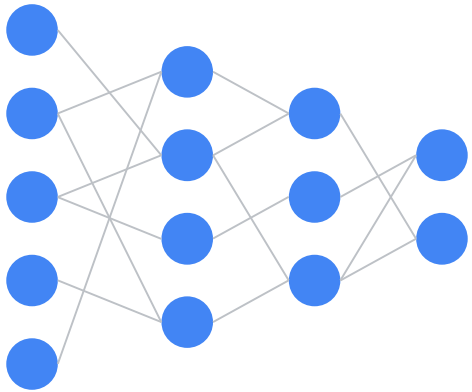
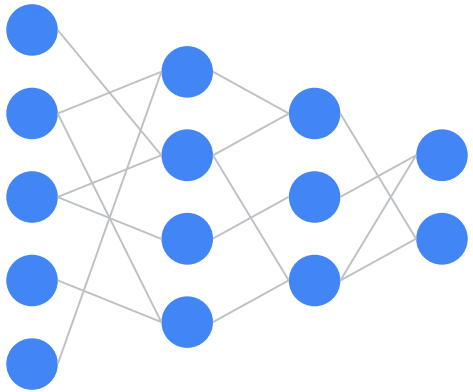
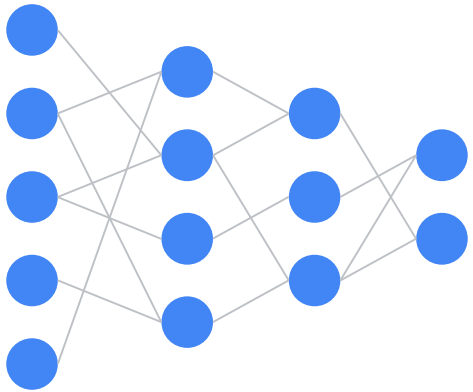
ML Lifecycle



Input Data

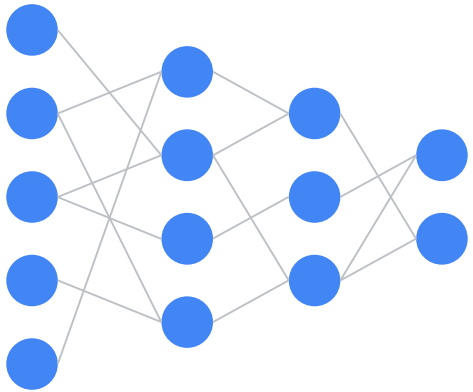


Input Data



Output

Input Data

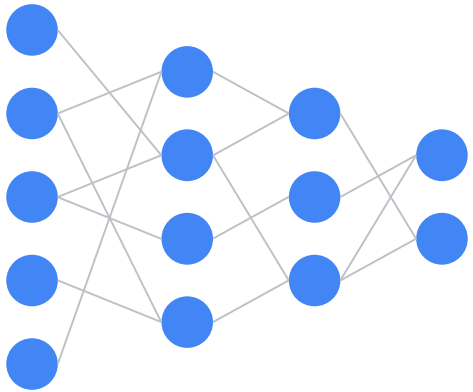


Output

Inference

Training

Input Data



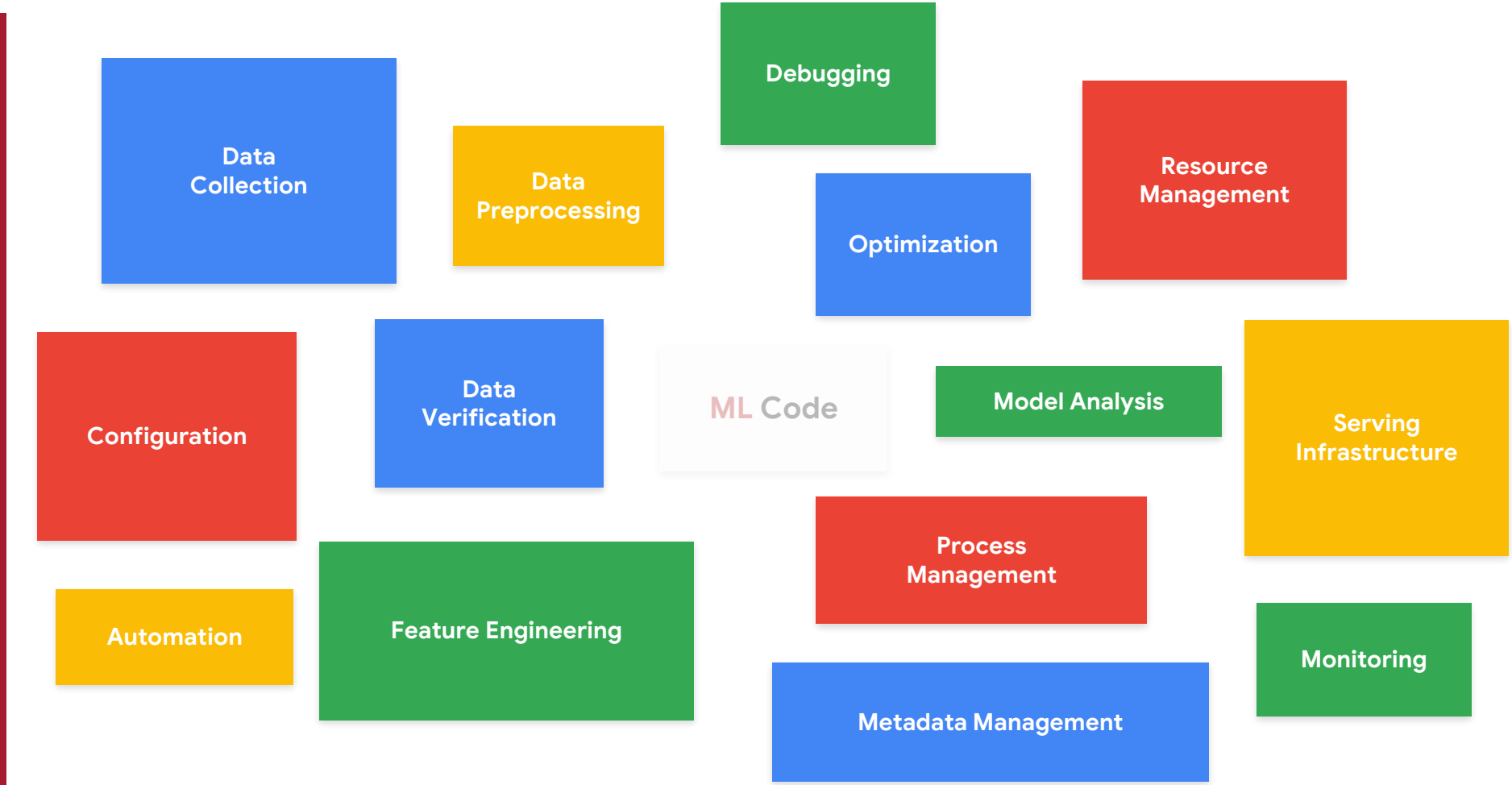
Output

Inference


Training
Input Data
Output
Inference


Training
Input Data
Output
Inference

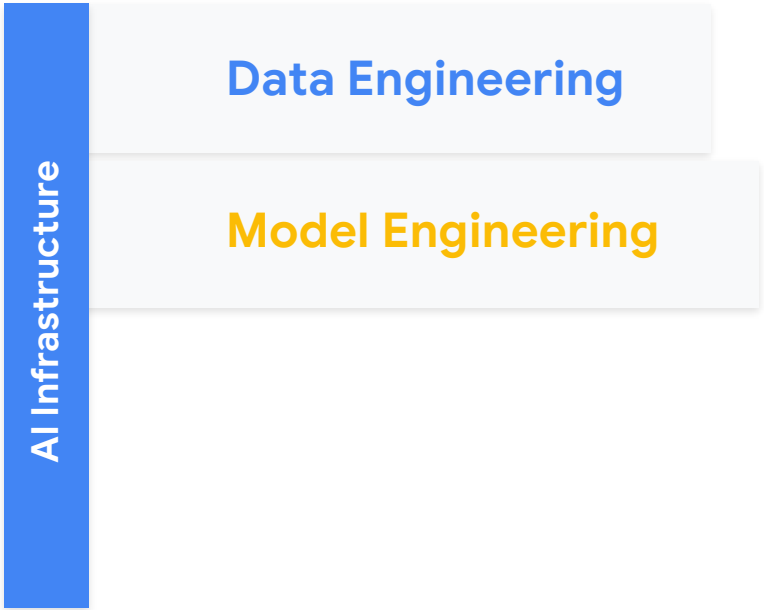
ML Code

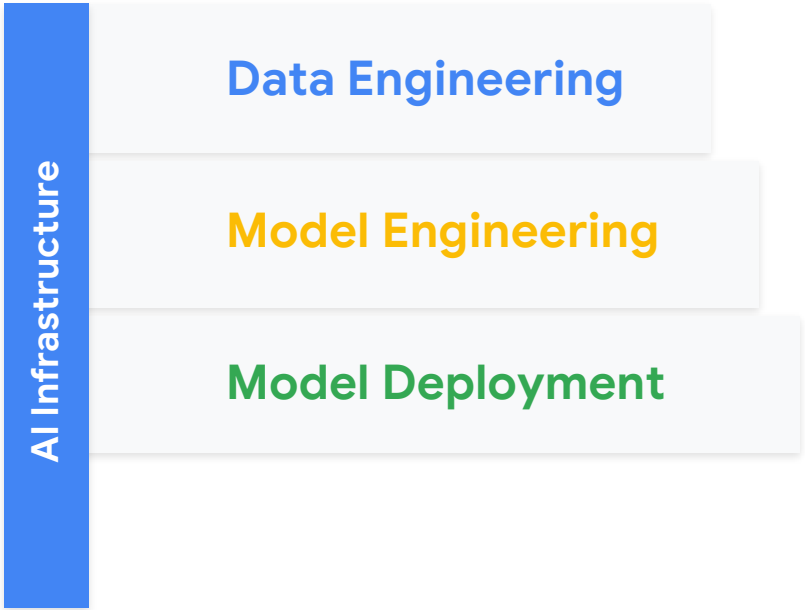

Debugging
Data Collection
Data Preprocessing
Resource Management
Optimization
Configuration
Data Verification
ML Code
Model Analysis
Serving Infrastructure
Process Management
Automation
Feature Engineering
Monitoring
Metadata Management

