

The Use of Domain Names in e-branding by the World's Top Brands

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INTRODUCTION

There is substantial research on branding via traditional media (Aaker 1991, Keller 2003), yet little research of online branding. The prevalence and strategies of e-branding through the use of domain names, or urls, remains relatively unexplored apart from anecdotal reports of dotcom successes and failures. Do top companies choose and register domain names that easily link visitors to their site in a manner that complements and reinforces the brand's identity? The Ford Motor Company, for example, uses ford.com as its global domain name and ford.com.au in Australia. How do companies use the global .com domain, other global domains and myriad country domains for branding? Finally, does research from the study of Organizational Diffusion of Innovations (Rogers 1995) help explain, and perhaps accurately predict, how major brands will use domain names for e-branding?

Promoting and protecting the brand offline is a constant and expensive activity for top companies. It is important online as well, but legislation to safeguard brands from the effects of fake and protest e-brands has been slow and inconsistent as courts wrestle with this new medium (Fitzgerald 2000; Hanson 2000; Mosquera 2000; Sargert 2000). This study reviews the roles and

history of brands to the evolution of e-branding – particularly using domain names to promote and protect brands online. It focuses on domain name registrations by the world's top brands in order to investigate how major brands develop, reinforce and protect their online brand and associated reputation from competitors and imitators.

LITERATURE REVIEW

Brands and branding

Brands have existed since early Roman times, but branding as a marketing tool is only about 120 years old (Tedlow 1990). A well accepted definition of a brand name is a 'distinguishing name and/or symbol ... to differentiate ... goods or services from competition' (Aaker 1991: 7). This concept of a brand evolved from nineteenth century trade (Interbrand 1992). Since the 1880s, branding efforts have associated images and emotions with a brand in an attempt to create a competitive edge beyond simple differentiated product features (Alderson 1965; Borden 1942; Veblen 1899).

By the 1990s, marketers were attempting to measure the value of this competitive edge. Commonly referred to as 'brand equity', this

A b s t r a c t

This research links branding literature and domain names to explore electronic, or e-Branding, strategies. It focuses on how the world's top brands use domain names to extend their brand online and protect its associated reputation against competitors and imitators. Two hypotheses explore and benchmark domain name use by the world's top 75 brands. The results show that most companies register their brand name both globally in the .com suffix and locally, for example, with France's .fr and Australia's .au. These top brands had less presence in the .net and .org global domains, as well as in typographical variations of their .com name. The findings support past diffusion research in that size and industry relate to organizational adoption of technology. Larger brands (in total brand value) and technology-based brands had a greater adoption of domain names for e-branding.

Keywords: brands, e-brands, domain names, diffusion of innovations

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value is theoretically 'a set of assets (and liabilities) linked to a brand's name and symbol that adds (or subtracts from) the value provided to the customer' (Aaker 1991: 7). Interbrands' (2000) annual study of the world's leading brands valued number one Coca Cola at 73 billion US\$ and number 75 Benetton at one billion.

Promoting the brand name can add value to the product, attract more loyalty and create perceptions of superiority and quality in the consumer's and trade's minds (Mela *et al.* 1997). In an ocean of products, known brands obtain better distribution. This saves consumers' search time, even in the store (Steiner 1987). Deciding which brand to buy is often related to recognized brand names (Kotler and Armstrong 1993). Well-known brands may become the name for the product category as well as provide mnemonic and symbolic value to consumers. Coke, for example, has become synonymous with a cola beverage and Jell-O with a gelatine dessert (Marconi 1993).

The movement toward global competition in the past two decades increased the value of having a strong 'brand presence' that could transcend distance and have world-wide appeal (Aaker 1991; Moran 1990). The value of a brand name also applies to online commerce. A study of traditional and online retailers found that known brand names become more valuable online because information on those brands is readily accessible from memory (Degeratu *et al.* 2000). Chen (2001) has also noted that the Internet complements traditional brand functions such as providing associations that indicate the brand users' status, and developing brand familiarity through favourable brand associations.

e-brands

Brands become even more valuable as web use evolves from its initial exploration or 'surfing' phase. Most experienced consumers return to the same sites rather than 'surf the web' (Carpenter 2000). The declining use of search engines and lower rates of clicking on advertising banners by Internet users further support the existence of this trend. Search engines bring less than one in ten visitors to a site (Statmarket 2000), and click-through rates on advertising banners average less than one per cent (Hanson 2000). With experience, Web users rely less on search engines and gravitate towards easy-to-remember domain names, such as *ford.com*, to find websites (Ries and Ries 2000). The ideal domain strategy lets a prospective visitor easily remember or guess the domain name (Hanson 2000; Ilfeld and Winter 2002).

