

A black and white photograph of a busy city street with blurred pedestrians. A bright yellow diagonal graphic element cuts across the bottom right of the image. In the bottom left corner, there is a circular graphic containing various icons and the words 'SOURCES' and 'NETWORKS'.

In the decade of the customer, knowing your customer means owning your data

Data ownership and domain consolidation
in digital analytics today

EY

Building a better
working world



Contents

Foreword	1
Introduction	4
Owning your data	6
Privacy concerns and your customer data	7
Domain consolidation and domain change	9
Causes for domain consolidation or change	11
Domain change impacts	13
Domain change preparation and mitigation plans	15
Alternatives to consolidating domains	17
Conclusion	20
Endnotes	22
Contacts	24



Foreword

Large organizations with a strong internet presence typically own many online properties, especially if they control multiple well-recognized brands, or invest heavily in microsites and international markets. Since many of these organizations were established over time through multiple acquisitions, websites within these organizations may still utilize their own domain names (e.g., [www.site1.com](#), [www.site2.com](#)) in order to maintain brand recognition, strengthen natural search engine rankings and mirror internal organizational structure. The typical approach to link together customers as they travel across an entire network of sites on disparate domains is to use third-party cookies.

However, this solution has drawbacks, including a reliance on the ability to place third-party cookies (particularly as mobile browsing continues to rise in use), third-party costs to support this customer function, and data security concerns. An alternative solution is to consolidate all the sites in the network under a common root domain, thereby creating a first-party network.

The importance of this network of first-party data has increased as companies face a greater need to target and personalize the experiences of online customers. Companies are seeing the value of the resulting engagement lift – based on EY's experience working with clients, those who have turned to first-party cookies, rather than third, have seen a 12-25% increase in page consumption, advertising click-through rates (CTR), or site revenue as a result of



these methodologies. Among the several methods researched for collecting the data to form a “de-duplicated,” first-party customer database, consolidation of domains into a single domain was the best alternative.

EY has reviewed the history and experiences of organizations that have gone through the domain-consolidation process, researched other examples of domain change, tabulated the principal causes driving these changes, and studied the effects – intended and unintended – that came about as a result. To supplement this research, EY also distributed a domain change survey (the *EY Survey*) to leading analysts and executives, designed to further understand the effects of a large organization changing or splintering domains.

We have drawn two basic conclusions from the *EY Survey*:

1. Time, preparation and planning are required to mitigate the many impacts of a major domain consolidation, impacts that include search engine optimization (SEO), analytics, user experience (UX) and many others.
2. Though historically companies have consolidated domains for branding purposes, another factor, namely the impetus for companies to own and control their audience data, has become and will increasingly manifest itself as an important cause for implementing a domain-name consolidation, especially in the face of high third-party cookie rejection rates.



Data Digital assets Attribution
analytics Domain

Web analytics Web intelligence
Reporting **Customers**

Targeting Segmentation Tagging
Digital database marketing

Personalization Predictive modeling



Introduction

The root domain of a website can be used to establish a unified brand identity across multiple sites, and commonly serves as the primary brand identity by which a company presents itself to the online universe. Organizations, therefore, tend to be conservative about their root domains, and do not change root domains without good business reasons. Increasingly, one of these reasons has become the need for companies to own their data to provide reporting, analytics, segmentation and targeting, through an in-house solution that offers decreased cost and data security advantages.

Five years ago, customers might have been surprised when served cross-sell products or advertising banners that were tailored to their browsing history; now, customers have come to expect this. Many consumers want product

offerings based on known products purchased (retail), content based on past interest (media), financial offers based on current relationships or life stage (financial services), and cross-industry targeted advertising (e.g., product ads on weather.com¹). Companies that do not provide customers with some level of targeted content, products or advertising run the risk of losing those customers.

In parallel, increased concern with internet privacy has directly focused on third-party data collection, cookies and tracking techniques. Just when the need for rich, online behavioral data about customers is reshaping the entire advertising industry, the means by which much of this data is collected are being questioned. It is not without a sense of urgency, therefore, that EY decided to look more closely at the solutions that enable first-party data collection across large organizations with multiple domains today.



**On to the
report! ▶**



Owning your data

> Digital analytics is an evolving field whose goal is to organize digital data (web, mobile, social, apps) into something valuable. In today's environment, this value increasingly revolves around optimizing and engineering your customers' experiences. Digital data collection originated with server log files, which could be examined to identify what sections of a website were viewed, along with some other rudimentary information. The subject of analysis was the *server* and it was, by definition, owned, proprietary data. Today, data collection is primarily done via JavaScript™ embedded on web pages that, when executed (upon a page load, link click, or other activity), creates an image request (a container for information) composed of data that allows for analysis of the user's behavior. Here, the subject of analysis is the *user*.

As measurement shifted to become more about observing a user, keeping a given user's identity intact became progressively more complex. Today, serving the user an HTTP cookie primarily does this. Cookies are instruments that live within a computer and web browser combination, and maintain a record of a person's history within and across websites. Cookies can store many kinds of data that are used to track visitors.

The catch is that while cookies enable you to keep track of visitors on your domain, they also enable third parties to track users across multiple domains. This is the distinction between a first-party cookie (a cookie served from the domain that the user currently is using) and a third-party cookie (a cookie served from any other domain).

Third-party cookies find their way onto web pages through many different sources, and may come from an advertiser, marketer, data aggregator or any other entity; for most websites, these cookies come from all of the above. In fact, today "some 40% of all data collected from publishers is actually being gathered by third-party ad tags without the publisher's knowledge."² With third parties collecting such vast amounts of data, concerns over internet privacy naturally arose.

