMBERS https://gtldresult.icann.org/application-result/applicationstatus/viewstatus (last visited Mar. 11, 2014).

strings would threaten the free and open Internet that consumers rely upon.¹³³

By registering domain names like .blog, Google could theoretically implement a policy that all *.blog* domains must use its blogger service (stamping out competitors like Tumblr or Wordpress). If Google were to own all the second-level .*blog* domains, customers might have to use Google's blogger if they wish to register a blog. Typically, a company is under no obligation to deal with potential rivals and can refuse with immunity.¹³⁴ However, the Supreme Court has held that antitrust liability can be extended to a company that has absolute control over a resource and refuses to provide access to a competitor.¹³⁵ In Verizon Communications v. Law Offices of Curtis V. Trinko,¹³⁶ the Court narrowed this holding by explaining that a company will only be liable under Section 2 of the Sherman Act if it abandons a prior profitable course of dealing with a competitor for anticompetitive reasons or if it is itself a competitor in the downstream market for its products, thereby giving it a monopolistic incentive to refuse to deal with downstream competitors.¹³⁷ That latter factor may be a possible way for companies like Tumblr to ensure that Google is required to provide a domain name, even under a closed domain name system. However, it is unlikely that Simpson's prediction will come true considering that ICANN has frozen applications for gTLDs, and those companies that registered for closed generic registries have amended their applications.¹³⁸

III. NEW GTLDS WILL NOT SOLVE ANY POTENTIAL ANTITRUST VIOLATIONS

Professors Froomkin and Lemley and other critics argue that the potential antitrust violations would be eliminated with the advent of more gTLDs that are owned by registrars other than VeriSign.¹³⁹ However, this argument assumes that VeriSign's market power will shift with the advent of

^{133.} See Jenna Jones, Watchdog Attacks Google and Amazon over gTLD Applications, IPPRO THE INTERNET (Sept. 21, 2012), http://www.ipprotheinternet.com/ipprotheinternetnews/ domainnamesarticle.php?article_id=2551#.UugDdxDTnIU.

^{134.} See Aspen Skiing Co. v. Aspen Highlands Skiing Corp, 472 U.S. 585, 585 (1985).

^{135.} *Id.*

^{136. 540} U.S. 398, 409 (2004).

^{137.} Id. at 409.

^{138.} See Michael Berkens, Google Backs Off on Closed Generic Strings Including .Search So Does L'Oreal, THE DOMAINS (Oct. 10, 2013), http://www.thedomains.com/2013/10/10/google-backs-off-on-closed-generic-strings-including-search-so-does-loreal/comment-page-1.

^{139.} Froomkin & Lemley, *supra* note 17, at 52.

new gTLDs, and that .com will be become less popular. There is nothing to indicate that this will be the case. VeriSign's market power will only shift if companies perceive a scarcity of gTLDs and therefore have reason to purchase the new gTLDs. However, there is no engineering scarcity of TLDs—only an artificial scarcity¹⁴⁰ created in the .com realm.

A. ENGINEERING THEORY OF SCARCITY

Engineering scarcity of a good exists when demand for the product exceeds the resources available to satisfy consumer desires.¹⁴¹ Land in San Francisco, for example, is considered a relatively scarce resource because there is a large number of people who want land, while there is only a finite amount of earth in that location and no way of creating more. In contrast, there is an artificial scarcity if there exists the means to produce sufficient amount of the product, but the production is deliberately kept low, usually to increase the price of the product.¹⁴² For example, property in San Francisco is an artificially scarce resource; there is a way to build a seemingly infinite amount of homes, but those homes are not created.¹⁴³ Similarly, the United States has the means to print an unlimited amount of dollar bills, but doing so would cause hyperinflation.

