

The ROI of Marketing Technology

HOW THE TOP TRAVEL SITES PERFORM

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MEASURING THE

Return on Marketing Technologies (RoMT)

Most of today's marketing technology innovations use snippets of code, called tags, which are generally inserted into the website's template. The speed at which these solutions are being launched into the marketplace means that there are more marketing technologies being deployed than ever before. This research report is a groundbreaking tag audit of the top travel sites. 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 140 of the top global travel websites, using ObservePoint's advanced tag auditing solution. The 140 global travel domains consisted of five categories:

- Online travel agencies (OTA's)
- Online hotel booking sites
- Branded sites offering hotels
- Airlines
- Car rental sites

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 travel ecommerce sites.

Four Key Takeaways

- Online Travel Agency (OTA) sites are deploying the most marketing technologies, followed by airlines, online hotel booking aggregators, rental cars, and hotel brand sites.
- 2. One out of three travel sites deploy some type of Tag Management Solution (TMS), and half of those with TMS use free analytics solutions.
- 3. Sites with TMS experience slightly decreased site load times, but benefit from better site quality & performance
- Composite site performance scoring allows digital marketing teams to have greater confidence in data-driven business decisions

Methodology

Lima Consulting Group (LCG) and ObservePoint audited the top global travel websites using ObservePoint's advanced tag auditing solution. Armed with this groundbreaking data, the team of digital marketing analysts and data scientists at LCG came up with never before seen insights about the world's leading travel companies.

Key Concepts

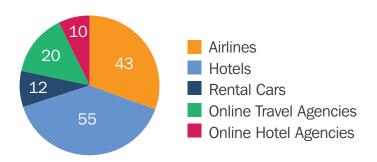
Tag Management System —Similar to a content management system, TMS allows non-technical users to deploy and maintain the tags of over 2,000 marketing technologies. Tag management features and procedures are deployed to support website navigation, cross-user uniformity, and site compliance. Once they 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.

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

TRAVEL INDUSTRY PERFORMANCE RANKINGS

In an independent audit of 140 of the top global travel websites, Lima Consulting Group explored, detected, and discovered 1051 tags. Lima Consulting Group maintains a list of approximately 2,000 marketing technologies, so the category as a whole is deploying about 50% of all known technologies.

Top Travel Websites by Category



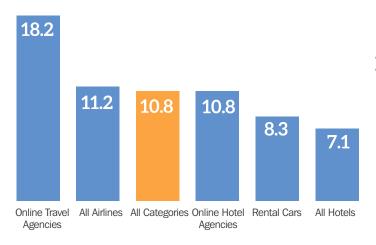
By 2017 the CMO will spend more on IT than the CIO . It should not be a surprise that marketers are deploying more marketing technologies than ever before. These technologies are generally sold as Software as a Service (SaaS), deployed by third parties, and usually have a high degree of interdependencies 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 bestpractices 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.

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.

What follows are our insights to help CMOs determine ways to calculate their Return on Marketing Technologies as a further means to measure success on software spend from an efficiency (how useful?) and effectiveness (how

ONLINE TRAVEL AGENCY (OTA) SITES ARE DEPLOYING THE MOST MARKETING TECHNOLOGIES; HOTEL SITES LAG BEHIND.

Avg # of Mktg Technologies Deployed by Travel Category



Some observations:

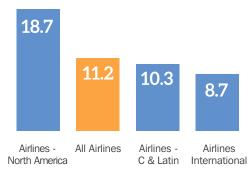
- In terms of complexity, OTAs and airlines deploy the highest number of marketing technologies.
- Hotels deploy a lower-than-average number of marketing technologies.
- Within the hotel category, global hotel brands deploy 88% more marketing technologies than average, and twice as many as regional hotel chains.

