

Buyers Guide to Tag Management Systems

Key Factors to Consider When Buying a
Tag Management System

Authored by Logan Tod & Co.
www.logantod.com

Logan Tod & Co

Sponsored by Tealium
www.tealium.com



Summary

As organisations increase their reliance on digital marketing tools, they find themselves deploying a growing number of page tags on their sites. From affiliate marketing to online advertising and web analytics, digital marketing solutions use page tags to optimise their services. This growing landscape has created many challenges. It is resource-intensive, tedious, and costly. Additionally, many organisations find themselves with incomplete tagging engagements that fail to meet their requirements.

A solution to this tagging challenge comes in the form of “tag management”. Tag management provides organisations with the ability to manage their page tag deployments using a centralised interface controlled by marketing teams. With the recent increase in the number of tag management vendors, the onus is on the buyer to cut through the clutter and determine which solution is right for them.

Different tag management vendors often take different approaches to solving the same problem, and like all technology products; a one-size-fits-all strategy does not work. Some solutions are more suitable for large-scale web sites while others are better tailored to the mid-market. Some solutions are a good fit for dynamic web sites while others are a good fit for static web sites.

So how does a company decide which tag management solution is right for them?

This paper outlines some of the high-level considerations that companies need to take into account when in the market for such solutions.

White Paper	3
Buyers Guide to Tag Management Systems	
Summary	2
Tagging Landscape Today	5
Tagging Is Expensive	5
Tagging Is A Repetitive Function.....	6
Tag Deployments Are Often Incomplete	6
Tag Deployments Are Isolated	6
Tagging Impacts Site Performance	7
What is Tag Management?	7
Tag Management Reduces IT Resources	8
Tag Management Expedites Deployments.....	8
Tag Management Reduces Total Costs	8
Tag Management Puts Marketers In Charge	9
Tag Management Provides a Single View of The Visitor Journey.....	9
Tag Management Improves Site Performance.....	10
Key Considerations	11
Architecture	11
Client-Side	12
Server-Side	13
Tag Structure	17
Basic Tag	17
Web Analytics	17

Complex Tags.....	18
Tag Management Rules	18
Basic Load Rules	18
Complex Load Rules.....	19
Customisation	19
Conclusions.....	20
About Logan Tod.....	21
About Tealium	22

Tagging Landscape Today

The Internet is undoubtedly the most measurable medium today, making it ideal for marketers. While many businesses were hit hard during the last recession, the Internet as a whole has remained recession-proof, and in some cases, prospered. According to David Hallerman, eMarketer senior analyst, the “anxiety attached to the still-healing economy encourages marketers to bet on more ‘sure things’—and the ability to measure Internet ads, especially search, makes them more sure than most traditional ad spending”.

This measurability is in large part thanks to page tags. The page tagging technology allows digital marketing solutions to easily provide measurement and transparency around their performance. Over the last few years, we’ve seen an explosion of tag-based technologies and vendors. Tags are now being used across a number of channels & tools, including web analytics, search engine marketing, internet ads, voice of customer, affiliates, comparison shopping engines, agencies, data brokers, retargeting solutions and more. And as the use of tagging increases, companies are facing a growing challenge associated with tagging.

Tagging Is Expensive

The sheer number of tag-based vendors – in the hundreds – is intimidating. But what’s more intimidating is how each tool’s deployment is unique. Each vendor has its own set of tags, with different variables, syntax and implementation rules.

Ever tried implementing both Google Analytics and SiteCatalyst on an e-commerce site? On the confirmation page, both solutions require you to pass practically the same data points: product names, price, quantity and order ID. Yet, the syntax used between the two solutions is completely different, often causing confusion and errors. And as you start adding other solutions (ads, affiliate, voice of customer, etc.), the complexity increases. It’s not uncommon to see web sites with a dozen or more different tags on their site.

Tagging as a practice has become an expensive proposition requiring heavy investment in IT resources and talent. IT resources are required each time tags are added, removed or modified – increasing the opportunity cost to the organisation.

Tagging Is A Repetitive Function

Let's face it, site tagging is not a one-time task. Organisations today find themselves constantly burdening IT for tag related development. In a given month, IT may be tasked with adding an analytics tag; two months later, an affiliate marketing tag and so on. As the number of solutions used by the marketing team increases, so does the IT burden. Many web sites today deploy over a dozen different tag-based solutions. In addition, different solutions are deployed at different times, creating a constant backlog of tag-related development.