A company name in the .com domain, such as *ford.com*, is the crucial first point of product contact. Part of a company's branding and positioning strategy (Fitzgerald 2000; Sargert 2000), the domain name

tackles three primary objectives: 'reinforce branding ... build traffic ... [and] anticipate consumer behaviour and mistakes' (Hanson 2000: 262). While the concept of branding has not significantly changed, Internet branding focuses more on promoting and protecting the name itself (Ries and Ries 2000). For example, an individual in Georgia rather than General Motors initially registered *generalmotors.com*, thereby weakening General Motor's web presence because visitors confronted non-General Motors imagery (Hanson 2000).

Unfortunately, weak regulation and the easy registration of domain names have encouraged the abuse of brands as domain names. The failure to register relevant and obvious domain names leaves the brand's image, and thus its equity, susceptible to sabotage by competitors, adversaries and scheming entrepreneurs (Hanson 2000). As there is little room for a follower brand on the Internet, top global brands cannot afford the risk of failing to register their brand as a domain name (Ries and Ries 2000).

Domain names

A web site address is a series of numbers called the Internet Protocol or IP Address. For example, <http://208.134.241.178> takes the web user to Coca-Cola's site. But the domain name *cocacola.com* is easier to remember and less prone to mistakes than keying in the IP address (Hanson 2000). To maintain their offline branding efforts, Coca Cola connected *cocacola.com* and *coke.com* to the same IP address (Hanson 2000). General Electric (*generalelectric.com*, *ge.com*) and Hewlett Packard (*hewlettpackard.com*, *hp.com*) have done likewise, linking domain name variations of their brand to the same website.

Global domains, for example .com, .org and .net, originally represented commercial enterprises, not-for-profit organisations and network providers, respectively. Of the almost 27 million global domain names registered in December 2001, the .com suffix was the most prevalent, with three out of every four global domain registrations (Zooknic 2002). Registration in these global domains is available to anyone in any country on a first-come, first serve basis.

Registering a name in the over 200 country domains, such as .au for Australia and .fr for France, is often more expensive and cumbersome. Country domain names can cost up to \$1,000 US for a .nf name in Norfolk Island and are usually double or triple the \$10 to \$40 fee for global domain names (Murphy and Hofacker 1997). Registrants must meet country regulations such as having a registered name and Australian Business Number for registering an Australian domain name. Some countries though, such as Nieuwe (.nu) and Tonga (.to), require only a small fee in order to encourage registrations (Murphy and Hofacker 1997).

Brands often use country domains to feature country-specific websites such as Coke's *cokebuddy.com.au*, IBM's *ibm.com.au* and Sun Microsystems's *sun.com.au* in Australia. In 2000, there were 133,022 .com.au, 54,791 .fr domains and 56 .us domains registered (domainstats.com). Companies in France and the US register relatively fewer country domains than companies in Australia as they prefer .com (Allardice and Probert 1998).

e-brand abuse

Protecting brands from competing with similar names or packaging is necessary to dissuade competitors from poaching the brand's franchise. Look-alike and sound-alike brands take advantage of marketing clutter to confuse consumers and thereby increase the copycat's sales and market share (Balabanis and Craven 1997; Foxman *et al.* 1992; Louviere *et al.* 1987). For example, Coca-Cola was the victim of a look-alike offline brand Sainsbury Cola, which made its packaging resemble Coca-Cola packaging. After lengthy court proceedings, Sainsbury changed its packaging (Zaichkowsky 1995).

Just as look-alike brands confuse offline consumers, similar domain names can confuse online consumers; unrelated individuals or firms can easily register brand name variations (Ries and Ries 2000). Although they resemble established trademarks, their global nature makes domain names much harder to regulate and an ongoing problem (Anon 2001a; Mosquera 2000; Ogdin 2000; Rohan 2000). As of December 2002, disputes involving over 10,000 domain names had been settled and over 700 domain name disputes were yet to be settled (ICANN 2002). This rise in domain registrations, e-brand confusion and litigation has spawned jargon for domain name abuses and abusers.

