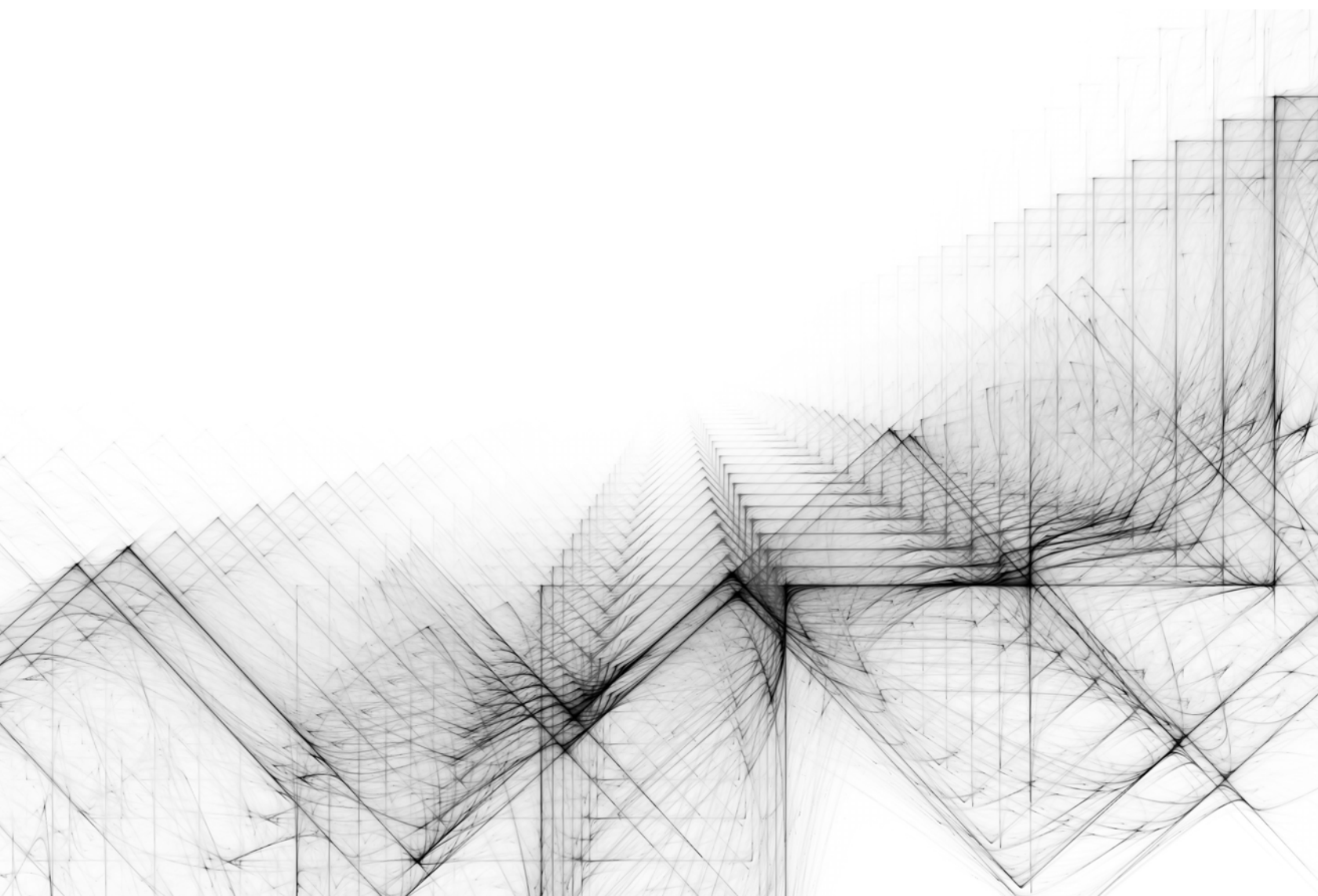


MEASURING THE RETURN ON

MARKETING

TECHNOLOGIES



Measuring the Return on MARKETING TECHNOLOGIES

Most of today's marketing technology innovations involve snippets of code, called tags, which are generally inserted into a website's template. The marketing technologies field, commonly referred to as MarTech, has emerged as its own distinct software category. There are currently over 2,000 Marketing Technologies (MarTech) and Advertising Technologies (AdTech) and the break-neck pace of innovation is only matched by the adoption and deployment of these technologies across every sector in every industry.

For marketers, the rapid expansion of MarTech technology has created an astonishing breadth of choices and capabilities available to help meet their business objectives. With technologies and choices available to marketers ever-increasing, so too is the complexity of today's websites. This additional complexity drives the need for governance. Frameworks, such as LCG's Digital Analytics Maturity Model, and associated technology roadmaps are increasingly important. These solutions increase the veracity of data, affording marketers both digital clarity and confidence that they are making decisions that lead to positive returns on their MarTech (RoMT).

This research report is a groundbreaking audit of the top Financial Services and Insurance (FSI) websites. Findings indicate that while some organizations are actively establishing and maintaining processes to manage and trust their data, many have yet to establish processes for data governance.

Lima Consulting Group (LCG) and ObservePoint audited 142 of the top global and U.S. Financial Service Industry (FSI) websites, using ObservePoint's advanced tag auditing solution. The 142 financial services sites were divided into of four sectors:

Financial services

Insurance

Real Estate

Banks & Credit Unions

Armed with this groundbreaking data, the team of digital marketing analysts and data scientists at LCG developed never-before-seen insights about the world's leading financial service industry sites.

“By 2017 the CMO will spend more on IT than the CIO.”

By 2017 the CMO will spend more on IT than the CIO.¹ It should not be a surprise that marketers are deploying more marketing technologies than ever before. These technologies are generally sold as Software as a Service (SaaS), deployed by third parties, and usually have a high degree of interdependencies between each other. The digital marketing landscape is fast evolving, and the financial stakes are increasing due to the lower cost of entry, increasing complexity of IT systems within the enterprise, and the intense level of competition. CMOs of organizations big and small are struggling to effectively deploy the best-practices associated with Big Data and carefully measure their Return on Marketing Technologies (RoMT), hence our introduction of the concept of the RoMT to the industry.