Tag Deployments Are Often Incomplete

Many organisations are unsatisfied with their tag deployments. A critical factor is the fact that measurement is a marketing function whereas tagging is handled by IT. Site tagging requirements therefore have to be handled by marketing, requiring detailed knowledge of the analytics tools.

Additionally, there is typically more than one way to answer the same question, which further complicates requirements. For example, say you want to measure the usage of gift cards in an ecommerce site using the most popular paid analytics tool: SiteCatalyst. You can achieve this in a number of different ways, each requiring a different implementation technique and each with its own sets of pros and cons. An organisation can find itself deploying one way and only after analysing the data realise that another method would have been more suitable. This requires further editing of the page tags by IT.

Tag Deployments Are Isolated

As organisations add more tags to their site, they find that each solution works in silo and independent of others. This is a critical factor affecting organisations that

use multiple pay-for-performance (PFP) vendors, as they are likely to overpay for such commissions.

Publishers typically sell their remnant inventory to multiple PFP ad vendors. Advertisers that use more than one PFP vendor often end up targeting the same audience multiple times. This contributes to the duplication effect. As the number of PFP tools increases, so does the potential for commission duplication, impacting the advertiser's margin.

Tagging Impacts Site Performance

Tagging can have a negative impact on site performance. Too many tags add unnecessary and often redundant page weight to the site. Many tags are poorly written and directly impact the performance of the site and their placement should be carefully taken into account.

According to a recent study by Strangeloop, a one second increase in landing page load time can double the bounce rate and lower the conversion rate by 50%. Poor tag deployments play a role in site performance, adding more frustration to IT.

A solution to the tagging nightmare comes in the form of new technology often labelled as either "universal tag" or "tag management".

What is Tag Management?

"Tag management" or "universal tag" is a system that effectively externalizes the implementations of tags and provides an interface through which to manage them without IT involvement. Using a tag management solution, one can effectively add, remove or modify different tags on the fly, providing companies tremendous cost savings and faster deployment times.

Tag Management systems can be compared to content management systems for tags. Content management systems let users submit new content without requiring technical knowledge of HTML or uploading any files.

Tag management systems work the same way by allowing users to add new tags or edit existing ones without requiring technical knowledge of tags or JavaScript. Tag management systems solve much of the pains associated with traditional tagging.

Tag Management Reduces IT Resources

One of the primary benefits of tag management solutions is their ability to reduce dependence on IT. For example, an organisation using five different solutions can incorporate all five into one single deployment, reducing IT resources by a large factor.

Once deployed, tag management solutions let marketers and analytics professionals manage the implementation, further reducing the IT burden. Adding a new solution or modifying an existing one can be handled through the tag management platform, which is welcome news to most IT organisations.

Tag Management Expedites Deployments

Tag management systems reduce the deployment cycles in a number of ways. First, they can be deployed faster than traditional tags because they provide a simplified deployment. In many cases, especially those regarding static web sites, deployments can be as simple as a single line of code.

Furthermore deployment cycles improve drastically once tag management systems are in place. Adding a new tag is now a matter of minutes or hours instead of weeks or months. Also web analytics practitioners can continuously modify and fine-tune their analytics deployments, allowing better deployments.

Tag Management Reduces Total Costs

Tag management systems ultimately reduce overall cost to the enterprise because of their ability to reduce IT requirements and speed up deployments.

More importantly, they reduce the hidden costs associated with tagging, which in great part is attributed to opportunity costs of using IT and the costs associated with having poor deployments out of the gate. For example, a Fortune 500 company has been able to fine-tune their analytics deployments frequently without IT resources, increasing their analytics adoption.

Tag Management Puts Marketers In Charge

Online Measurement is a marketing function whereas until now, tagging has been owned by IT. This decoupling has put a heavy reliance on well-documented requirements being provided by marketing. At the same time, most organisations lack the level of expertise needed to create such detailed requirements, making implementations fragile or sub-par. Tag management systems alleviate this by putting marketers and analytics professionals in charge of the deployments. If the analytics implementation requires improvements, the modifications can be done from within the tag management platforms as long as the data is available within the implementation. Compared to traditional tagging, tag management systems provide a better implementation over time.

Tag Management Provides a Single View of The Visitor Journey

By incorporating all marketing tags in the same platform, marketers gain a more holistic view of the visitor journey from within their analytics implementation. Understanding the visitor journey helps marketers solve the marketing attribution challenge. For examples, marketers can learn which channels are most effective at attracting first-time buyers and which channels are redundant, helping reduce marketing costs.