All registered trademarks are the property of their respective owners.



Privacy concerns and your customer data

A woman with long dark hair is sitting on a light-colored, tufted sofa. She is holding a silver laptop in front of her face, completely obscuring it. She is wearing a black long-sleeved top and a grey skirt. The background is a solid light green wall. The overall image conveys a sense of privacy and data protection.

> There is a sharp contrast between the positive cultural attitude toward first-party data collection and the negative attitude toward third-party data collection, which is associated with privacy concerns. In the European Union (EU), these concerns have spurred regulatory action; in the US, several congressional bills have sought to limit third-party online tracking mechanisms, a subject which is still being debated.³

In response to these concerns, the major web browsers are building features that give users more control over who sees their data. Third-party cookies have always been a feature that could be disabled within a browser, but that often required a fairly savvy user. Recent versions of popular browsers now make this blocking the default setting; Safari™ has already made third-party cookie tracking a feature that users need to opt-in to rather than disable, and Mozilla has plans to mirror this functionality for Firefox™.⁴

In a recent article, it was found that 13% to 18% of users block third-party cookies, a figure that is rising steadily due to these feature enhancements.⁵ In the case of Safari, with iOS's strong share in the mobile and tablet markets, this makes any type of mobile data collection extremely susceptible to inaccuracy if third-party cookies are used. Thus, while third-party cookies have played a big role in the advancement of targeting, public sentiment has turned against them. That being said, most users don't seem to object to being tracked by the site they are visiting: while third-party cookie rejection is 13% to 18%, first-party cookie rejection remains low (0.5% to 4%).⁶ Brand owners need to take note and ensure their collection strategies align with their customers' willingness to be tracked.

The problem for larger organizations is that while many users associate third-party cookies with advertisers or data collection agencies (and, subsequently, wish to block them), these cookies are used by, and are important to, the organization that owns a given web property – particularly if that organization owns multiple domains. For example, imagine that EY owns two web properties, www.eytax.com and www.eyconsulting.com. Each of these domains sets a first-party cookie, meaning that we are getting two distinct chunks of information.

The section of data that will be difficult for EY to see is the subset of users who are visiting both of these properties. In order to glean information on those users, EY sets a third-party cookie (www.eyglobal.com) meant to effectively maintain that user's identity across the two sites.

Alternatively, EY could go to one of the truly third-party data aggregators, which additionally might be able to provide profiles, personas, and other information about its customers based on the wider users browsing experience across multiple sites. If they do that, however, cookie rejection means that EY's data is now incomplete, as the 13% to 18% (and growing) of the users blocking third-party cookies are not in their data set. Therefore, with separate domains, whether EY uses first or third-party cookies, the data set will be incomplete.

As a solution to this problem, some data scientists are advocating that, in contrast, EY could put both properties onto a single domain, for example, tax.ey.com and consulting.ey.com. In this example, there is only one first-party cookie, covering two subdomains located on the same domain (in this example, ey.com). Now, even if 100% of the users are rejecting third-party cookies, for the EY data set, it will not matter. EY has compiled a complete picture of its audience because it is only relying on first-party cookies. For an organization with a single domain, obviously this is the default solution. But, if an organization has multiple brands, with multiple websites and domains and if visitors can be expected or encouraged to visit more than once, implementing a single domain to house all of these websites is the more effective way to collect first-party data and information about the behavior of as many of your customers as possible. A single domain, ensuring first-party data collection, is the best way to avoid having to rely on third-party cookies and analytics, and to avoid the risk that these collection methods are excluding an increasing percentage of your customer audience.

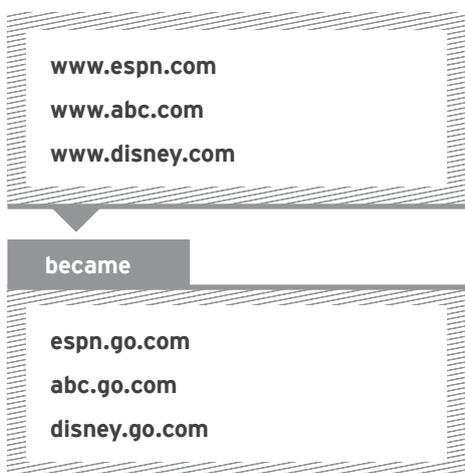
So why hasn't everyone already done this? Changing a domain has large-scale implications, both for the brand and for the larger constitution of a company's internet presence. These impacts are varied, unintentional and sometimes subtle – driving us to investigate further.



A man in a dark suit, white shirt, and dark tie is shown from the chest up, pointing his right index finger upwards. The background is dark blue with several glowing, out-of-focus squares of varying sizes. A horizontal dashed line is visible near the top of the image. The text 'Domain consolidation and domain change' is overlaid on the left side of the image, with 'Domain' on a white background and the rest on a white background with a yellow vertical bar on the left edge.

