

Usermind builds its data science platform from scratch to production in 3 months

Key Achievements

- John Snow Labs delivered a full enterprise-grade data science platform in 3 months, generating Usermind a new revenue stream.
- The platform is fully white-label and Usermind has a license to its full source code and the right to modify and extend it at will.
- The platform license includes full deployment to development and production, security hardening, integrations into the Usermind platform, training and support.
- Starting from scratch, Usermind now has a platform & team who apply machine learning with real enterprise clients.

The Challenge

[Usermind](#) is a Customer Engagement Hub, enabling enterprises to integrate customer data and orchestrate actions to deliver a world-class customer experience. Building a 360^o view of customers, segmenting them and enriching them by mapping data across systems requires strong data discovery and visualization tools. Applying machine learning to personalize, experiment and optimize customer journeys requires an end-to-end enterprise data science platform

Being a strategic part of the Usermind platform and value proposition, its data science platform had to meet three key requirements:

1. It must be a white-label, fully embedded component of the Usermind product. Usermind must have the full code, rights and ability to build its own intellectual property in it over time. It's part of the company's core assets and valuation.
2. It must truly be enterprise-grade, since Usermind serves some of the world's largest and most demanding companies. Cobbling together open source tools wasn't going to cut it.
3. It must get to market very quickly to enable new revenue. Recruiting a team and building from scratch would result in prohibitively high time to market, upfront investment and risk.

Usermind required a proven, complete, web scale and enterprise grade solution – but as means to accelerate its own data science IP & team. There's a need to a ready-made, white-label solution, that is neither build-from-scratch consulting nor closed-source software licensing.

Case Study

“John Snow Labs assembled a multi-continent team of big data experts that allowed Usermind, within three months, faster than we thought possible, to build several significant components that are providing real value to our customers.”

“John Snow Labs brought expertise in a variety of technologies including ElasticSearch, Spark, JupyterHub, OpenScoring and Machine Learning, significantly accelerating Usermind's development and expertise.”

“John Snow Labs demonstrated their commitment to Usermind's success by responding gracefully and promptly to our evolving requirements, turning on a dime, allowing Usermind to meet our customer needs faster and more reliably than we ever expected.”

“Usermind would not hesitate to leverage JSL experts again.”

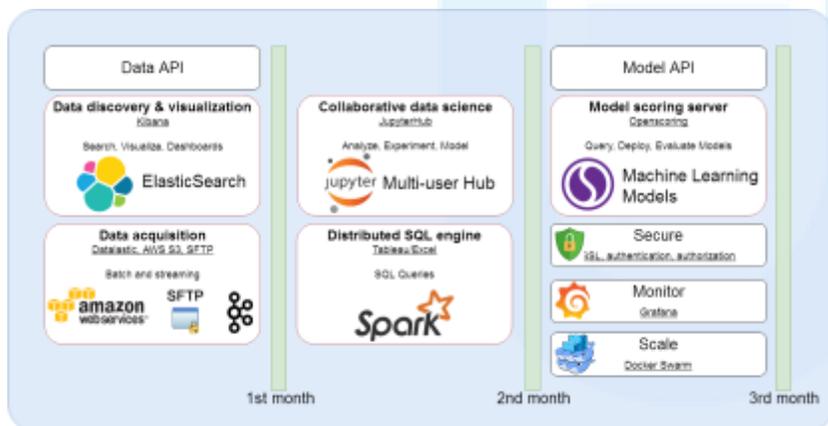
- Chris Jones,
Principal Engineer, Usermind

Platform

[John Snow Labs](#) delivered its Data Labs platform. The delivery process includes both the software product and a turnkey service that ensured Usermind was in production successfully and that its team was familiar and confident with the source code and operational aspects.

Platform capabilities:

1. Ingest batch or streaming data, via an API or files
2. Interactive queries and full-text search on all indexed data
3. Create, edit and share visualizations & dashboards
4. Web based notebooks for data mining and machine learning
5. Comprehensive & current Python and R data science libraries
6. Train, measure, optimize & visualize machine learning models
7. Distributed in-memory SQL & data pipelines using Spark
8. Deployment of trained models to a production-grade REST API
9. Docker containers for all components & full deployment scripts
10. Multi-tenancy support for every component, enabling Usermind to use one platform instance securely
11. Authentication & authorization for every component & API
12. Complete monitoring of each cluster and component



Delivery

The delivery project included knowledge transfer to the Usermind analytics team, so the two teams worked closely throughout. This included deploying the platform to development and production; security hardening; integration with Usermind's own monitoring services; development of customer data ingestion API's; and training.

As a result, Usermind could confidently go to production and deliver on a new revenue stream quickly, while building its internal capability to scale & evolve its new data science platform from now on.

Case Study

"John Snow Labs delivered a whole new revenue stream for Usermind within three months."

"John Snow Labs delivered a complete data science platform that enables Usermind and our customers to mine millions of records from heterogeneous systems and build models using R and Python machine learning and data mining libraries."

"John Snow Labs designed and built a lead conversion prediction model on this platform for our customer in two weeks."

"Our customers have better understanding of their customers' journey and how to improve it."

- Arun Theivendirarajah,
VP Product, Usermind