The visitor journey also helps marketers reduce commissions associated with pay-for-performance vendors. The savings from commission de-duplication can in some cases pay for the entire tag management costs.

Tag Management Improves Site Performance

Finally, an added benefit associated with tag management solutions is site performance improvements. This is welcome news to most IT organisations. By removing all different tags from the page and replacing them with a single tag, companies can achieve substantial savings in page weight associated with tagging.

It is important to note that depending on which type of tag management system you use, you may be incurring additional calls to the tag server. This is covered in more detail later in this paper. However, the page-weight savings can be substantial. Often customers are able to reduce page weight by 2.5 KB using such a solution.

Enterprise-level tag management solutions can improve performance in other fashions. One way is to allow conditional loading of tags based on specific conditions. For example, the affiliate marketing tag can only be loaded if the traffic is originating from an affiliate and not otherwise.

Tag management systems therefore provide much needed help to organisations with heavy reliance on tags. But how does one know which solution is right for them? All tag management providers rely on “single tag” architecture. However, different providers have different architecture or different levels of functionality. This paper outlines some of the high-level considerations in order to help you with your decision-making process if you’re in the market for such a solution.

Key Considerations

Not all tag management solutions are built the same. Vendors take a different approach to solving the same problem. Depending on the approach, you'll find that one solution is a better fit than others. For example, some solutions are a better fit for large dynamic sites while others are more suitable for static sites.

There are some high-level considerations that you should take into account when in the market for such solutions. This document will outline these considerations, without delving into individual features, as individual features are plentiful and constantly change.

These considerations include:

- Architecture – covers the system architecture, which helps you decide which system is a better fit for your environment.
- Solution Hosting – covers whether the solution is on-demand or on-premise.
- Tag Structure – covers the types of tags that can be integrated.
- Tag Management Rules – covers some of the most common rules available for managing tags.
- Customisation Customisations - covers some of the extra capabilities provided by vendors.

Architecture

By architecture, we're referring to the way the vendor loads tags. So far we've seen two types of architecture: client-side and server-side. This is an important consideration because it directly impacts the number of server calls or back-and-forth requests between the web site and the tag management server.

Client-Side

In this model, the systems take advantage of browser caching in order to reduce the number of trips, speeding up performance. This is shown in figure 1. Within the start of the session, the system loads the necessary vendor libraries from the tag management server. The library then sends the proper requests to different vendors. On subsequent hits of the session, the library is cached in the browser, which eliminates the need for additional calls to the tag management server.

As an example, consider a session with 10 page views. On the start of the session, the web site will make a request to the tag management server for the necessary vendor libraries. Once loaded, the requests will be sent to the different vendors. On the next nine page views, the library is already cached in the browser, so there's no additional need for server calls to the tag management server. The vendor requests can be made directly from the browser. In this example, the number of server calls to the tag management server is only one, which is the original request at the start of the session.