Domain consolidation and domain change

➤ Consolidating domains, by definition, requires an organization to change domains across the properties being consolidated. Because these changes can impact not only the source code for the site, but also the public's relationship with a brand, these changes are not made frequently. For context, we looked at several major domain changes and consolidations over the past decade. For example, in 2010, ESPN, ABC, and Disney merged under the go.com domain, so that



Similarly, Gap acquired Old Navy and Banana Republic, consolidating in 2010 these separate domains from



Among smaller companies and startups, domain changes are much more common. To draw from our experience: the boutique digital analytics consultancy



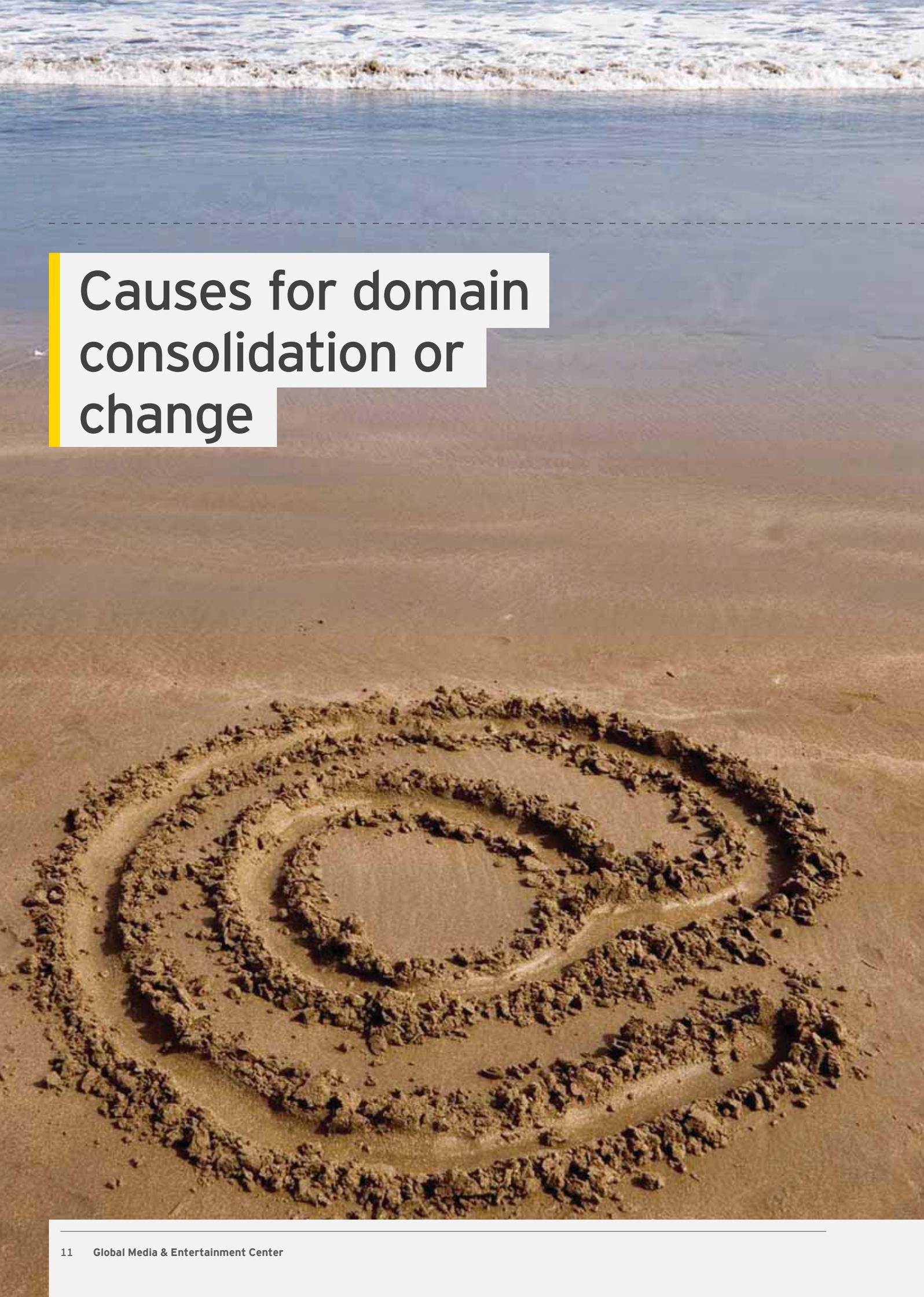
as part of a re-branding initiative in 2005. Semphonic has now been acquired by EY and discussions about the future of the semphonic.com domain are currently underway.

In other words, when domain changes happen, they accompany a major strategic decision made by the organization. The root domain of a website is immensely important for many reasons including:

- ▶ A brand image the company wants to present to the online universe
- ▶ The unique point of recognition for search engines or panel-based traffic monitors and the technical pivot around which websites are architected
- ▶ A long and persistent history within blogs, emails, social media, posts, news archives, and partner sites
- ▶ Analytically, it is the point of differentiation between first-party and third-party cookie and privacy settings

Thus, consolidating or changing domains has potentially large and diverse impacts for an organization. Probing further, we examined the strategic decisions that often accompany such changes.



A photograph of a beach with waves in the background and a sandcastle in the foreground. The sandcastle is built on a sandy beach and has a circular base with a smaller circle inside it. The waves are breaking on the shore, creating white foam. The sky is not visible.

Causes for domain consolidation or change

➤ To better understand the rationale behind the decision making, we interviewed several marketing and analytics managers at companies where this change has already been implemented. EY also created an online survey and invited a select group of managers, analysts and directors to participate. Of the questions asked, the preeminent point of interest was: why did you do it?

Answers fell into four main categories, though the most salient was quickly clear: **branding**. Seventy percent of the organizations we researched cited branding as the principal impetus for changing domains. “Branding” causes for a domain change can be broken down into the following categories:

- ▶ Mergers or acquisitions of one company by another leads to the desire to change the domain of the daughter company to conform with the parent (35%).
- ▶ Internal reorganization of the company merges or consolidates microsite-level domains so that they conform with the domain of the larger organization (15%).
- ▶ There is a disconnect between the domain name and the perception or recognition of the larger brand (20%).⁷
- ▶ The new domain is perceived as being “better” than the old one, for public relations purposes (10%).⁸

Branding is also a commonly cited reason why organizations might choose not to consolidate domains after an acquisition – the different target market of the acquired company and its brand strength recommend maintaining the old domain.

