Optimize
Infrastructure
with Our
Transformer
Fault Diagnostics
Solution





Presenting our Fault Diagnostics solution, a major step forward in electrical infrastructure maintenance.

This intelligent system precisely **detects and analyzes faults**, **reducing downtime** and **operational risk**. Traditional methods are often manual, delayed, and inaccurate, leading to asset failures, compliance issues, safety risks, and financial loss. Our solution integrates **Azure Machine Learning**, **Azure Kubernetes Service**, **Azure Blob Storage**, and **Azure Data Lake** for real-time fault identification. With **Azure Custom Vision**, **Segment Anything Model** (**SAM**), and **OpenAI's CLIP** (**Contrastive Language-Image Pre-training**), it ensures fast model training, pixel-level accuracy, and contextual understanding, adapting swiftly to new or damaged components using limited annotated input.

**Gartner** projects **global IT spending** in the power and utilities sector to reach \$249.1 billion in 2025, a 10% increase from \$231.2 billion in 2024. This growth is expected to continue with a 10.3% CAGR, reaching \$385.6 billion by 2029.





## **Core Benefits**



Data-Driven Insights



Asset Management



Early Fault Detection



Optimized Resource Allocation

## **Impacts**

2X
Minimized
Downtime

60%

**Cost Efficient** 

5X

**Time Savvy** 

40%

Improved Reliability 4X

Enhanced Decision-Making