Individuals known as *cybersquatters* register famous brands to attract consumers to their site or sell the site to the highest bidder – often the offline brand. *Gripe sites* are websites that add a derogatory word, sucks is the most popular, to the domain name as in *fordsucks.com* (Nemes 2000). *Parasites* take advantage of user typing errors to encourage hits. United Airlines, for example, failed to register *untied.com* (Krauss 1999), while Yahoo registered *yahop.com* to accommodate potential visitors' clumsy fingers.

Microsoft's popular free email service *hotmail.com* illustrates a domain name with parasites attached to it. Parties unrelated to Microsoft registered domain name iterations of Hotmail. The websites *hoymail.com* and *hotmal.com* redirect users to gambling sites, *hotmale.com* redirects to a porn site and *ahotmail.com* takes visitors to a Hotmail competitor. While it failed to register these typographical errors, Microsoft registered *hotmail.net* and *hotmail.org* as global domain names, and in country domains such as *hotmail.com.au* in Australia and *hotmail.fr* in France.

Domain names and strategic e-brand management

Research on brand management and new media argue for modifying conventional media planning rather than new approaches to media planning. All media compete for the same budget and are critical to integrated marketing communications (Canon 2001). Firms should explore online branding opportunities, but they should also incorporate their branded domain name into traditional marketing such as print, radio and TV (Hanson 2000; Ilfeld and Winter 2002). As the previous Hotmail examples illustrate, domain names play a key role in strategic e-brand management.

The demise of Network Solutions' monopoly over global domains in 1998, and an ensuing increase in domain name registrations, has heightened concerns about trademark protection (France 1999). With over 200 country domains, e-brand management can become complex and time-consuming. The introduction of seven new global domains, such as .biz or .info (ICANN 2000), reinforces the need for the strategic management of domain name registrations.

Registering a trademark offline fails to guarantee the corresponding domain name. The 1999 US Anticybersquatting Consumer Protection Act attempted to address trademark infringements (Plave 2000; Rohan 2000). Companies, however, found this initiative too little and too late as laws and monetary penalties failed to halt these threatening domain name practices (Heckman 2000; Thibodeau 2000). The World Intellectual Property Organization (WIPO) and the Internet Corporation for Assigned Names and Numbers (ICANN) now resolve domain name conflicts, given proof of bad faith, consumer confusion and a profit-driven motive (ICANN 2002; Plave 2000; WIPO 1999).

Common names, however, make legal settlement difficult. The Australian Financial Review, for example, stumbled trying to reclaim *financialreview.com* from an American businessman, as they failed to prove malicious registration (Anon 2001b). Similarly, the Italian fashion house Armani failed to win *armani.com* from a Canadian, Mr. A. R. Mani (Anon 2001a).

Even with recognized names, winning a domain name that resembles a trademark takes time and effort. In March 2000 for example, Microsoft began proceedings to acquire 'msninstantmessenger.com', 'microsoftmessenger.com' and 'msnmessenger.com', which a company named Cupcake Party registered in July 1999. After eight months and a half-dozen legal steps, all paid for by Microsoft, the WIPO-appointed arbitrator ruled in favor of Microsoft (WIPO 2000). This case illustrates three of the dozens of global domain names that Microsoft has disputed.

The pre-emptive securing of domain names and variations – misspellings, phonetic similarities and insulting phrases – helps fight these escalating e-branding battles (Hanson 2000; Ogdin 2000; Rohan 2000). Protecting

its e-brand, Exxon registered *exxonsucks.com* to avoid cybersquatter battles (Nemes 2000). Ries and Ries (2000) suggest using short domain names – the longer the name, the greater probability of user typographical errors and cybersquatter variations.

An effective domain name strategy requires decisions on registering the brand in several global domains, hundreds of country domains as well as a multitude of parasitic and complaint versions of the brand across global and country domains. One theoretical approach of technology adoption, Diffusion of Innovations (Rogers 1995), helps explore and benchmark online branding by the world's leading brands.

Diffusion of innovations

Since the mid-1940s scholars from agriculture, management, geography, sociology, marketing and other fields have studied the diffusion of new technologies throughout society (Rogers 1995). Innovation characteristics, adopter characteristics and social influences shape the speed of adoption by individuals. Rogers (1995) and others (Abrahamson 1991; Damanpour 1991) have extended the diffusion of innovations to organizations, noting that individuals make optional innovation decisions, but organizations decide authoritatively or collectively. Organizational adoption of domain names, represents another application of diffusion theory. Murphy and Tan (2003), for example, found that use of branded e-mail addresses related to successful adoption of e-mail as a customer service tool.