As noted previously, several commentators view the DNS as limiting the number of domain names.¹⁴⁴ Furthermore, one firm (VeriSign) essentially

^{140.} Although this Note and the other articles that are mentioned employ the term "artificial scarcity," the term is not quite appropriate. An artificial scarcity requires that all of the goods are interchangeable. For example, Bitcoins are considered an artificially scarce resource since each coin is identical to the other, even though they all have a unique string identifier. *See* Joe Weisenthal, *Here's What Bitcoin Gets Right*, BUS. INSIDER (Nov. 24, 2013, 9:33 AM), http://www.businessinsider.com/heres-what-bitcoin-gets-right-2013-11. A better term to describe this type of scarcity is "economic scarcity." *See* Karl M. Manheim & Lawrence B. Solum, *An Economic Analysis of Domain Name Policy*, 25 HASTINGS COMM. & ENT L.J. 359, 388 (2003). However, most law review articles use the two terms interchangeably (with a larger percentage using the term "artificial scarcity"), and thus, artificial scarcity is used in this Note to remain consistent.

^{141.} *Scarcity,* INVESTOPEDIA, http://www.investopedia.com/terms/s/scarcity.asp (last visited on Feb. 7, 2014).

^{142.} Ronald Coase's theory has been used to discuss this issue of artificial scarcity. He wrote an article on point where he said, "Since we are usually concerned with a particular problem, we think not in terms of the total supply but the supply available for a particular use." R. H. Coase, *The Federal Communications Commission*, 2 J.L. & ECON. 1, 20 (1959).

^{143.} Technically, a better term would be "economic scarcity," since the homes would not be identical. Each property would have a different value due to external factors. *See supra* note 140 and accompanying text.

^{144.} See supra notes 17-19 and accompanying text.

884 BERKELEY TECHNOLOGY LAW JOURNAL [Vol. 29:865

controls the limited resource, *.com*, thereby giving it monopoly power.¹⁴⁵ Some commentators have even suggested that ICANN and VeriSign violate antitrust law through the perpetuation of their policies and practices.¹⁴⁶

The current domain name regime does not, however, create true engineering scarcity, but rather artificial scarcity.¹⁴⁷ Technically, there is a near infinite supply of domain names; the problem is that domain names are not fungible.¹⁴⁸ There is a higher demand for some domain names over others, thereby creating an artificial scarcity.¹⁴⁹ Creating more gTLDs will not, however, affect the demand for domain names because individuals have little demand for the domain names that will be created under the new gTLDs. Furthermore, there is going to be little change in the monopolistic power of ICANN and VeriSign, since VeriSign's gTLDs will still represent the majority of domain names.

B. THERE IS A SUFFICIENT SUPPLY OF DOMAIN NAMES

In 1999, Wired magazine reported that almost all of the standard dictionary words in the Merriam-Webster dictionary had been taken as .*com* domain names; only 1,760 words were free out of 25,500 standard words.¹⁵⁰ It noted that, at the time, "only about 100 new dictionary-word.com domains" were registered every month.¹⁵¹ However, even if the pace of dictionary-word registration decreased and new words were added to the dictionary, based on Wired's hypothesis, there should have been an end to all .*com* registration within two years.¹⁵² Obviously, this did not occur.

^{145.} *What Does .Com Mean?*, VERISIGN, https://www.verisigninc.com/en_US/domain-names/com-domain-names/what-does-com-mean/index.xhtml (last visited Feb. 24, 2014).

^{146.} See, e.g., Blue, supra note 74; Froomkin & Lemley, supra note 17; Marsh, supra note 62; Uddin, supra note 47; see also supra Sections II.B, II.C.

^{147.} See JENNY NG, THE DOMAIN NAME REGISTRATION SYSTEM: LIBERALISATION, CONSUMER PROTECTION AND GROWTH 122–23 (2012). See also supra note 140 and accompanying text.

^{148.} See Fungibility, INVESTOPEDIA, http://www.investopedia.com/terms/f/ fungibility.asp (last visited on March. 13, 2014). See also supra notes 141, 144 and accompanying text.