Four Key **TAKEAWAYS**

1. As a sector, insurance websites are the most advanced deploying the most marketing technologies.
2. Approximately 37% of the Media and Entertainment industry have deployed a Tag Management System (TMS)
3. Of the Media and Entertainment sites implementing Tag Management Systems, 26% are opting for paid solutions.
4. Sites with fully deployed Tag Management Systems are generally out-performing those without.

KEY CONCEPTS

Tag Management System

Similar to a Content Management System, Tag Management Systems allow non-technical users to deploy and maintain the tags of over 2,000 MarTech and AdTech. Tag management features and procedures are deployed to support website navigation, cross-user uniformity, and site compliance. Once they are properly deployed, marketing departments no longer need to rely on their IT department to deploy or maintain new Marketing Technologies. Some Enterprise level TMS solutions also have features to enhance website speeds, workflow features that improve the quality of deployments, and user rights features that permit agility by pushing access to manage tags to the lowest levels across the Enterprise.

Tag Auditing

Tag auditing is a systematic, comprehensive evaluation of the current tag configuration on a web site. Tag-auditing systems crawl each page on a web site, executing all of the code, and testing the functionality and configuration of each tag across the site. Tag auditing software can also simulate human interactions in order to reach dynamic pages such as shopping carts or order confirmation pages that only render when users trigger them.

The Return on Marketing Technologies

(RoMT) is measured by the returns associated with a marketing technology over the effective costs of ownership of marketing technologies.

(RoMT)

Metrics Used to Measure

RETURN ON MARKETING TECHNOLOGIES

There are 4 major factors to consider in measuring the efficiency of Marketing Technologies. These can be captured through audits to evaluate the impact of the most common challenges top financial sites face including Incomplete Tag Presence, Long Site Load Time, High Rates of Data Duplication, and higher numbers of Java Script Errors (a measure of technology overhead).

Tag Presence

Generally, tags should be deployed to 100% of a website's pages. Incomplete tag presence degrades the quality of data being fed into website analytics tools. Gaps in the data created by missing tags prevent businesses and marketers from seeing the complete picture and can lead to suboptimal business decisions.



Site Load Times

Today's consumers have become accustomed to instant information and ultra high speed internet. As a result, we see that load times have a direct correlation to a site's bounce rate. When site load times are high, users grow impatient and are more likely to exit a company's website. Not only do high bounce rates have a direct, negative impact on sales and business outcomes, it can also degrade data collection as the user or customer may exit the site before all tags have fired.



Data Duplication

Data duplication occurs when multiple exact copies of a tag are found on a given page. This indicates that distinct page views are erroneously being counted more than once. Duplicate tags inflate the traffic statistics reported in website analytic tools and make it difficult for stakeholders to understand the true behavior of a site's web traffic.



Java Script Errors

The percentage of pages with Javascript errors is an indicator of bugs or development problems that affect the efficiency of installed tags. This is also a measure of technology overhead. Overlapping or conflicting marketing technologies can lead to increased Javascript errors. These errors, in turn, can block or degrade the effective firing of installed tags.





Other Considerations: DATA QUALITY, DATA LEAKAGE, & SITE COMPLEXITY

In general, websites with greater amounts of tags are more complex and are more likely to return inconsistent data and have slower load times. These factors adversely affect RoMT. One way to assess data quality is to examine the number or different versions of a given tag on a site.

The location of tag placement is also important. Whether a tag is placed in the top, middle, or bottom of the page impacts the accuracy of the data collected. The primary reason for this decrease in effectiveness is the fact that bounce rates increase dramatically as load times go up. For this reason, tags located in the bottom section of a page are less likely to fire than those placed at the top of a page.

Lastly, the number of custom variables (such as eVars, sProps and Events for those using Adobe Analytics) established in a web analytics tool reflects the complexity of the analytics implementation. The higher the number of custom variables, the greater the likelihood that multiple web teams with varying KPI goals are accessing and analyzing web data.

STATE OF THE INDUSTRY

Lima Consulting Group conducted an independent audit of 143 of the top financial services websites. Detected, and discovered 100 unique marketing technologies. Lima Consulting Group and ObservePoint maintain a list of approximately 200 unique Marketing Technologies, so the industry as a whole is deploying about 55% of all known Marketing Technologies.

