

CASE STUDY

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Enhanced trading alerts

Online brokerage firm, tastytrade's customizable cloud-based solution

tastytrade offers an online trading platform for self-directed retail investors. The company leverages third-party data services that provide alerts when selected stock trends occur. While effective, the services can be inflexible as changes to the alert logic are extremely expensive and time-consuming to create. **Partnering with Equal Experts, tastytrade was able to build its own cloud-based alerts service that is now available for retail consumption.**

3 Months

Created a minimal-viable-solution

5 Months

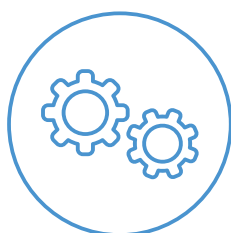
Delivered a complete, cloud-based alerting system for customers



About tastytrade

tastytrade is an online brokerage firm that specializes in options, futures, crypto, indices, commodities, and stock trading for self-directed investors. The company offers customers a fast, reliable, and secure trading platform that allows them to make their own trades.

INDUSTRY



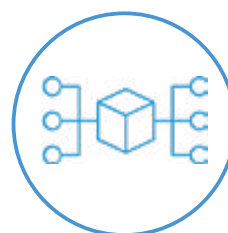
Financial

LOCATION



USA

SERVICE



Platform
Build

Replacing an expensive and complex third party solution

The retail brokerage business is one where every second counts - stocks can move in milliseconds. Customers need to be kept aware of changing market conditions at all times.

Customers use the platform to execute individual trades, often using market data feeds that provide a traditional on-screen ticker of stock prices. Users typically set up alerts that inform them about specific stock price movements.

Until 2022, tastytrade contracted with a third-party alert service that enabled traders to establish custom alerts. For example, a user might receive an alert if the Apple stock price went above \$500 or if Microsoft fell by more than 5%.

The problem with this approach was the lack of fine-grain alert scenarios that were more complex than merely stock prices moving up and down. tastytrade wanted to build an alert service that allowed for more complex alerts to be easily established.

The second challenge with the third-party tool was that customizing the current alert creation logic was too complicated, making it hard to update information received in response to market changes. As a subscription service, tastytrade had pushed it to its limits.

Seeing the opportunity to create a more robust alerts tool, tastytrade sought to build a service that allowed greater complexity for alert queries. For example, a customer might want to know how one stock price changed in relation to a wider sector, or how long a stock remained at a certain price point before issuing an alert.

In 2022, tastytrade approached Equal Experts with an idea: was it possible to create an in-house alternative to the current alerts platform? The new platform would be entirely owned by tastytrade and needed to be easily maintained and adapted over time.

Delivering low latency in a cloud-based environment

The new platform didn't just need to be flexible and scalable, it also had to run as a managed service in a cloud environment. This is a significant challenge for a trading alerts service, where vast quantities of data and associated queries must be processed and results delivered in a matter of milliseconds.

Equal Experts assigned a team of engineers that set to work creating a tool that could process more complex queries. **The initial version of the tool went live over a two-month period and was performant with single conditional alerting as its proof of concept.** The team then spent three additional months refining the learning algorithm and building metrics that would measure the response time for queries ensuring that the low latency was delivered.



“

What made the difference in this project is having a CTO who is visionary, and encouraged and supported us to push the boundaries of what was considered achievable in a cloud environment.

”

Eric Laguer, Principal Engineer, Equal Experts

Creating a product and building revenue streams

As of January 2023, the platform is complete and is being trialed internally. tastytrade is working with front-end developers to prepare the platform for external customers.

The product vision is to create a system of alerts that can be packaged and shared with other organizations and for in-house use within tastytrade's platform. tastytrade will soon make the tool available to its customers via its platform and an API.

Want to know more?

Are you interested in this project?

Or do you have one just like it?

Get in touch. We'd love to tell you more about it.