

ParallelM / MLOps Sales Play - September 2019

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The below is an internal overview for Sales to understand when to position MLOps as part of DataRobot's offerings. In this document, you will find the background you need to understand if you should qualify, qualification questions and next steps if you believe you have found an opportunity.

Step 1. Where MLOps Fits into the ML Lifecycle

What is MLOps?

Machine Learning Operations (MLOps) technology and practices increase an organization's ability to deliver value from ML applications and services; providing a scalable and governed means to rapidly deploy and manage ML applications in production environments.

What is the ideal customer situation for MLOps?

MLOps and Governance is a particularly good fit where you find multiple data science teams creating and deploying machine learning models within an organization. The situation is even better for us when these models are built on different machine learning platforms. The variety across these options makes deploying and managing machine learning models difficult and centralized monitoring and governance impossible.

Who is the Target Buyer for MLOps?

Regardless of their title, the person you are looking for is responsible for the success of machine learning models deployed in production. The ideal customer for MLOps is on the IT/Operations side of the business. However, many companies have not developed roles for ML operations yet. Buyers may be leaders of data science teams or data science centers who need a centralized way to deploy and manage the models their team is developing. Decision makers may aslos be enterprise architects or ML architects who are build out the infrastructure for production ML operations.

What are the benefits of using MLOps with Automated Machine Learning?

Automated machine learning allows the business to create a large number of models to help improve business results and power predictive applications. These models still need to be managed and governed when running in production environments. By deploying and managing these models using MLOps, the organization has a single system of record for all AI projects running in the organization and can centralize its management and better coordinate resources.





Q. Is this a new (stand-alone) product for DataRobot?

Yes, this is a new product and yes, MLOps can be sold by itself. The MLOps and Governance product will address the issues faced by companies as they try to deploy, monitor, manage and govern models built on a variety of platforms and languages. We believe this will be sold to different buyers and will appear to a different set of potential clients.

Q. When will the DataRobot MLOps product be available?

DataRobot MLOps will be available in the 5.2 release, which is scheduled to be available in October 2019.

Q. What are the key features of MLOps in 5.2?

MLOps 5.2 is focused on the ability to deploy custom models and monitor them. We are also adding a tracking agent that can be deployed onto customer environments to collect model metrics information and report that back to our MLOps system. This will allow DataRobot to monitor models that are not deployed on DataRobot's prediction servers.

Q. In the meantime, can I sell what we have today from ParallelM?

No. We are integrating key capabilities of ParallelM into the DataRobot product. We are not selling the ParallelM product.

Q. What is the vision for the product?

The vision is that we will offer an industry-leading MLOps and Governance product that will allow our customers to deploy, manage and govern machine learning-based applications no matter where the models are generated or where they are deployed.

Q. Can I sell this to people who are using other machine learning platforms?

Yes, with the new MLOps offering, you will be able to sell that to companies that are using other ML Platforms or who are creating models using Jupyter notebooks and other methods.

Q. How is MLOps different from Model Management and Monitoring?

A. Model management is typically focused on models from a particular vendor and creating a repository of models. MLOps is focused on the entire production lifecycle including deployment, monitoring, lifecycle management and production model governance for models from a variety of systems.





Step 2: Qualification Questions

Tell me about your data science environment today...

Q. How many models do you have running in production today?

- a) None
- b) Less than 5
- c) 5 to 10
- d) More than 10

What are you looking for? 5 or more. They typically have to feel the pain of manual deployment using tools like Jenkins and scripts to realize that those tools will not scale so they can deliver hundreds of models in production. Once an organization has a few AI-driven applications up and running and they see the results, executives don't want a few more, they want a lot more.

Q. How many different data science teams do you have?

- a) One
- b) A few
- c) 5 to 10
- d) More than 10

What are you looking for? Ideally more than one. Once there are a few teams then deployment and management becomes an issue and is more likely to be centralized with IT. Even with a single team, however, different team members can be using different tools or languages, so follow up.

Q. How many different ML platforms or languages does your data science teams use?

- a) We have standardized on a single platform
- b) A few
- c) Whatever they want, we have a lot of different ones

Q. Do you have Data Scientists who are writing their own models in R or Python?

What are you looking for? More than one ML platform. Ideally, the company is using more than one platform or an ML platform plus some data scientists write their own code using R or Python. When you find this variety, then it is very difficult for the company to deploy and manage models in production.

How are you deploying your models today?

a) Manually





- b) We wrote some scripts
- c) We built our own tools
- d) We have bought a tool

What are you looking for? Anything they are doing is probably not MLOps. Even if they have purchased something it is probably just to deploy the model code with a REST endpoint. They will quickly run into the limitations of this approach as they try to build more complex applications that involve multiple models and orchestration.

How do you know if your production models are operating as expected?

- a) We don't. We just deploy and pray
- b) We just retrain periodically
- c) We custom coded some metrics
- d) We have a system to track model performance in production

What are you looking for? If they are not tracking or using their own code or tools, they will be impressed with our MLOps data drift and management capabilities. If they have a system, ask how the track models. Do they track data drift? If not, then they are a good fit as well. If the track data drift, ask if they track other model and infrastructure metrics. If not, again they are a good fit.

Q. How many models do you plan to have in production in the next 6 months?

- a) Less than 5
- b) 5 to 10
- c) 10 to 20
- d) More than 20

What are you looking for? Someone who has more than a few models that they need to have in production. Ask if they have any critical projects that have to be up and running soon. If so, how are they going to ensure the success of these projects? Do they have the tools in place to deploy, monitor, manage and govern their models running on their production environment?





Step 3: Next Steps

Q. My customer is asking about MLOps, what can I tell them?

A. Qualify the deal. If it seems like a good fit, then do an overview of MLOps. If additional resources are needed to demonstrate MLOps, please engage the platform team. If additional resources are needed at the business or executive level, please reach out to Sivan Metzger the Managing Director or our MLOps business to get some help.

Q. If a customer or prospect asks about pricing, what should we say?

A. Qualify the deal. If the are just kicking the tires, let them know we are working on the integration and will get back to them once that is finalized. If there is a real opportunity, then pricing questions should be directed to Sivan Metzger, Managing Director of our MLOps business. He can walk them through the pricing.