AI Infrastructure

AI Infrastructure

Data Engineering


AI Infrastructure
Data Engineering
Model Engineering


AI Infrastructure
Data Engineering
Model Engineering
Model Deployment


AI Infrastructure
Data Engineering
Model Engineering
Model Deployment
Product Analytics

Data Engineering

- Defining data **requirements**

Data Engineering

- Defining data **requirements**
- **Collecting** data

Data Engineering

- Defining data **requirements**
- **Collecting** data
- **Labelling** the data

Data Engineering

- Defining data **requirements**
- **Collecting** data
- **Labelling** the data
- Inspect and **clean** the data

Data Engineering

- Defining data **requirements**
- **Collecting** data
- **Labelling** the data
- Inspect and **clean** the data
- Prepare data for **training**

Data Engineering

- Defining data **requirements**
- **Collecting** data
- **Labelling** the data
- Inspect and **clean** the data
- Prepare data for **training**
- **Augment** the data

Data Engineering

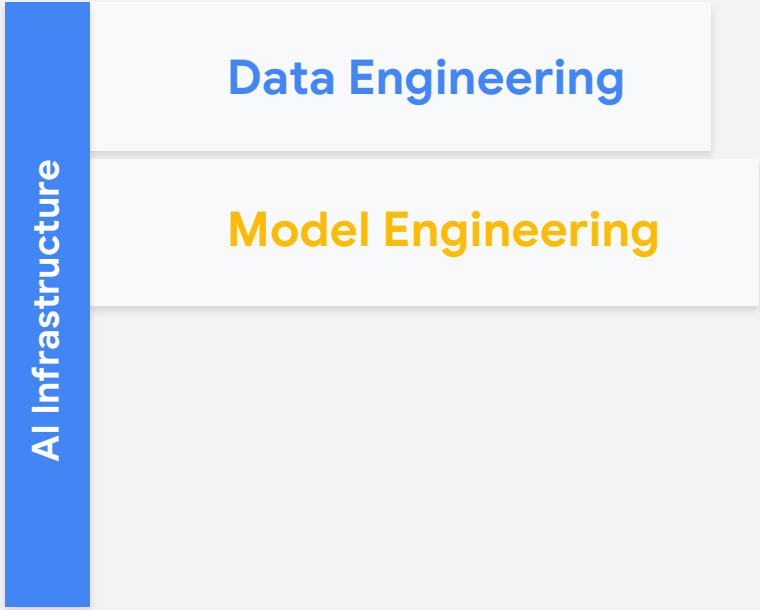
- Defining data **requirements**
- **Collecting** data
- **Labelling** the data
- Inspect and **clean** the data
- Prepare data for **training**
- **Augment** the data
- **Add more data**

Data Engineering

- Defining data **requirements**
- **Collecting** data
- **Labelling** the data
- Inspect and **clean** the data
- Prepare data for **training**
- **Augment** the data
- **Add more data**

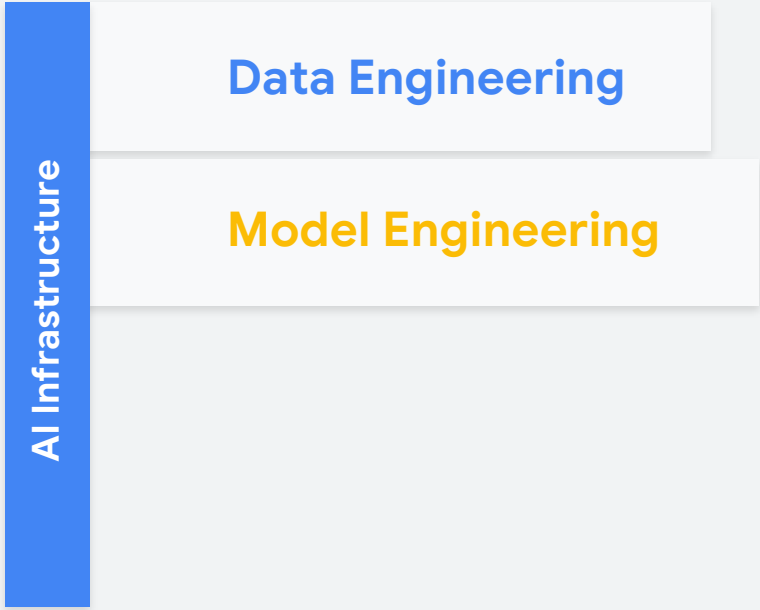
Model Engineering

- **Training** ML models



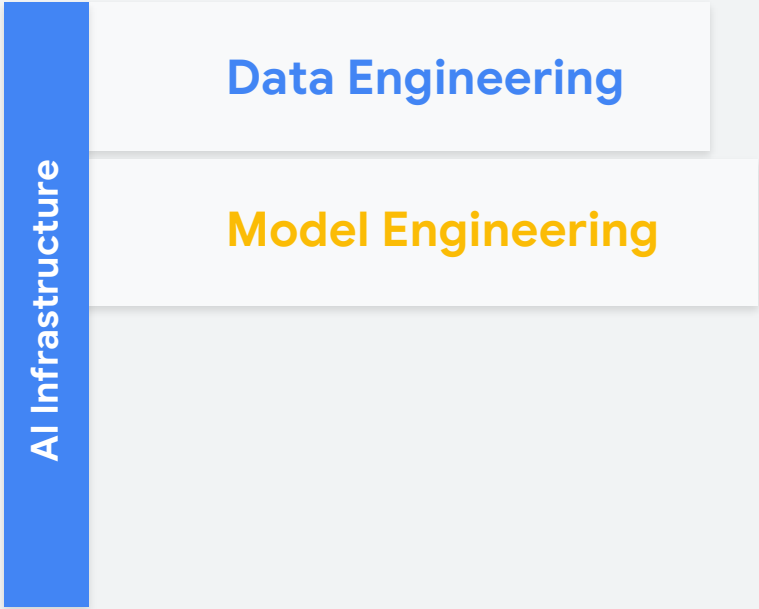
Model Engineering

- **Training** ML models
- Improving training **speed**



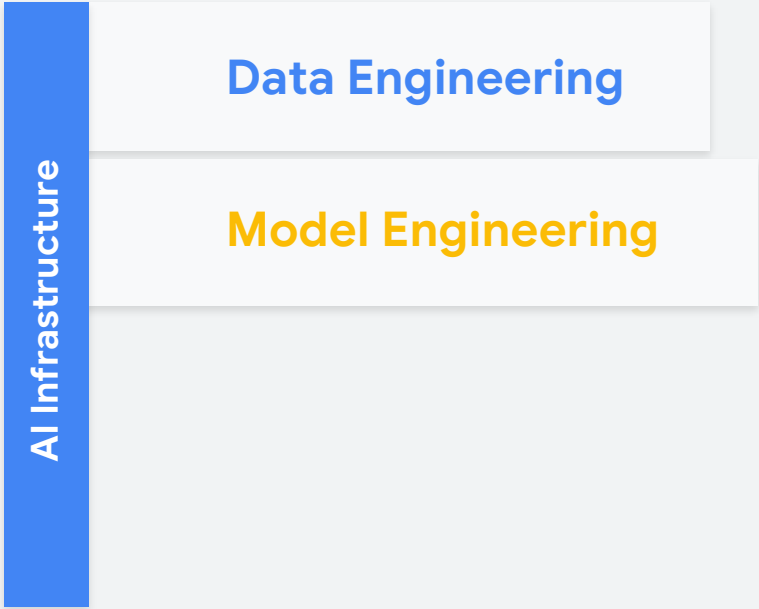
Model Engineering

- **Training** ML models
- Improving training **speed**
- Setting **target** metrics



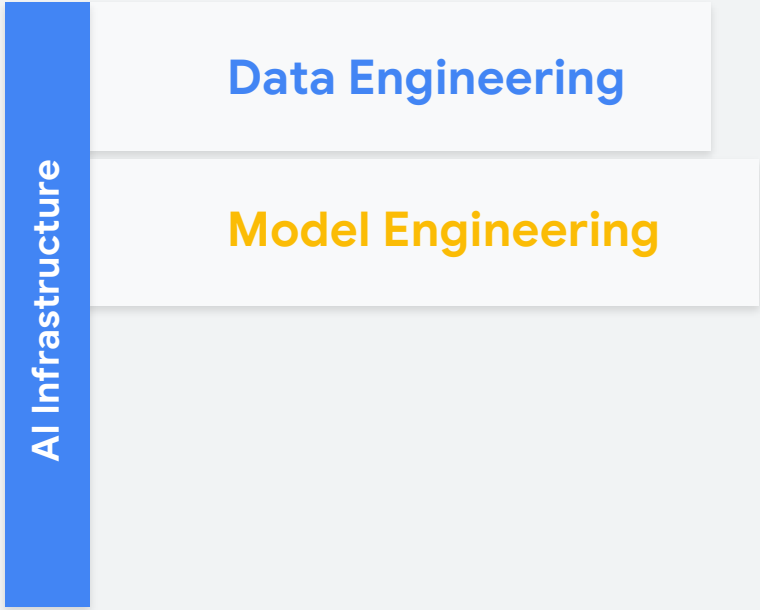
Model Engineering

- **Training** ML models
- Improving training **speed**
- Setting **target** metrics
- **Evaluating** against metrics