Most organizational research has focused on the stage of adoption or innovation itself, but these could be secondary determinants of adoption compared to organizational characteristics (Damanpour 1991). Researchers call for more investigation into organizational characteristics related to adoption such as size, type and scope for innovation (Damanpour 1991; Raymond 2001; Rogers 1995; Wolfe 1994). Drawing upon diffusion of innovations, several hypotheses are proposed based on securing brand-related domain names.

HYPOTHESES

Research on the most common organizational characteristic related to diffusion of innovations, size, has shown that large organizations adopt innovations quicker than small firms (Kimberly and Evanisko 1981; Rogers 1995: Ch 10). Larger organizations have greater access to resources for strategic planning (Rogers 1995; Schumpeter 1947), resulting in 'economies of scale, which enhance the feasibility of adoption' (Kimberly and Evanisko 1981: 698). Larger hotels, for example, adopted Internet technologies more than

small hotels (Murphy *et al.* 2003; Siguaw *et al.* 2001). The adoption of domain names should reflect this positive relationship between size and adoption.

Depending upon the organizational setting and study objectives, researchers have used various measures of size, such as employees, sales, financial assets and hotel rooms (Kimberly and Evanisko 1981; Lenox 2001; Murphy, *et al.* 2003; Rogers 1995; Siguaw *et al.* 2001). Given the focus on brands, this research uses brand value as a proxy measure of size. The possible confusion from look-alike brands (Balabanis and Craven 1997) and the importance of brand maintenance (Zaichkowsky 1995) suggests that larger brands should have registered more e-brands in global and country domains.

Hypothesis 1a – The brand value will be positively associated with a .net and .org global domain name identified with the brand's name.

Hypothesis 1b – The brand value will be positively associated with country domains identified with the brand's name.

Hypothesis 1c – The brand value will be positively associated with the brand's registration of .com parasites (obvious misspellings of the brand's name).

Hypothesis 1d – The brand value will be positively associated with the brand's registration of a sucks.com gripe site.

Poon and Swatman (1997a, b) argue that the adoption of Internet technology increases in sectors with related technology interests. It should be expected that organizations that Interbrands classified as technology or new media companies would register their e-brand more widely in global domains, country domains, gripe sites and parasites.

Hypothesis 2a – Brands directly used in Internet activities will have a greater likelihood of registering in the .net and .org global domains than non-Internet associated brands.

Hypothesis 2b – Brands directly used in Internet activities will have a greater likelihood of registering in country domains than non-Internet associated brands.

Hypothesis 2c – Brands directly used in Internet activities will have a greater likelihood of registering their brands in .com parasites than non-Internet associated brands.

Hypothesis 2d – Brands directly used in Internet activities will have a greater likelihood of registering their brands in the sucks.com gripe site than non-Internet brands.

METHODOLOGY

The methodology addresses two common limitations of organizational diffusion research, relying upon stated behaviour and using just one industry (Damanpour 1991; Rogers 1995). To cover a wide range of industries, this study drew upon the Interbrand census of the world's top 75 brands, which has been cited in branding literature (Chen 2001; Hankinson and Hankinson 1999; Ries and Ries 2000).

The top 75 brands include 43 US, six British and five German brands. Interbrands classify the brands in the categories of foods, beverages, automobiles, tobacco, media, technology and new media. Although the proportion of brands is skewed toward US ownership, these brands are seen to embody the global Internet (Ries and Ries 2000).

This study also investigates two other prominent global domains, .net and .org. In order to explore and benchmark internationalization, this study investigates registration in two country domains. Because managing domain names in over 200 countries is a costly and time-consuming process, successful brands should concentrate on key countries first. With almost ten million people online each at the time of this study, France and Australia fit this category (Nua Surveys 2002) and rank number six and nine respectively in total domains registered (Zooknic 2002). Exploring registrations in France also addresses a potential Anglophone bias, as these sites usually use French rather than English, the Web's current lingua franca.

Investigating sites, parasites and gripe sites

Rather than ask brands about their registration practices, researchers queried three separate databases, in February 2001, that contained domain name ownership information. They typed the name into Network Solution's database <www.netsol.com/cgi-bin/whois/whois> of .com, .org and .net domain names, as well as the Australian <www.inww.com/whois> and French <www.nic.fr> databases for .au and .fr names. The company that registered the domain name determined if the name was used defensively by the brand or offensively by a cybersquatter, gripe site or parasite. To identify problems and clarify data coding, pre-testing was done with the popular brand Hotmail, not listed in the top 75 brands. Table 1 lists the criteria for investigating four parasites and the most popular gripe site, sucks.com.