Other non-branding reasons for a domain change are noteworthy. Some companies cited architecture- or infrastructure-related reasons, such as a new content management system (CMS). There were technical or system requirements in some cases, related to a single authentication engine across domains, or a single shopping cart. Finally, in one case, the domain change was undertaken for legal reasons.

That branding was most often reported as the main driver behind switching domains came as little surprise. While exact calculations are somewhat nebulous, brands carry high dollar values and companies spend their entire lifetimes refining and polishing their brand positioning. What did come as a surprise was that the effects a domain change would have on all facets of audience analytics were often not secondary considerations, but not considerations at all.

In EY’s online survey, marketing, brand/PR, senior leadership, and IT were cited as being the team(s) responsible for driving the domain change – but no participant in the survey responded that analytics or business intelligence was the primary mover. Effects of the domain change on analytics, nonetheless, were sometimes cited as one of the unanticipated impacts of a domain change.

However, after discussion with some of the executives, we believe that analytics will increasingly become the strategic imperative behind such a change, given the third-party concerns outlined above. As analytics and targeting have matured, so has the thinking behind the importance of first-party cross-domain tracking.



Domain change impacts

➤ One of the key insights EY took away from interviewing managers at companies that have changed domains is that most of them are happy with the change; all reported that they would do it again (100%). Survey respondents also reported that support for the domain change was reasonably widespread among different stakeholder teams (or at least neutral), with only the IT, SEO and legal teams providing some push back.

Despite this, the benefit of hindsight did call to mind many unforeseen costs or issues that caused trouble that more careful planning might have mitigated.

If an organization is considering a domain change, varied and commonly overlooked areas will be affected, and deserve attention prior to making a final decision. Thus, the first step in the decision to undertake a domain change is really an “impact discovery” phase in which any and all teams within the organization – and third-party vendors – that rely on, use, engineer, disseminate, promote or monitor the company’s domain are identified as stakeholders in the domain-change initiative.

Most immediately apparent among these potential impacts is **SEO**. The basic process by which search engines “crawl” sites, record content and deploy their proprietary ranking algorithms has not changed substantially in the last decade. A domain change has the following general effects:

- ▶ Click throughs to content stored within the memories of the search engines are no longer “fresh,” thus reducing rankings.
- ▶ Depending on how the redirect was instrumented, content URLs within search engine listings might no longer work and result in broken links – and hence reduced rankings.
- ▶ Physical crawling on the site might be more difficult, especially if in-site re-directs are being used for existing links.
- ▶ Referral links to pages on your site from social sites, marketing sites, emails, blogs, partner sites and news sites – might not be legitimate anymore, thus hurting rankings that factor in cross-domain link saturation.
- ▶ The keyword ranking algorithms tend to factor in how well a domain name matches the content of the website; a potential new domain that does not match high-density keywords within its page content might rank more poorly.⁹

▶ Similarly, brand keywords are expected by the search engines to match domains; Overstock’s switch to “o.info” would have been expected to confuse search engines and reduce rankings.

▶ Cross-domain linking can improve SEO. Because of this, in the case of domain consolidation, separate websites, which before had their own domains but contained considerable between-domain cross-traffic links (hypothetical example, ABC and ESPN), would no longer be considered separate sites, and would therefore hurt search rankings.

Initially, it can be expected that branded keyword rankings will likely be lower, as search engines gradually adjust to new domain names. All survey respondents indicated a decline in natural search referrals immediately following the domain change (recovering after several weeks). In addition, keywords that make up the long tail of search engine referrals can disappear entirely. Based on our research and past experience, an organization making a domain change with no planned SEO mitigation could expect search engine traffic to drop as much as 30%, taking at least a few weeks (and up to 4-5 months) to recover. Recovery is generally gradual, and long-term rise was reported by some survey respondents.

There are obvious **IT** impacts in any domain change, since hard-coded links may break, the CMS in use may encounter errors, and overall site performance and responsiveness are at risk. Additionally, server-side re-directs may not capture all internally referring links, particularly on large sites with heavy, rich media components. Additional IT resourcing for troubleshooting should be set up ahead of the new domain launch date.

Hard-coded links also could be problematic for **social media**. Any hard-coded link maintained on the internet could potentially be disrupted by a domain change, but social media (widely defined) is a particularly “sticky” repository for such links. Additionally, if the domain change is abrupt and the new domain is significantly different from the original brand, unanticipated “buzz” and a disruption of an established social media monitoring system could result – as observed in our research.

Our general impression from both interviews and survey responses is that social media was, for the most part, ignored in the planning process. For example, when choosing a new domain, respondents cited surveys, vanity URL (a URL that is friendlier or easier to remember than the actual destination URL) response rates, and brand consultants and research, but no respondent pointed to social media as a source of possible ideas regarding the name of the new domain.¹⁰ In an era of very public relationships with brands, this dynamic may change; customers included in the process of a switch may actually enhance loyalty, rather than harm it.

Branding, while commonly expected to be a long-term beneficiary, faces shorter-term risks if appropriate actions are not taken. Individual brand recognition appeared to have declined for some companies observed, with one actually undoing the domain switch after the initial lack of success that featured brand confusion so severe that many existing customers were accidentally navigating to an unrelated (but similarly named) website. Disconnects in branding are also exacerbated if international markets are prevalent.

Similar to branding, many **panel-based monitoring** agencies are publicly monitoring internet traffic and providing reporting on overall brand strength and company internet rankings – notably Compete, Quantcast, Nielsen, and comScore. A radical and abrupt domain change without prior preparation could topple an organization's rankings on these lists.