64

Average Audit Score

12

Average Number of Tags

82%

Average % of Pages Tagged

2.28s

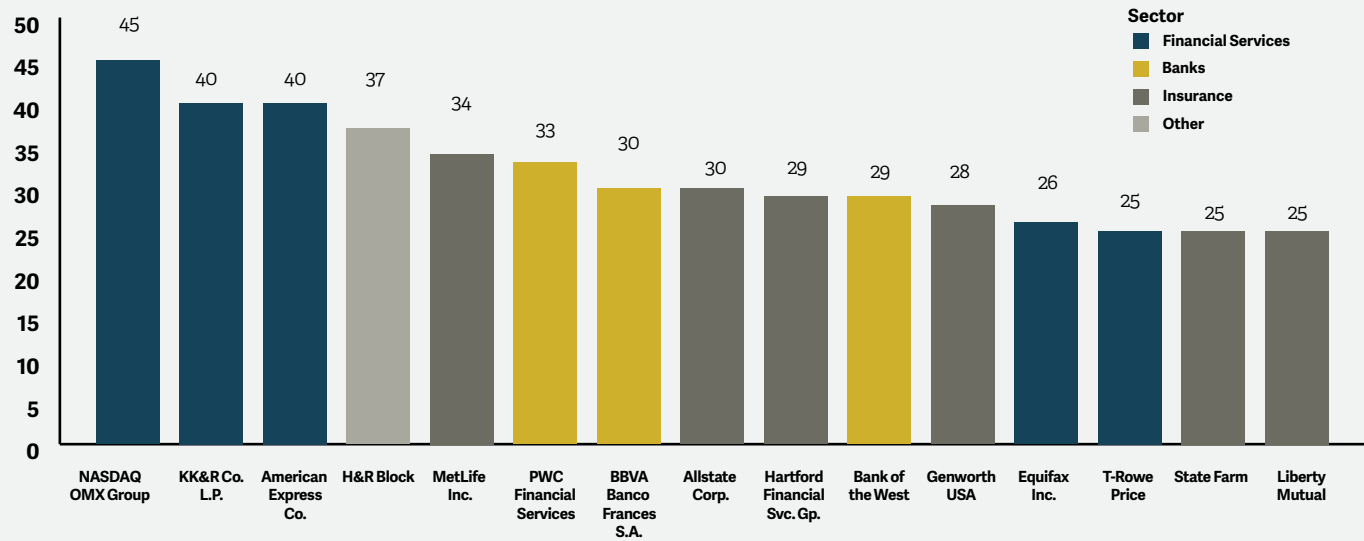
Average Site Load Time

24%

Average % Pages with Java Script Errors

We found that 96% of the financial services websites were using at least some sort of marketing technology. While sites within the Financial Services and Insurance industry deployed an average of 12 tags, the top 16 sites contained more than twice that amount of the known marketing technologies. Nasdaq.com deployed the most tags (45 tags).

Sites within the Financial Services Industry with the Most Tags



Five of the sites we audited in the Financial Services Industry contained zero tags or marketing technology.

Bank of China

Berkshire Hathaway

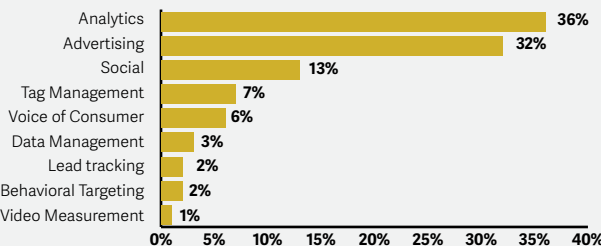
Hudson City Bancorp

Leucadia

State Employees' Credit Union

TCF Financial Corporation

The Marketing Technologies deployed most commonly by the financial services industry are for analytics and advertising. Approximately two-thirds of the tags found on financial service industry websites are used for analytics and advertising. Social media and tag management technologies also have a significant presence.

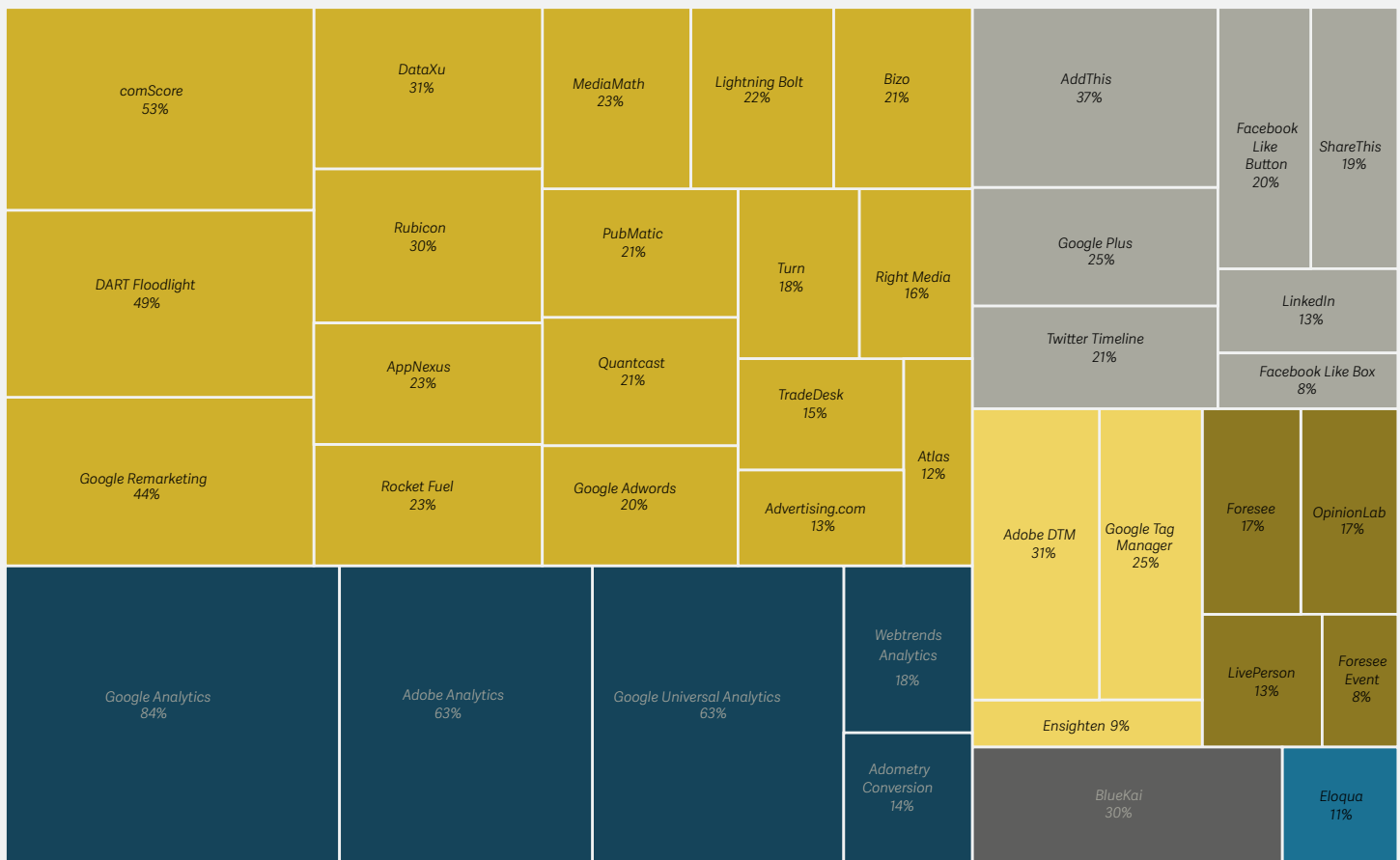


68% of the tags found in the FSI are used for Analytics and Advertising.

