



predictive
partner

CASE STUDY

Jobvite Needed A Data Science Team To Differentiate

Jobvite, a San Francisco based recruiting and applicant tracking software company, is a well-established, top-tier, comprehensive recruiting platform that has been leading the industry for nearly a decade. Jobvite was aware that the effective use of its data would be key to their future success. Additionally, with recently acquired companies, there were new data sources to be integrated and leveraged. Today, Jobvite is effectively leveraging its data assets and differentiating its platform by applying artificial intelligence (AI) and machine learning (ML) in collaboration with Predictive Partner.

The Need: Product Differentiation Focusing On The End-User

The Jobvite team was well-versed in potential use-cases of AI and ML and had defined specific business challenges they were looking to solve. With their team's healthy obsession around user experience, it was no surprise that most of the desired applications of AI and ML centered around the product (building more intuitive and elegant solutions) and the activities of the customer success team.

One of Jobvite's priorities was to predict customer churn and alerting the customer success team to take specific, preventative actions based on in-product behaviors. Secondly, there was a desire to more effectively monitor and communicate the value of the platform to the customer which included leveraging the information within their applicant text messaging platform.

The Challenge: Scale Up A Data Science Team Quickly

The Jobvite team had leveraged both internal and external resources for artificial intelligence and machine learning in the past with only modest success. Most issues they had encountered could be blamed on the ineffective application of the algorithms. In other words, there was not a clear path to implementation and integration into the business of the data science work that had occurred and therefore, the value was unrealized.

Despite their desires around leveraging data better; Jobvite, with their keen understanding of the job market and salaries, knew that building a full-scale data science team would be exorbitantly expensive and take months to accomplish. Also, they had an awareness of the breadth of skills needed for an effective data strategy, so the idea of hiring just one or two data scientists was deemed insufficient.

The Solution: Predictive Partner

Once Jobvite clearly determined that building an internal data science team was impractical, Jobvite engaged with Predictive Partner, a data science firm. Predictive Partner now serves as Jobvite's outsourced data science team, providing a complete stack of experienced data science capabilities that include: Chief Data Scientist, Data Scientist, Jr. Data Scientist and a Software Engineer.

The Predictive Partner team works on a 2-week sprint schedule with output and results delivered every 90 days. Throughout the sprints, there is a steady stream of communication between the Jobvite team and Predictive Partner. A key element in the solution is continuously assuring that all data science work has a clear path to technical production, along with ties to meaningful business outcomes.

Highlighting the value of being business outcomes-focused, Zach Linder, Vice President of Analytics and Machine Learning at Jobvite, shared, "What we appreciate most about the Predictive Partner team is their drive to get actionable data into a production environment. Successful models will fail if the end-user never consumes the data. Predictive Partner knows this and helps work with our team to build a pipeline and process to implement all of their great work."

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-Zach Linder, Vice President, Analytics and Machine Learning at Jobvite

The Results: Quick Wins and Ongoing Value

The results were rapid, with three predictive algorithm models delivered within the first 90 days of the engagement. The speed of success was one of the most surprising factors for the Jobvite team.

By partnering with Predictive Partner, Jobvite has built a full infrastructure that allows for quick ideation, training, iteration, and retraining of data models. Predictive Partner provides a consistent way to pull data into other systems, making the models and updates immediately actionable.

The current work is focused on building an engagement model that tracks the value of every user, action, feature, and each customer. Additionally, there is now the ability to track value over time and quickly alert the Jobvite Customer Success team when the behavior starts to trend in a negative direction. Subsequently, the algorithm and the integrations provide Customer Success Managers with recommendations on how to mediate the situation and prevent churn.

Zach shared, “Understanding underlying data points that drive topline numbers (sales, costs, etc.) separate the great operation companies. We are on a path to better understand and predict churn. We will know what products reinforce stickiness. These are the types of metrics that will enable our management team to make more informed decisions.”

Additional deliverables thus far have included successfully leveraging natural language processing (NLP) to predict when a conversation is over. Also, by utilizing a blend of NLP and behavioral-based modeling the Predictive Partner team has been able to predict how long it will take for a representative to respond to an inquiry, based on the initial message. In combination, these algorithms enable better resource planning and optimization and ultimately, an improved customer experience.



We love working with Predictive Partner! The team is great, creative, and capable. We’ve already re-engaged with them and increased the work that they are doing for us.

-Zach Linder, Vice President, Analytics and Machine Learning at Jobvite

Conclusion: Success and Future Ambitions

The Predictive Partner approach has worked well for Jobvite and is providing a flexible, reliable solution with less risk and more redundancy at a lower cost than alternatives. Zach and the Jobvite team, having strong knowledge and respect for the potential of well-implemented data strategies and algorithms helped accelerate the timeframes for success.

The key to success is ensuring that equal priority is given to the successful deployment of algorithms as is to the development of the algorithms.

Jobvite plans to continue to address business challenges through data science and to leverage Predictive Partner to do so. Upcoming projects include more work supporting the Jobvite team’s ongoing obsession with improving the users’ overall experience as well as beginning to apply machine learning and artificial intelligence to additional areas of their business including opportunities for cost savings and revenue growth.

About Predictive Partner

Predictive Partner is a leading data science firm that solves critical business problems. Leveraging predictive analytics, data science, machine learning, and artificial intelligence, Predictive Partner achieves transformational business results for its clients. A team-based model with experienced Ph.D. data scientists allows clients to deploy and scale their data strategies with low risk and high dependability.



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