The disruption to the result-relevancy **internal search** algorithms (algorithms dictating which results appear following given searches) came as a surprise to some. Internal search faces a UX and acceptance risk as a general result of a domain change. The nature of the domain-change impact on internal search depends on the tools and algorithms used.

In some cases, "natural" results may balloon for generic or brand keywords, as the aggregate amount of internal site content is expanded under the new domain. In other cases, the relevancy of content specific to a given keyword may be diluted by the inclusion of so many more pages under the new, consolidated domain, so that what previously were top results now fall to the bottom. Finally, programmatic search results (PSRs) will all have to be redefined to point to the current URLs and account for a new domain structure.

Marketing impacts to a domain change are similar to the disruption to any traffic source; newsletter links, email blasts, banner advertisements, quick response (QR) codes and vanity URLs from offline media all could be impacted. Since it is not uncommon for large organizations to engage with dozens, if not scores, of third-party agencies each responsible for their own piece of the marketing universe, a domain change requires extensive prior communication with these parties and can involve unforeseen costs as these engagements are modified to accommodate the extra effort. **Advertising cost per mille (CPM)** increased in the long-term, but one respondent to our survey indicated an initial decline, presumably from the short-term traffic and search disruption.

Often neglected until the last minute in terms of planning and preparation, **analytics** are heavily impacted by a domain change or consolidation. Since altering or unifying domains naturally changes the underlying structure for data collection, the technical impacts to the methods used to measure a visitor or session need to be analyzed and addressed. The valuable pool of customer information that a company has built up over years is at risk of being entirely lost upon consolidating domains if proper precautions are not taken ahead of time.

This is primarily because the cookies set on browser and machine combinations are changing as domains do. For example, an established customer whose profile was created via a visitor identification (ID) set by a cookie from the domain *espn.com* will no longer have that same visitor ID when we start looking at data from the *espn.go.com* domain; there needs to be a way to bridge the two. Put simply, visitor "A" in your old data may be the same person as visitor "Z" in your new data, but there may be no way to know for sure. With a new cookie set to be read by the new domain, every visitor will suddenly become a "new" visitor, even if data is still being sent to the old report suite or profile ID in the web analytics tool.

➤ It can take anywhere from a few weeks to several months (and many dollars) to recover from domain-change issues. This is why the results of our research must be stressed: careful, inclusive planning is required in order to mitigate the many impacts of a major domain consolidation. According to our interviews and survey responses, it generally took a minimum of three months to roll out a domain change (decision through launch) from a purely technical perspective on single domains, but this does not include bringing multiple stakeholders on board. If an organization owns multiple properties and is looking for a full domain consolidation, this process could take longer – anywhere from 10 to 18 months.

Mitigation plans will vary by company, but at a high level, well in advance of a domain change, **SEO** should be considering temporary pay-per-click (PPC) campaigns; a refinement or creation of a content and directory architecture strategy; provision for a likely cannibalization or wallpapering effect while both old and new domains remain indexed at the same time; and an in-depth domain name deployment strategy. **IT** should be appropriately staffed to undertake both discovery and troubleshooting exercises, while brand consultancy engagements could be considered and global coordination must be specified, if applicable. Nielsen, comScore, Compete or other watchdogs should be alerted to the change. **Internal search** stakeholders may have to secure vendor-specific or third-party resources to counter disruptions. **Marketing** will likely need to plan both a reconfiguration of data feeds and server redirects, while simultaneously negotiating a potential expansion in the scope spelled out in vendor contracts. **Social media** is tasked with the reconfiguration of monitoring tools ahead of a domain switch, and forming a PR strategy for socially communicating any changes.

Finally, for **analytics**, a good starting point is parallel tagging of both first- and third-party cookies for a specified pre-launch period, in order to provide a dataset with which old visitors can be “recreated.” This dataset mitigates much of the risk of losing visitor profiles. After the switch, this tagging structure can be maintained in the short-run, so that appropriate matches can be made between your old and new configurations.

All of this mitigation costs money. Third-party contractual arrangements – with marketing agencies, analytics vendors, SEO experts – will have to be renegotiated to handle what they would likely see as out-of-scope engagements. Internal resources for IT will have to be budgeted. Analytics teams will not only have to plan to ensure continuity of data collection, but also potentially reconstruct existing reporting that might be based on older URLs or profiles.

And in the case of a domain consolidation across all areas of the company, **governance** becomes much more important as what used to be several different groups maintaining separate domains is now many groups all making changes to and monitoring a single domain. Some of the up-front planning efforts must be dedicated to thinking through taxonomy, visitor definition and cadence, and measurement definition to ensure that the organization gets the expected benefits from cross-domain analytics.

Despite all of these concerns and impacts, organizations that have undergone a domain consolidation tend to be happy and satisfied with the experience. All survey respondents said they realized the benefits they had hoped for, and that they would carry out the domain change again. As SEO recovers and natural search increases, the new domain is accepted and disseminated on social networks, and the brand as a whole is usually seen to have been strengthened. In the cases of domain consolidation, a new wealth of data becomes available in one place. As these internal data sets expand, reporting and analysis become streamlined and faster, and the new domains open opportunities for targeting, cross-sell, and overall richer data collection.

Despite the initial obstacles, audience databases *improved* upon consolidating domains. Many managers we spoke with saw this benefit and, indeed, as digital analytics have become more sophisticated, data scientists within these organizations have begun to initiate these conversations about domain consolidation. Rather than being an *impact* of domain consolidation, better analytics are being recognized as a potential *reason* for domain consolidation. Given the importance today of owning your data, we believe this reason may well be *decisive*.