Within the Financial Services Industry, a small number of tags are dominating the space. Below are the market leaders within the industry by type. Google Analytics holds the most market share within the Financial Services Industry and is deployed on 84% of the websites. The #2 solution is Adobe Analytics deployed on 63% of sites.



Market Share of Tags by Category



Type Advertising Analytics Data Management Lead tracking Social Tag Management Voice of consumer

Each category leader is represented below.

Advertising



DART Floodlight
49%

Analytics



Google Analytics
84%

Behavioral Tagging



33 Across
6%



NetMining
6%

Data Management



BlueKai
30%

Lead tracking



Eloqua
12%

Social



AddThis
37%

Tag Management



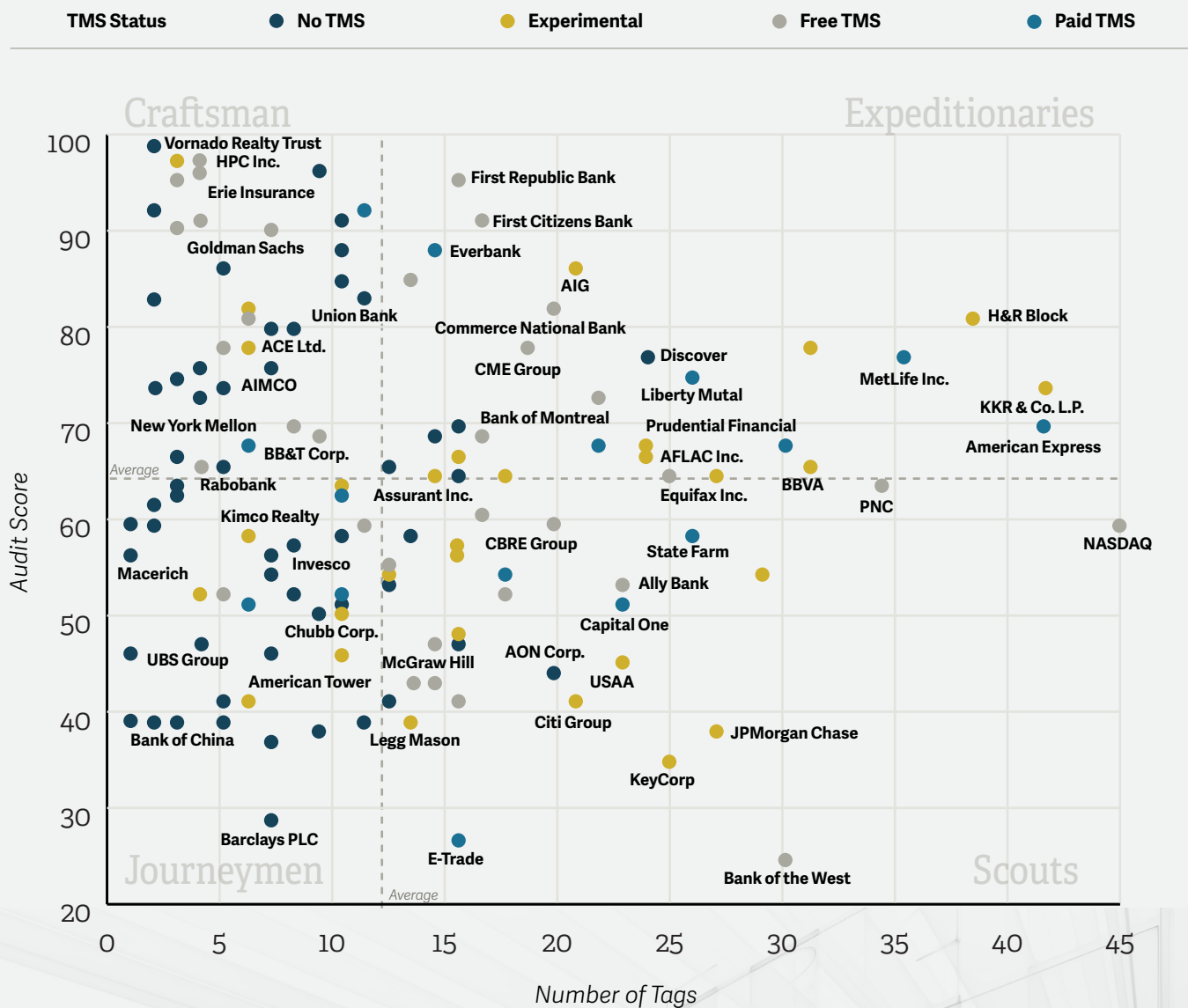
Adobe DTM
35%

Voice of consumer



Adobe DTM
35%

Number of Tags vs. Audit Score



Definitions of categories of Organizations:

Journeyman

What few tags these organizations have attempted to deploy, they deployed sporadically. These organizations have low audit scores and have attempted to deploy few MarTech. It would stand to reason that these firms have made smaller investments in MarTech and they may have had less complexity as a result. Journeyman may need to assess their business objectives relative to their MarTech capabilities and make investments in additional MarTech to compete. But prior to additional investments, this group should focus on data governance and deploying best-practices to improve the results from current MarTech investments.

Craftsmen:

What few tags these organizations have deployed, they've deployed adequately. Craftsmen have high audit scores and they have not made an attempt to deploy as many tags relative to the average. Craftsmen have adequately deployed a limited number of tags. They may need to assess their business objectives relative to their MarTech capabilities and make investments in additional MarTech to compete. This group is well positioned to sustain best-practices as they scale additional MarTechs. They should document tag management processes and ensure that they have a data layer to make sure that as they scale, they are able to do so while maintaining and improving their Audit Score.