^{149.} There is only an artificial scarcity because technology exists to create an abundance of domain names. *See LDH (Letter, Digit, Hyphen)*, INTERNET CORP. FOR ASSIGNED NAMES & NUMBERS, http://www.icann.org/en/node/1145376 (last visited Jan. 26, 2014) [hereinafter LDH].

^{150.} Declan McCullagh, *Domain Name List Is Dwindling*, WIRED (Apr. 14, 1999), http://www.wired.com/science/discoveries/news/1999/04/19117.

^{151.} *Id.*

^{152.} See id.

ICANN'S NEW GTLDs

Currently, there are over 111 million *.com* domain names, and there are more added every month.¹⁵³ In 2009, the number of *.com* domain names was more than eight hundred times the number of domain-friendly words in Project Gutenberg's¹⁵⁴ online dictionary.¹⁵⁵ This is possible because domain names do not have to be one word; they can have numbers and dashes and contain made-up words. Conceivably, the domain name can have up to sixty-three characters.¹⁵⁶ Furthermore, it is becoming increasingly common to remove vowels to misspell words in domain names (such as Flickr, Socializr, and Tumblr) or to add random vowels (for example, Zooomr and Oooooc).¹⁵⁷ Individuals have created software that will randomly generate short, pronounceable domain names available for purchase.¹⁵⁸

Since domain names can contain letters, numbers, and hyphens, and can be between three and sixty-three characters long,¹⁵⁹ there is an incredible number of possible domain name combinations.¹⁶⁰ Even assuming that hyphens and numbers are not used, since they are less common, and using the median length of eleven characters, there are still more than three quadrillion possible domain names available.¹⁶¹ That number does not even account for other publically available gTLDs, such as *.net*, *.org*, *.info*, and *.biz*, and there are fewer than thirty-five million domain names currently registered online for those gTLDs.¹⁶² As such, it is impossible to say that there is an actual economic scarcity of domain names, or even *.com* domain names. Nor are there large barriers to entry,¹⁶³ considering a domain name

158. Id.

159. LDH, supra note 150.

160. The actual number is ninety-nine digits long and calculated with the following formula: $\sum_{i=3}^{63} 37^i$.

162. Domain Counts & Internet Statistics, supra note 154.

163. Barriers to entry are obstacles that make it difficult to enter a market. *Barriers to Entry*, INVESTOPEDIA http://www.investopedia.com/terms/b/barrierstoentry.asp (last visited Feb. 7, 2014). For example, in the oil market, requirements to enter the market are a large amount of capital and access to oil.

^{153.} Domain Counts & Internet Statistics, WHOIS SOURCE, http://www.whois.sc/internet-statistics (last visited Jan. 26, 2014) [hereinafter Domain Counts & Internet Statistics].

^{154.} Project Gutenberg is the world's oldest online dictionary and it contains full texts of public domain books.

^{155.} Max Chafkin, *Good Domain Names Grow Scarce*, INC. (July 1, 2009), http://www.inc.com/magazine/20090701/good-domain-names-grow-scarce.html.

^{156.} The world's longest possible domain name contains exactly sixty-three characters: http://www.thelongestdomainnameintheworldandthensomeandthensomemoreandmore.co m/record.htm.

^{157.} Chafkin, supra note 155.

^{161.} Only 0.8 percent of domain names are over twenty-five characters long. *See Average Length of Domain Names,* ZOOKNIC, http://www.zooknic.com/Domains/dn_length.html (last visited Feb. 7, 2014).

can cost as little as \$10 a year if the user is not picky about his or her domain name.

