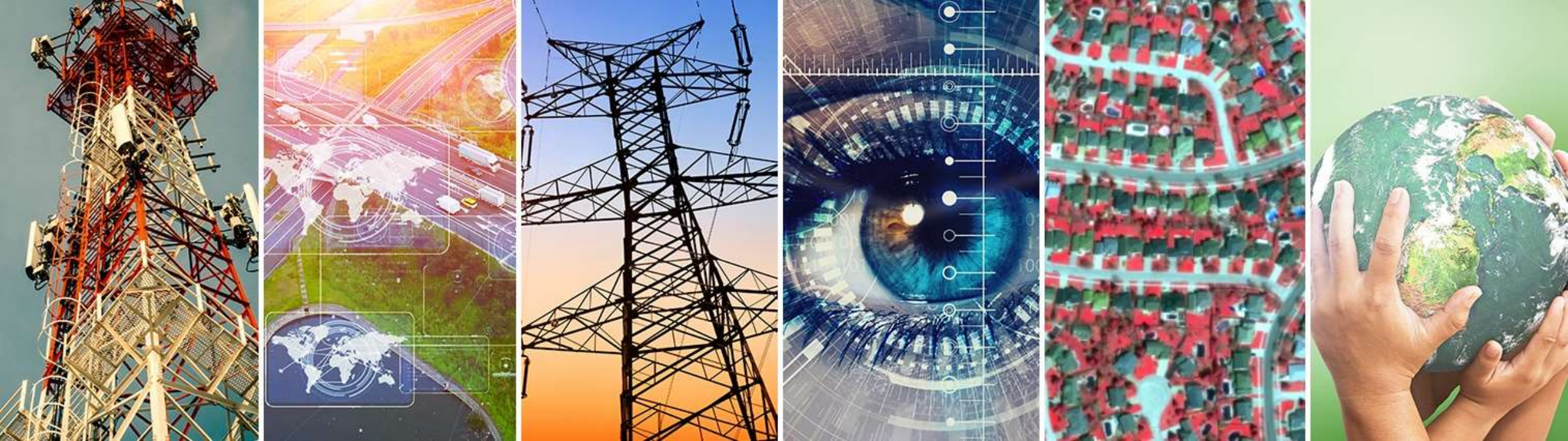




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Harnessing the Power of Digital Transformation and Geospatial Data Analytics for Utilities Asset Management

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What's Trending in the Utility Industry?