Table 1. Criteria for testing for parasites and sucks.com gripe sites

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- Modifying the last letter of the domain name to the letter that falls beside it on the keyboard to the left, e.g. fors.com instead of ford.com
 - Modifying the last letter of the domain name to the letter that falls beside it on the keyboard to the right, e.g. forf.com instead of ford.com
 - Inverting the last two letters of the domain name, e.g. fodr.com
 - Inverting the first two letters of the domain name, e.g. ofrd.com
 - Adding *sucks* to the end of the domain name e.g. fordsucks.com
-

RESULTS

.com

Consistent with Ries and Ries (2000) and Alpert and Kamins (1995), Table 2 shows that almost all the world's top brands (96%) had a live .com site at an obvious version of their name. The Diffusion of Innovations (Rogers 1995) would argue that adoption of a new technology peaks at about 90%. Over 90% participation also suggests that registering domain names as e-brands may be late in its life cycle (Rogers 1995). Furthermore, two of the three brands without a site – Johnny Walker and Marlboro – may be keeping a low profile due to their controversial products.

The third brand uses *armani.net*, as Mr. A. R. Mani successfully registered *armani.com* first. With the global preference for .com sites, the Giorgio Armani homepage at *armani.net* could suggest that the company was a laggard in the adoption process (Rogers 1995). As web users move away from search engines and towards finding sites by typing in the brand followed by .com, *armani.com* will receive hits from web users searching for the Italian clothing company. On 27 December 2002, *armani.com* redirected visitors to *whistler.com*, a promotional site for a Canadian resort town.

.net, .org and .au and .fr

Hypotheses 1a and 1b tested brand name registrations in domains other than .com. A log linear function corrected the brand values to a normal distribution ($p = 0.924$, Kolmogorov Smirnov test). Next the one-way analysis of variance (ANOVA) tested for significant differences in brand value between those with and without an e-brand. The results supported these hypotheses. The brand value was significantly larger for brands with registrations in both global domains, .org ($F = 6.427$, $df = 1$, $p = 0.0065$) and .net ($F = 4.980$, $df = 1$, $p = 0.0145$) than for brands not registered in these domains. Likewise, brand value was significantly larger for brands with registrations in Australian ($F = 16.748$, $df = 1$, $p < 0.001$) and French ($F = 9.197$, $df = 1$, $p = 0.015$) country domains than brands not registered in these countries.

A follow-up t-test found no significant differences ($t = 0.371$, $df = 73$, $p = 0.71$) in the total number of .com, .org, .net, .au and fr. domains registered by US and non-US brands.

As Table 2 shows, about half the companies registered their brand in the .org (56%) and .net (49%) global domains, which is far less than their .com registrations (96%). As registrants stake these global domains – first come, first serve – others may have registered their .org and .net e-brands first. For example, the Associated Talmud Torahs owns *att.org*, while the Public Existentialist

Table 2. The world's top 75 brands, their domain name registrations and Interbrand value in 2000

