



STAFF REPORT ACTION REQUIRED

Personalized .toronto Web Address

Date:	January 29, 2016
To:	Government Management Committee
From:	Chief Information Officer, Information & Technology Division General Manager, Economic Development and Culture Division
Wards:	All
Reference Number:	P:\2016\Internal Services\I&T\Gm16001I&T (AFS #22554)

SUMMARY

The purpose of this report is to provide summary of considerations for the City of Toronto to introduce a .toronto personalized Web address that could be used by citizens and businesses as an opportunity to promote and boost the image of Toronto. The report provides an overview of possible benefits, other jurisdictions that have implemented, potential cost considerations and different delivery models.

RECOMMENDATIONS

The Chief Information Officer and General Manager, Economic Development and Culture recommend that:

1. This report be received for information.

Financial Impact

This report has no financial impact.

Anticipated costs to introduce .toronto are dependent upon an application process to acquire the address, different business model considerations and the level of City engagement with operating the service for citizens and businesses to make use of the address. Costs to apply for a .toronto address are estimated at \$400,000 with potential revenue estimated to be in the range of \$1-\$3 million over the first three years, dependent

on different models to operate and make .toronto available. Potential costs considerations are detailed in the report.

The Deputy City Manager & Chief Financial Officer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

On January 4, 2016, further to item GM 9.12, Government Management directed the Chief Information Officer in consultation with the General Manager, Economic Development and Culture to report back on the possible benefits and anticipated costs to introduce personalized .TO web addresses. The .TO web address is already assigned globally to the Island Kingdom of Tonga so it is unavailable, however, .toronto is not yet assigned globally and is the subject of this report.

ISSUE BACKGROUND

The City of Toronto could become the first Canadian municipality to implement a Generic Top Level Domain such as .toronto. Generic Top Level Domain addresses on the Internet include familiar addresses such as .com, .net, .org, .ca etc. Several jurisdictions globally have acquired their own Generic Top Level Domain address through an earlier application and selection process administered by the Internet Corporation for Assigned Names and Numbers (ICANN), the global organization managing Internet address assignment. Other cities that have acquired Generic Top Level Domain addresses include New York City (.nyc), Paris (.paris), London (.london), Melbourne (.melbourne) amongst several others.

A generic top level domain address could create new opportunities to support local businesses, organizations, and residents while establishing an unprecedented level of geographic authority in the digital sphere for Toronto. Unlike other Top Level Domains, such as .com or .ca, a .toronto domain could be made available only to individuals, businesses or organizations with a physical presence in the City of Toronto

Although the request from Government Management Committee was to investigate the benefits of introducing a .TO, this is not possible as .TO is already assigned to the Island Kingdom of Tonga. A logical alternative to .TO could be .toronto. The process to acquire a new Generic Top Level Domain is only available for a "window" of time, the last time being in 2012. It is anticipated there will be an opportunity to apply in 2018 as part of a Generic Top Level Domain address application program that would be opened up globally. Currently the process to apply is not open.

COMMENTS

What is a Top Level Domain?

A Top-Level Domain (TLD) is the highest level in the hierarchical Domain Name System (DNS) of the Internet – managing Internet site names and addresses. For example, in the domain name www.toronto.ca, the Top-Level Domain is ca. In the domain name www.google.com, the Top-Level Domain is com. Responsibility for management of most Top-Level Domains is delegated to specific organizations by the Internet Corporation for Assigned Names and Numbers (ICANN), which operates the Internet Assigned Numbers Authority (IANA). There are several different types of Top Level Domains defined by IANA including Generic Top Level Domains, Sponsored Top-Level Domains, and International/Country Code Top Level Domains.

Potential Benefits of .toronto

Introducing a .toronto Generic Top Level Domain would allow the City to promote itself as a significant and relevant provider of citizen-centric services, promote its brand, generate economic vitality, sell products/services, share information and its points of view, and better engage its constituent and global stakeholder communities. A City of Toronto Generic Top Level Domain could also help facilitate and cultivate peripheral financial and social benefits for broader business, cultural, and personal stakeholder domains. It could help promote and enhance transparent competition, generate broader consumer choice, and help grow public confidence and trust in the City as a government organization.

Municipalities have experienced remarkable success precisely because the website address relates to a physical address and helps put local businesses on the Internet's map. There are three key drivers to consider for a Generic Top-Level Domain address:

- **Brand:** A Generic Top Level Domain address is your city's brand, image and identity online and it gets amplified by every single individual and business that has a second level domain.
- **Control:** The City can establish rules on who can register a second level domain with your brand; you can secure communications with your citizens; and you reserve critical domain names for municipal use (e.g. police.toronto, council.toronto).
- **Revenue:** Unless you choose to give them away, municipal domains generate revenue for the city directly, or through a public-private partnership. If you structure the business model for profit this reduces the risk to the taxpayer while engaging in and promoting city-building activities on the web.

