CASE STUDY

Magicbricks Stays Up and Running With Real-Time Monitoring From Google Analytics 360

Early warnings

Anomaly alerts work to detect unusual patterns in website data. Things like unexpected campaign traffic, server outages, crashes, and code breakdowns on certain pages can all hamper the overall performance of a website, with bad results for the bottom line.

Tatvic and Magicbricks developed a novel solution that blended Google Analytics 360 data with an anomaly detection algorithm. When the system spots an anomaly, it sends automated real-time email and SMS performance alerts to the mobile devices of Magicbricks managers.

“Anomaly detection used in conjunction with Google Analytics 360 has helped us keep track of real-time performance measurement and user problems,” said Puneet Kukreja, associate product head of Magicbricks. “We were able to respond far more quickly to the various situations that ultimately helped us serve our customers better.”

Magnitudes of deviation

Tatvic’s solution for Magicbricks started with collecting website behavioral data and then defining algorithms to detect when (and by how much) new data deviate from normal levels. Three primary components were measured individually and aggregated to generate appropriate alerts: fixed trends, cyclical trends, and seasonal data.

Tatvic used R, a popular, robust, and free programming language for statistical computing and visualization. Google Analytics 360 data can be exported into R for advanced analysis through the RGoogleAnalytics Library. This let Tatvic decouple data between trends and seasonality as shown here:

About MagicBricks

• Magicbricks is India’s top high-end property portal. The site caters to a global market with its unique services and novel online features for both buyers and sellers.
• Headquarters: Noida, India
• www.magicbricks.com

About Tatvic

• Tatvic is a Google Analytics 360 Reseller, working with digital data to help businesses earn more.
• Headquarters: Ahmedabad, India
• www.tatvic.com

Goals

• Reduce website downtime
• Promptly alert management when outages occur

Approach

• Use Google Analytics data processed through Real Time and Management APIs
• Define key metrics for real-time anomaly detection checks
• Apply anomaly algorithm to data to calculate deviations in real time

Results

• 70% improvement in response time for errors and unexpected behavior
• Better identification and reporting of unexpected behaviors and other anomalies
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Behavioral data patterns for Magicbricks’ website broken out by trends and seasonality

The system collects behavioral and conversion data with Google Analytics 360, then uses the Real Time Management APIs to export relevant metrics into a separate database. Tatvic’s anomaly detection algorithm looks for unexpected changes in the data and sends alerts using an SMS API and email server. The meticulously tracked metrics include online form completion rates as a proxy for drop-off and slow page-loading for specific browsers and operating systems as well as validation errors and other changes in goals conversion rates.

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A simple example: One day the Tatvic system noted that a page that normally sends 1,000 business leads had sent only 50; this triggered the
alerts and an email was immediately sent to the relevant team to check and remove the obstacle, a server breakdown that happened in the morning. Instead of continuing for days and losing thousands of leads, the problem was fixed the same day.

**Result: 70% faster response time**

Tatvic's real-time anomaly alerts platform has been a timely success for Magicbricks. The company can clearly see variances in KPIs and move quickly to troubleshoot and fix them. In fact, response time for detecting errors and unexpected behavior has improved by an impressive 70%.

Sudhir Pai, CEO of Magicbricks, said, “As a No.1 property portal, Magicbricks aims to provide our users with an outstanding experience to help them make confident property decisions. Google Analytics 360 helped us measure various unexpected website behaviors which were hampering user experience. The response time for detecting errors, unexpected behavior, and monitoring performance improved by 70% after we deployed this anomaly detection solution.”

The automated SMS alert system has been improved to detect outages, determine severity, and provide real-time performance updates to senior and middle managers throughout Magicbricks. Today the full Magicbricks team can make the most of these real-time insights to keep the site up and running—and earning more every day.

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**About Google Analytics**

Google Analytics is the enterprise-class analytics solution that gives companies rich insights into their digital audiences and marketing effectiveness. With features that are powerful, flexible, and easy-to-use, companies large and small can measure engagement to create more effective marketing initiatives, improve user experience, and optimize digital strategies. Sophisticated conversion attribution and experimentation tools help savvy marketers determine the best allocation of media and resources to drive results. For more information, visit google.com/analytics.