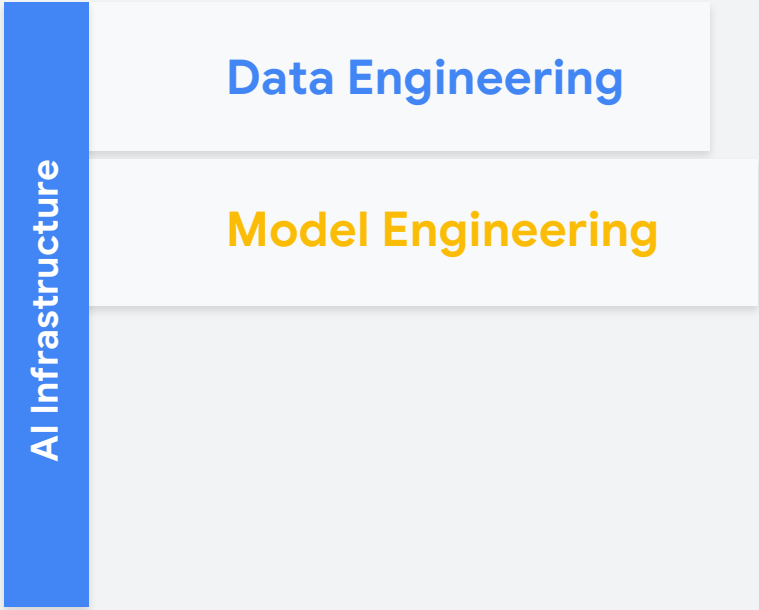
Model Engineering

- **Training** ML models
- Improving training **speed**
- Setting **target** metrics
- **Evaluating** against metrics
- **Optimizing** model training



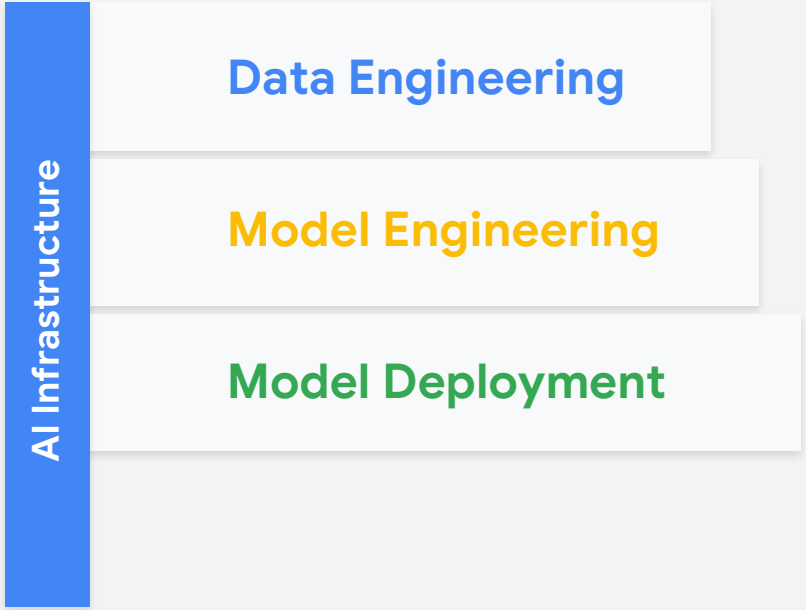
Model Engineering

- **Training** ML models
- Improving training **speed**
- Setting **target** metrics
- **Evaluating** against metrics
- **Optimizing** model training
- Keeping up with **SOTA**



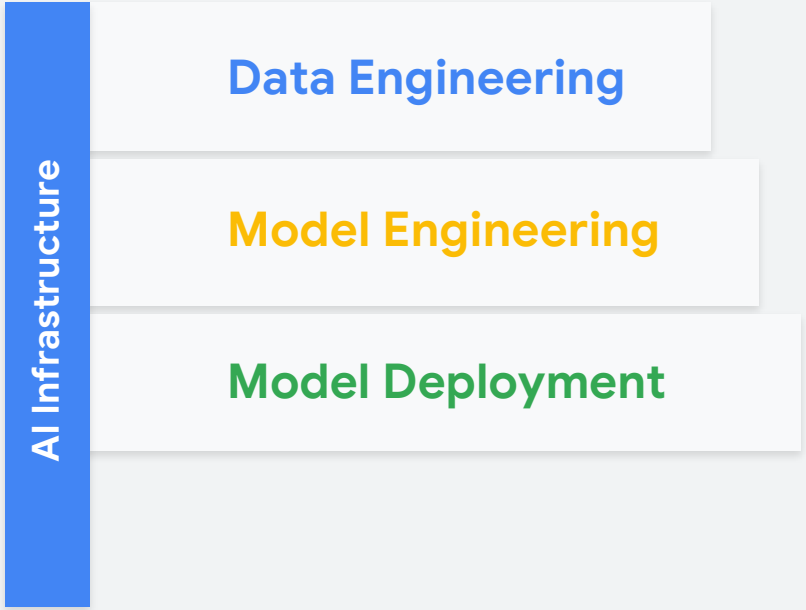
Model Deployment

- Model **conversion**



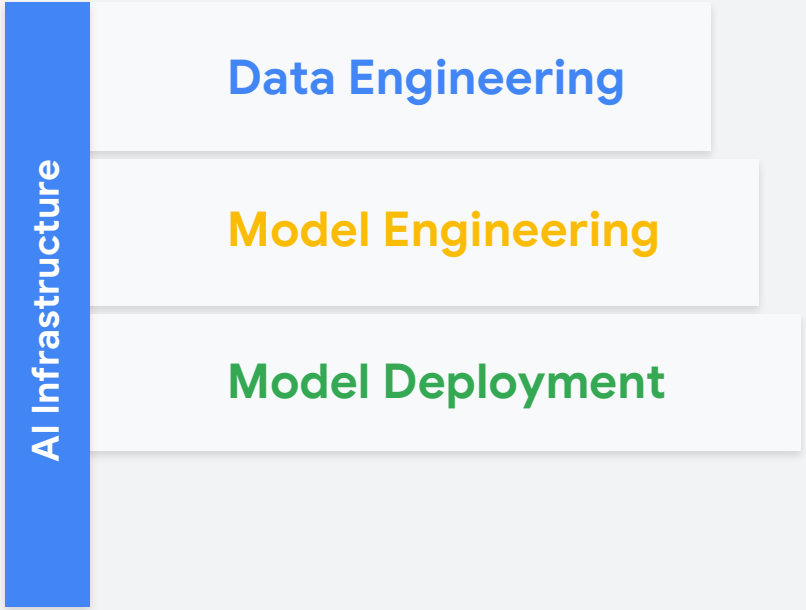
Model Deployment

- Model **conversion**
- **Performance** optimization



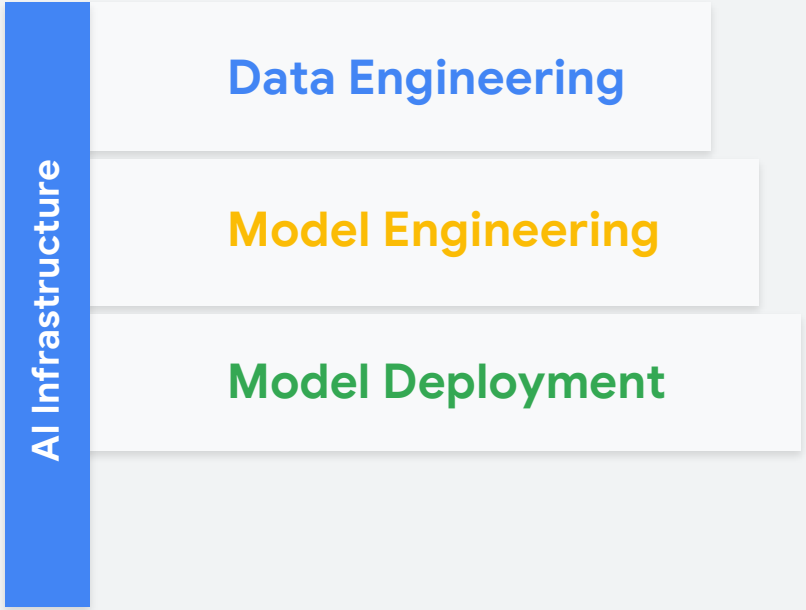
Model Deployment

- Model **conversion**
- **Performance** optimization
- **Energy-aware** optimizations



