Current Issues
Artificial Intelligence Panel

April 16, 2024
Santa Fe, New Mexico

Thomas F. O'Brien

Sr. Vice President and CIO

PJM Interconnection

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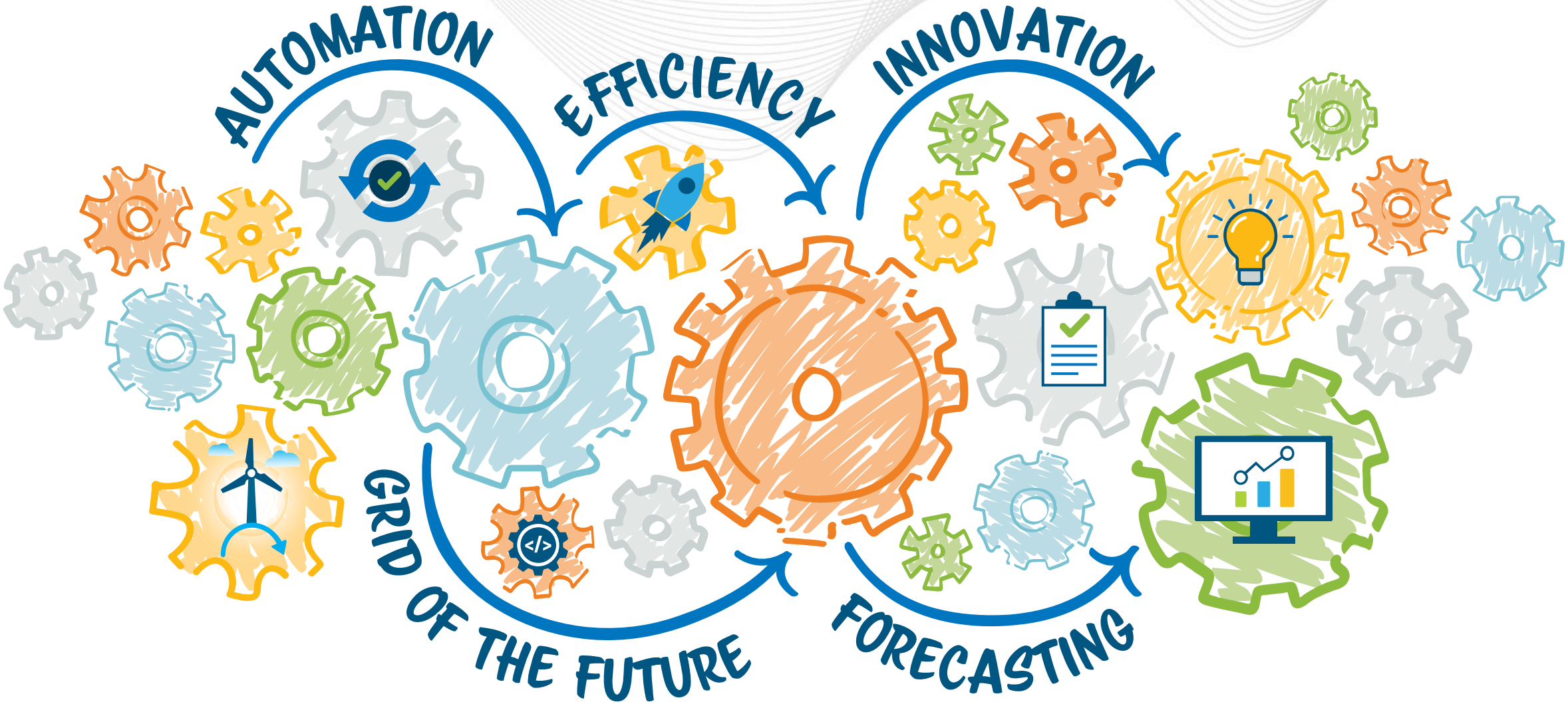
Artificial Intelligence



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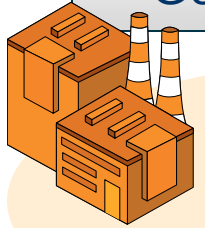
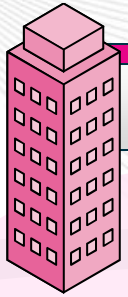
Reimagining Operational Tools – Use Cases



Generation

Price forecasting and optimization

Renewable energy forecasting



Energy Trading

Hedge optimization

Scenario analysis

Sensitivity analysis

RTO

Dispatch operations

Market surveillance

Extreme weather

Phasor measurement unit (PMU) data

Load forecasting

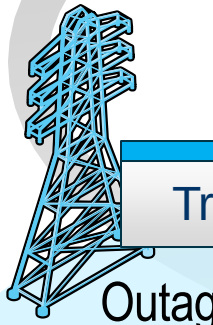
Renewable integration

Optimization engines

Data and analytics

Artificial Intelligence will impact us all

beyond traditional back-office efficiencies.

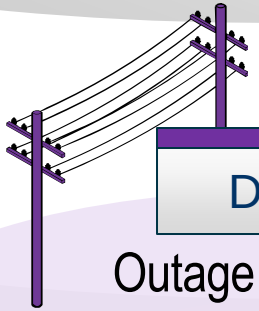


Transmission

Outage management

Constraint management

Predictive maintenance

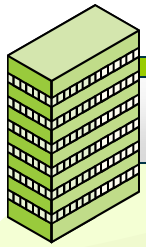


Distribution

Outage management

Workforce planning and optimization

Smart grid



Retail

Customer engagement

Sustainability and environmental monitoring

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Purposely Moving Ahead

Key Success Factors

- Quality data
- Controls and governance
- Experimentation
- Strategic priorities
- Skills development
- Strong partnerships
- Human engagement

THREATS

- Malicious use of AI
- Algorithms gone wrong

General Risks

Liability	Explainability
Trust	Regulatory risk
Workforce impacts	
Legal copyright challenges	
Bias	
Confidential data	

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