Scouts:

These organizations have deployed many tags relative to their industry and have deployed them sporadically. They are characterized by having attempted many Marketing Technologies and may need to emphasize process and governance to improve the deployments of the MarTech investments. They may need to focus on improving tag deployments.

Expeditionaries:

This group is realizing the best Return on their Marketing Technologies (RoMT) in the category. What many tags they've deployed, they've deployed adequately. They have tried a lot of marketing technologies and have performed well. They may need to focus on improving the deployments of existing MarTech through consistent tag auditing and to finish the complete deployment of their TMS.

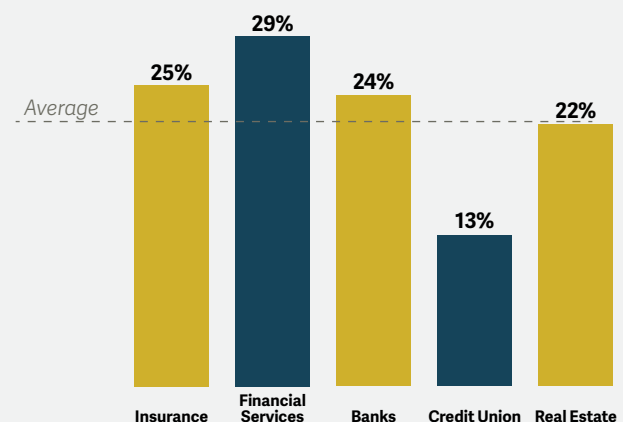
INSIGHT #1

*WITHIN THE FSI, THE INSURANCE AND FINANCIAL SERVICE SECTOR ARE THE **MOST ADVANCED.***

Insurance sites deployed 50% more tags than the industry as a whole. Insurance sites had a median of 14.5 tags compared to the industry median of 10. Credit unions and Real Estate sites have a median of 6 and 5 tags respectively.

Lima Consulting Group defines the standard for a fully deployed analytics solution at 95% of the pages are tagged. With the availability of Tag Management Systems and Tag Auditing software from ObservePoint, there is no reason why 100% of the tags should not be deployed on 100% of the pages. Relative to the investments to acquire, convert and retain customers in both digital and traditional channels, the ROI to invest in Tag Management and Tag Auditing software is easily justified.

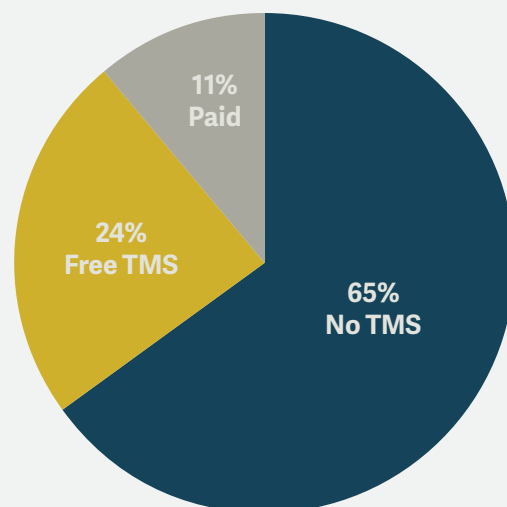
Percentage of Sites with Analytics Deployed to at Least 95% of Pages



INSIGHT #2

35% OF THE FINANCIAL SERVICES SITES AUDITED HAVE A TAG MANAGEMENT SYSTEM.

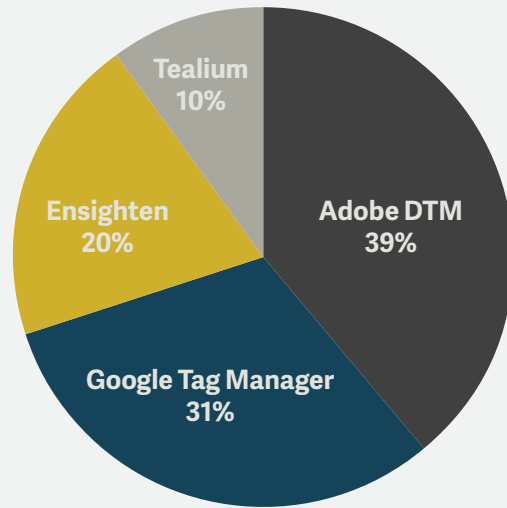
Similar to Content Management Systems, Tag Management Systems (TMS) allow non-technical users to deploy and maintain the tags of over 2,000 MarTech and AdTech. Tag management features and procedures are deployed to support website navigation, cross-user uniformity, and site compliance. Once they are properly deployed, marketing departments no longer need to rely on the IT department to deploy or maintain new marketing technologies. TMS also have features to enhance website speeds, workflow features that improve the quality of deployments, and user rights features that permit agility by pushing access to manage tags to the lowest levels across the Enterprise



Sites with less than 33% of their pages tagged with a TMS Are considered experimental and are grouped with "No TMS"

Of the financial services sites using a Tag Management System, Adobe DTM and Google Tag Manager are the market leaders. These free solutions have a market share of 39% and 31% respectively. Ensignten is the most commonly used paid tag management system, being implemented by 20% of the TMS adopters within the FSI.

Primary TMS Vendors of FSI Implementing Tag Management Systems

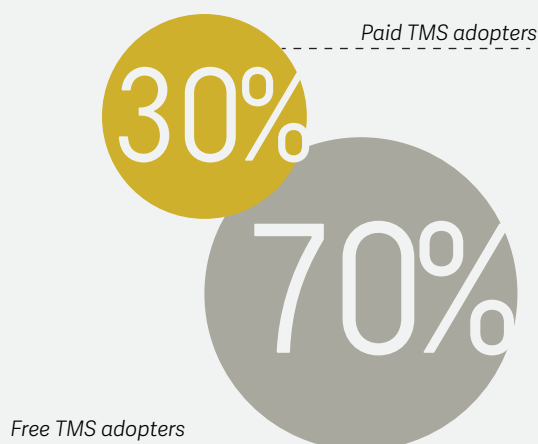


35% of sites without a deployed Tag Management Solution are experimenting with the technology.