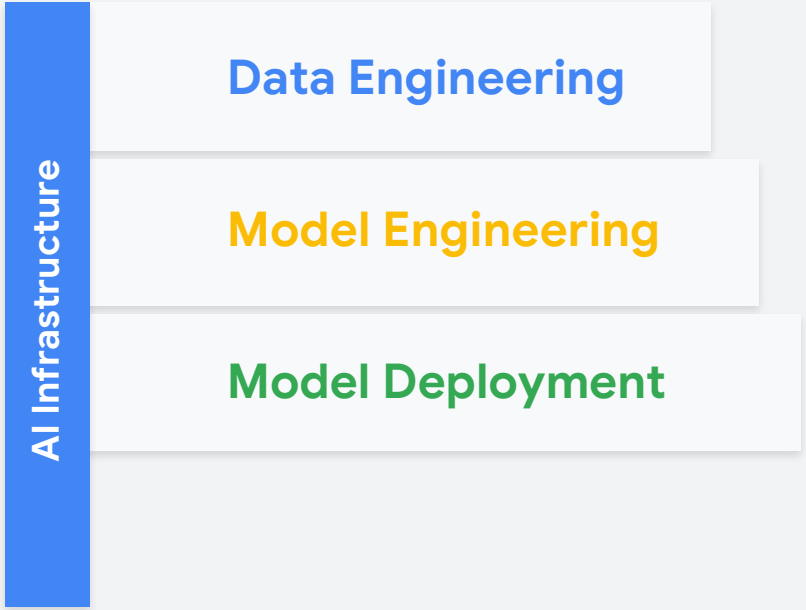
Model Deployment

- Model **conversion**
- **Performance** optimization
- **Energy-aware** optimizations
- **Security** and **privacy**



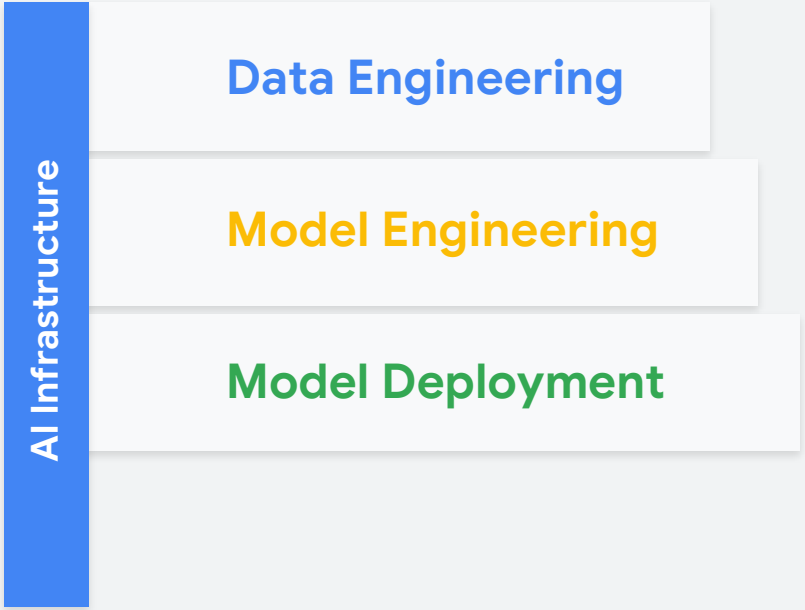
Model Deployment

- Model **conversion**
- **Performance** optimization
- **Energy-aware** optimizations
- **Security** and **privacy**
- **Inference** serving APIs



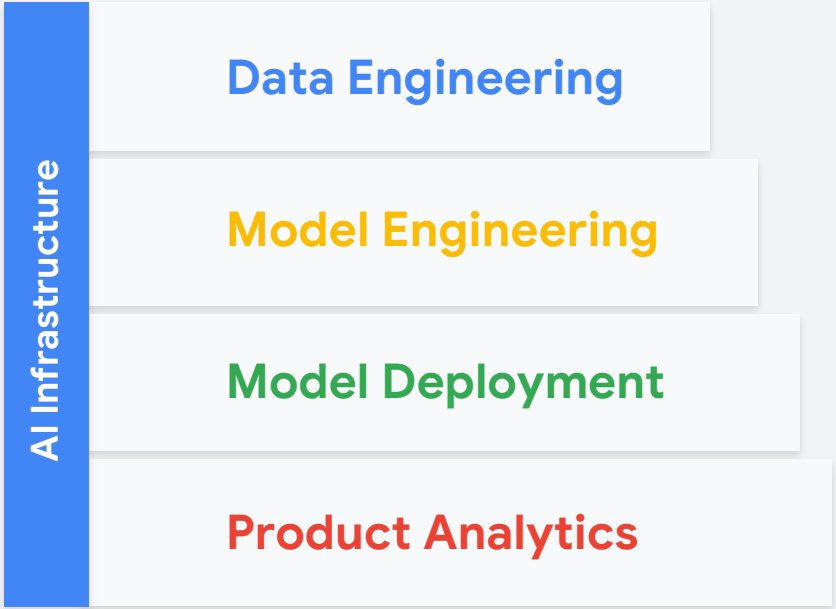
Model Deployment

- Model **conversion**
- **Performance** optimization
- **Energy-aware** optimizations
- **Security** and **privacy**
- **Inference** serving APIs
- **On-device** fine-tuning



