Mindtree

A Larsen & Toubro Group Company

The Client-side Tag Management Solution Approach

Welcome to possible

A Mindtree White Paper

Introduction

Tag management helps track user's interaction and produce the highest data quality that enables to generate better reports, insights, and marketing decisions. In addition, it helps to automate the collection and measurement of digital analytics.

Tag Management Solution (TMS) provides enterprise-level support and service to the business by understanding customer behavior and interactions on website & mobile apps.

To understand customer journey on websites and mobile apps, the user interactions must be tracked by implementing custom tracking tags directly into the code. Considering this takes a lot of a developer's efforts and time, tag management plays a vital role.

TMS allows updating, deploying, and organizing all the tags easily and quickly in one place. TMS improves data collection and sharing between a website-mobile app and third-party tools, which seamlessly distributes data to respective reporting and analytics services.

Why pay attention to client-side tag management?

Client-side TMS uses tags from website and mobile apps to track and deliver data. This makes it easy to implement and cost-effective. It helps with:

- **Improved Agility:** TMS helps optimize outcomes faster and gives more control over analytics.
- **Data Control & Accuracy:** It results in reliable data that helps to make better decisions, since almost all TMS abide by the laws of data privacy.
- **Cost Saving:** Reduces costs of measurement, implementation and especially ad-hoc tracking changes in various marketing and analytics platforms.
- **Usage of Events:** We can reuse event names and variables for multiple vendors, which eliminates duplicate work.
- **Loading Type:** Asynchronously loaded files will not affect page load speeds.

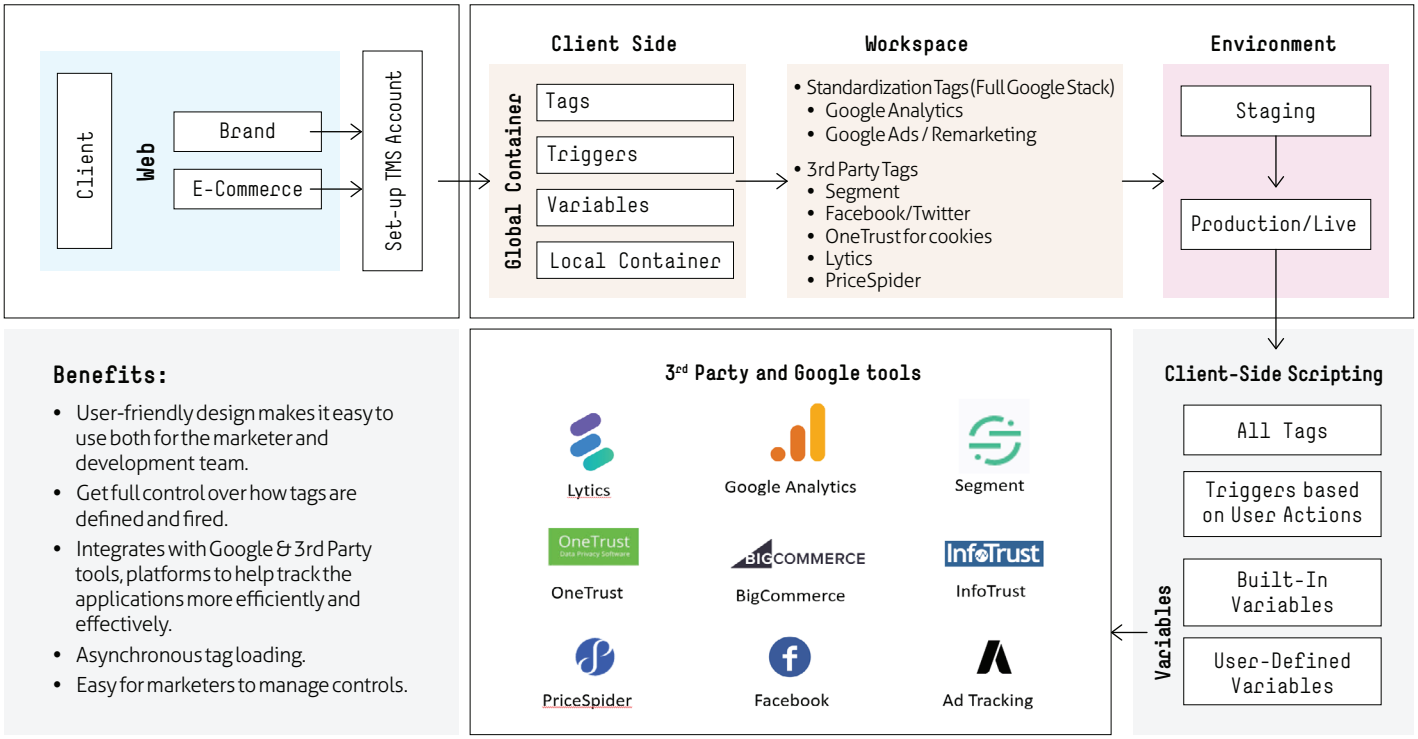
Client Side TMS Architecture

A tag management system is used to set up tags and establish triggers that cause the tags to fire when an event occurs. One can publish tags to the production/live environment based on tag validation & testing.