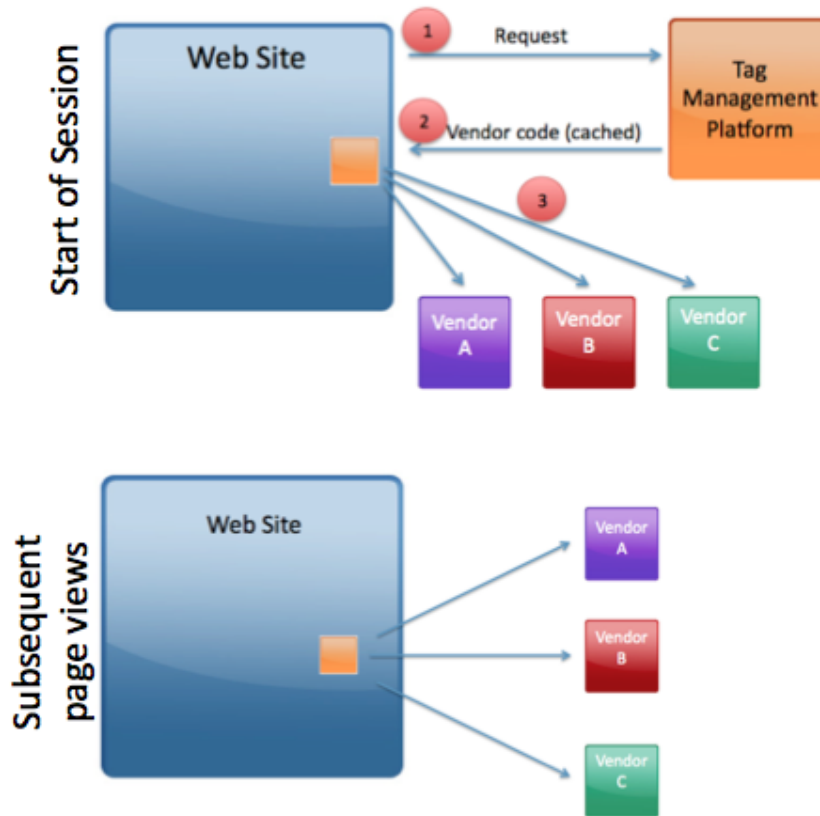


Figure 1 - Tag Management systems leveraging caching

Server-Side

This model relies more heavily on the server and is shown in figure 2. In this environment, a request goes from the web site to the tag management server on every single page view. The tag management server sends the proper vendor codes and then the requests are consequently made to the different vendors. This happens again on every page view event.

Using again our previous example of a session with 10 page views, we're going to see a total of 10 requests to the tag management server – one for every page view. In some deployments, we've seen two requests be made to the tag management server per page view, which equates to 20 round-trips in our example.

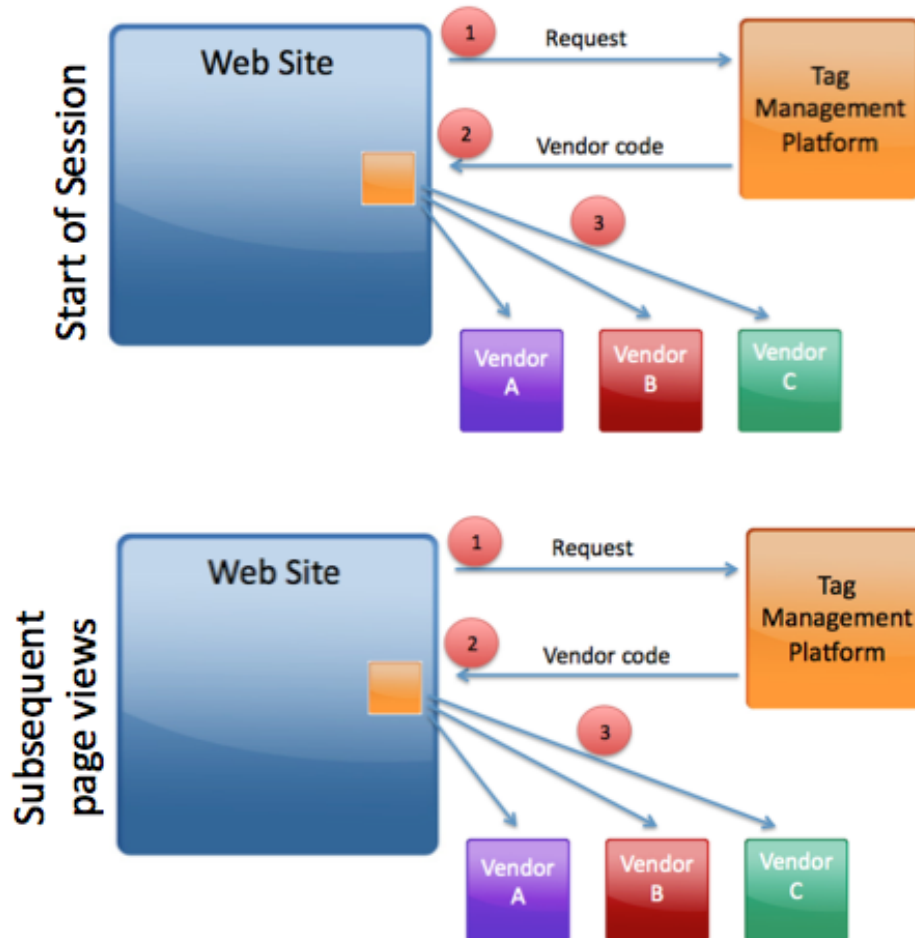


Figure 2 - Tag management systems relying primarily on server calls

There are several factors that should impact your choice of architecture.

Performance & Dependability

For sites that are concerned about performance and dependability, the client-side architecture makes the most sense as it reduces the number of server calls and dependence on the system.