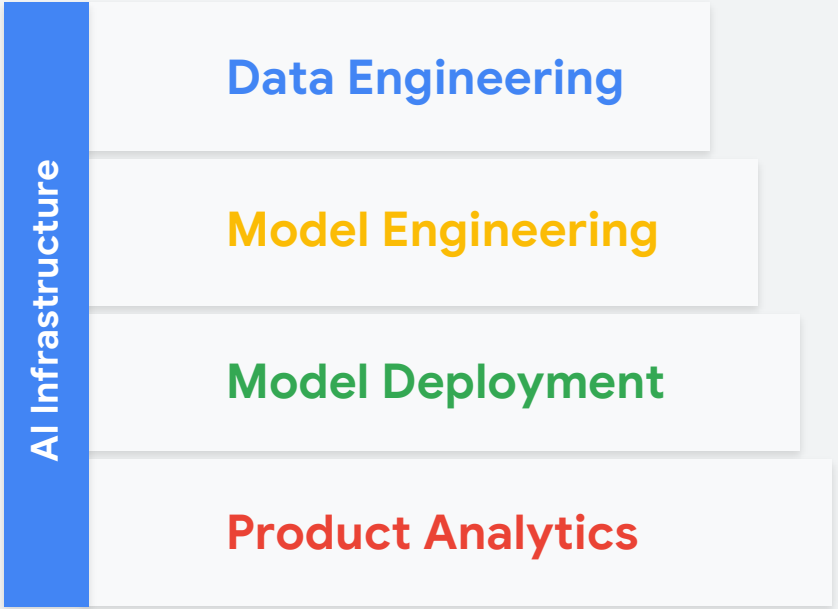
Product Analysis

- Dashboards



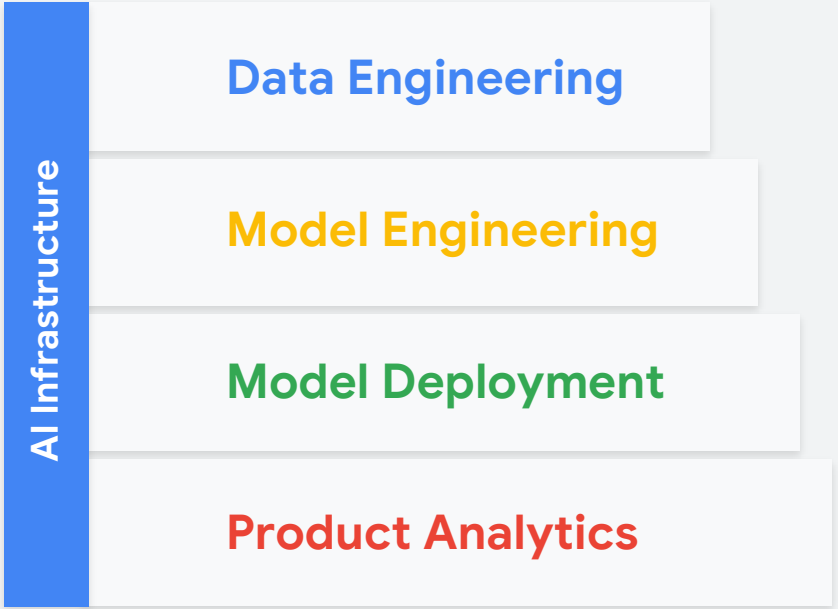
Product Analysis

- Dashboards
- Field data **evaluation**



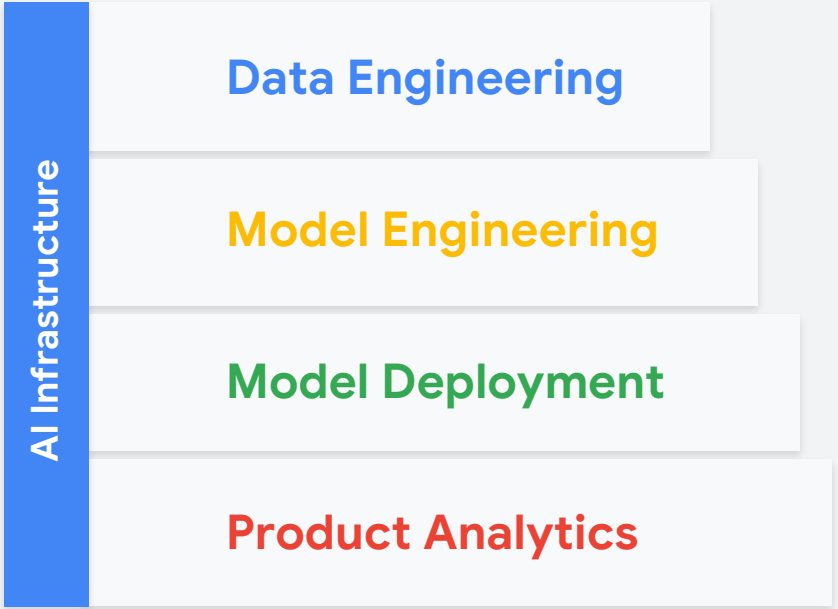
Product Analysis

- Dashboards
- Field data **evaluation**
- **Value-added** for business



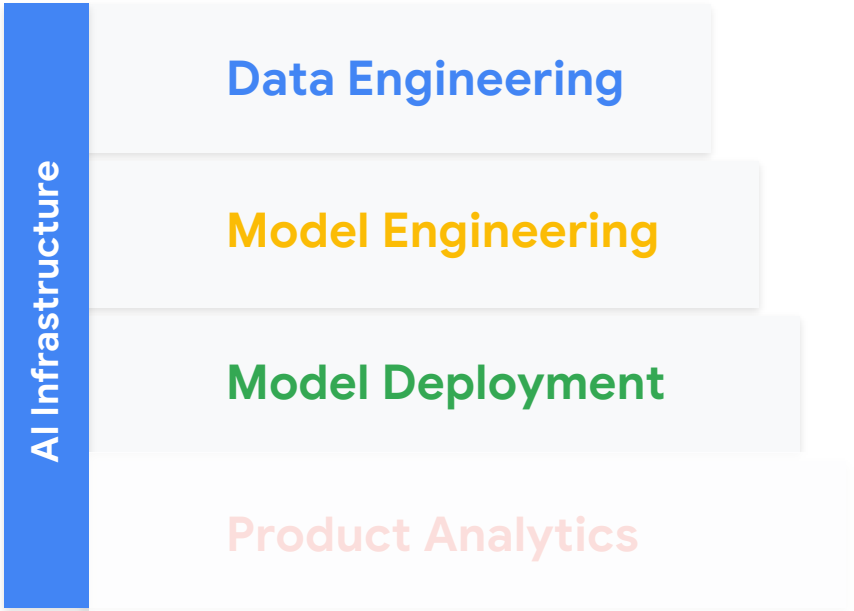
Product Analysis

- **Dashboards**
- Field data **evaluation**
- **Value-added** for business
- Opportunities for **advancement** and **improvements**