Commentators have frequently mentioned that there is an artificial scarcity of domain names, or a lack of catchy and short domain names.¹⁶⁴ There is a problem of artificial scarcity if applicants attempt to have domain names that are guessable, meaningful, memorable, spellable, or enterable. For example, *www.bookstores.com* is a more valuable domain name than *www.kdispjebdg.com* even though there is an equal number of letters in each one. For some very recognizable and popular domain name, there are huge barriers to entry for new consumers since the domain name can cost over a million dollars.¹⁶⁵ In short, even though there is no engineering scarcity in domain names, there is not a sufficient supply of "good" domain names, thereby creating an artificial scarcity.¹⁶⁶

C. THERE IS LITTLE DEMAND FOR NEW GTLDS

Even though there is an artificial scarcity of domain names for the *.com* gTLD, creating thousands of new gTLD's will not alleviate the problem because there is little demand for the new gTLDs over *.com*, the existing favorite gTLD.¹⁶⁷

1. New gTLDs Are Not Popular

In 2010, Michael Katz, Gregory L. Rosston, and Theresa Sullivan published a report to ICANN on the economic considerations of expanding to new gTLDs.¹⁶⁸ In the report, they analyzed some of the more recently created gTLDs, as well as the importance of different open TLDs.¹⁶⁹

With regard to *.mobi* (a TLD intended for mobile device-friendly websites that launched in 2007), the study found that registration for *.mobi* domain names did not reach expectations.¹⁷⁰ The CEO of dotMobi, the company that operates the gTLD *.mobi*, expected that there would be one million

^{164.} See Froomkin & Lemley, supra note 17, at 52.

^{165.} See e.g., Alyson Shontell, The 25 Most Expensive Domain Names of All Time, BUS. INSIDER (Dec. 23, 2012, 8:03 AM), http://www.businessinsider.com/the-20-most-expensive -domain-names-2012-12?op=1.

^{166.} See NG, supra note 147, at 122-23.

^{167.} See MICHAEL L. KATZ, GREGORY L. ROSSTON & THERESA SULLIVAN, ECONOMIC CONSIDERATIONS IN THE EXPANSION OF GENERIC TOP-LEVEL DOMAIN NAMES—PHASE II REPORT: CASE STUDIES 12 (2010), available at http://archive.icann.org/en/topics/new-gtlds/phase-two-economic-considerations-03dec10-en.pdf ("The relief of name scarcity is unlikely to be the principal source of social benefits derived from new gTLDs.").

^{168.} See generally id.

^{169.} *Id.*

^{170.} *Id.* at 20.

registrations in the first year, but he received twenty percent fewer registrations than expected.¹⁷¹ Furthermore, less than thirty-seven percent of *.mobi* domain names were renewed two years later.¹⁷² Additionally, although *.mobi* was intended to provide value for websites intended to be viewed on mobile sites, according to a *Los Angeles Times* article published in 2010, *.mobi* domain names "are now all but worthless" because the current mobile technology allows most websites to be easily accessible.¹⁷³

In 2001, .museum, a registry restricted to genuine museums, began accepting registrations.¹⁷⁴ The owner of the registry (MuseDoma) explained that individuals could use the gTLD "to locate museums, even without knowing their precise names."¹⁷⁵ For example, if a user wanted to go to the website for the Louvre, they could simply enter www.Louvre.museum without having to determine the correct domain name, and a search engine user could quickly identify the relevant page without having to browse through multiple entries. Furthermore, a museum without a public relations budget and without a large online presence would essentially get free advertising in the .museum index.176 In MuseDoma's application to ICANN to create the new gTLD, it estimated that forty thousand institutions may qualify for the .museum gTLD.¹⁷⁷ However, in 2010, when ICANN's report was published, only 556 different entities had registered, yielding an estimated attrition rate of about 1.4 percent.¹⁷⁸ In present day, there are 562 unique entities in the .museum index, and there are an estimated fifty-five thousand museums in the world, which yields an attrition rate of about one percent.179

When the ICANN report analyzed a ten percent sample of the domain names on the *.museum* index, it found that fifty-five percent of the sites either

173. See Carey, supra note 172.

^{171.} Id.

^{172.} Id. For example, in 2007, someone purchased poker.mobi for \$150,000, and the site is now defunct. See Bridget Carey, "Mobi" Mobile Domain Names Snapped Up by Speculators Are Now All But Worthless, LOS ANGELES TIMES (June 9, 2010), http://articles.latimes.com/2010/jun/09/business/la-fi-domains-20100609.