As an example, consider a session where the visitor goes to pages A, B, C and D respectively. Within the client-side system, the libraries are loaded once initially

and then cached. Once cached, the visitor can navigate through pages very quickly without any reliance on the performance of the tag management server. With a server-side architecture, there is a request to the tag management server on every page view. If for example the visitor goes from page B to C before the tag management request has been completed, the navigation path will end up looking like A -> C -> D. In this case, page B activities will not be recorded.

Another side-benefit of the client-side architecture is that because the libraries are cached, marketers can leverage the solution to measure some of the in-page activities such as link clicks or onClick calls as there's no need for round-trip communications in such instances. Of course, this is typically an area that is of interest to more advanced users of analytics tools.

Taxonomy

One area that could dictate which solution is a good fit relates to the taxonomy and how it's defined. The server-side architecture lets business users push much of the taxonomy to the server. This helps in some instances to simplify the implementation.

The client-side method on the other hand has less reliance on third-party servers for taxonomy. Instead, it relies more on in-page elements or use of tag components. For most dynamically driven sites, the client-side solution is a better fit. For example, it's practically impossible to define the taxonomy for an e-commerce site (such as products purchased, price and quantity) without the use of data driven from the e-commerce engine.

Based on these observations, we see the client-side option to be more suitable for heavy traffic and dynamic sites whereas the server-side option is best suited for mid-market sites or sites with lots of static content.

Solution Hosting

Another consideration to take into account is the hosting environment. The two primary choices are on-demand vs. on-premise.

With on-demand, the provider is managing the service and the required infrastructure. This model is most suitable for organisations that want to free IT from all tag management activities.

The on-premise model lets companies manage the process internally and is more suitable for either high-volume or privacy-conscious sites.

The factors that will impact your decision are:

- **Volume** – the on-premise model tends to be more suitable for high volume sites (such as those with over 500 million page views per month). Such sites can leverage their robust infrastructure to incorporate the tag management system while not having any reliance on a third-party. The on-premise model eliminates the single point of failure associated with the on-demand model.
- **Price** – based on the traffic, one model may be offered at a lower price than another. You should investigate the pricing option for both models with your vendor.
- **Privacy** – one of the primary drivers for the on-premise model is around privacy. Because the solution is completely hosted on the customer site, this model provides the most privacy-friendly environment. In one instance, a financial services company discovered that some visitors were typing personal information into the site's search tool, effectively adding such data to the URL. The company opted for the on-premise model in order to strip the URLs of all personally identifiable information before sending any requests to any measurement tool. This type of capability is more easily handled with the on-premise model.
- **IT Resources** – the on-demand model is ideal for organisations that want to free IT resources. It requires less IT resources than on-premise, and the additional cost is more than adequately covered by savings in configuration and IT management costs.

Tag Structure

In addition to “tag management” or “universal tag”, another term used to describe this sector has been “container tag”. Although tag management vendors today do a lot more than “contain” different tags, it still is one of the core functionalities of such tools.

So far, we’ve identified three types of tag that are used:

- Basic tags – most ad and affiliate tags fall into this category
- Web analytics – tags with rich data definition
- Complex tags – tags doing DOM manipulation such as recommendation engines

Basic Tag

Most tags fall into this category. These include ads, affiliates, voice of customer and other such tools. All tag management solutions should be able to handle such tags without problems.

Web Analytics

One area that separates enterprise-level tag management from others is the ability to integrate web analytics tags. By web analytics, we’re not referring to simple deployments of Google Analytics, but complex implementations of enterprise tools such as SiteCatalyst or Coremetrics.

Granted, not every company uses tag management for web analytics. However, we believe that companies that are serious about analytics should explore this option. We’ve seen many companies successfully deploying their analytics using tag management systems. Because tag management puts marketers in charge, companies are able to fine-tune their deployment frequently, resulting in better analytics implementations.

If you have advanced analytics needs you are well served exploring this option. For example, if you use SiteCatalyst, find out how each solution lets you populate data into different variables (props, eVars, events, etc.).

Complex Tags

Another group of tags includes those associated with recommendation engines such as Rich Relevance and Certona. These tags are different in that they do DOM manipulation and their integration into tag management tools is not a matter of a simple copy and paste.

Of course not all organisations are going to need this level of integration since not all utilise such tools. But if you include recommendation or multi-variate testing tools in your roadmap, then you should explore the tag management vendor's track record in this area. Ask for some example sites that have deployed these tags.

Tag Management Rules

This refers to the ability to load different tags based on custom rules. This is one of the key features of most tag management solutions. Based on our observation, we've seen two types of load rules.