Alternatives to consolidating domains

➤ Our research has also found that domain consolidation is the best universal strategy for overcoming third-party data rejection and de-duplicating visitors across multiple domains. However, individual brand strength, contractual arrangements, technical challenges or organizational buy-in might prohibit the consolidation of domains. Here are some alternative methods for building a strong database that de-duplicates visitors across multiple domains. All of these cases avoid the previously-discussed problems that result from changing domains, though they carry other disadvantages.

A **universal log-in** across properties allows for de-duplication of anonymous visitor IDs, while simultaneously creating opportunities to join customer data with available third-party customer demographic data. However, this is heavily dependent on the specific case in question; a universal log-in will not be feasible, unless the domains in question already require one. If the log-in is optional, current data shows that only 2% to 5% of a user base will actually log in. If the log-in is mandatory, the data set will be richer but the log-in experience itself can be distracting or cannibalizing to the customer experience. In some of our research, requiring log-ins can decrease overall page consumption by as much as 30%. Therefore, the overall impact of a log-in on-site engagement should be measured and analyzed. Log-in placement analysis – figuring out when and where to make the “ask” – and log-in content analysis – are you giving away too much content for free? – can help alleviate these impacts to an engagement.

Various **technical work-arounds** can be employed. For example, an iFrame (content embedded within other content). For our purposes, this would be content embedded on a page, whose source differs from the page it is found on and could be used to generate a first-party cookie containing basic data that could then enable the cross-domain visitor tracking, which in turn could be joined to the richer, domain-specific data. Another example of a technical work-around could be a one-time redirect on each property visited that is performed so that a universal organization ID could be captured, and subsequently passed to the domain to which the visitor was en route. Technical workarounds such as these carry the benefit of minimizing some of the negative impacts, in particular those on SEO and other risks that changing URLs present. The downside is that they are technically messy, impacts site performance and are difficult to scale and maintain for very complex properties.

While not a means to accomplish a 100% complete data set, if already present, cross-domain link tracking is a viable means to pass visitor information from one domain to another.

For example, two separate domains may attract similar types of people with similar interests, and so moving a visitor from one domain to the next may not overly disrupt the experience. This method will only work when a user moves directly from one site in scope to another, but if they go to another out-of-scope property on that journey, this linkage is lost. During this switch, visitor information would be exchanged through query parameters in the URL. This is a major branding decision and would likely not be practical for many companies.

In a similar vein, the use of **marketing emails and URLs** presents an analogous opportunity to improve (though not a 100% complete) data sets. If a known visitor of one domain is sent a marketing email that drives to a second domain, a visitor-specific identifier can be passed and serve de-duplication purposes. As with cross-domain link tracking, this is a serious marketing decision that is not desirable for many brands and only solves the data need if the visitor goes directly to the property from the email or marketing message.

External **first-party data sharing** could be negotiated to de-duplicate visitors across brands, though this too does not create a 100% complete data set. For example, your organization could contractually negotiate an agreement with Facebook in which Facebook would share individual visitor IDs and other important user data across domains. In this example, any visitors coming to your site from the third party would be effectively de-duplicated. In addition to the required legal negotiation, this option carries the challenge of potentially skewing the data in a way that could render it useless (e.g., if all of our de-duplicated visitors are from Facebook, are they representative enough to draw conclusions from and project their behavior on the rest of the customer population?).

Finally, **statistical modeling** could be used to try to “predict” whether a visitor to a given site should belong to a given targetable segment rather than knowing for certain. Statistical matching algorithms look at the early behavior of an anonymous visitor and project (within certain margins of error) to which segment that visitor should belong. Such techniques have been successfully applied to political campaign websites, for example, to predict whether a site visitor is male or female or a likely voter based on their first few clicks on the home page.¹¹ Modeling, matching and profiling techniques carry the benefit of not requiring any additional technical implementation, but clearly necessitates sophisticated statistical modeling that even if done well, may carry wide allowances for predictive error. It also requires that an organization has advanced, in-house statisticians; this skill set is in demand and not every organization that we talked to has yet built in these capabilities.

Weighing the advantages and disadvantages of each of these methods produced the following chart.

How to create a first-party de-duplicated customer database across multiple domains

		Scalable to all properties and microsities	Provides census-level data (captures all customers)	Ease of technical implementation	Ease of cultural implementation	Little reliance on third-party solutions	Little impact on organizational buy-in	Little disruption to site performance	Addresses cross-platform needs (phones, tablets, apps)	Creates first-party data network	Preserves individual brands	Requires ongoing governance	Value of data collected	Overall score
1	Do nothing – maintain multiple domains													1.5
2	Consolidate all domains into a single domain													2.6
3	Establish common, universal log-in across all properties													1.9
4	Technical work-arounds to collect first-party visitor identifiers													2.1
5	Visitor-specific, cross-domain link tracking													1.7
6	Visitor-specific external “marketing” emails and URLs													1.7
7	External first-party data-sharing (Facebook, Twitter, etc.)													2.0
8	Statistical modeling													2.1

*Shaded categories are weighted twice for overall score.

When EY ranked these solutions, four factors seemed more important than others and were weighted twice when computing overall scores:

- ▶ The solution has to be scalable for all domains controlled by an organization.
- ▶ The solution should capture as many visitors as possible. Solutions that would only de-duplicate 5% of visitors would not be useful.

- ▶ The ease of technically implementing the solution
- ▶ The ease of implementing the solution from an organizational and cultural perspective

These scores are qualitative, but they rank these solutions as one might expect. And, it should not be forgotten that most of these solutions are not mutually exclusive, and can be pursued concurrently.