Avg # of Mktg Technologies Deployed by Hotel Category



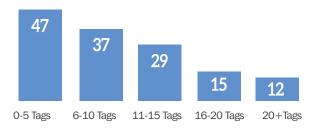
 Within the airline category, North American airline sites deploy 67% more marketing technologiesalmost twice as many as Central & Latin American airlines and more than twice as many as international (European & Asian) airlines

Avg # of Mktg Technologies by Top Airline Websites



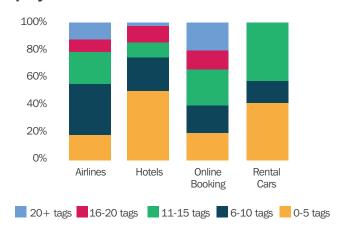
The number of marketing technologies deployed indicates the breadth and complexity of tag systems on a site. A frequency chart of tag system implementation across the travel industry shows that 12 sites (8.5%) have more than 20 different types of tags, while 47 (33.5%) have less than 5 different types of tags on their sites. The majority (60%) have less than 10 tags deployed.

of Travel Sites with Mktg Technologies Deployed



By breaking down tag deployment by travel subcategory, we can see that the hotel category is the least sophisticated, with almost 50% of hotel sites deploying less than 5 tags. The car rental category is the 2nd least sophisticated, with 40% of the sites deploying less than 5 tags. Online booking sites (travel and hotel aggregators) have the most sophisticated sites, with 20% deploying 20 or more tags.

"% of Travel Sites by # of Mktg Technologies Deployed



Travel Sites with the Highest # of Marketing Technologies

- Airtkt.com
- Cheapoair.com
- Travel Supermarket
- United.com
- Bookingbuddy.com

MEASURING RETURN ON MARKETING TECHNOLOGIES (RoMT)

There are 4 major factors to consider in measuring the efficiency and effectiveness of marketing technologies. These can be captured through stress tests impacting the most common challenges top travel sites face include incomplete tag presence, high average page load time, the high rates of data duplication*, and a high number of Javascript errors (a measure of technology overhead).



Completed Tag Presence

Average % of Travel site pages with Tag Presence = 89.3%



Site Load Time

2.31 seconds



Rate of Duplication

36.8% inflation of page views across all sites



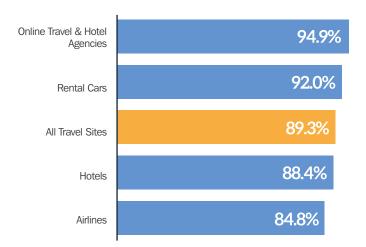
Javascript Errors

Average number of Javascript errors per 100 pages = 19.5 errors

*The number of times a page had more than one tag with the same account variable

Complete tag presence indicates that 100% of the site's pages have tags. An incomplete tag presence indicates that website analytics tools are less accurate, and therefore, data-driven business decisions are made from flawed data. In terms of completeness, airlines and hotels rank the lowest, with an average of 84.3% tag presence and 88.2% tag presence, respectively. This means that 15.7% of airline site pages are not tagged, and 11.8% of hotel site pages are not tagged. While this may sound minimal, consider that many of the pages that are missing the tags are generally the most important pages such as the shopping cart, order entry pages and other pages that are dynamically rendered in the ordering process.

Completed Tag Presence by Travel Sub-Category



Hotel category:

- In the hotel category, four global hotel brands had 99% tag presence Holiday Inn, Starwood Hotels, Marriott, and Hilton.
- 17 out of 54 hotel sites (almost one-third) did not have tags on more than 10% of pages.

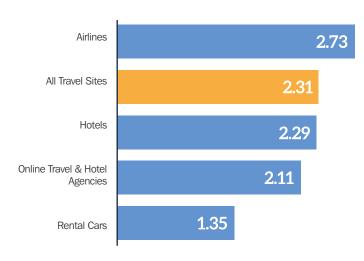
Airline category:

- In the airline category, 8 out of 42 (~20%) had at least a 98% tag presence.
- 16 out of 42 (~40%) did not have tags on more than 10% of pages.

Online booking category:

- By contrast, in the online booking category, 16 out of 34 (47%) had at least a 98% tag presence
- Only 3 out of 34 (<10%) did not have tags on more than 10% of pages.
- Online booking sites did a better job of completeness of tag presence.

Average Site Load Time by Sub-Category



The average site load time (*desktop versions only) of travel sites is 2.31 seconds. Airlines have the longest average site load time (18% longer), followed by hotel sites.

The airline category turned in the slowest page load times across all categories and was consistently slow across all of the websites in this category.

- 30% had page load times greater than two seconds (14 out of 46)
- Among the worst performing sites conducted

in the study were five sites with average site load times greater than 4.5 seconds which represented 10% of this category.

The Hotel category was the next slowest.

- 34 out of 56 (61%) had average load times less than two seconds.
- 15 out of 56 (27%) sites had an average load time longer than three seconds.