INSIGHT #3

*OF THE FSI SITES IMPLEMENTING TAG MANAGEMENT SOLUTIONS, 30% ARE OPTING TO **PAY FOR THE SERVICE.***

While free tag management systems, led by Adobe and Google, are the most common TMS in the Financial Services industry, many of the digital marketing executives have chosen paid Tag Management Systems. Of TMS adopters, 30% are opting to pay for their Tag Management System (15 paid TMS adopters out of the 49 TMS adopters).

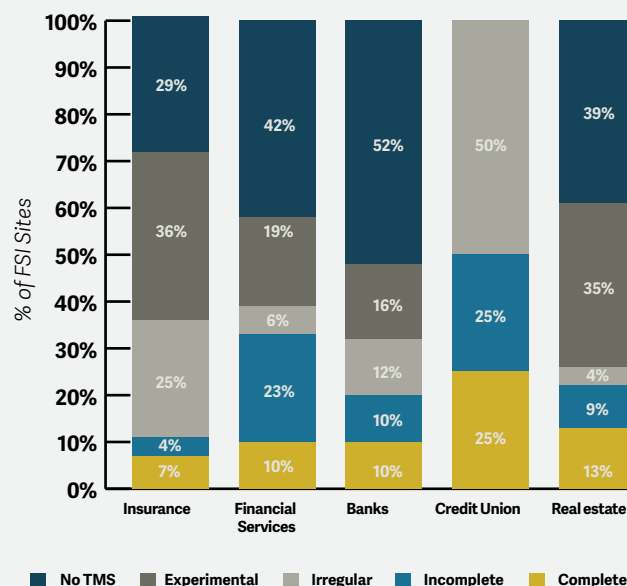


In our antidotal surveys, the complexity of internal IT architecture, the desire to avoid vendor lock-in, and privacy concerns were often cited as major decision criteria when evaluating paid TMS solutions.

Financial Services and Credit Union sub-sectors are deploying their TMS systems with the greatest efficacy and have more Complete deployments (ie. 95% of the pages have the TMS and/or analytics tags present). Banks and Credit Unions have the least number of TMS deployments. But for those Banks and Credit Unions that have invested in TMS solutions, they reach the Complete status of deployments at levels that are higher than other sub-sectors. Nowhere are leaders and laggards more noticeable than in these two categories.

The Insurance sub-sector has the most Irregular deployments, which is often explained by deploying the tags on silo's within the content of their site (ie. the FAQ area but not the product pages).

TMS Implementation by Sector



DEFINITIONS OF THE

completeness of Tag Deployments:

When assigning levels of completeness to both TMS and analytics deployments, LCG uses the following standards:

Experimental: *tags appears on less than 33% of pages*



Irregular: *tags appear on more than 33% of pages, but less than 66%*



Incomplete: *tags appear on more than 66% of pages, but less than 95%*



Complete: *tags appear on 95% of pages audited*

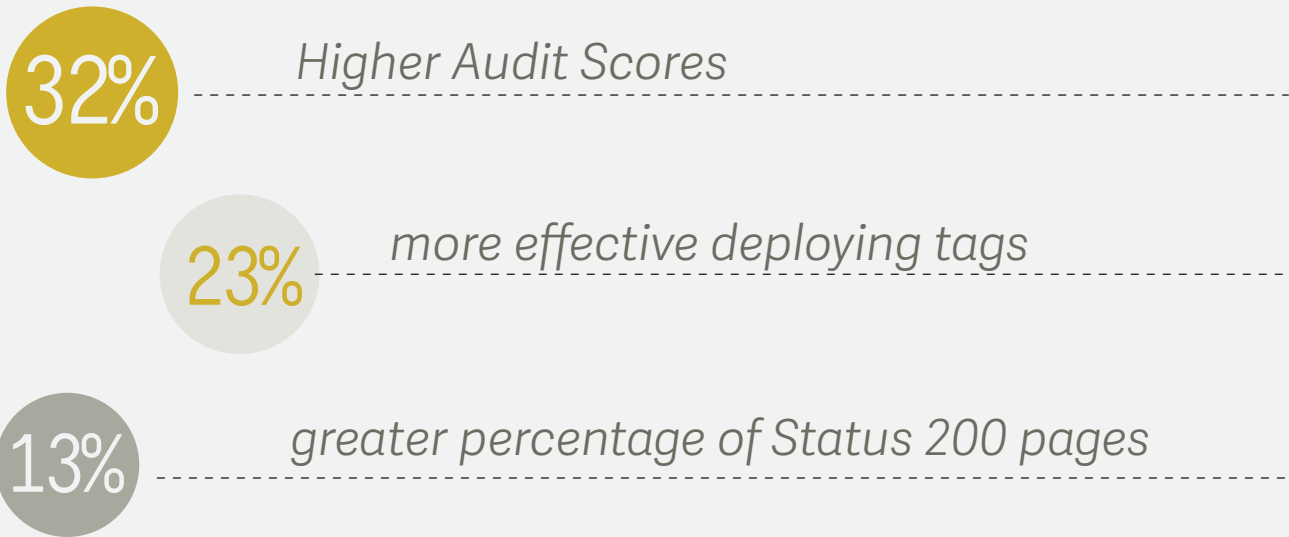
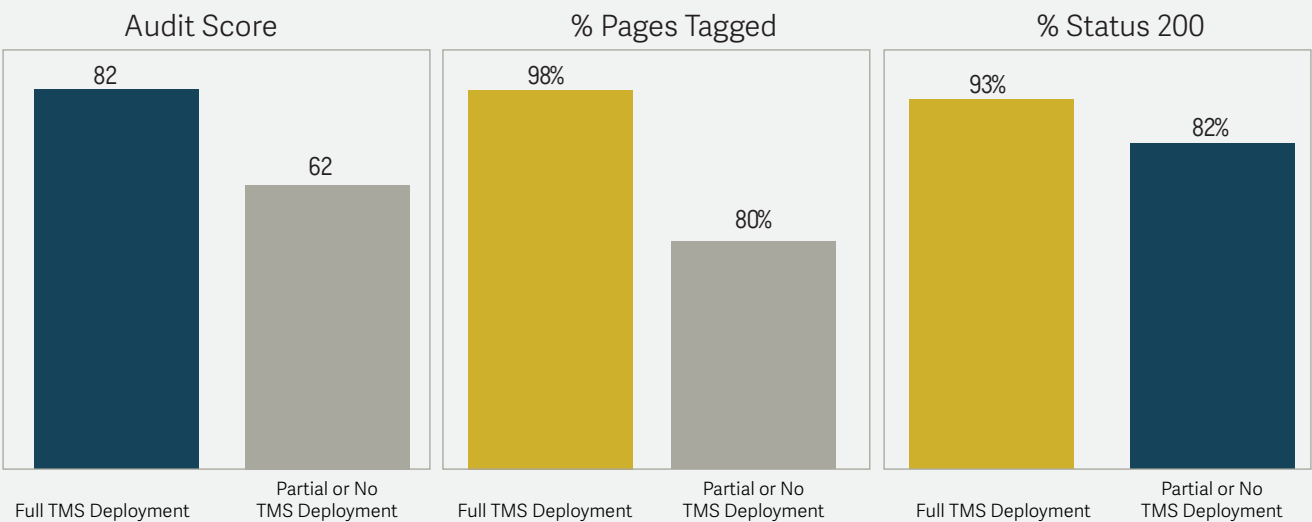


