“I gain joy from delivering value for our customers, not tweaking the parameters of machine learning models,” said Rachik Laouar, Head of Data Science at The Adecco Group, UK & Ireland, a leading talent advisory and solutions company which provides temporary and contract staffing, outsourcing, permanent recruitment, outplacement, and career services. “Understanding what features are important, finding the right candidate, and giving them the opportunity to work for the best company they can work for, that for me is the goal. It’s not building the model, it’s the outcome. That’s what we’re going for,” he said.

Laouar’s desire to connect workforce talent with the organizations that need them is at the heart of The Adecco Group ethos, but they had an efficiency problem to solve. An evaluation of the traditional recruitment process had uncovered inefficiencies—human-driven processes that were costing the company millions of pounds. How could they use machine learning (ML) and artificial intelligence (AI) to reduce time and speed to fill open positions and improve their hiring attraction pipeline for client talent pools?

**Industrializing Their Data**

The existing operational environment calls for multiple manual interventions in the recruiting process, which is prone to both mistakes and human interpretation. Recruiters have to sift through high volumes of CVs finding it difficult to match the right candidates to the right job—to separate the grain from the chaff—and ensure the best candidates don’t slip through the cracks.

With recruiters working full throttle, it is easy for data-driven insights to remain hidden. Potential drivers of successful recruiting could be overlooked. “There are about 1,000 recruiters in this company, in the U.K. alone, and they receive about a million candidates a year,” said Laouar. “We had CVs and job descriptions, but none of them were parsed. We had to turn them into a digestible format before we could move to analysis,” he said.
Laouar’s first step was to build a data platform that would enable his team to make broader and better use of the data at hand. “The datasets we build should have 10, 20, 30, if not a hundred use cases in them,” said Laouar. From there, he began to look at the advantages to be gained by applying AI to that data.

**DataRobot as a Recruitment Accelerator**

Laouar had experienced success with DataRobot at a prior company, so he reached out for an initial project to incorporate MLOps and automate models to reduce the time it took for recruiters to fill jobs, while also building a more appealing pipeline for prospective talent. The project would leverage three metrics to gauge success:

- **Productivity** — The team was looking for DataRobot to enable their data scientists to increase productivity throughout the machine learning lifecycle and realize 3x gains in efficiency.
- **Accuracy** — The effort should make recruiters more effective in their efforts, driving a 5 percent reduction in the ratio of CV’s to recruiters. Delivering more accurate CVs to recruiters allows them to focus on the best candidates.
- **Interpretability** — New insights generated by the models should be readily incorporated to drive ever-better decision making by recruiters.

In simple terms, would the DataRobot models enable recruiters to sort through resumes more effectively? DataRobot and Laouar took a novel approach, “We have a CV and a job description. Based on that, can we predict the wrong person? Can we remove all the ones that we know will not get the job?”

Short answer: Yes. DataRobot’s best-performing model drove a 37 percent reduction in the number of CVs that had to be reviewed, filtering out those that were not the best match for the job, leading to a 10 percent productivity gain.

In just three weeks, DataRobot enabled the launch of 60 projects utilizing more than 3,000 models, far faster than had been possible using conventional approaches to AI deployment in the past.

The project also met the interpretability goal, with new insights and interactions driving enhancements. For example, the team found that CV length is an important factor in filtering, and shorter resumes should be given positive weight. They also learned quickly to factor in typos and grammatical mistakes as predictive indicators.

“That’s good for our candidates and it’s good for our company,” Laouar said.

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— Rachik Laouar, Head of Data Science at The Adecco Group, UK & Ireland

**Deployment Stats:**

- **60 PROJECTS & 3,000 MODELS IN 3 WEEKS**
- **3x PRODUCTIVITY INCREASE FOR DATA SCIENTISTS**
- **37% REDUCTION IN CVs TO REVIEW**
- **10% PRODUCTIVITY GAIN FOR RECRUITERS**
DataRobot a Match for Future Use Cases

Going forward, Laouar sees a number of potential use cases for AI. "We plan to embed AI across the entire process, from when a client requests a hire all the way through to the end of their engagement and redeployment," he said.

One use case would factor in data around projected revenues and profit margins, for example, leveraging DataRobot to match individuals with the highest earning potential with the highest-paying jobs.

The Adecco Group team is looking especially at use cases around DataRobot’s Ethical AI—the use of machine learning to measure and mitigate bias in support of diversity and inclusiveness. With many manual processes, bias tends to creep into human decision-making. In recruiting, this gives rise to obvious disparities.

They hope to leverage these capabilities within DataRobot to help recruiters and hiring managers better understand and manage their own unconscious bias around things like race and gender. The team also will be looking to ensure that the AI itself does not inadvertently perpetuate bias. “If there is bias, we can mitigate it,” Laouar said.

AI could also help to drive better communications throughout the recruitment process.

“Right now, the only feedback candidates get is whether or not they got the job. That’s like hitting a wall,” Laouar said. “They should know why we’re talking to them or not. Giving people closure is key, and that’s the core of Ethical AI: It’s all about explainability. That will be the next generation of CV matching.”

"We plan to embed AI across the entire process, from when a client requests a hire all the way through to the end of their engagement and redeployment."
— Rachik Laouar

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