A tag manager container code is placed on the website, which helps track and share data to required interactions on a website/mobile app for digital analytics reporting/ third party tools.

Once tags have been placed, the TMS will send data to the respective Google marketing platform or third party tools such as Google Ads, Price Spider, Lytics, Facebook, WebEngage etc., which helps marketers take decisions based on data outcomes.

The following illustration explains how the client-side tag management system works:

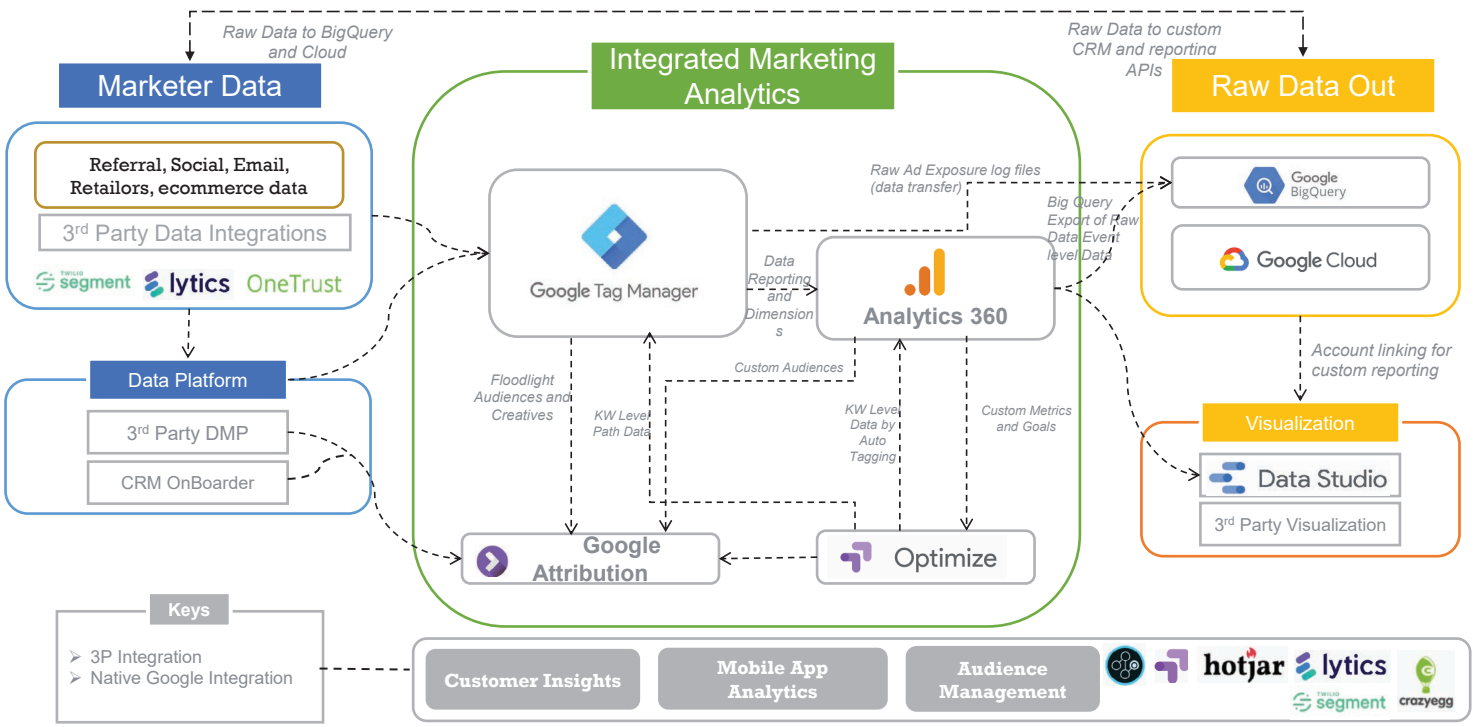


Note: *Server-side tag management and services are in beta version

Digital Analytics Solution Architecture – With Client Side TMS & Other Tools

All raw data interactions on respective channels within the website and mobile apps are collected and structured in the tag management solution. The data is further sent to digital analytics and third party tools for analysis. This helps understand content performance, landing pages, user behavior flow, retargeting, A/B testing, audience management, and lead generation.