Areas of opportunity for the City of Toronto owning its own .toronto address could include:

- **Entrepreneurship:** The City can create its own unique business model and establish accessibility policies for its Generic Top Level Domain. It can be specifically tailored to the City's target markets, its customers/constituents, and demographics.
- **Increased control:** The City can set the rules and the price for those registering under its Generic Top Level Domain address.
- **Ongoing revenue stream:** The City's customers/associates could renew their domain names year after year.
- **Innovative marketing opportunity:** The City can build better brand definition, brand awareness, brand loyalty and trust by having full control over its own Generic Top Level Domain.
- **Innovative business models:** When new Generic Top Level Domains combine with other emerging Internet technologies, new personalized products and services are possible.
- **Internationalized Domain Names (IDNs):** Increase market reach by making the Internet completely accessible to users whose local languages use non-Latin characters. Makes the City of Toronto a globally accessible commodity.
- **Community Engagement:** The City can create a rallying point for supporters of its causes, communities or cultures to unite with a community-based Generic Top Level Domain. Possibilities could include Neighbourhoods.toronto for Community Groups and Organizations to register for a neighborhood domain name like Guildwood.toronto, Oakridge.toronto etc.
- **Bring together geographic areas:** The City can better celebrate local citizens, commerce, activities, and culture with a geographic Generic Top Level Domain.

Immediate Areas of Direct Economic Opportunity for the City of Toronto potentially include:

- Growing Awareness of Available City Services, Information, and Initiatives
- Growing Global Brand Recognition to Drive Local Investment
- Enhancing Public Trust
- Growing Tourism-related Economic Return
- Engaging Cultural Communities
- Promoting local Social Events
- Promoting Environmental and Social Responsibility

Peripheral Areas of Opportunity for City of Toronto stakeholders via brand association potentially include:

- Spotlight on Toronto Chamber of Commerce and individual businesses and emerging business ventures
- Cultivation of Small/Niche Business
- Highlight Tech Industry achievements and resources
- Enhance Film/Theatre Industries visibility
- Music Industry
- Fashion Industry
- Art Industry
- Sports/Fitness Industries
- Highlight potential Housing/Real Estate/Commercial Development opportunities
- Extend Digital Marketing value and reach
- Promote Toronto-specific 'Think Tanks' and academic communities of interest
- Support and shape the Sharing Communities' evolution
- Advance the value of Personalized Services Organizations within Canada's largest economic hub
- Cultivation of Online Communities of Interest

In addition to serving as a digital platform for small businesses, individuals and organizations, .toronto could help spur the creation of new online communities. New York City has launched Digital.nyc, the official online hub of the New York City startup and technology ecosystem. Since its launch in October 2014, Digital.nyc has seen over 1.2 million page views, resulting in over 123,000 content engagements, and over 3,000 user-generated content submissions. Currently, Digital.nyc receives over 110,000 visitors per month and the site's directory has grown to 6,455 startups.

Potential Models and Costs

In 2011, Invest Toronto detailed application costs to consider a Toronto-specific Top Level Domain application with ICANN advising applicants to set aside \$400,000 to meet application costs which would include:

- 1) The ICANN Application Fee - \$185,000 USD;
- 2) Cost of preparing the application - \$50,000-\$100,000;
- 3) Additional evaluation costs - \$50,000 or more;
- 4) Objection adjudication - \$5,000 - \$15,000; and

The costs are estimates for budgetary purposes as the actual costs for a possible 2018 new Generic Top Level Domain release have yet to be published by ICANN. The process to acquire and operate a Generic Top-Level Domain such .toronto could be structured within one of three different business models:

- Closed Business Model – the domain owner manages and uses the domain, any and all sub-domains, and all domain names for its own exclusive content (for example, the use of .book exclusively for Amazon books). The Domain owner pays all associated costs of doing business within the defined Generic Top Level Domain and its sub-domains.

Pros: Content can be presented in a coherent format that transforms the customer experience. With control of the entire system, a closed environment can provide a better experience, a change in mode that goes beyond content. It is easier to control the business risk of a closed Generic Top Level Domain.

Cons: Can lead to content confusion. A visitor can type .com instead of .net, or somebody looking for a selection of blogs can land on .blog and get forwarded by Google to its Blogger service. It would be as if the owner of blog.com ran it as an open environment or forwarded traffic to Blogger.com. Expansion is slower, and City policies may be off-putting to some, model can stifle innovation and creativity.

The associated costs for a Closed Business Model are entirely borne by the domain owner. Invest Toronto, the city corporation tasked with courting investment dollars, explored the business case in 2011 for running a domain registry and found the initial investment was estimated at the time to be \$1million. The Internet Corporation for Assigned Names and Numbers (ICANN) lists the evaluation fee at \$185,000 U.S., as well as a \$6,250 U.S. yearly fee plus \$0.25 domain registered in the Generic Top Level Domain.