Rank	Brand	.com	.net	.org	.au	.fr	Value (\$m)	Country	Industry
1	Coca Cola	Yes	Yes	Yes	Yes	Yes	72,537	USA	Food/Beverages
2	Microsoft	Yes	Yes	No	Yes	Yes	70,197	USA	Technology
3	IBM	Yes	No	Yes	Yes	Yes	53,184	USA	Technology
4	Intel	Yes	Yes	Yes	Yes	Yes	39,049	USA	Technology
5	Nokia	Yes	Yes	Yes	Yes	Yes	38,528	Finland	Technology
6	General Electric	Yes	Yes	Yes	Yes	No	38,128	USA	Diversified
7	Ford	Yes	No	No	Yes	Yes	36,368	USA	Automobiles
8	Disney	Yes	Yes	Yes	Yes	Yes	33,553	USA	Leisure
9	McDonalds	Yes	Yes	No	Yes	Yes	27,859	USA	Food Retail
10	AT&T	Yes	No	Yes	No	Yes	25,548	USA	Telecommunication
11	Marlboro	No	No	No	Yes	No	22,111	USA	Alcohol/Tobacco
12	Mercedes	Yes	No	Yes	Yes	Yes	21,105	Germany	Automobiles
13	Hewlett-Packard	Yes	Yes	Yes	Yes	Yes	20,572	USA	Technology
14	Cisco Systems	Yes	Yes	No	Yes	Yes	20,068	USA	Technology
15	Toyota	Yes	No	No	Yes	Yes	18,824	Japan	Automobiles
16	Citibank	Yes	Yes	Yes	Yes	Yes	18,810	USA	Fin. Services
17	Gillette	Yes	No	No	Yes	Yes	17,359	USA	Household Goods
18	Sony	Yes	Yes	Yes	Yes	Yes	16,410	Japan	Electronics
19	Amex	Yes	Yes	Yes	Yes	Yes	16,122	USA	Fin. Services
20	Honda	Yes	Yes	Yes	Yes	Yes	15,245	Japan	Automobiles
21	Compaq	Yes	No	Yes	Yes	Yes	14,602	USA	Technology
22	Nescafe	Yes	No	No	Yes	Yes	13,681	Switzerland	Food/Beverages
23	BMW	Yes	Yes	No	Yes	Yes	12,969	Germany	Automobiles
24	Kodak	Yes	No	No	Yes	Yes	11,822	USA	Leisure
25	Heinz	Yes	No	No	Yes	Yes	11,742	USA	Food/Beverages
26	Budweiser	Yes	Yes	Yes	No	Yes	10,685	USA	Alcohol/Tobacco
27	Xerox	Yes	Yes	Yes	Yes	Yes	9,700	USA	Technology
28	Dell	Yes	No	Yes	Yes	Yes	9,476	USA	Technology
29	Gap	Yes	No	No	No	Yes	9,316	USA	Apparel
30	Nike	Yes	Yes	Yes	Yes	Yes	8,015	USA	Apparel
31	Volkswagen	Yes	No	No	Yes	Yes	7,834	Germany	Automobiles
32	Ericsson	Yes	Yes	Yes	Yes	Yes	7,805	Sweden	Technology
33	Kelloggs	Yes	No	No	Yes	No	7,357	USA	Food/Beverages
34	Louis Vuitton	Yes	Yes	Yes	Yes	Yes	6,887	France	Luxury Goods
35	Pepsi Cola	Yes	No	No	Yes	Yes	6,637	USA	Food/Beverages
36	Apple	Yes	Yes	No	Yes	Yes	6,594	USA	Technology
37	MTV	Yes	No	No	No	Yes	6,411	USA	Leisure
38	Yahoo!	Yes	Yes	Yes	Yes	Yes	6,300	USA	New Media
39	SAP	Yes	No	No	Yes	No	6,136	Germany	Technology
40	Ikea	Yes	No	Yes	Yes	Yes	6,032	Sweden	Household Goods
41	Duracell	Yes	No	No	Yes	Yes	5,885	USA	Household Goods
42	Philips	Yes	No	Yes	Yes	Yes	5,482	Netherlands	Electronics
43	Samsung	Yes	Yes	Yes	Yes	Yes	5,223	S. Korea	Electronics
44	Gucci	Yes	Yes	Yes	No	Yes	5,150	Italy	Luxury Goods
45	Kleenex	Yes	No	No	No	No	5,144	USA	Household Goods
46	Reuters	Yes	Yes	Yes	Yes	Yes	4,877	UK	Media
47	AOL	Yes	Yes	Yes	Yes	Yes	4,532	USA	New Media
48	Amazon.com	Yes	No	No	Yes	Yes	4,529	USA	New Media
49	Motorola	Yes	Yes	Yes	Yes	Yes	4,446	USA	Technology
50	Colgate	Yes	No	No	Yes	No	4,418	USA	Household Goods
51	Wrigley's	Yes	No	No	Yes	No	4,324	USA	Food/Beverages
52	Chanel	Yes	Yes	Yes	Yes	Yes	4,142	France	Luxury Goods

Table 2. (cont'd)