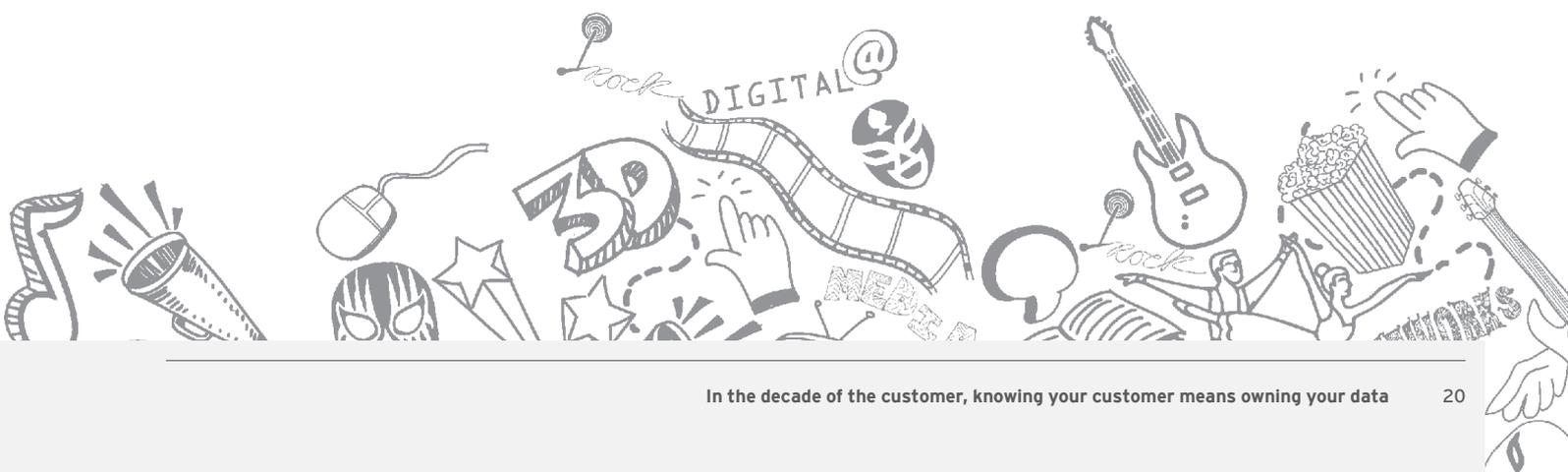
Conclusion

> Every day a newspaper headline proclaims that customer data is the “new oil,” and just as extraction and refining techniques for energy have advanced with technology, so too should the techniques for understanding customers and providing a targeted, custom experience. Companies with multiple websites can see benefits (engaged visits, ad CTR, orders, page consumption) when better cross-domain techniques are introduced. In an era where both public sentiment and technical improvements are reducing the amount of third-party data available, companies should be investigating methods to track and own more first-party data across domains.

Domain consolidation is one of the best options for organizations with multiple domains to achieve customer data ownership. Domain consolidation also saves the organization money by reducing its dependence on third parties to provide analysis, reporting and customer targeting. Further, data security is also enhanced because the data does not need to leave the network.

While analytics have traditionally not been a driver of this sort of change, we expect to see analytics increasingly becoming the rationale for enlightened organizations. As such, the traditional, conservative notion of the “storefront” domain name, mirroring the individual brand, might give way to a more flexible, personalized customer experience in which the domain’s name is of less importance than the scope and quality of the customer data it collects. Eventually, www.mysite.com could give way to www.yoursite.com, pulling customers into a personalized, engineered experience enabled by the full collection, ownership, and analysis of these customers’ data.

To borrow from our oil analogy one final time, governments plan for years different ways to achieve “energy independence” so that they can better control their overall balance of trade and security. Digital organizations similarly should strive for data independence so they can better control their customers’ experiences and personal data.



met - webpage



http://www

worites

News ▼

Website

Endnotes

- ¹ Katherine Rosman, "Weather Channel Now Also Forecasts What You'll Buy," *The Wall Street Journal Online*, 14 August 2013, via Factiva, © 2013 Dow Jones & Company, Inc.
- ² Erik Saas, "Centro Teams with Krux to Protect Publisher Data" *MediaPost.com*, 16 May 2012, via Factiva, © 2012 MediaPost.com.
- ³ Chloe Albanesius, "Boucher's Privacy Bill Scolded by Consumer Groups," *PC Magazine*, 4 May 2010, via Factiva, © 2010 ZIFF DAVIS MEDIA Inc.; "S. 799--112th Congress: Commercial Privacy Bill of Rights Act of 2011." *www.GovTrack.us website*, www.govtrack.us/congress/bills/112/s799, accessed 14 August 2013. No specific act of Congress has yet been passed that requires companies to abide by any third-party cookie measurement standards beyond opt-in/opt-out browser setting options or terms and conditions disclosures on proprietary websites.
- ⁴ Safari rejects third-party cookies by default, affecting many third-party cross-session visitor measurement methodologies.
- ⁵ Teague Dugan, "Is Cookie Rejection Ruining Analytics Data?," *Web Marketing Today website*, webmarketingtoday.com/articles/is-cookie-rejection-ruining-analytics-data/, accessed 14 August 2013.
- ⁶ Ibid.
- ⁷ "O.co (aka Overstock.com) Acquires O.info Domain for New Consumer Portal," *PR Newswire (U.S.)*, 21 September 2011, via Factiva, © 2011 PR Newswire Association LLC; "O, no! Overstock backs off O.co name change," *Advertising Age*, 14 November 2011, via Factiva, © 2011 Crain Communications, Inc.; "Overstock.com Launches O.info Consumer Information Portal," *PR Newswire (U.S.)*, 28 February 2012, via Factiva, © 2012 PR Newswire Association. The equivocation regarding the Overstock.com domain is a case in point. Overstock promoted the o.co domain, backed away from it and introduced a new o.info domain. The domain today is overstock.com. The change from harpo.com to oprah.com ("harpo" is "oprah" backwards) might be considered another example of this kind of disconnect.
- ⁸ The move from thefacebook.com to facebook.com probably falls into this category (a domain change reason exceptionally popularized in the movie *The Social Network*).
- ⁹ Pages within a domain such as www.cat.com should have a high keyword density for the word "cat," but not "dog," and a user who types in "cat" is probably looking for a site like www.cat.com but not www.dog.com.
- ¹⁰ This was surprising. One could fairly easily mine social data to look for keyword affinities with the brand name to see if social users commonly express alternatives to the "real" brand or domain. Instances where a social post provides the "wrong" URL (e.g., amex.com instead of americanexpress.com) might be particularly valuable in this regard.
- ¹¹ Joseph Carrabis, "Politics and Your Mind 9 Oct 2012 (Introducing the NextStage Political Reader)," *NextStage Evolution, LLC website*, politics.hungrypeasant.com/index.php/2012/10/09/politics-and-your-mind-9-oct-2012/, accessed 14 August 2013.

