
















Machine Learning Operations Canvas (v1.1)

Product name:

Designed by:

Date:

Iteration:

Problem	Data	Model	Operations	Monitoring	Risk
Background  <p>Describe the context, including the problem and business need. Explain why this ML project is important</p>	Data Collection  <p>Identify the data sources and methods for gathering data. Include information on data frequency, volume and labelling process.</p>	Modelling  <p>Detail the algorithms and techniques used for building the ML model. Include information on feature engineering and selection.</p>	Inference  <p>Describe the deployment process for the model to make predictions. Include details on the infrastructure and environment used.</p>	Feedback  <p>Describe the mechanisms for collecting feedback on model performance. Explain how this feedback is used to refine the model.</p>	Fairness  <p>Evaluate potential biases in the data and model that could lead to unfair outcomes. Include strategies for identifying, measuring, and mitigating bias across the system.</p>
Value Proposition  <p>Outline the key benefits and the value the ML solution will bring. Highlight its impact on the business or users.</p>	Data Verification and Governance  <p>Explain the data management policies, focusing on quality, privacy, and compliance. Include mechanisms for data access controls, quality checks, and compliance monitoring.</p>	Metrics and Evaluation  <p>Specify the performance metrics and evaluation methods. Describe how the model's effectiveness will be assessed.</p>	Decision  <p>Explain how the model's predictions are integrated into decision-making. Detail any human oversight or automated decision systems.</p>	Lifetime  <p>Outline the lifetime after model deployment. This includes monitoring for model drift, conditions for retraining, and conditions for decommissioning.</p>	Explainability  <p>Detail how the model's decisions can be interpreted and understood by stakeholders. Include methods to enhance transparency and communicate decision-making processes effectively.</p>
Objectives  <p>State the specific, measurable goals of the ML project. Detail the expected outcomes and success criteria.</p>		Model Governance  <p>Outline the process for managing models versions including conditions from going from staging to production. Outline procedures for updating and retraining models.</p>			Security  <p>Identify risks related to data breaches, adversarial attacks, and system vulnerabilities. Include measures for safeguarding data and ensuring model robustness against malicious exploitation.</p>