^{174.} Carl Karp & Kenneth Hamma, *A Top-level Museum Domain*, ARCHIMUSE (Mar. 15, 2001), http://www.archimuse.com/mw2001/papers/hamma/hamma.html.

^{175.} What Will a .Museum Give You, .MUSEUM, http://about.museum/benefits.html (last visited Jan. 26, 2014).

^{176.} This index is the list of names that have registered under the .museum gTLD.

^{177.} Executive Summary of ICANN Application, .MUSEUM, http://www.nic.museum/exec_summary.html (last visited Feb. 7, 2014).

^{178.} See KATZ, ROSSTON & SULLIVAN, supra note 167, at 27.

^{179. .}Museum Names Containing the Label ".", .MUSEUM, http://index.museum/fullindex.php (last visited Jan. 26, 2014).

had no content or returned errors, thirty-two percent redirected to other sites, and only thirteen percent had museum content that was not available on any other domains.¹⁸⁰ In short, most of the domains did not provide unique content, and more than half of the domains provided no content at all. The report also analyzed various gTLDs and found that second-level domains other than *.com* were more than fifty percent less likely to contain content, much more likely to redirect to other gTLD sites, and much more likely to return unavailable sites.¹⁸¹ For example, for *.net* and *.org* domains, more than thirty-one percent of sites redirected the user to a different gTLD, more than thirty-four percent of the sites were not available, and less than seventeen percent of the sites stayed on a page with active content.¹⁸² Compare this with *.com* sites, where less than six percent of sites redirected the user to another gTLD, less than three percent of the sites were unavailable, and more than ninety-two percent of the sites stayed on the same page.¹⁸³

The same ICANN report also found that most brands are registered in .com, and the rest of the companies with headquarters outside of the United States are registered under their ccTLDs.¹⁸⁴ Brands that are registered in .com are registered on an average of 2.7 other gTLD's (.net, .org, .biz, .info), and the more valuable the brand, the more likely it is to register for other gTLDs.¹⁸⁵ The less valuable brands register fewer domains than do the most valuable brands, but even the top brands do not always register for non-.com gTLDs; the top brands register for an average of only seventy-five percent of other gTLDs, and many of these non-.com registrations do not support commercial content relevant to the brand of the company.¹⁸⁶ The report hypothesizes that this is because "many brand owners will not feel compelled to register their brands in new gTLDs if those new gTLDs offer no worse trademark protections and no better opportunity for gathering traffic than existing gTLDs brands."¹⁸⁷

Overall, the research indicates that creating more gTLDs does not create a larger market. Most of the top brands only register outside of their main gTLD (*.com*) for a defensive purpose, and then usually redirect the traffic to their main site. Less popular brands are less likely to register defensively,

^{180.} Katz, Rosston & Sullivan, supra note 167, at 42.

^{181.} Id. at 72.

^{182.} Id. at 73.

^{183.} Id.

^{184.} Id. at 64-65. ccTLDs are country code top-level domains, such as .uk, .fr, and .ru.

^{185.} Id. at 66.

^{186.} Id. at 65-66.

^{187.} Id. at 66.

which suggests "that significant costs may be borne only by the holders of the most valuable brands."¹⁸⁸ Furthermore, the creation of new gTLDs does not seem to create a large amount of new content because existing companies use these gTLDs to redirect traffic, while less well-known companies may not use gTLDs at all.¹⁸⁹ This suggests that large brands like Apple and IBM will use gTLD's like *.apple* and *.ibm* to link to their main *.com* site, and generic brands like *.maps* and *.book* will act similarly to the *.museum* gTLD. In other words, until consumer preferences change, most brands that have existing sites will redirect to their main site *www.books.google.com* and *www.maps.google.com*, and smaller stores will end up sticking with original gTLDs without ever purchasing domain names in the new gTLD sphere.