Hotel and airline web sites may take longer to load due to media-rich content favored by travel sites to display images of hotel properties or destinations, compared to transaction-heavy OTA sites designed to be accessible on desktop & mobile devices for online reservations. Some types of travel sites use more flash or video; those that are more sophisticated in their use of audio/video content are larger in size.

By contrast, 19 out of 37 Online Booking sites (51%) had average load times of two seconds or less. In fact, 11 out of 37 (\sim 30%) had average load times of 1.5 seconds or less. Only 7 out of 37 (\sim 20%) had average load times of three seconds or more.

Rental car sites have the fastest average site load time by 42%.

- 11 out of 12 rental car sites (>90%) had average site load times of two seconds or less.
- Rental cars are the only travel sub-category to have a less than two second average load time

 the standard minimum acceptable load time for e-commerce sites (see appendix)

Average # of Javascript Errors by Travel Subcategory



The number of Javascript errors indicates the number of bugs or development problems and affect the efficacy of installed tags. It is also a measure of the impact of technology overhead. The higher the number of overlapping or conflicting marketing technologies, the higher the number of Javascript errors. JavaScript errors can block or degrade the effective firing of tags.

Although the online booking sites had shorter average load times, the number of Javascript errors per 100 pages was the highest among all travel sites by 24%. We will further explore the relationship between the number of tags deployed and the number of Javascript errors, but first we need to discuss some other criteria related to site data quality.

OTHER CONSIDERATIONS: DATA QUALITY, DATA LEAKAGE, & SITE COMPLEXITY

In general, the more tags that a site has, the more complex it is, and the higher chance of the site returning inconsistent data or showing slower load times, which adversely affects RoMT. One way to test data quality is to count the number of versions of the same tag that appears on a site. For example, are there two versions of SiteCatalyst or Google Analytics deployed throughout the website? The existence of different versions of tags on the same page (due to frequent web design changes, browser or operating system upgrades, or tags that are out-of-date) is indicative of poor data quality, in which case the metrics captured by marketing technologies would be inaccurate.

Secondly, the location of tag placement in the top, middle, or bottom sections of a site page can impact the accuracy of data quality. The primary reason is that if a page takes more than two seconds to load, bounce rates start to increase by double digits. Higher bounce rates increase the possibility that tags located in the bottom section of a page are not tracked, because site visitors are leaving before the tag fires. If the data in an analytics suite is incorrect, it will be difficult to accurately capture RoMT.

Lastly, the number of custom variables (such as eVars) set up in a web analytics tool influences site complexity. The average number of variables in a web analytics tool is 30. The higher the number of custom variables, the higher the likelihood that multiple web teams with varying KPI goals are accessing and analyzing web data.

For example, in our travel site analysis, Google Flights was accessible by over 220 accounts and contained over 2,800 variables. Website data retrieved by many account access types and with many custom variables is prone to data leakage, because web teams may not be aware of the data being passed for each custom variable or may not be aware of data captured by 3rd party marketing technologies integrated on their sites. If custom variables contain PII (Personally Identifiable Information) or purchase process information, such as likely travel destinations, or transaction preferences across customer value tiers, then allowing marketing technologies to do pixel-tracking may become a privacy or security issue. In some cases, overlapping or complex organizational structures across web teams may create instances where tags implemented could be outside the scope or awareness of another business unit, resulting in a potential security breach.

One test to measure the probability of data leakage is to measure the number of Unique Account (UA) identifiers or values for a single tag. When the number of accounts increases (across an ad team, agency, consultants, social-media plug-ins, or other scripts placed by 3rd parties to get on to the site), the potential for data leakage increases. When data is being copied to parties that primary access web teams have no control over, data can be sent out to multiple accounts, creating customer privacy issues and leakage of business intelligence. A notorious example of this are some of the social sharing apps (like Facebook) that collect user data and share it with 3rd parties.

The average number of separate web analytics accounts among this travel sites is a little more than 12, which is more than twice the recommended limit of 5 accounts.

- 33% of the group had more than 5 accounts, and roughly 10% had more than 15 which is a strong indicator that some of this proprietary data is outside the control of the website owner.
- 9 travel sites had over 30 different accounts accessing the site tags.