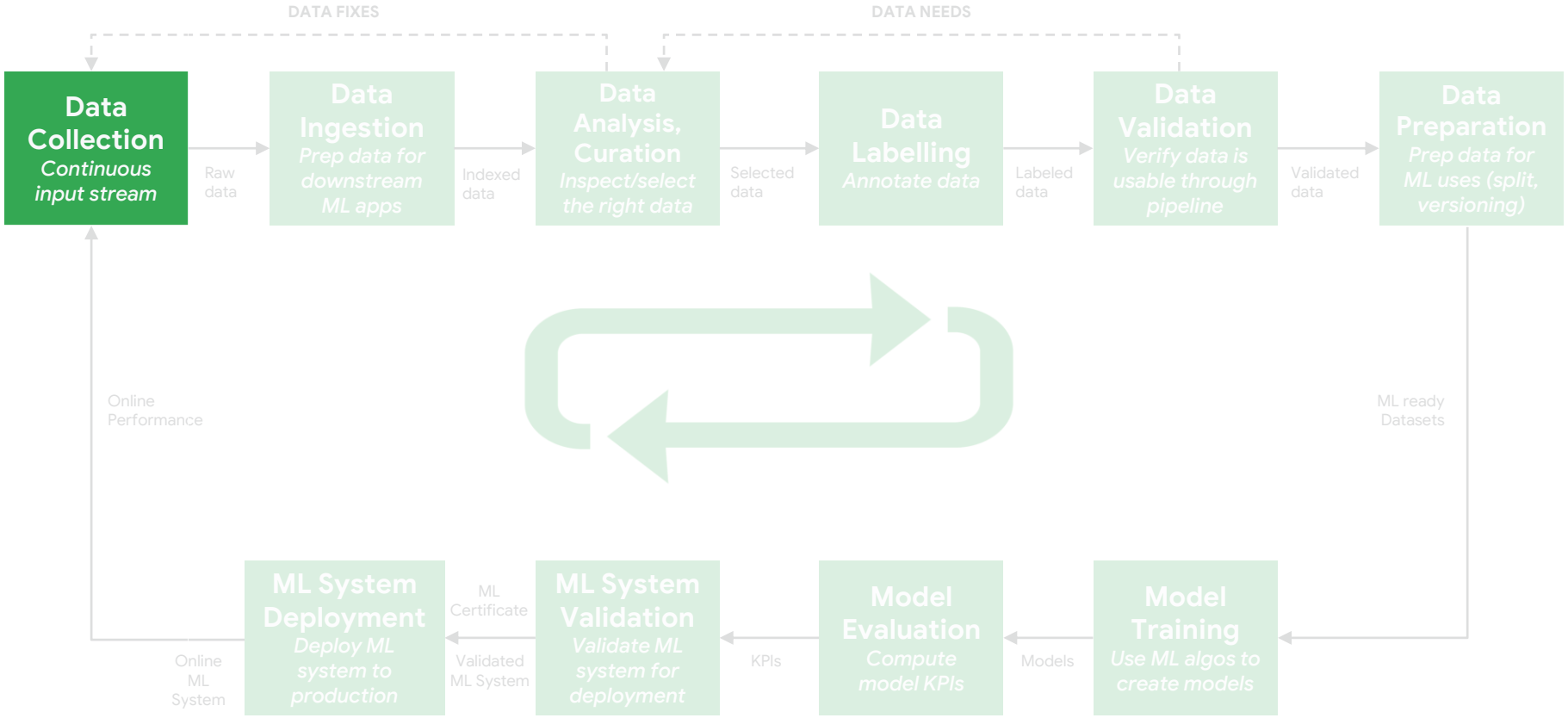


Focus in TinyML

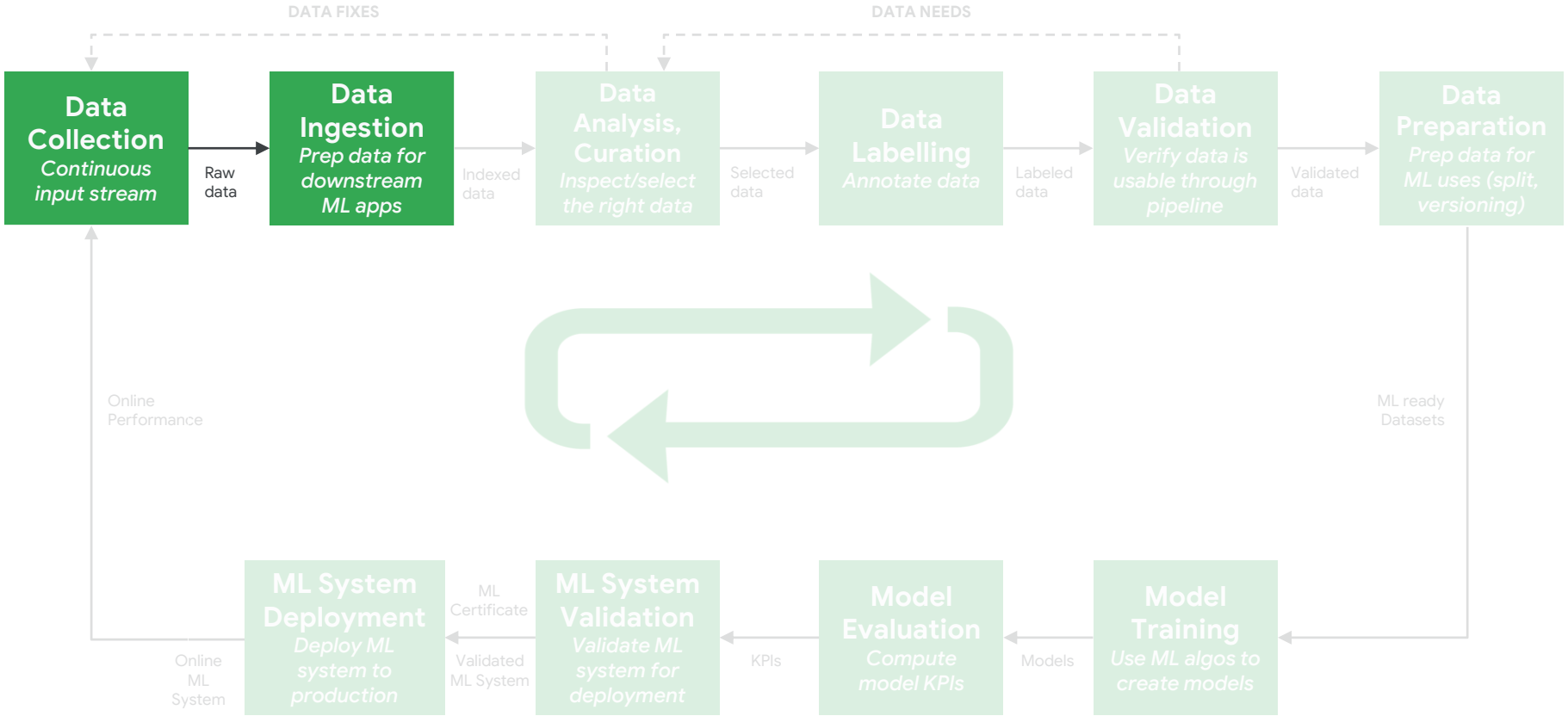
Focus in TinyML



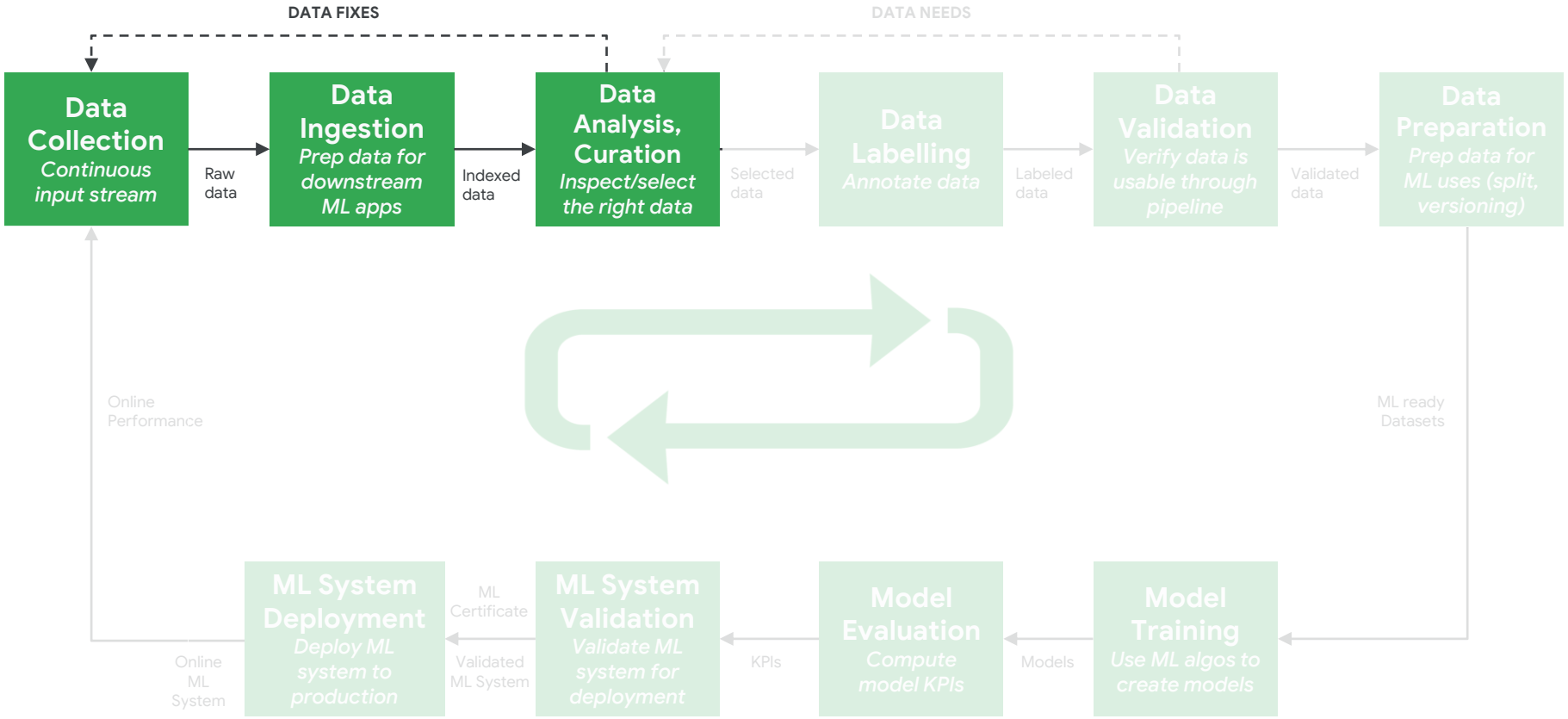
Life cycle of ML



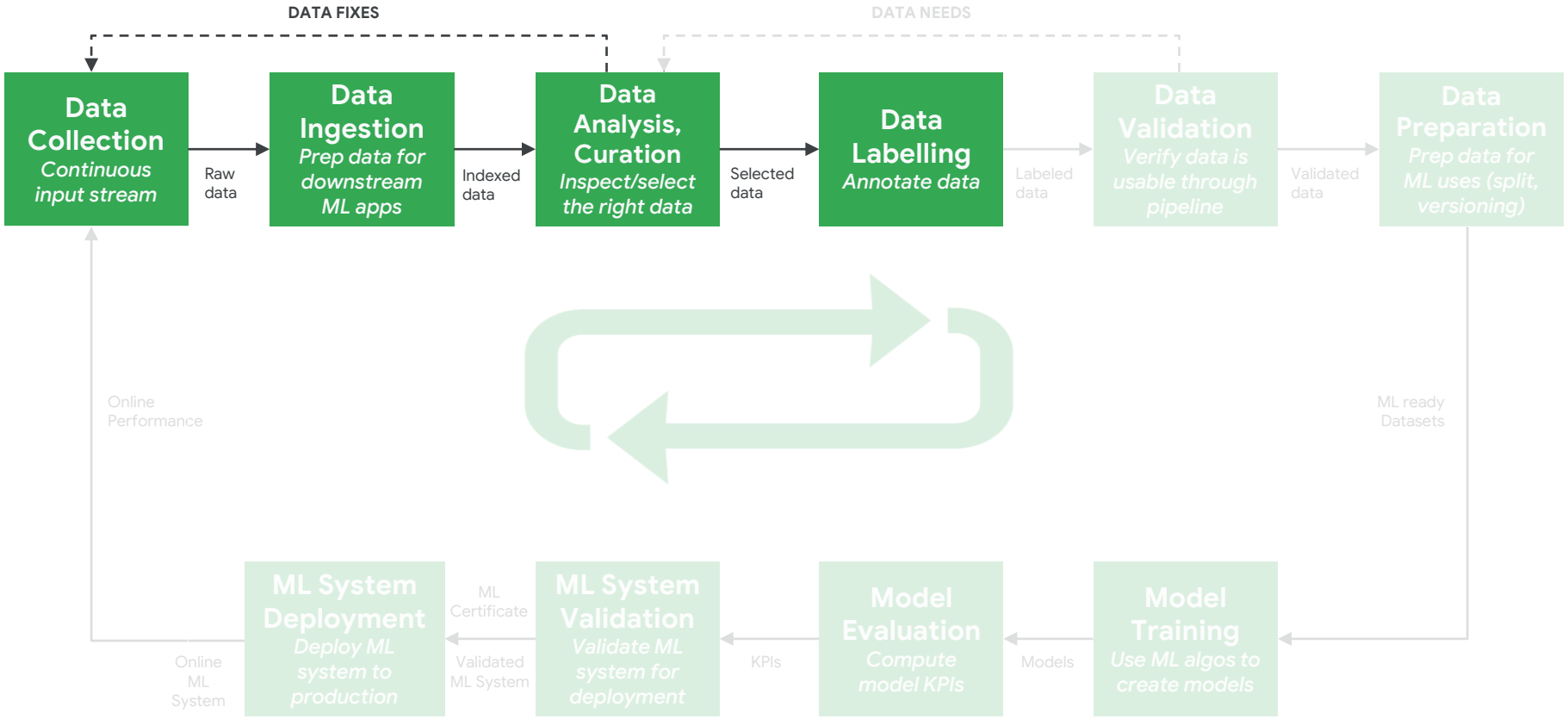