- Open Business Model: Other parties aside from the domain owner can unilaterally set up sub-domains, domain names, and web sites where they independently control web content, as long as they pay the domain owner's pre-requisite and ongoing fees (e.g. if Amazon opens up .book, other book sellers and libraries would be able to set up sub-domains, sites where they control content).

Pros: There is synergy value (economies of scale) in running more than one concurrent open Generic Top Level Domain for a company's different product lines, such as Amazon's bid for .book and .video. The synergies are driven by an integrated business model.

Cons: High risk associated with low control over content.

- **Hybrid Business Model:** A variation of the Closed Business Model, the Hybrid Model allows the domain owner to govern and approve individual external proponent requests on a case by case basis for sub-domains and domain names based on City policies and standards, and oversees the appropriateness of content published by all parties. Infrastructure and development costs are shared between owner and proponents via a fee for services rate card.

Pros: City can establish broad control at the policy level, and implement audit-based governance mechanisms while allow sub-domain owners to create and administer compliant content from within their own development budgets.

Cons: Minimal.

Projected Earnings of .toronto

Working with VeriSign, the Registry Operator of .com, in 2010/11 Invest Toronto was able to develop a regression model to predict the registration volume of .toronto. Using the estimated registration volumes, the .toronto Top Level Domain market size is expected to be between 85,700 (Scenario 1) and 202,100 (Scenario 2) domain names by the 3rd year of operations. Based on these sales volumes, an estimated unit price of \$11 and a number of other assumptions found in Scenarios 1 & 2, the three year average cash flow for .toronto, not including start-up costs, can be projected to be anywhere from \$104,351 (Scenario 1) to \$599,700 (Scenario 2). The cash inflows for .toronto could be between \$1-3 million annually over the first 3 years. The inflow would come from 3 primary sources:

- **Generally Available Registrations:** The sale of domains names Registrants through Registrars at a price of \$11 per domain;
- **Auctions:** Would be used prior to the generally availability of domain names to resolve conflicts that arise when multiple registrants desire the same name and to sell off highly valued domain properties. Prior to general availability, Trademark holders are required to have an opportunity to pre-register in the Top Level Domain to protect their property. When two or more entities are seeking the same domain name an auction can be used to resolve the conflict. The use of auctions has proven effect in reducing the legal costs that negatively affected some of the earlier launches of Top Level Domains.
- **Premium Domain Sales:** Can be used in tandem with the auction process to generate additional revenue. Premium names can be auctioned or sold at price significantly above those available for \$11. Premium domain names are identified prior to general availability as being extremely valuable – and could including names such as performing arts.toronto, hotel.toronto, tourism.toronto or hockey.toronto. For example on Go Daddy a premium domain in the .mobi Top Level Domain is being sold for \$70, ten times the price of a generally available .mobi domain.

New York City .nyc Example

The first municipal support for a Generic Top-Level Domain was New York City. The .nyc Top Level Domain was introduced to council with the Internet Empowerment Resolution passed April 19, 2001. The Resolution called for the city's Commission on Public Information and Communication or a public interest organization to acquire and develop the Top Level Domain. On October 5, 2009 a Request for Proposals was issued by the City of New York seeking "services to obtain, manage, administer, maintain and market the geographic Top Domain name .nyc." Notably, conditions included that proposals include a system of ensuring connection or central link with the city (i.e. qualifying only individuals/businesses with an address in the City), and also a preliminary list of reserved names including all city precincts, schools, districts, and neighborhoods.

New York City established a partnership with Neustar, Inc in a Hybrid Model. Neustar, which already handles the .us, .biz, and .co Top Level Domains, paid the application fee of \$185,000 for the domain for the city and post-application fees, including the \$25,000 annual fee. New York City was initially seeking a five-year option for .nyc, with two five-year renewal options.

New York City receives 40% of revenues yearly from .nyc, which include not only the use of the domain or domain names, but also click-thru fees and advertising sales. The city will receive a minimum revenue of \$3.6 million for the initial five-year contract period, with set yearly minimums of \$300,000 for the first year; \$650,000 for the second year; \$750,000 for the third year; \$850,000 for the fourth year; and \$1,050,000 for the fifth year. If the gross yearly revenue for the domain exceeds the minimum for that year, Neustar will pay the city the difference to compensate.

The contract includes managing the central global database for all .nyc registrations, as well as the global Domain Name System and Whois lookup. It also means interacting with the registrars through which people will actually acquire a URL with the new .nyc suffix, such as Godaddy.

New York rolled out .nyc in phases, first for nonprofits and public institutions, then for homegrown residents and businesses, and finally for outside companies that sell a product or service specific to New York City.

There have been more than 75,000 registrations to date and counting – all by individuals, businesses, and organizations based in the five boroughs as of March 31, 2015. This includes:

- There are more than two dozen industries represented on the .nyc domain
- 53 percent of .nyc domains have been registered to individuals; 47 percent have been registered to small businesses and organizations

- The average registrant owns between 2-3 domains, and 97 percent of registrants own 10 or fewer domains
- The average retail cost paid for .nyc domain is \$34.99

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