Transforming Customer Experience Through
Big Data

Bringing data and real-time analytics for making better business decisions and transforming customer experiences.

BACKGROUND

There was a point of time when organizations took their data for granted. But those times are no longer here. Organizations have started taking their data quite seriously and the demand for utilizing it in making faster decisions is growing in a staggering manner. However, with a great deal of demand comes a need for an even greater solution. Although Google Analytics was a good option for studying the data, our client sought a sturdier tool.

CHALLENGES

▎ Google Analytics refreshes periodically which resulted in complexity. The options for higher functionality or analyzing data thoroughly was tough. And the analysis too wasn't relatively new.

▎ The archival and retrieval of data was cumbersome. It caused a mammoth amount of chaos because of which the client wanted to bring in an order.

▎ Understanding customer behaviour and the reasons for the conversions and drop-offs were two factors that were affecting the business. It was incumbent for us to arrive at a clarity in those areas too.

Although several existing solutions resolved these issues individually, the lack of one solution which gave us actionable results for these concerns altogether was a pressing need.

SOLUTIONS

Despite having the goal of resolving the aforementioned challenges, we wanted to do more. Our idea was to transform the experiences of the customers. We identified that the data was extremely valuable and it could be leveraged to craft experiences that the customers would love.

So what began as seamless analysis of data steered us into a direction that did more than just that. For that purpose, we chose Big Data, which offered us with the flexibility of going beyond the dashboards and tell a story worth listening.

WHAT WE DID

Our client's website received a good number of visitors, but the inability of studying the nature of the customers created some gaps in the business. We wanted to rectify that concern, first.

- When a customer visited the site, all his data was stored in JSON, a lightweight data-interchange format, which is easily readable. This data had information like the browser configuration, which URLs were visited, and how much time was spent in each category.

- Every action by the customer was triggered as an event.

- Each event was converted into an event log file. These logs were created every hour, which meant two things - the analytics were super fast, and they were real-time too. We were able to study all the minute details.

- We used Amazon S3, a storage server for placing these log files, which are subsequently moved to a Big Data database.

- In the next phase, we build tables for inserting all the log files and map them to the Big Data database to ensure consistency.

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▌ For a better analysis, we implement these tables to Reporting where graphs are inserted in UI. These graphs are carefully surveyed to comprehend the user behaviour.

▌ This brings us to the final stage where we optimize data in the most convenient fashion. The entire data gets compartmentalized and organized in a way that pulling them whenever there is a requirement is easy.

▌ The constant analysis of customer behaviour gives us a clarity on what features will give the product the added advantages of performing exceptionally.

TAKEAWAY

Faster data processing: Large volumes of data is processed at a snap speed. In fact, we got to analyze the drop-offs, conversions etc. just as they were happening on the website. Since the process was quick, the time taken was less.

Better marketing decisions: Having a control over the data helped the marketing team plan their campaigns and strategies accordingly. This majorly contributed to a terrific Search Engine Optimization (SEO) and Search Engine Marketing (SEM), which in turn fetched more website visits.

Cost-effective: If you wondered this solution might consume lots of resources or time, we'll give you the reality. The fact that this solution is easily manageable, maintainable, and has no absolute tracking issues makes it all the more better. Plus, it works with a less number of resources too.

CONCLUSION

What all this amounts to is a better system, definitely. But more than that, it is poised to a stage where we can exponentially transform the experience of customers, and maybe even surprise them.