Rank	Brand	.com	.net	.org	.au	.fr	Value (\$m)	Country	Industry
53	Adidas	Yes	No	No	Yes	Yes	3,791	Germany	Apparel
54	Panasonic	Yes	No	No	Yes	Yes	3,734	Japan	Electronics
55	Rolex	Yes	Yes	Yes	Yes	Yes	3,561	Switzerland	Luxury Goods
56	Hertz	Yes	No	Yes	Yes	Yes	3,438	USA	Leisure
57	Bacardi	Yes	Yes	Yes	Yes	Yes	3,187	Cuba	Alcohol/Tobacco
58	BP	Yes	No	No	Yes	Yes	3,067	UK	Oil
59	Moët & Chandon	Yes	No	No	No	Yes	2,799	France	Alcohol/Tobacco
60	Shell	Yes	No	No	Yes	Yes	2,786	UK	Oil
61	Burger King	Yes	No	Yes	No	Yes	2,702	UK	Food Retail
62	Smirnoff	Yes	Yes	Yes	No	Yes	2,443	UK	Alcohol/Tobacco
63	Barbie	Yes	Yes	Yes	Yes	Yes	2,315	USA	Leisure
64	Heineken	Yes	No	No	Yes	Yes	2,219	Netherlands	Alcohol/Tobacco
65	Wall Street Journal	Yes	Yes	Yes	No	No	2,185	USA	Media
66	Ralph Lauren/Polo	Yes	No	No	Yes	No	1,834	USA	Luxury Goods
67	Johnnie Walker	No	No	No	Yes	No	1,541	UK	Alcohol/Tobacco
68	Hilton	Yes	No	No	No	No	1,483	UK/USA	Leisure
69	Jack Daniels	Yes	No	No	No	No	1,480	USA	Alcohol/Tobacco
70	Armani	No	Yes	No	No	No	1,456	Italy	Luxury Goods
71	Pampers	Yes	No	No	No	Yes	1,400	USA	Household goods
72	Starbucks	Yes	Yes	No	No	Yes	1,330	USA	Food retail
73	Guinness	Yes	No	Yes	Yes	No	1,225	UK	Alcohol/Tobacco
74	FT	Yes	No	No	No	No	1,149	UK	Media
75	Benetton	Yes	No	No	No	Yes	1,008	Italy	Apparel

Programs for Surrealistic Imaginations' *pepsi.org* takes Website visitors to an Internet service provider, *bee.net*.

Compared to about half their brands registered in the global .net and .org domains, companies registered their brand as Australian (77%) and French (80%) domain names more often. This may be because both countries protect trademarks as domain names through regulations such as requiring associated brand names, business names or local contact details.

Gripe sites

Individuals outside the company registered nine out of ten brand names followed by sucks.com. The Robin Hood organization owns *mcdonaldssucks.com*, while the GreenPeople own *amexsucks.com* and *burgerkingsucks.com*. The Secaucus Group, which owns a collection of domain names followed by sucks.com including *reuterssucks.com*, *attsucks.com* and *kodaksucks.com*, redirects the web visitor to a public forum at *www.sucks.com* offering gripe sessions on topics ranging from the US President to large corporations. As seen earlier with *pepsi.org*, some organizations use popular domain names to lure visitors to another site.

Only four of the world's top 75 brands – Ford, Sony, GE, General Electric and Rolex – registered their

brand name followed by sucks.com. Rather than take the visitor to their live site, the sucks.com domain for these four companies gives visitors an Internet out of order message – code 404 or file not found. Further research of Ford gripe sites found that individuals not associated with Ford had registered *fordsucks.org* and *fordsucks.net*. Along with preventively registering other iterations such as *ihate* before the brand name in global domains, gripe site and parasite protection would be a major task with separate registration authorities for 200 plus country domains.

Parasites

After investigating two-thirds of the brands for the four typographical iterations tested, just three companies had registered a total of six parasites. But in this same sample of 48 brands, outsiders had registered 78 parasites. Short brand names, simple .com registration requirements and the monetary potential of cybersquatting help fuel this popularity.

Hoping to cash in the Budweiser brand, Casino 44 redirected *budweizer.com* and *budweisre.com* visitors to *casino44.com*, its online casino. In a similar vein, Love Poetry uses the inverse of AOL, *oal.com* to float visitors to *lovepoetry.com*. Whether these examples stem from

parasitic intentions or simply wanting an easy-to-remember domain name is a subject for future research. Typographical iterations were often found in brands with short names, such as AOL, SAP, ATT, or IBM.

Yahoo! registered *yahop.com*, *ayhoo.com* and *yahoi.com*, which lead the user to a page offering a hyperlink to Yahoo's official site. Amazon.com registered two variations and saved visitors one click compared to Yahoo by automatically redirecting visitors to the Amazon homepage.

The one-way ANOVA test explored if brand value and technology orientation helped explain parasitic registrations by individuals not affiliated with the company. The top ten ranked brands averaged 2.8 registered parasites, which was significantly more ($F = 35.372$; $df = 1$; $p = 0.001$) than the 0.2 registered parasites for the bottom ten brands. The same test found an average of 2.5 parasites registered for technology-based brands, compared to 1.71 parasites for non-technology brands ($F = 10.64$; $df = 1$; $p = 0.002$).