Life cycle of ML



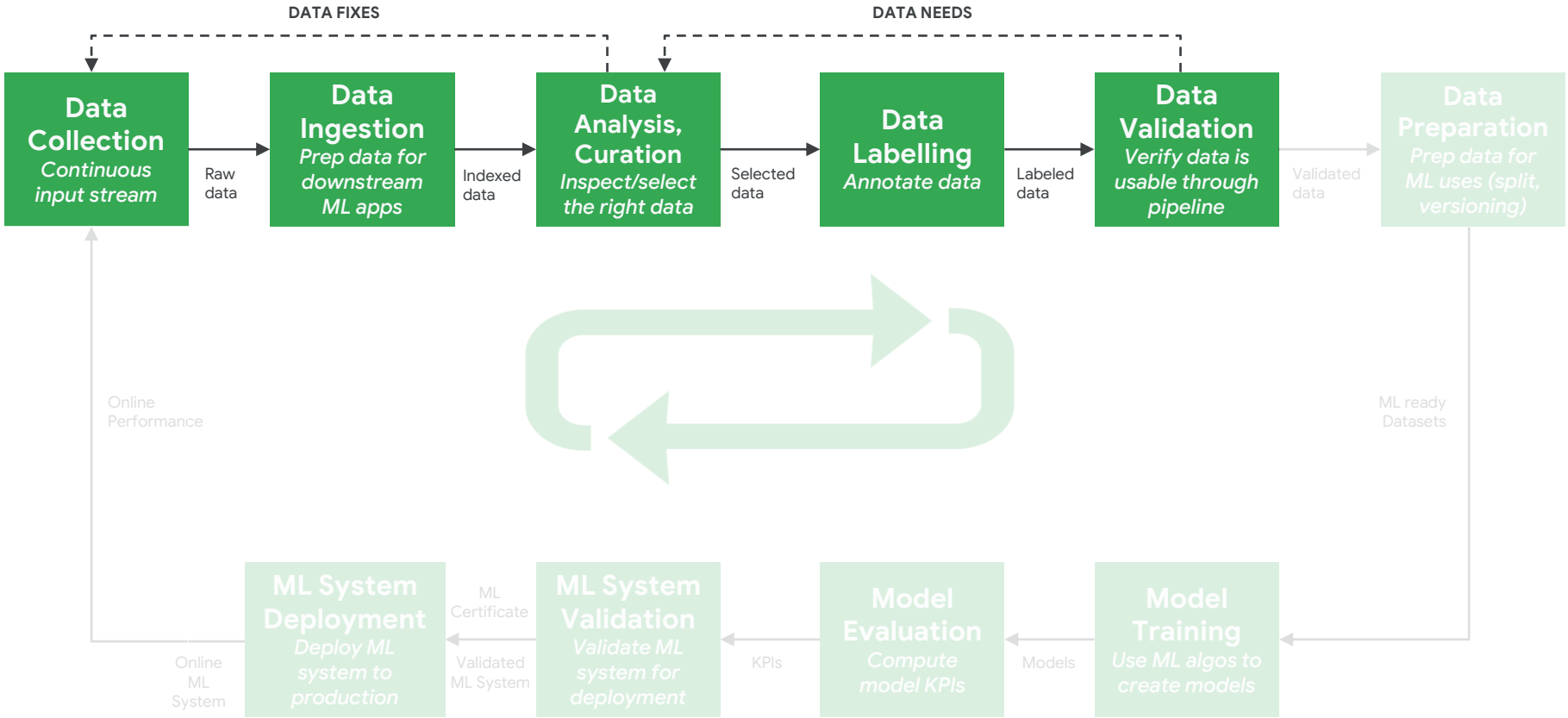
Life cycle of ML



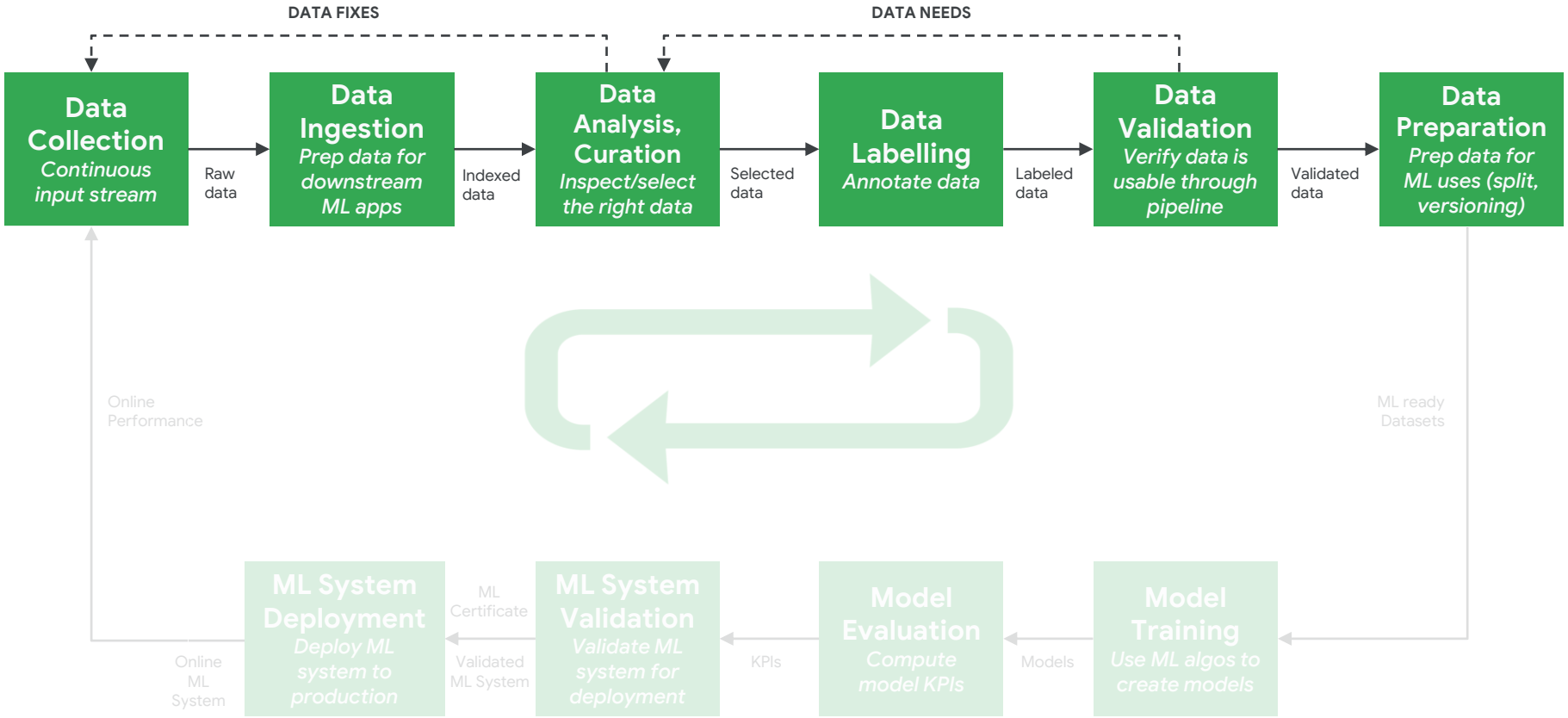
Life cycle of ML



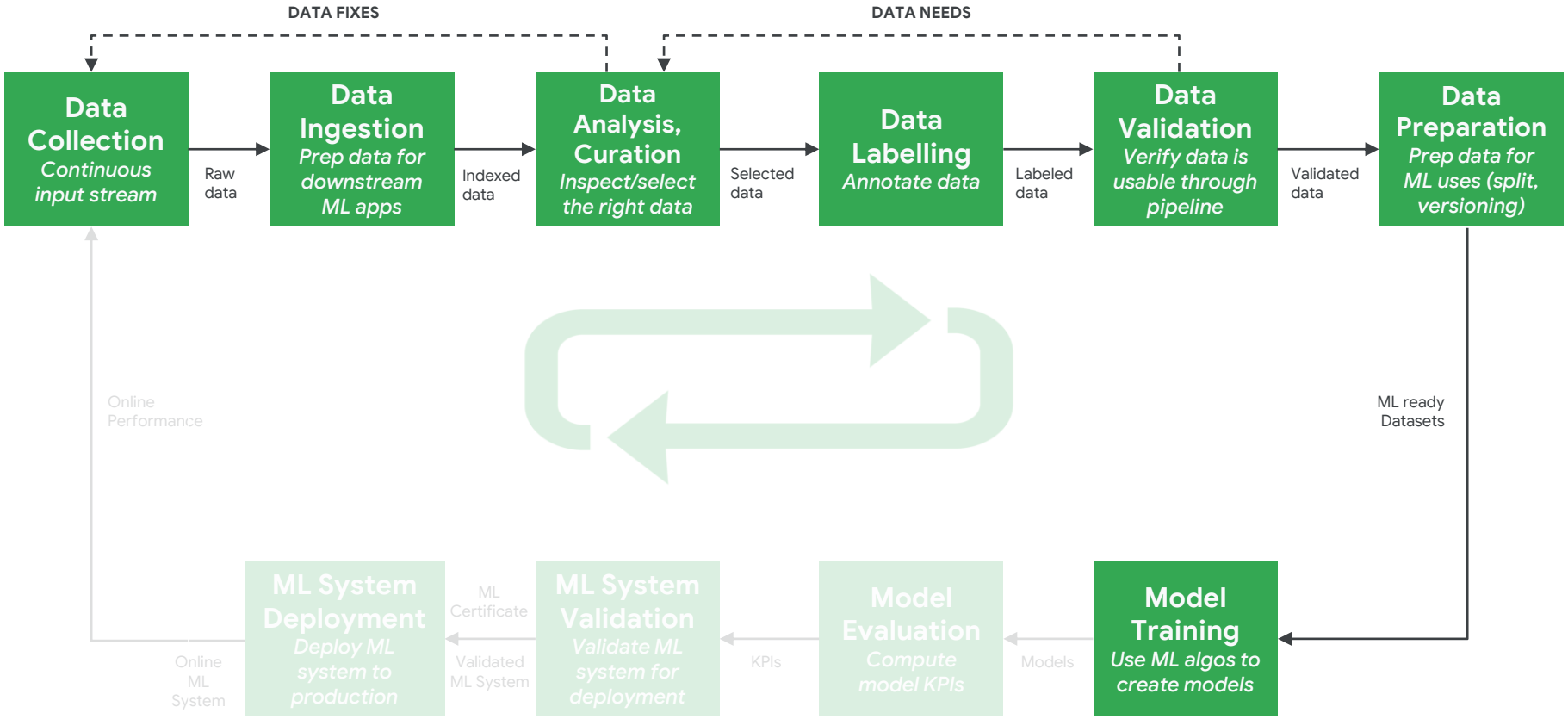
Life cycle of ML