A simplified way to measure data leakage is to calculate data inflation, measured as a multiple tag request count and a duplicate tag request count. The higher the data inflation percentage, the higher the data leakage, and the lower the efficacy or efficiency of an analytics tool to report accurate site-side data. The average data inflation for all travel sites is over 35%, which compared similarly to retail e-commerce sites. Among the travel sub-categories, online booking

sites had almost twice the average data inflation, and the highest average number of different accounts accessing the site through marketing technologies, indicating the possibility of data leakage.

Among travel sub-categories, hotels had the highest number of custom variables, implying a higher potential risk of data leakage. Airlines had the highest average number of different versions of tags on the same page, as well as the highest average number of tags in the bottom of their pages, which puts them at lower expected levels of data accuracy and quality from marketing technologies that fail to fire a pixel before the page is fully loaded due to bounced visits.

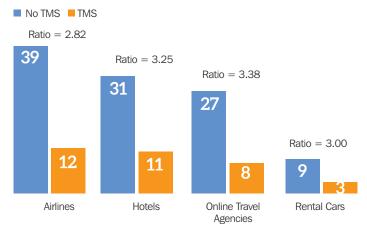
	Avg # of Accounts	Avg # of Versions	Avg % Inflation	Avg # of Custom Variables	Avg # of sites with lowest number of Marketing Technologies
Online Travel Agencies (OTA)	13.38	2.00	65.68%	217.15	2,876
Hotel	13.04	1.67	25.70%	385.81	1,952
Airlines	11.86	2.48	25.50%	334.45	3,675
All Travel Sites	12.31	2.05	36.81%	309.40	2,798
Rental Cars	7.58	2.42	37.33%	156.17	3,518

In summary, while OTA sites are the most complex in terms of marketing technologies deployed, they have been relatively successful in managing the challenges presented with the added complexity. They have the highest levels of completed tag presence and lower-than-average site load times but they scored poorly in data leakage and JavaScript errors. They are the slowest to adopt TMS but they stand the most to gain from the benefits of using a TMS.

ONE IN THREE TRAVEL SITES HAVE A TAG
MANAGEMENT SOLUTION. OF THOSE, HALF
USE A FREE WEB ANALYTICS VENDOR INSTEAD
OF AN ENTERPRISE-CLASS PAID SOLUTION.

Among travel sites, the presence of any Tag Management Solution ("TMS") systems is most prevalent in airline and hotel brand sites. OTAs have the highest ratio of sites without TMS.

Travel Sites with TMS vs. Non-TMS



Among the sites that recognize the need for siteside analytics solutions, the primary distinction is choosing between a Free vs. Paid Enterprise Tool.

In our research, we found almost half of the top travel sites installed Google Analytics – a free tool -- as its primary tool (56 out of 107 with a listed Primary Vendor) Among paid enterprise tools, Adobe Site Catalyst was the most popular.

Free vs. Paid Tools (%)



Paid vs. Free Tools Primary Vendor Secondary Vendor 39 24 7 15 4

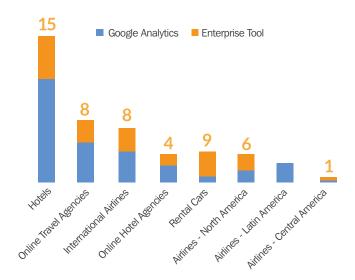
Within the travel subcategories, hotels, rental cars, OTAs, and international airlines have the highest adoption of enterprise-class paid solutions. From a paid vs. free solution standpoint, rental car brands and North American airlines have the highest rates of adoption, with Central and Latin American airlines lagging the most in terms of considering paid enterprise-class solutions.

Adobe SiteCatalyst

All Other

Travel Site Adoption of Free vs. Paid Enterprise Tools by Sub-Category

Google Analytics



SITES WITH TAG MANAGEMENT SOLUTIONS EXPERIENCE SLIGHTLY INCREASED SITE LOAD TIMES, AT THE BENEFIT OF BETTER SITE QUALITY & PERFORMANCE.

Measuring the benefit a TMS can be complex. Several ways to look at site efficiency metrics include site load times, the number of Javascript errors, and site compliance.

Site compliance is an indication of site performance and quality, measured by the percentage of Status 200-compliant pages. HTTP status 200 indicates a successful HTTP request, as opposed to 301/302 redirects, 500 server error, no proxy, unauthorized, or 404 page not found errors. In other words, the higher the Status 200 percentage, the better the site quality.