INSIGHT #4

*SITES WITH FULLY DEPLOYED TAG MANAGEMENT SOLUTIONS ARE GENERALLY **OUT-PERFORMING** THOSE WITHOUT.*

Sites within the financial services industry with a tag management system deployed to at least 95% of their pages dramatically outperform their peers.

BENIFITS OF DEPLOYING A TAG MANAGEMENT SYSTEM



TMS Status	Number of Sites	Avg. Audit Score	Avg. # of Tags	Avg. % of Pages Tagged	Avg. Status 200	Avg. JS Error %	Avg. Load Time	Avg. Duplicates/Pg	Avg. Failed Vendor Rules/Pg
No TMS	60	62	6.9	71%	83%	0.22	2.06	0.09	0.03
Experimental	33	61	16.7	84%	81%	0.20	2.04	0.23	0.09
Free TMS	34	70	13.8	93%	88%	0.24	2.07	0.26	0.05
Paid TMS	15	65	19.0	91%	80%	0.26	2.59	0.50	0.19

In our experience with Analytics, we've noticed that firms that rely predominantly on a single analytics solution will deploy multiple versions of that solution over time. For example, web analysts may deploy Google Analytics and later on may deploy Google Universal Analytics. Firms that tend to have several versions of the same tag are more likely to realize the need for a TMS to help them manage the complexity associated with multiple versions of the same tag.

The most common instances where a tag has several versions will include, Google Analytics and Google Universal as well as the various versions of s.code that are required to effectively deploy Adobe Analytics.

Along that journey, their first action is typically to deploy a free TMS to effectively manage the 3.3 average tag versions across the enterprise. As the complexity grows, the ability to justify investment in a paid TMS becomes more clear and as paid TMS deployments make their way across the enterprise, the average tag versions nearly returns to the pre-TMS average of 2.

Using automated web analytics auditing and verification, site managers can apply debugging features and identify undetected problems arising from tag management. Organizations that are experiencing challenges with site performance due to data leakage, data duplication, or site compliance are not able to employ data-driven, decision-making processes. We believe the adoption of robust data governance and quality assurance processes improves the reliability of web data, and improves the Return on Marketing Technologies.

Looking at TMS usage within the financial services industry, we found that Insurance companies were most likely to use a paid Tag Management Solution. Savings and Loans Banks, Real Estate, and Mortgage Investment sites audited are either not adopted a TMS or are relying exclusively on free solutions. The chart below shows how sectors within the Financial Service Industry are deploying Tag Management Solutions.

“Sites with a paid Tag Management Solution have on average a 25% greater tag coverage rate than those without a TMS.”

42% of the sites within Financial Services Industry are not using a tag management solution. Among those who are, Adobe DTM is the preferred vendor. Google Tag Manager is close behind with 20% of the Financial Services sites using the service.

The chart below shows the relationship between ObservePoint Audit scores, number of tags, and tag management solution. Sites with higher than average audit scores and higher tag counts are more likely to use a paid tag management solution.

SUMMARY OF BEST PRACTICES:

Tag Auditing Improves the Return on Marketing Technologies (RoMT)

Tag auditing improves the Return on Marketing Technologies. Based on our learning from this Whitepaper and similar research for other industries, we have consolidated a list of best practices.

Avoid vendor lock-in. If you have a TMS vendor other than your analytics vendor, you can negotiate contract renewals more aggressively because you have reduced your switching costs.

Pay only for what you use. By reducing data duplications, you can improve your return on marketing technologies (RoMT). Companies that have high duplication rate are overpaying on their MarTech.

Organizations considering an investment in any TMS should conduct a Tag Audit as part of the vendor selection process to better understand the current pain points and to desired outcome.

Monthly tag deployments audits can help organizations identify attain the Fully Deployed status by identifying pages with missing tags, duplicate tags and failed vendor rules.



APPENDIX

METHODOLOGY

Sites include in the Financial Services Audit

LCG and Observepoint audited the websites of companies categorized as financial service companies in both the SP500 and the Fortune500. In addition, we included the largest banks and credit unions (by assets managed) in the audit. In total, 142 sites were audited. A list of the companies whose sites were audited, broken down by sector, is given below.

