inter|ana

Edmunds Explores Journey Analytics 100 Times Faster on Interana

Enabling self-service analytics for business users, analysts and executives - faster than complex SQL-based queries.

edmunds

Executive Summary

- Edmunds implemented Interana alongside existing tools like Databricks and Tableau to enable self-service analytics for business users, analysts and even executives.

- Interana performs many times faster than complex SQL-based queries combining different time windows across all comparable datasets.

- Asking custom questions and getting immediate answers allowed Edmunds product owners to change website features and glean learning in a faster and more adaptive way.

- With Interana offloading compute-intensive behavioral queries of time-series data, traditional BI reporting in Tableau and Databricks now runs more efficiently as well.

About Edmunds

Edmunds has evolved its business over the years from a printed book of car pricing information to a one-stop platform devoted to making car buying easy today. This platform involves a rich set of vehicle data, pricing, reviews, industry insights and buyer preferences from user interactions on the Edmunds.com website.

"Interana is many times faster than SQL, or any platform we've seen on the market."

Rob Hardy
Director of Analytics Engineering, Edmunds

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Challenges

Historically, product owners in the business would constantly ask data analysts to run custom reports for them. As visitors to Edmunds.com grew and buyers became more sophisticated in their search for a new vehicle, helping the Edmunds product team learn about behaviors across the entire customer journey grew increasingly complex. Each new dataset and sophisticated reporting requests required additional ETLs and modeling on the back-end. Product owners would wait days, or often weeks, for answers.

The turnaround time was simply too slow and labor intensive with the company's existing technology. The analytics stack consisted of Tableau dashboards, Google Analytics reports, and SQL queries in Databricks. In addition to high data volumes, certain aspects of Edmunds's data sets required daily reloading in order to properly reflect historical data that had been augmented with delayed information from external sources.

Eventually, the ad hoc nature of these behavioral query loads placed strain on existing systems, which in turn made getting answers through Tableau or SQL so slow that analysts were sometimes unable to run critical queries at all in the time frames needed. Things were breaking.

Solutions

To offload the computationally intensive queries focused on user behaviors, the Analytics Engineering team at Edmunds, identified Interana to complement the company's existing analytics toolchain. As a full-stack managed service, Interana's focus on analyzing large amounts of time-series data across multiple channels allowed Edmunds to improve processes and content by iterating faster on the types, and frequency, of its analytics questions.

The flexibility of Interana allows Edmunds to deploy four main data sets to best serve the customer journey: web traffic, ads, leads, and transactions. And Edmunds continues to expand the use of Interana to include data sets for teams in Sales, Engineering, Editorial, and Operations.

Results

With Interana, both Edmunds data analysts and product owners can quickly iterate on specific questions about user cohorts and product features over time. This flexibility has also freed up analysts to do more strategic work and be more proactive in identifying opportunities rather than putting out fires.

In Action

Using the dynamic AB view in Interana, product owners were able to define custom metrics to apply to their AB tests both on the fly and after the AB test had already been run.

MATRIX	A - B	A - C	A - D		Absolute #Δ ∨
Measures	**A**	**ΔB**	**ΔC**	**ΔD**	
Count number of instances of Purchase Journey	674,744	-624,444	-51,072	-52,820	
Avg Time to Add to Cart	34.6h	+3,699,031.57041	-298,331.956528	-300,153.53406	
Avg Total Events	1,318.38651696	-893.211407617	+73.6560310455	+75.5842640352	
Time Before Purchase	34.8d	-3,008,405,000.51	+0	-15,004,590.3022	

These custom metrics could be very specific to each AB test. Prior AB test reporting had a fixed set of metrics and any new metric would take days and sometimes weeks to add to the reporting structures and would require justification to apply across all tests - plus backfilling for previous data was complicated and required careful developer attention. The benefits from Interana's AB view helped recognize and stop poorly performing AB tests much earlier, saving revenue and avoiding poor user experiences.

A secondary benefit was that Interana offloaded a number of behavior-based and usually ad-hoc query patterns, ultimately improving performance in Databricks and Tableau. While these tools are still used for more formal reports, Interana allows Edmunds BI team to manage fewer of them. That's because Interana ingests data in real-time and in its rawest and most granular form—giving users the ability to query data directly.

Driving toward more sophisticated analytics

To learn more about journey analytics at large scale and see the Interana solution that helped Edmunds drive innovation and improve their business, register for a demo at:

https://www.interana.com/request-demo

"Our analysts rely on Interana to run complex queries that used to hang in our traditional data warehouse, giving us the ability to answer large-scale questions about how people are using our site. Vehicle and customer data sets are constantly updated, so getting answers fast —and in real-time— is critical to our business."

Rob Hardy
Director of Analytics Engineering, Edmunds

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