Across all travel sites, it appears that the sites with more tags appear to be using TMS more often. Those with TMS have a similar status 200 performance, but site load times and Javascript errors were slightly higher than those companies that do not have a TMS.

In an earlier section, we discovered that Online Travel Agencies (OTAs) had the fastest site load times, but the highest number of JavaScript errors. We also saw that 20% of OTAs deploy at least 20 different tag types, indicating high site complexity. It appears a large majority of OTAs use TMS, but the use of TMS does not minimize the number of JavaScript errors.

TMS software can help organizations improve these issues faster and there is an opportunity for professional services and web teams to correct the issues.

All Travel Sites	Avg # of Tags	Load Time (in Seconds)	Avg # of JS Errors	Status 200
w/ TMS	15.06	2.41	1,018	84.2%
w/o TMS	10.43	2.32	780	85.3%
Difference	44.4%	4.0%	30.5%	1.2%

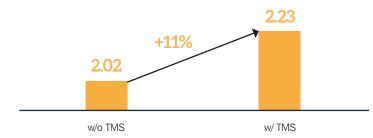
The benefit of TMS is more pronounced with more complex travel sites, as ranked by the number of marketing technologies deployed. Taking the top 10% of travel sites that have the highest number of tags, we can compare the efficiency metrics for those with and without TMS. With TMS, site load times are similar, but site performance is much better (as measured by Status 200 Compliance), at the expense of many more Javascript errors.

Top 10% Travel Sites	Avg # of Tags	Load Time (in Sec) - Top 10%	Avg # of JS Errors	Status 200
w/ TMS	40.33	2.23	2,102	87.0%
w/o TMS	26.80	2.02	531	76.4%
Difference	50.5%	10.4%	295.5%	13.8%

The benefits are illustrated in the following charts...



Load Time (in Sec)

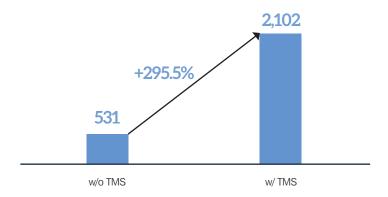


Some Examples of Top Travel Sites with and without TMS are below:

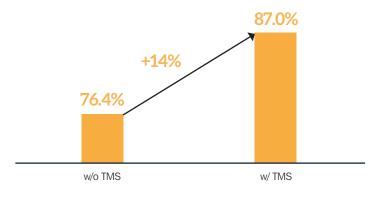
Observed with TMS	Observed without TMS
Cheap O Air	Last Minute Air Ticket
United Airlines	Bookingbuddy.com
Travel Supermarket	Room77
Four Seasons Resort	Delta Air Lines
JetBlue Airways	Air Canada
La Quinta Inns &	Google Flights
Suites	WebJet
Orbitz	Priceline
Holiday Inn	KLM Royal Dutch
Starwood Hotels	Airlines
Travelocity	One Travel

A detailed breakout of site load times and average count of JavaScript errors by travel sub-category are outlined in the appendix.

Avg # of JavaScript Errors



Status 200 Compliance (Site Performance)



COMPOSITE SITE PERFORMANCE SCORES ALLOW DIGITAL MARKETING TEAMS TO HAVE GREATER CONFIDENCE IN DATA-DRIVEN BUSINESS DECISIONS

The site auditing solution used to conduct this audit is provided by ObservePoint. ObservePoint's proprietary scoring system measures site compliance, site load times, Javascript errors and duplicate and missing tags. The system provides an overall score from 0 to 100, with 100 being the best.

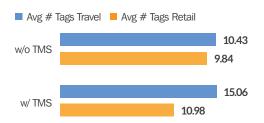
In ranking the travel site sub-categories, the highest composite score was rental cars. They scored a 79.3 out of a possible 100, 6.7% higher than the average score of 74.3 across all site categories. All airlines scored below the average, with North American airlines performing 16.2% below the average score.

Composite Site Performance Score (Measured by ObservePoint)

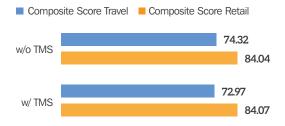


In comparison with a prior white paper ranking the top retail/e-commerce sites, travel Sites – regardless of whether they had TMS or not – had greater complexity, as measured by the average number of marketing technologies deployed. Alongside that observation, we can see that the overall RoMT, as measured by ObservePoint composite scores are higher for e-commerce sites than travel sites, and thus, website teams on travel sites need to undertake a full analysis to determine how best to optimize their site performance.