Banks

Bank of America
Bank of China
Bank of Montreal
Bank of the West
Barclays PLC
BB&T Corp.
BBVA
Citigroup
Comerica Inc.
Commerce National Bank
Deutsche Bank
Everbank
Fifth Third Bancorp
First Citizens Bank
First Hawaiian Bank
First Merit Bank
First National Bank
First Republic Bank
Frost Bank
GE Capital Bank
HSBC Holdings PLC
Hudson City Bancorp
Huntington Bancshares
IberiaBank
Investors Bancorp Inc.
JPMorgan Chase
KeyCorp
M&T Bank Corp.
New York Community Bank
One West Bank
People's United Bank
PNC
Rabobank
Regions Financial Corp.
Santander Bank
SunTrust Banks
Synvus
TCF Financial Corporation
Texas Capital Bank
The Private Bank
U.S. Bancorp
UBS Group
Union Bank
Valley National Bank
Washington Federal Inc.
Wells Fargo
Whitney Bank
Zions Bank
First Tech Federal Credit Union
Golden 1 Credit Union
Navy Federal
Pentagon Federal Credit Union
Schools First Federal Credit Union
Security Service Federal Credit Union

Credit Union

Star One Credit Union
State Employees' Credit Union

Financial Services

Affiliated Managers Group Inc.
Ally Bank
American Express
Ameriprise Financial
BlackRock Inc.
Capital One
Charles Schwab
CIT Group
CME Group
Discover
E-Trade
Equifax Inc.
Fannie Mae
Franklin Resources
Goldman Sachs
Intercontinental Exchange
INTL FCStone Inc
Invesco
KKR & Co. L.P.
Legg Mason
Moody's Corp
Morgan Stanley
NASDAQ
Navient
New York Mellon
Northern Trust Corp.
Scottrade
State Street Corp.
T. Rowe Price
The Blackstone Group
USAA

Insurance

ACE Ltd.
AFLAC Inc.
AIG
Allstate Corp.
AON Corp.
Assurant Inc.
Berkshire Hathaway
Chubb Corp.
Cincinnati Financial
Erie Insurance
Genworth USA
Guardian Life Ins.
Hartford
Liberty Mutual
Lincoln National
Loews Corp.
Marsh & McLennan

Insurance

MetLife Inc.
New York Life
Principal Financial Group
Progressive
Prudential Financial
State Farm
The Travelers Companies Inc.
Torchmark Corp.
Unum Group
W.R. Berkley Corp.
XL Capital

Other

H&R Block
McGraw Hill

Real Estate

AIMCO
American Tower
Avalonbay Communities Inc.
Boston Properties Inc.
CBRE Group
CROWN CASTLE
Equity Residential
Essex Property Trust
General Growth Properties Inc.
HCP Inc.
Health Care REIT, Inc.
Host Hotels & Resorts
Kimco Realty
Leucadia
Macerich
Plum Creek Timber Co.
Prologis
Public Storage
Realogy Holdings Corp
Simon Property Group
Ventas Inc
Vornado Realty Trust
Weyerhaeuser

AUDIT SCORE METRICS

Calculating the ObservePoint Audit Score

The audit score provides an overall gauge of the how well the site performs and its tagged. Score is out of 100.

Tag Presence:

For the primary tags (analytics tags implemented at 75% or higher rate), a measurement of pages containing the tag. The more pages missing primary tags the lower this number. A score of 40/40 is a perfect tag presence score and indicates that all pages in the audit were found to have a primary vendor tag in place.

Load Time:

A measurement of the page load time for all pages in the audit. If the average is over three seconds points are taken off. A score of 20/20 indicates that the average page load time was three seconds or less.

Status Codes:

Quantifies how problematic the site is with respect to redirects, broken links and server errors. A score of 20/20 means we found no pages other than status code 200, which means The request has succeeded. Most pages should render a Status Code of 200.

The world wide web consortium manages the universally accepted list of Status Codes, which consist on 46 unique codes. Vie the complete list at their website.

<http://www.w3.org/Protocols/rfc2616/rfc2616-sec10.html>

Duplicates:

A duplicate tag is flagged when an exact copy of any tag is found on the page. If an audit has no duplicates the score would be 10/10. Duplicates can be an indicator that a page view is being counted more than once.

Vendor Compliance:

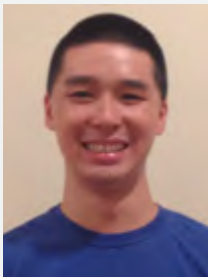
For every tag supported by ObservePoint we apply rules specified by the analytics vendor that dictates which kind of data and how much data can be set for a specific variable. For example in SiteCatalyst, sProps and Pagename have a limit of 100 bytes, any of these variables that are longer than 100 bytes will be said to have failed vendor compliance and the score will be reduced. Vendor compliance accounts for 10 points in the Audit Score.

BIOS



Sunny Youn, Solutions Consultant, Lima Consulting Group

Sunny Youn has over 20 years experience providing digital strategy consulting to Fortune 500 companies. She has worked at Goldman Sachs, AT&T, comScore, and Morgan Stanley. She holds a Bachelor of Arts in Economics and Applied Mathematics and a Masters of Business Administration from the Massachusetts Institute of Technology, Sloan School of Management.



Ray Tran, Solutions Consultant, Lima Consulting Group

Ray Tran is an analyst who specializes in conducting empirical research on digital marketing. He holds a Bachelor of Science in Economics from the University of Pennsylvania, The Wharton School.



Paul Lima, Managing Partner, Lima Consulting Group

Paul Lima, founder of Lima Consulting Group, has over 15 years experience consulting on issues related to digital strategy and marketing technologies. He holds a Bachelor of Science in Economics from the United States Military Academy, and a Master's of Science in the Management of Technology from the University of Pennsylvania's Engineering School and The Wharton School.



Matthew Miller, Director of Marketing, ObservePoint

Matthew Miller has served as the Director of Marketing at ObservePoint since 2009 and is a subject matter expert in conducting tag audits. He holds a Masters of Business Administration from the University of Phoenix, John Sperling School of Business.



Liana "Li" Evans, Senior Solutions Consultant, Lima Consulting Group

Liana "Li" Evans is an award-winning author with over 15 years of experience advising companies in digital media strategies. She is also the founder of several startups. She holds a Bachelors in Information Systems & Public Relations from Susquehanna University