2. Domain Names Are Losing Importance

Evan Williams, the man who co-founded Blogger and Twitter, explained that domain names are getting less important every year.¹⁹⁰ First, and probably most important, is the prevalence of using natural searches to find webpages. The percentage of adult Internet users who use search engines on a typical day has been steadily rising, growing from less than thirty percent in 2004 to a new high of fifty-nine percent of all adult Internet users in 2012.¹⁹¹ Furthermore, the search engines (Google, Yahoo!, Bing, Ask, etc.) have been improving steadily every year. Fifty-five percent of search engine users say that, in their experience, the quality of search results is getting better over time, and ninety-one percent of users say that they always or usually find the information that they are looking for when using search engines.¹⁹² According to one survey in 2013, almost fifty percent of all web traffic to thirty different websites in various industries came from natural searches.¹⁹³ Consumer electronics, online retail, and education get between fifty-three and fifty-six percent of their traffic from natural searches.¹⁹⁴ Users are more likely to look for a particular product or service through a search engine than to try to access various sites and search independently on each one, especially if they

^{188.} Id. at 74.

^{189.} Id.

^{190.} See Giles Turnbull, Do Domain Names Even Matter Any More?, TIME (June 24, 2011), http://techland.time.com/2011/06/24/do-domain-names-even-matter-any-more.

^{191.} See Kristen Purcell, Joanna Brenner & Lee Rainie, Search Engine Use 2012, PEW INTERNET (Mar. 9, 2012), http://www.pewinternet.org/Reports/2012/Search-Engine-Use-2012/Summary-of-findings.aspx.

^{192.} Id.

^{193.} Nathan Safran, *310 Million Visits: Nearly Half of All Web Site Traffic Comes from Natural Search*, CONDUCTOR BLOG (June 25, 2013), http://www.conductor.com/blog/2013/06/data-310-million-visits-nearly-half-of-all-web-site-traffic-comes-from-natural-search. 194 *Id.*

are new users.¹⁹⁵ In contrast, the banking and finance industries see a larger portion of their traffic coming from direct visits, as users log in to online banking or trading websites through direct site access, presumably because they are not new users.¹⁹⁶

Furthermore, most website traffic comes from referrals, either through social media, links from other websites like Yelp, or through emails. Unless a user is talking about a general website, usually it is easier to provide a hyperlink to share with friends, especially because "the full URL is typically so lengthy and convoluted that the vast majority of users simply copy and paste hyperlinks so that the intended recipient can simply click on a link."¹⁹⁷ This is especially true when users are close to their cell phones that have access to the Internet. It is simply easier to send an email link to a friend than to tell them, "I got this pair of boots from karmaloop.com, and you're going to have to go and search for Jeffrey Campbell Lita and it should be on the page." even worse, "Ι second Or got these shoes at http://www.karmaloop.com/product/The-Lita-Shoe-in-Black/114750," because a user would rarely remember that string. Additionally, users often post videos and newspaper articles on social media that have character limits, like Twitter. In those cases, users will use link shorteners, which mask URLs and convert them to short versions, thus making actual URLs almost irrelevant.¹⁹⁸

Some users never even see domain names because they are constantly browsing on mobile devices. According to a recent survey, twenty-one percent of adult cell phone owners do most of their online browsing through a cell phone rather than through a desktop or laptop computer.¹⁹⁹ On a desktop computer, domain names are visible at the top of every page, which draws the attention of the user. However, due to space constraints, the address bar at the top of the screen on a cell phone is often hidden, and if a user hovers over a link, there is no status bar at the bottom of the page that provides the domain name.²⁰⁰ Furthermore, most major websites have

890

^{195.} Id.

^{196.} *Id.*

^{197.} See Uddin, supra note 47, at 828-31.

^{198.} See Jenna Wortham, Goo.gl Challenges Bit.ly as King of the Short, N.Y. TIMES: BITS (Dec. 14, 2009, 10:00 PM), http://bits.blogs.nytimes.com/2009/12/14/googl-challenges-bitly-as-king-of-the-short.