Basic Load Rules

Not all tags are to be loaded on every page. For example, most e-commerce re-targeting tools require an addition of tags on the product and confirmation pages. A basic load rule allows companies to define their templates (such as product, cart, checkout and confirmation pages) and load different set of tags based on templates.

Another example is the multitude of tags that are placed on confirmation pages (post-purchase surveys, PPC tags such as AdWords, etc.). All such tags require a basic level of tag rule, where they're only triggered on the appropriate page.

Complex Load Rules

As the name indicates, this covers load rules that are more complex than simply based on different pages or templates, requiring some conditional logic in order to be triggered.

An example of such a rule is to load a DoubleClick tag only if the session traffic did in fact originate from the DoubleClick ad, or loading an affiliate marketing tag only if the traffic originated from the affiliate network. Such rules let businesses better manage their tags by not loading every single pixel on every page view and actually creating a better user experience for the visitor.

A popular area where such complex load rules are applied is in the field of commission de-duplication. As mentioned previously in this paper, the use of multiple PFP marketing vendors creates a potential for companies to overpay commissions. A complex load rule lets companies manage this process by only paying commission to the last affiliate driving the winning traffic, or whatever the business rule is. The potential for commission savings alone can be substantial and pay for the tag management investment.

Customisation

Finally, another consideration that you should take into account is the level of customisation that can be provided by the tag management vendor. The fact is, tag management is a new industry and many customers are still discovering the possibilities.

For example, customers could use the tag management solution to control the loading of non-tag solutions such as internal JavaScript libraries. As mentioned earlier, a financial services company is using tag management in order to strip the page URLs of any personally identifiable information.

The best way to learn is by asking vendors about some of the customisations that they have provided to-date. This is not only educational, but also helps understand the level of customisation that's possible through the platform.

Conclusions

Site tagging is one of the necessary steps that organisations have to take in order to take advantage of the latest developments in the area of digital marketing. However, tagging is expensive, laborious, resource-intensive and error-prone.

Tag management provides organisation with much-needed relief in this area. Once a field dominated by early adopters, tag management solutions are now deployed on hundreds of web sites.

With the increasing number of tag management vendors, companies are struggling to determine which solution is right for them. The purpose of this paper is to help shed some light on such solutions. The paper does not concentrate on individual features associated with different products, since features change, especially when it comes to a new sector such as this one. However, we hope that we've been able to outline some of the key architectural building blocks to examine when considering such tools.

We also recommend that you speak with industry peers that have deployed such solutions to better understand their experience. Finally, we welcome you to contact us directly at matthew.tod@logantod.com for more personalised discussion about such tools.

About Logan Tod

Logan Tod & Co is Europe's leading online performance optimisation consultancy, delivering guaranteed improvements to their online business performance for leading retail, consumer, finance, media and travel brands.

Over the last eight years, and over 200+ client engagements, we have developed a structured and data-led process that ensures we deliver improvements and results. At the core of the Logan Tod & Co methodology is detailed investigation of online and offline data, to really understand customers' multichannel behaviour. Our eight year experience, with extensive experience of all major web analytics products, enables us to generate unique insight into the true constraints which prevent faster more profitable growth.

Logan Tod & Co is based in Covent Garden with a team of over twenty people. The analytical expertise of the company is complemented by a team of consultants, architects and designers who work with clients to implement recommendations.

Logan Tod & Co's clients include: ASOS, BBC, Boots, Carphone Warehouse, Debenhams, Europcar, Financial Times, Focus DIY, Harrods, HSBC, John Lewis, M and M Direct, Penguin, Signet, Sky, Sportingbet, Waitrose.

About Tealium

Tealium is a leading provider of tag management technology, serving some of the most demanding clients. Tealium can be implemented in days instead of weeks or months, reducing tagging costs. Through Tealium's Tag Management Console, business users can manage their tag implementations in a simple drag-and-drop interface without further taxing the IT department. The solution lets customers save on IT costs, while improving analytics and digital marketing deployments and the performance of web pages.

Founded in March 2008, Tealium currently serves the tag management needs of over 50 demanding customers.

For more information on Tealium, please visit www.tealium.com, or email info@tealium.com.

Logan Tod & Co



© Logan Tod & Co. & Tealium 2011. All rights reserved.

No part of this document may be reproduced in any form without prior written permission of Logan Tod & Co. and Tealium. All trademarks or service marks are the property of their respective holders and are hereby acknowledged.