Accelerated
use of Cloud
and AI/ML



Grid
Modernization
and Automation



Cybersecurity
for Critical
Infrastructure
Management



Enhancing
Customer
Engagement

Source: Gartner Report

Use Cases



AI-based Predictive Maintenance for Critical Infrastructure Management

Leverage ML algorithms to analyze extensive data collected from sensors

Identify patterns basis historical records and operational parameters

Predict equipment failures before they occur

Drone and sensor based inspection of pipelines to detect possible safety hazards

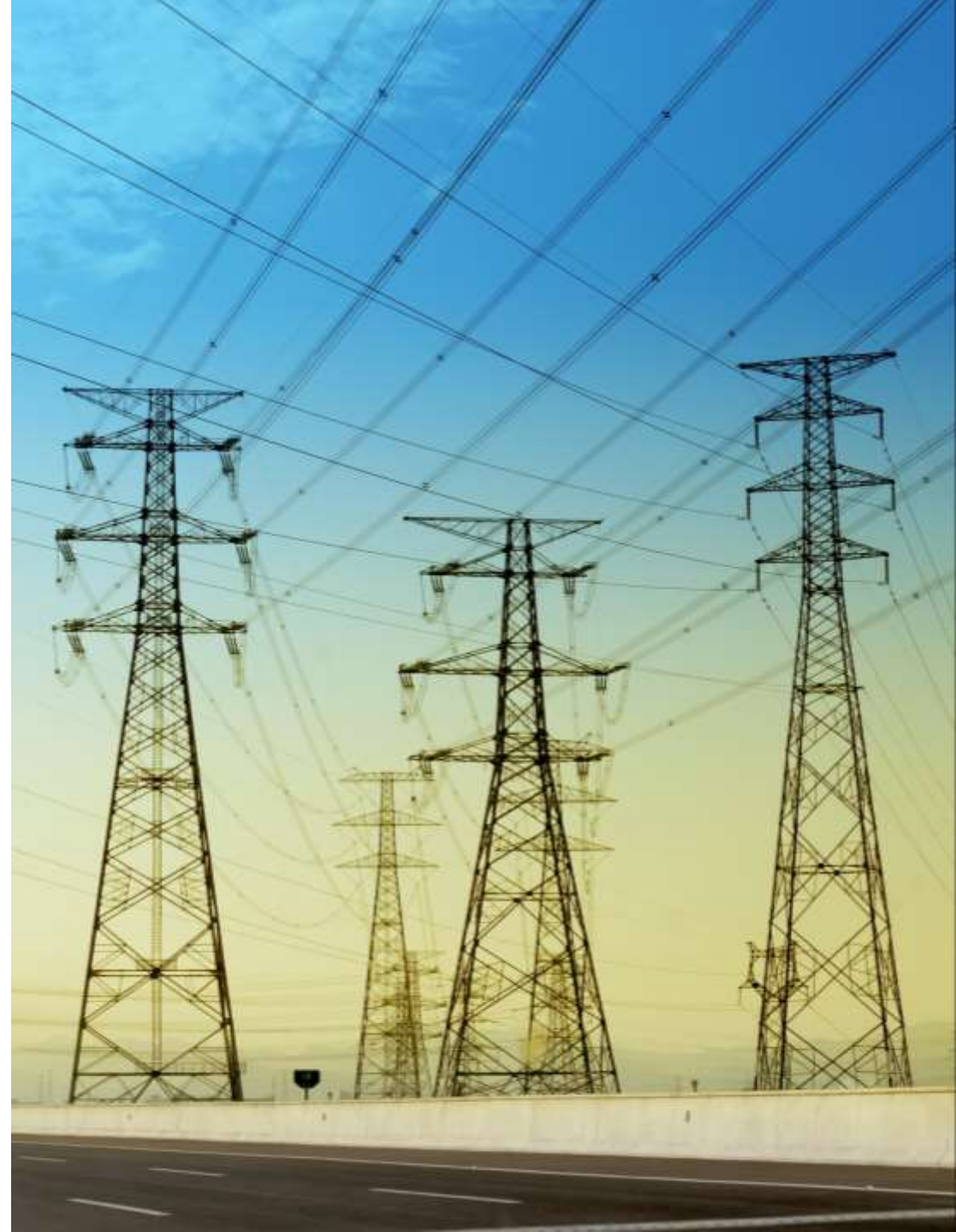


AI Forecasting Models for Optimizing Resources

Conceptualize and transform virtual replicas (digital twin models) of physical assets using AI

Optimize maintenance strategies with continuous monitoring and identification of potential issues

Anticipate variations in demand using AI-based demand forecasting models



LiDAR Data Analytics for Vegetation Management

Traditional asset data collection workflows
are excessively manual

Field crews survey thousands of miles of
network to remediate vegetation
encroachment risks on their network

High precision LiDAR combining GIS, 360°
street-level imagery with AI/ML provides
valuable insights to improve network
reliability



Benefits of Digital Transformation

25-30%

field productivity improvement from AI-powered scheduling

Upto 80%

capital reallocation based on ML insights in asset health

>30%

improvement on customer satisfaction in select journeys

2-5%

increase in heat rate or yield for fossil as well as renewable generation assets

30%

improvement in reliability and resiliency outcomes within existing spend levels

Source: <https://www.mckinsey.com/industries/electric-power-and-natural-gas/our-insights/winner-takes-all-digital-in-the-utility-industry>