^{199.} See Maeve Duggan & Aaron Smith, Cell Internet Use 2013, PEW INTERNET (Sept. 16, 2013), http://www.pewinternet.org/Reports/2013/Cell-Internet.aspx; see also Brian Conlin, 50 Astonishing Mobile Search Stats and Why You Should Care, VOCUS (June 4, 2013), http://www.vocus.com/blog/50-mobile-search-stats-and-why-you-should-care.

^{200.} See Evan Williams, Five Reasons Domains Are Getting Less Important, EVHEAD, http://evhead.com/2011/06/five-reasons-domains-are-less-important.html (last visited Feb. 28, 2014).

applications ("apps") that can be used to navigate through features in the site that do not interact with the domain name or the gTLD.²⁰¹ Finally, "visual URLs" like QR codes—two dimensional bar codes that can be scanned by a mobile device—allow users to visit a specific site without ever entering a URL.²⁰² The growing use of this visual browsing technology would allow individuals to navigate to online destinations without ever seeing or entering an actual URL.

Evan Williams explains that although some people think of URLs as telephone numbers, very few people actually memorize numbers.²⁰³ Usually, they will save the numbers onto their cell phones and never remember them again.²⁰⁴ Similarly, many users bookmark, favorite, or star frequently visited websites rather than memorizing the websites' URLs. Most internet browsers also have an auto-complete or "suggest" feature in their address bars that memorize domains once users have visited more than once.²⁰⁵ On average, twenty-nine percent of traffic to a website comes through direct traffic.²⁰⁶ However, direct traffic is not limited to manually entered web addresses; rather, it also includes traffic from bookmarks and auto-complete.²⁰⁷ Unfortunately, without direct access to Google's analytics of a website, it is impossible to determine the percentage breakdown of each category of direct traffic.

More gTLDs will not make a difference in the marketplace if people do not type domain names into their browsers at all. Domain names only matter the first time a consumer manually accesses a website, which happens rarely in the modern technological atmosphere.

^{201.} See Zoe Fox, Mobile-App Use Increased 115% in 2013, MASHABLE (Jan 14, 2014), http://mashable.com/2014/01/14/mobile-app-use-2013.

^{202.} See Kim-Main Cutler, People Actually Use QR Codes (in China), TECHCRUCH (May 29, 2013), http://techcrunch.com/2013/05/29/people-actually-use-qr-codes-in-china.

However, there are people who believe that QR codes are "dead." See Ilya Pozin, QR Codes: Are They Dead Yet?, LINKEDIN (May 13, 2013), http://www.linkedin.com/ today/post/article/20130513152348-5799319-qr-codes-are-they-dead-yet; Alexander Taub, QR Codes Are Dead! Long Live QR Codes! A Conversation with Scan's Founder, Garrett Gee, FORBES (Dec. 6, 2012, 10:41 AM), http://www.forbes.com/sites/alextaub/2012/12/06/qr-codesare-dead-long-live-qr-codes-a-conversation-with-scans-founder-garrett-gee.

^{203.} Williams, supra note 200.

^{204.} See Sarah Maslin Nir, Dumbed-Down Dialing, N.Y. TIMES, Aug. 29, 2010, at ST7.

^{205.} See How Do I Enable Autofill in My Broswer?, COMPUTER HOPE, http://www.computerhope.com/issues/ch001377.htm (last visited on Feb 7. 2014).

^{206.} See Brandon Gaille, 23 Terrific Statistics on Referral and Direct Website Traffic, BRANDONGAILLE.COM (Oct. 16, 2013), http://brandongaille.com/23-terrific-statistics-on-referral-and-direct-website-traffic.

^{207.} See Safran, supra note 193.

