

# Scenario-Based Interview

The Borealis AI team is looking forward to your onsite interview. The interview questions are essential to succeed in the interview process. So come prepared but have fun with it too. Borealis AI is all about big, bold ideas, collaboration, and determination.

During your interview, you will need to present how you will successfully lead an ML Platform team towards success within Borealis AI. Answer the questions within the scenario to help showcase how you can organize and execute your platform vision. You will also need to consider partnering with centralized ML Platform teams within RBC for a more significant impact.

Come prepared for a collaborative discussion with our product, engineering, and research teams throughout your presentation.

The scenario is designed to evaluate how you onboard a new team, build trust as a product leader, tactically execute your platform vision, and measure success. Pay attention to the engineering, product, and business details. The Common Platform team leads and the Director of Product will be interviewing you, whom you will be directly working with if you are hired.

Please feel free to reach out to Calvin Gerus directly if you have any questions ([Calvin.Gerus@borealisai.com](mailto:Calvin.Gerus@borealisai.com)).

# Scenario

For your interview with the Borealis Platform team Leads and the Director of Product

Interview Time: 1.5 Hours

## Platform Strategy and Development

Borealis AI builds ML products for many different business units across RBC. Each business unit operates slightly differently, and Borealis AI partnerships reflect this uniqueness across our teams. However, ML model development and the Borealis AI product development lifecycle follow a familiar path. Modern ML development teams experiment, build, and productionize ML products from ML platforms. Platform teams need to engineer the ML development lifecycle into orchestrated steps that can accelerate a products team's ability to deliver value to customers faster with more ease and at higher quality.

ML Platforms need scalable and reliable access to data. GPU infrastructure with comprehensive job scheduling keeping private cluster utilization high and public cloud-optimized. In addition, they need tools and services that help manage training pipelines, track, log, and report on experiments, and streamline the release of models to production for many flavours of production inference.

As the Technical Product Manager for the Borealis AI Common Platform team, you will lead the platform product vision for three groups of software engineers and architects specializing in Data, Infrastructure, and ML software development.

Consider the scenario of taking on the Technical Product Manager role where you will lead the platform product vision for three groups of software engineers and architects specializing in Data, Infrastructure, and ML software development. The ML platform you will be taking over is one and a

half years old and can be considered version 1 complete. The ML Platform has the following capabilities generally available to its users:

1. Simple data connectors to source data
2. A deep learning training framework (something like Pytorch Lightning)
3. Hyperparameter tuning service
4. Large GPU cluster with job scheduling and management
5. Centralized model inference service
6. Full Experiment Management Service

## Scenario Questions to Guide your Presentation

How would you organize your group of software engineers to optimize development?

What steps would you take to roll your team structure out and establish the best agile software development practices?

Describe your process in going from version 1 of the Common Platform to version 2?

Provide a vision of an ML platform that you think would help accelerate ML Development. Be specific on what ML Platform capabilities might be missing and what the developer's experience might look like based on the information from this case study and any external Knowledge.

How will you attract customers? And how will you make the platform core to the ML Development lifecycle?

Borealis AI partners with other ML Platform teams from Capital Markets and RBC Technology & Operations to help build a centralized ML Platform that can serve a broader range of Data scientists across the bank. Describe a stakeholder management strategy to help position our platform to provide value for the bank as a whole?

Ultimately, how would you evaluate success?