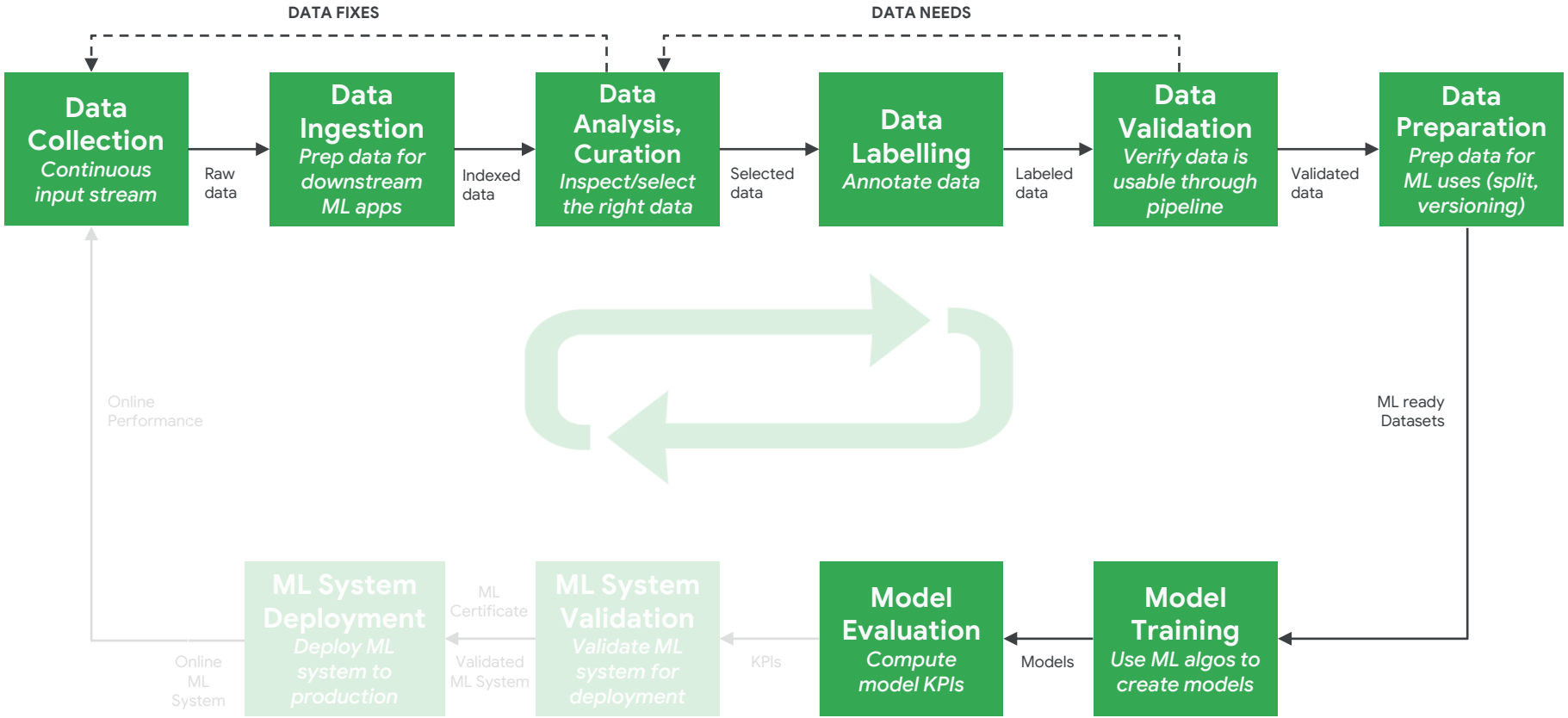
Life cycle of ML



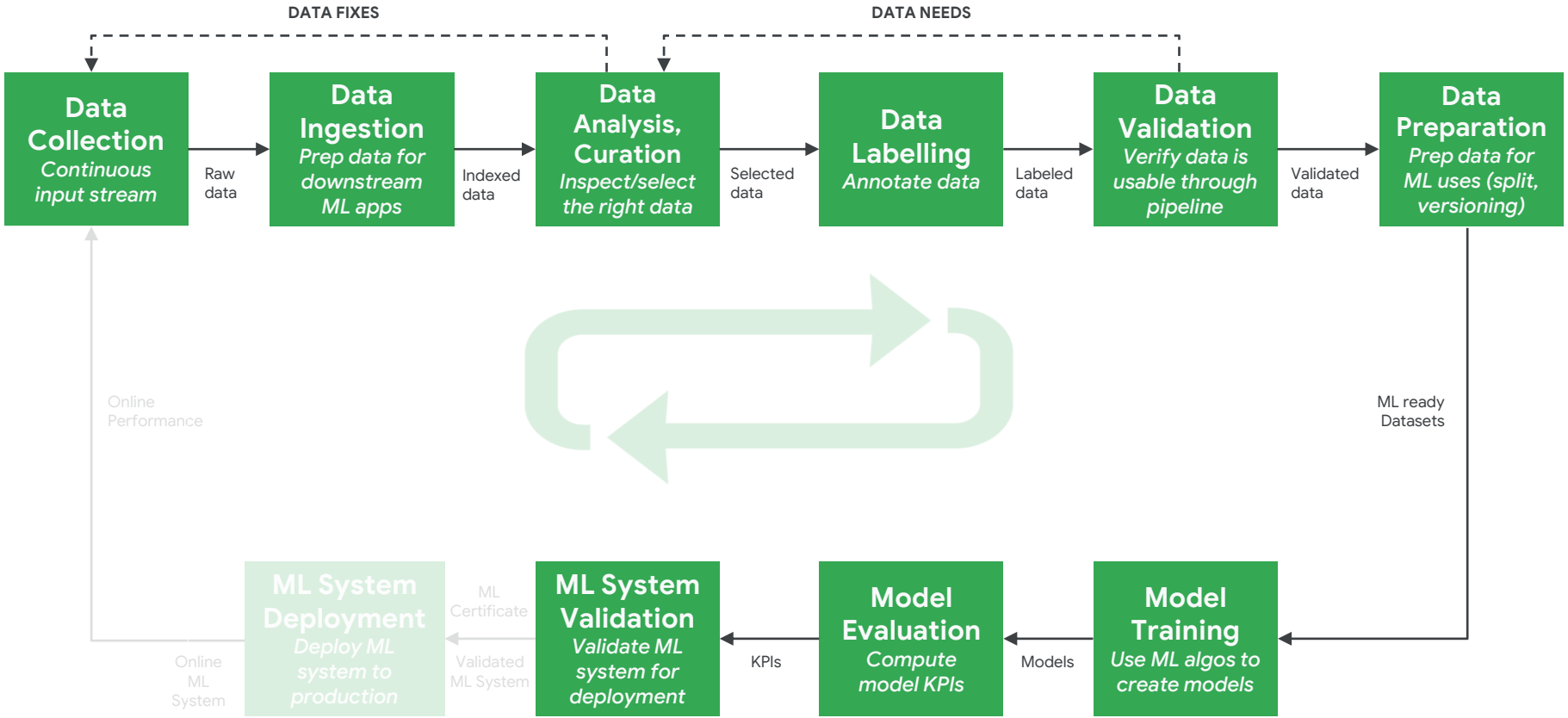
Life cycle of ML



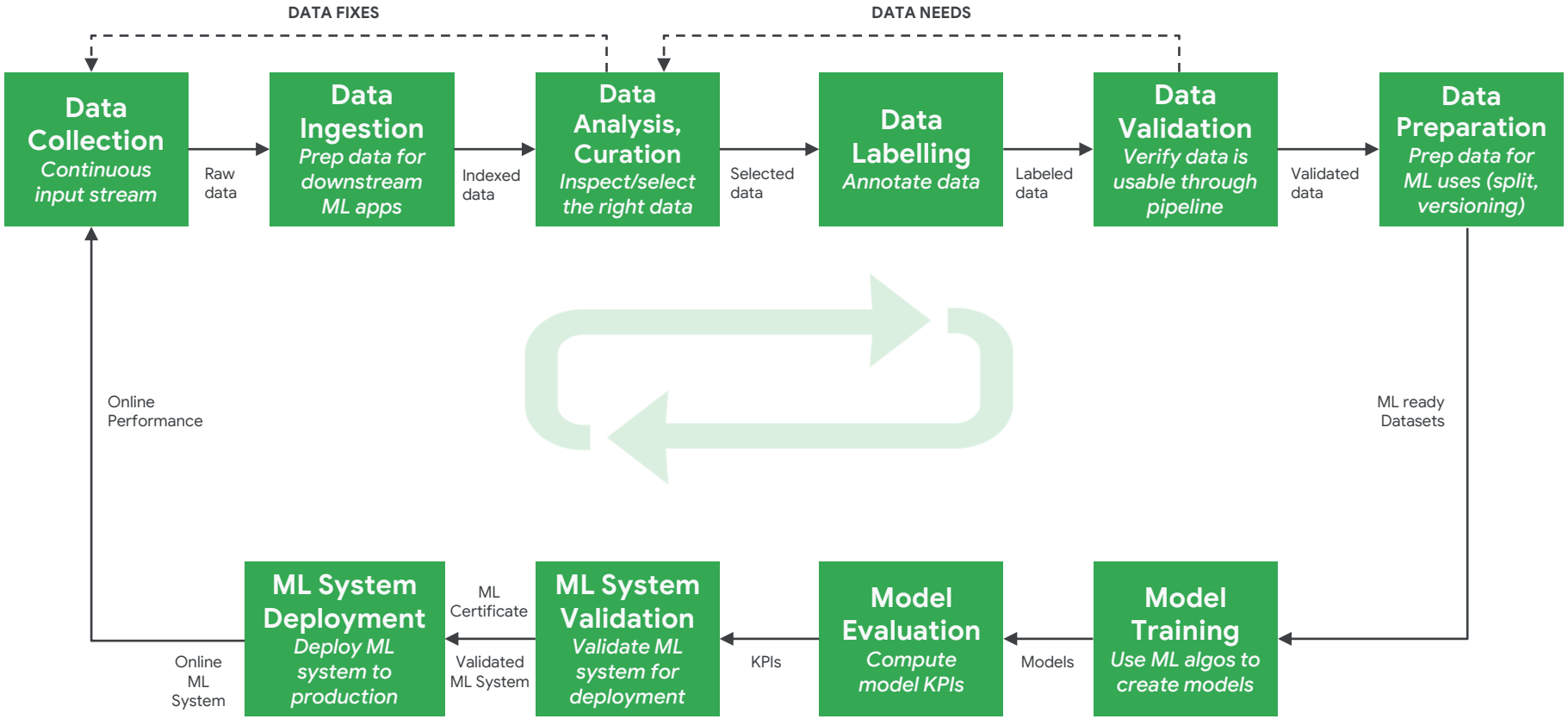
Life cycle of ML



Life cycle of ML



Life cycle of ML



Life cycle of ML