

SIEMENS ADVANTA

Grid maintenance optimization

Kärnten Netz GmbH

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Grid maintenance optimization



KNG - Kärnten Netz GmbH

Distribution grid operator for electricity and natural gas in Carinthia, Austria



CLIENT CHALLENGES

Improve efficiency and lower efforts for maintenance workload with constrained budgets



OUR SOLUTION

Built an application for outage prediction and maintenance simulations



CLIENT BENEFITS

Optimized asset management prioritizes maintenance on assets with highest failure probability

>90%
Prediction accuracy
for failures at
named assets



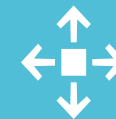
Electricity & Gas



Annual turnover € 1.3 bil



Carinthia, Austria



Grid covering
400,000 customers
18,000 km of power lines
65,000 poles
7,000 transformers



Leading electricity
and gas distribution
network operator in Carinthia

THE CHALLENGE

Advancing sustainable energy system while coping with high maintenance efforts and constrained budgets

1

Increased grid complexity with growing amount of distributed energy sources

2

Outage risk due to environmental factors and higher stress on assets due to integration of fluctuating sources

3

Budget constraint, avoiding / delaying infrastructure replacements



OUR APPROACH

By identifying, integrating, enriching and interpreting data, we co-created a decision support system to predict future outages

1

Identification of influencing parameters and available data sources

2

Integration & enrichment of own data with available external data sources

3

Co-creation of outage prediction application based on AI & domain expertise

THE IMPACT

Optimized asset management prioritizes maintenance on assets with highest failure probability

1

Optimized utilization of maintenance resources due to dynamic inspection schedules

2

Prediction accuracy for future failures at named assets >90%

3

Smart route optimization for workforce crew as spin-off for added value



>90%
Prediction accuracy
for failures at named assets

Why is Siemens Advanta the best partner for this sort of project?

Benefit from our deep **Domain Knowledge**

Siemens Advanta brings unparalleled operational technology (OT) experience in power utilities to the table, key to capture the essence of domain-specific challenges and work out effective solutions.

Leverage unique **IT OT Integration Expertise**

Cross-functional, multi-disciplinary teams with IT, OT, and analytics skills allows for a lean setup to achieve big value with limited budgets.

Profit from our powerful **Ecosystem**

Siemens Advanta agnostically integrates across various platforms, drawing on an extensive, global partner network to deliver tangible business outcomes for your projects.