IV. RECOMMENDATIONS AND PREDICTIONS FOR BUSINESSES

Since the application period for companies wanting to act as registrars for new gTLDs is over, it is important to know where companies should go from here with regard to creating new domain names. First, with the arrival of the Sunrise Periods of gTLDs,²⁰⁸ trademark owners should make sure to register their trademarks with the Trademark Clearinghouse ("TMCH"). So far, only twenty thousand trademarks have been registered with TMCH, which is curious given that about eighteen thousand trademarks are registered within the United States every year.²⁰⁹ By registering with the TMCH, the registry owner is obligated to provide notice if another applicant applies for a domain name in the registered trademark.²¹⁰ Trademark holders are given the right of first refusal to get the name that matches their trademark.²¹¹

Furthermore, companies should try to register their brands defensively in the generic extensions before another company does so. Although this Note hypothesizes that gLTDs will not change the *.com*-centric DNS, other companies are likely to make use of the new gTLDs. It is better to register for second-level domains before another company with a similar brand does.

Given the fact that domain names are losing importance, this Note predicts that the advent of new gTLDs will not significantly change the existing domain name space. Companies are accustomed to their domain names, and they have built up reputations for the current domain names to rank highly in search engines.²¹² However, it is possible that marketing could build up new domain names in the corresponding new gTLDs. Conceptually, the idea of thousands of new gTLDs makes sense. It will make websites

^{208.} See Trademark Clearinghouse FAQs, ICANN NEW GENERIC TOP-LEVEL DOMAINS, http://newgtlds.icann.org/en/about/trademark-clearinghouse/faqs (last visited Apr. 13, 2014).

^{209.} See Crunching the New gTLD Numbers, WORLD INTELL. PROP. REV. (Dec. 19, 2013), http://www.worldipreview.com/article/crunching-the-new-gtld-numbers.

^{210.} See Questions for the GAC—Protection of Rights, INTERNET CORP. FOR ASSIGNED NAMES & NUMBERS, http://archive.icann.org/en/topics/new-gtlds/questions-on-scorecard -protection-of-rights-28feb11-en.pdf (last visited Jan. 26, 2014).

^{211.} See id.

^{212.} Search-engine ranking refers to how high a site appears in a search engine in unpaid search results. Usually, higher ranked sites correlate with more traffic from search engine users. That ranking is dependent on an algorithm developed by each search engine that looks at a number of factors including the age of the site, the number of visitors to the site, the number of links to the site from other websites, etc. *See* David Harry, *How Search Engines Rank Web Pages*, SEARCH ENGINE WATCH (Sept. 23, 2013), http://searchenginewatch.com/article/2064539/How-Search-Engines-Rank-Web-Pages.

easier to identify and brand-if a consumer is looking for a certain brand of shoes, he or she can just go to the domain name www.adidas.shoes. Nevertheless, it is unlikely that the search will play out in that manner. If a consumer already knows the brand, it is just as easy to go to their .com web address; in contrast, if the consumer is searching for a particular brand, it is unlikely that they will enter a domain name rather than go through a search engine or a referral.²¹³ Without the support of larger companies, it is unlikely that smaller brands will use the new gTLDs as opposed to their current established top-level domain. The idea of generic top-level domains makes the most sense in an offensive context, where a company has a product innovation. For example, Canon could provide a secondary domain name for every consumer's individual camera, and then consumers could just go to a website with their images based on the domain name provided (e.g., www.27462828.canon). However, most of these ideas would be just as effective with the current model (e.g., www.canon.com/users/27462828). In short, although there will not likely be a significant change in competition with the arrival of new gTLDs, existing companies will find ways to make use of the gTLDs.

V. CONCLUSION

Although critics of ICANN's current model view the new gTLDs as solutions to the anticompetitive DNS atmosphere, it is unlikely to create much of a difference. Although adding more gTLDs will increase competition for new registries and thereby alleviate ICANN's antitrust concerns, it is unlikely that the new gTLDs will increase competition for consumers in the *.com*-centric internet model. The predominant effect of the gTLD expansion program will be to produce an ICANN money-making vehicle, which will raise costs for the many entities using the Internet and possibly produce a new set of monopolization concerns within new gTLDs.²¹⁴

^{213.} See supra Section III.B.2.

^{214.} See supra Sections I.B, I.C.

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