Technological Influence?

The final hypothesis examined if domain registrations were more prevalent by Internet-based companies, those that Interbrands classified as new media or technology companies. A t-test compared the mean number of names registered by these hi-tech brands against all other brands. After considering the variance based on the Levene's test, the one-tailed results showed that Internet related companies had a significantly greater tendency than non-Internet companies to register their e-brand in the .org ($t = 3.94$, $df = 73$, $p = 0.026$) and .net ($t = 3.7$, $df = 33$, $p = 0.037$) global domains, as well as in the Australian ($t = 3.46$, $df = 44$, $p = 0.045$) and French ($t = 5.02$, $df = 60$, $p = 0.075$) domains.

CONCLUSION

All but three, or 96% per cent, of the world's top 75 brands had a live .com site at an obvious name. Companies were less vigilant, however, protecting and promoting their brand in other domains. About half of the brands registered an e-brand in the .net and .org global domains, and about four out of five branded themselves in Australia and France's country domains.

The registration practices of Internet-associated brands demonstrate that they are further along in their adoption of branded domain names than non-Internet associated brands. As in past diffusion research, organizational size also related to adoption of e-brands both by organizations and cyber-entrepreneurs hoping to cash in on valuable e-brands. Compared to those brands without a registered domain name, brands registered in the .net and .org global domains as well as in the

Australian and French domains had a higher brand value. Top brands also had an increased likelihood of parasites attached to their name. These results support the two hypotheses that brand value and technology orientation tend to be associated with wider domain name registration practices.

The registration practices of the world's leading brands suggest that businesses should register their name in the .com domain. As .com registration costs are trivial, \$10 to \$35 annually and given the Internet's global nature, all companies should consider registering a .com domain name. Companies should not waste time debating the registration of a few additional names or registering in both their country domain and the global .com domain. Companies with a strong international presence should also consider registering in the relevant country domains.

The aggressive country and global registrations by the top brands underscore the need for an online branding strategy. Apart from deciding the appropriate domains for registration, a major part of the online strategy is promoting the branded domain names, online and offline (Hanson 2000; Ilfeld and Winter 2002). Another part of the strategy is proactive registration to minimize domain name abuse.

The study of gripe sites and parasites identified a need for brands to assess registration trends. Outside parties had claimed about nine out of ten *sucks.com* gripe sites and had staked a similar percentage of parasites. ICANN's domain dispute resolution service is one avenue the trademark owner may pursue to demand recourse but pre-emptive action is an easier solution for gripe and parasite domain names. Although it may be impossible to register all domains and spelling variations, companies should explore popular trends, such as the introduction of .biz and .info global domains, and map out a relevant registration process.

AREAS FOR FURTHER STUDY

This exploratory study manually entered domain names in three online databases to examine registrations of brands in five .com name iterations, two global domains, and Australian and French domains. In addition to future research exploring brand registration in new global domains, a computer program or research team could investigate additional country domain registrations as well as spelling iterations in global domains. As these online databases often list the date of domain name registration, the registration date may prove to be a fruitful variable for future research.

Another research area would be the use of brand extensions. Does Kellogg's register *frostedflakes.com* or append the name as in *kellogs.com/frostedflakes*? Perhaps more importantly, what domain names are easiest for consumers to remember and can they produce a stronger

or more favourable attitude towards the brand? Finally, what are the effects of using global and country domain names as e-brands in more traditional forms of marketing activity such as advertisements in radio, television, print and packaging?

Further research could also explore the range of brands registered compared to a manual (McMillan 2000) or automated (Scharl 2000) content analysis of the respective sites to determine the branding clues, such as logo, colours or slogans on the website. Similar to domain names, toll free numbers such as 1-800 or 1-888 often have branded messages. Future research could explore branding with toll free numbers or compare toll free number branding with domain name branding.

Email communication could be explored as a form of cyberbranding. Given an e-mail's virtual environment (Turkle 1995), do brands reinforce their image through prompt, polite and personal answers to customer queries (Strauss and Hill 2000)? What other branding clues – such as logo, signature file, colours, or slogans – do their electronic missives include?

Diffusion of innovations research calls for investigating organizational characteristics apart from organization size. Future avenues could include brand age, brand region, brand type, etc. as well as the strategic orientation of the management team behind the brand.

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