All registered trademarks are the property of their respective owners.





www.ey.com/mediaentertainment

Mobile app: eyinsights.com

Connect with us



EY Global Media & Entertainment
on Twitter, @EY_MandE



EY Global Media & Entertainment key contacts

Global Media & Entertainment sector leader

John Nendick, Global Media & Entertainment Leader (Los Angeles, US)	+1 213 977 3188	john.nendick@ey.com
---	-----------------	---------------------

Media & Entertainment service line contacts

Gary Angel, Advisory Services (San Francisco, US)	+1 415 894 8255	gary.angel@ey.com
---	-----------------	-------------------

Howard Bass, Media & Entertainment Advisory Services (New York, US)	+1 212 773 4841	howard.bass@ey.com
---	-----------------	--------------------

Mark J. Borao, Media & Entertainment Advisory Services (Los Angeles, US)	+1 213 977 3633	mark.borao@ey.com
--	-----------------	-------------------

Mark Besca, Media & Entertainment Assurance Services (New York, US)	+1 212 773 3423	mark.besca@ey.com
---	-----------------	-------------------

Thomas J. Connolly, Media & Entertainment Transaction Advisory Services (New York, US)	+1 212 773 7146	tom.connolly@ey.com
--	-----------------	---------------------

Ian Eddleston, Media & Entertainment Assurance (Los Angeles, US)	+1 213 977 3304	ian.eddleston@ey.com
--	-----------------	----------------------

J. Chris Gianutsos, Media & Entertainment Advisory Services (New York, US)	+1 212 773 440	chris.gianutsos@ey.com
--	----------------	------------------------

Paul Legutko, Advisory Services (Boston, US)	+1 617 375 2319	paul.legutko@ey.com
--	-----------------	---------------------

Alan Luchs, Media & Entertainment Tax Services (New York, US)	+1 212 773 4380	alan.luchs@ey.com
---	-----------------	-------------------

Chris Pimlott, Media & Entertainment Tax Services (Los Angeles, US)	+1 213 977 7721	chris.pimlott@ey.com
---	-----------------	----------------------

Ekta Singh, Media & Entertainment Advisory Services (New York, US)	+1 212 773 8432	ekta.singh@ey.com
--	-----------------	-------------------

Media & Entertainment regional contacts

Farokh Balsara (Mumbai, India)	+91 226 192 0280	farokh.balsara@in.ey.com
--------------------------------	------------------	--------------------------

Peter YF Chan (Hong Kong, China)	+852 2846 9936	peter-yf.chan@hk.ey.com
----------------------------------	----------------	-------------------------

Neal Clarence (Vancouver, Canada)	+1 604 648 3601	neal.g.clarence@ca.ey.com
-----------------------------------	-----------------	---------------------------

Peter Lennartz (Berlin, Germany)	+49 30 25471 20631	peter.lennartz@de.ey.com
----------------------------------	--------------------	--------------------------

David McGregor (Melbourne, Australia)	+61 3 9288 8491	david.mcgregor@au.ey.com
---------------------------------------	-----------------	--------------------------

Yuichiro Munakata (Tokyo, Japan)	+81 3 3503 1100	munakata-ychr@shinnihon.or.jp
----------------------------------	-----------------	-------------------------------

Bruno Perrin (Paris, France)	+33 1 46 93 65 43	bruno.perrin@fr.ey.com
------------------------------	-------------------	------------------------

Michael Rudberg (London, England)	+44 20 7951 2370	mrudberg@uk.ey.com
-----------------------------------	------------------	--------------------

About EY

EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. For more information about our organization, please visit ey.com.

How EY's Global Media & Entertainment Center can help your business

In an industry synonymous with creativity and innovation, the bar for business excellence is set high. You need to embrace new technology, develop new distribution models and satisfy the demands of a voracious and outspoken consumer. At the same time it's important to manage costs, exceed stakeholder expectations and comply with new regulations. There's always another challenge just around the corner. EY's Global Media & Entertainment Center can help. We bring together a high-performance, worldwide team of media and entertainment professionals with deep technical experience in providing assurance, tax, transaction and advisory services to the industry's leaders. Our network of professionals collaborate and share knowledge around the world, to provide exceptional client service and leverage our leading market share position to provide you with actionable information, quickly and reliably.

© 2013 EYGM Limited.
All Rights Reserved.

EYG no. EA0070 (revised)
WR #1308-121683

ED None

This material has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax or other professional advice. Please refer to your advisors for specific advice.

ey.com