Average Complexity of Top Sites by Industry



Overall Return on Mktg Technology (RoMT) Scores



Tag audits are designed to assess the effectiveness of the practices behind the implementation and maintenance of marketing technologies.

- A site audit does not show the inherent effectiveness of one technology versus another or effectiveness of tag management solutions; only a site's implementation of a technology.
- TMS generally improves page load times by streamlining outgoing calls. Competing TMS technologies use various architectures with varying results, but tag auditing is not designed to specifically measure the speed of TMS systems.
- Tag management technologies do not cause data duplication. Rather it is the human-driven processes that are behind managing these technologies are to blame for duplication, JavaScript errors, tag presence, and to some degree, load times.

Measuring the Return on your Marketing Technologies starts with a comprehensive understanding of which overlapping systems are impacting site performance. Using automated tag auditing software site managers can apply debugging features and identify undetected problems arising from tag management. The adoption of a robust quality assurance process improves the reliability of web data and improves the Return on Marketing Technologies.

Travel companies with high rates of duplication are sending in extra server calls and paying more for their marketing technologies than they have to. The fact that less than 7% of the top travel sites had 100% tag deployment indicates that organizations are not conducting tag audits. Those that do are managing the complexity inherent with SaaS-based solutions more effectively than those that are not.

Summary results:

- Tag Management Systems can generate improvements and increase the Return on Marketing Technologies.
- 2. Tag Auditing can inform human-driven processes and shed light on hidden tag deployment issues, which secures RoMT.

Free tag audit

To request a free tag audit, contact FreeTagAudit@LimaConsulting.com

We invite companies in the top travel sites to contact Lima Consulting Group to obtain the specific findings for their audit.

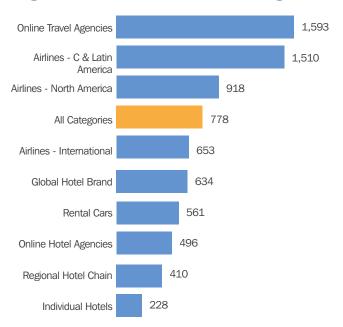
MyTagAudit@LimaConsulting.com

Appendix

Total Number of Tags Observed by Travel Category

	Total Tags
Airlines - C & Latin America	113.00
Airlines - North America	168.00
Airlines - International	201.00
Individual Hotels	65.00
Hotel Chain	214.00
Regional Hotel Chain	111.00
Online Hotel Agencies	108.00
Online Travel Agencies	364.00
Rental Cars	99.00
All Categories	160.33

Avg JS Errors Across All Travel Categories



- OTA and airlines have the highest number of Javascript errors –almost three times that of global hotel brands, rental cars, and online hotel agencies
- Central & South American airlines have nearly 700% more in JavaScript errors than the lowest category – Individual Hotels at 228.
 Central and Latin American Airlines stand out with their the high instance of JS errors when

compared to north american (918 JS errors) and international (a 653 JS errors).

This could be due to the relative business size of Central and South American airlines, as opposed to US-based airlines. Perhaps these smaller companies do not invest as much in digital marketing technology, so they are less concerned about data quality. As many of the airlines in Central and Latin America are based in developing countries, there is plenty of room for these sites to improve. For example, while we see a difference in JS errors between Global Hotel Brands, Online Hotel Agencies, Regional Hotel Chains, and Individual Hotels, it is not as pronounced as the Airlines category.

- Within the hotel sub-category, size matters. global hotel brands have three times as many Javascript errors as individual hotel property sites
- By comparison, online hotel agencies have a relative lower number of Javascript errors

Avg Load Time Avg Across All Travel Categories (in Seconds)



- International airlines, regional hotel chains and individual hotel properties each have higher average load times than any travel site.
- Rental cars and North American airlines have the fastest average load times in the travel industry