Recommended Solution Architecture



Approach:

- Audits on existing implementation to develop migration/setup plans to ensure uninterrupted data capture.
- Perform analysis, collect requirements, implement tracking, and validating the tags.
- Creating, testing, and publishing tags inside tag manger, based on the requirement.
- Publish GTM tags on the live website and eliminate existing tags.

Architecture:

- By reducing the dependency on IT, Google tag manager facilitates tracking tags modification, deletion, and addition via its interface, and there is no role for legacy code on individual pages.
- Simplify the tracking and analytics process, ensure strict naming conventions, and documentation for custom variables, tags, and triggers.
- Using multiple workspace and versions to release independence to avoid overwriting changes.

Environment Testing:

- Version maintenance, whenever the tags are modified and deployed on a production environment, creates a new updated version.
- Set the environment through a single container for staging and production.
- Data validation for both standard and ecommerce analytics.
- Technical audit to acquire a high-level understanding of the website and where optimization is required.

Functional Capabilities:

- Built-in debug feature to test tags in the staging environment.
- Custom events, variables, tags and triggers are created.
- Custom goals and segmentations are made and validated.

Tag Management Tools

Industry leading tag management tools are Google Tag Manager, Adobe Launch, Tealium iQ, Ensighten, Tag Commander etc

Common Features & Components in TMS

- **Tag library** – Tags can measure traffic and user behavior.
- **Data layer** - A JavaScript object, which is used to transfer information from the website-mobile app to TMS & digital analytics tools.
- **Control** – TMS will give admin to control on containers, publishing version tags and user permissions.
- Integration - Integration of third party tags and custom tags.

Best practices with Client-side TMS

- Plan specified documentation before implementing tag governance.
- Maintain structure and ownership of the account/container.
- Use easy to understand naming conventions.
- Grant edit rights only to the right people.
- Leverage workspaces and container size limits.
- Consider and use appropriate constant variables.
- Conduct regular tag audit, ongoing maintenance, and tag governance.
- Crosscheck and fix broken tags to avoid poor attribution.
- Align the capabilities of TMS to business goals.

Summary:

- TMS empowers the design, testing, implementation and customization of user interactions with the minimum dependency to the IT team. It precisely measures all interactions and saves time.
- The accuracy of sending data to third-party platforms helps marketers make better business decisions based on insights. It reduces errors & maintains data integrity, irrespective of any industry type.
- TMS tags load asynchronously, resulting in performance improvement and a boost in the page load speed of the website and mobile apps.

Conclusion:

The tag management industry will continue to expand as vendors innovate to optimize customers' needs and provide solutions to digital marketing.

TMS gives the freedom to design, test, implement, and customize tracking strategies, thus improving user experience. It also helps to automate the digital analytics collection and measurement by ensuring the highest data quality, security, and privacy. It helps to generate effective reports with data insights and assists in taking marketing decisions for the business.

Mindtree can organize all client-side tag management solutions to let business owners/clients focus on the most profitable business decisions. Mindtree also maintains updates on the upcoming server-side of the tag management solution.

Venugopal B

Technical Lead

With over 9.5 years of digital marketing experience, Venugopal has worked with various industries including B2B & B2C clients to help and transform their analytics and marketing functions by leveraging data and sales performance using SEO, web analytics and tag management solutions. He has experience in implementing technical SEO, web analytics, tag management and optimization techniques for e-commerce, health care & beauty, hospitality and travel industries.

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Consultant

With over 12 years of digital marketing experience, Rahul has worked with different domains and various clients to help them grow and transform business performance using analytics, Google Ads, and tag management solutions. He has experience in web analytics, search and display advertising, social media marketing, campaign management and optimization for B2B and B2C clients.

About Mindtree

Mindtree [NSE: MINDTREE] is a global technology consulting and services company, helping enterprises marry scale with agility to achieve competitive advantage. "Born digital," in 1999 and now a Larsen & Toubro Group Company, Mindtree applies its deep domain knowledge to 260 enterprise client engagements to break down silos, make sense of digital complexity and bring new initiatives to market faster. We enable IT to move at the speed of business, leveraging emerging technologies and the efficiencies of Continuous Delivery to spur business innovation. Operating in 24 countries across the world, we're consistently regarded as one of the best places to work, embodied every day by our winning culture made up of over 32,000 entrepreneurial, collaborative and dedicated "Mindtree Minds."

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