Appendix

35) Carlson

69) Hertz

1) Accor Group	36) Cathay Pacific	70) Hilton*	103) Marriott	132) Student Universe
2) Ace	Airways	71) Holiday Inn	104) National	133) Swire Hotels
3) Aegean Airlines	37) Cheap Air	72) Hostelbookers.	105) Neorion Hotel	134) Swiss
4) Aerolineas	38) Cheap Fare Guru	com	106) Oasis Hotels &	International Air Lines
Argentinas	39) Cheap Hotels	73) Hotel Al Codega	Resorts	135) TACA Airlines*
5) Aeromexico	40) Cheap O Air	74) Hotel Alpenhof	107) Occidental	136) TAM Airlines
6) Agoda	41) Choice Hotels	Hintertux	Hotels & Resorts	137) Thai Airways
7) Air Astana	42) Club Arias Bed &	75) Hotel Belvedere*	108) Oman Air	138) The Milestone
8) Air Canada	Breakfast	76) Hotel Planner	109) One Travel	Hotel
9) Air France	43) Copa Airlines	77) Hotel Royal Corin	110) Onyria Marinha	139) The Oberoi
10) Air Jamaica*	44) Crown Paradise	78) Hotel Sultania-	Edition Hotel &	Udaivilas
11) Air New Zealand	Resorts	Boutique Class	Thalasso	140) The Samaya Bali
12) Al Maha Desert	45) Dann*	79) Hotels Combined	111) Orbitz	141) Thrifty
Resort	46) Delta Air Lines	80) Hotels Trivago	112) Palace Resorts	142) Tingo - A
13) Alamo	47) Despegar.com	81) Hotels.com	113) Palladium Hotels	TripAdvisor Company
14) Alpharooms.com*	48) Dollar*	82) Hotelzon	& Resorts	143) Travel
15) Amerian Hoteles	49) Easy Fly	83) Hotwire	114) Park Royal	Supermarket
16) American Airlines	50) easyJet	84) Howard Johnson	115) Price Tavel	144) Travelocity
17) ANA All Nippon	51) Emirates	85) Hyatt	116) Priceline	145) TRIP Airlines*
Airways	52) Enterprise	86) Iberostar	117) Qatar Airways	146) TripAdvisor
18) Aria Hotel	53) Etihad Airways	87) InterContinental	118) Real Inn	147) Tryp by
19) Asiana Airlines	54) Europcar	88) Japan Airlines	119) Ritz-Carlton	Wyndham*
20) Austrian Airlines	55) Executive Travel	89) JetBlue Airways	Hotel	148) Turkish Airlines
21) Avalon*	link	90) Jetsetz	120) Riu	149) Turnberry Isle
22) Avianca	56) Expedia	91) KLM Royal Dutch	121) Room77	Miami
23) Avis	57) Explore Trip	Airlines	122) Rudding Park	150) United Airlines
24) Azul Airlines*	58) Fairmont Hotels &	92) Korean Air	Hotel	151) US Airways
25) Barcelo Hotels &	Resorts	93) La Quinta Inns &	123) Silk Air	152) Veligandu Island
Resorts	59) Fiesta Americana*	Suites	124) Singapore	Resort
26) Best Western*	60) Finnair	94) LAN Airlines*	Airlines	153) Virgin America
27) Booking.com	61) Flight Network	95) Last Minute Air	125) Sixt	154) Warwick
28) Bookingbuddy.	62) Four Seasons	Tkt	126) Sol & Luna	International Hotels
com	Resort	96) Lastminute.com	Lodge & Spa	155) WebJet
29) Bookit.com	63) Fox	97) Late Rooms.com	127) Sol Meliá	156) Wyndham Hotel
30) British Airways	64) Garuda Indonesia	98) Late Rooms.com	128) South African	Group
31) Budget	65) Gol	99) L'Hermitage Hotel	Airways	
32) Camino Real	66) Google Flights	100) Lufthansa	129) Southwest	
33) Cape Grace*	67) HA Hoteles	101) Madison Hotel	Airlines	
34) Caribbean Airlines	68) Hawaiian Airlines	Hamburg	130) Spirit Airlines	
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^{*}These websites were either partially audited or not audited due to the administrative rights required to access the majority of the pages. In such cases, their data has been excluded from benchmarks.

102) Malaysia Airlines 131) Starwood Hotels

Bios



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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.



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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.



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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 10 years of experience in offline and online marketing data collection and analysis. As the head of Marketing at ObservePoint, he has been played a key role in the development of their auditing platform, created digital data quality management best practices, and is a subject matter expert in tag auditing. He holds Bachelors degrees in Management and Marketing, as well as a Master of Business Administration from the University of Phoenix, John Sperling School of Business.



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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

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