



Creating Infinite  
Possibilities.

# Truth/Devil is in the Details: The Fusion of Design and Telemetry Information in Comcast Access Networks

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## Agenda

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Digitization of Data

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Operational Logic

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Realtime Data Integration

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Access Network Architecture

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Integration and Orchestration

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Conclusion

## The power of digital transformation in automation



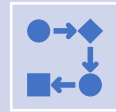
Technology

Technology Engine  
Standardized



Data

Data Integrity  
Fiber Accuracy



Process

Automation  
Triage Evolution

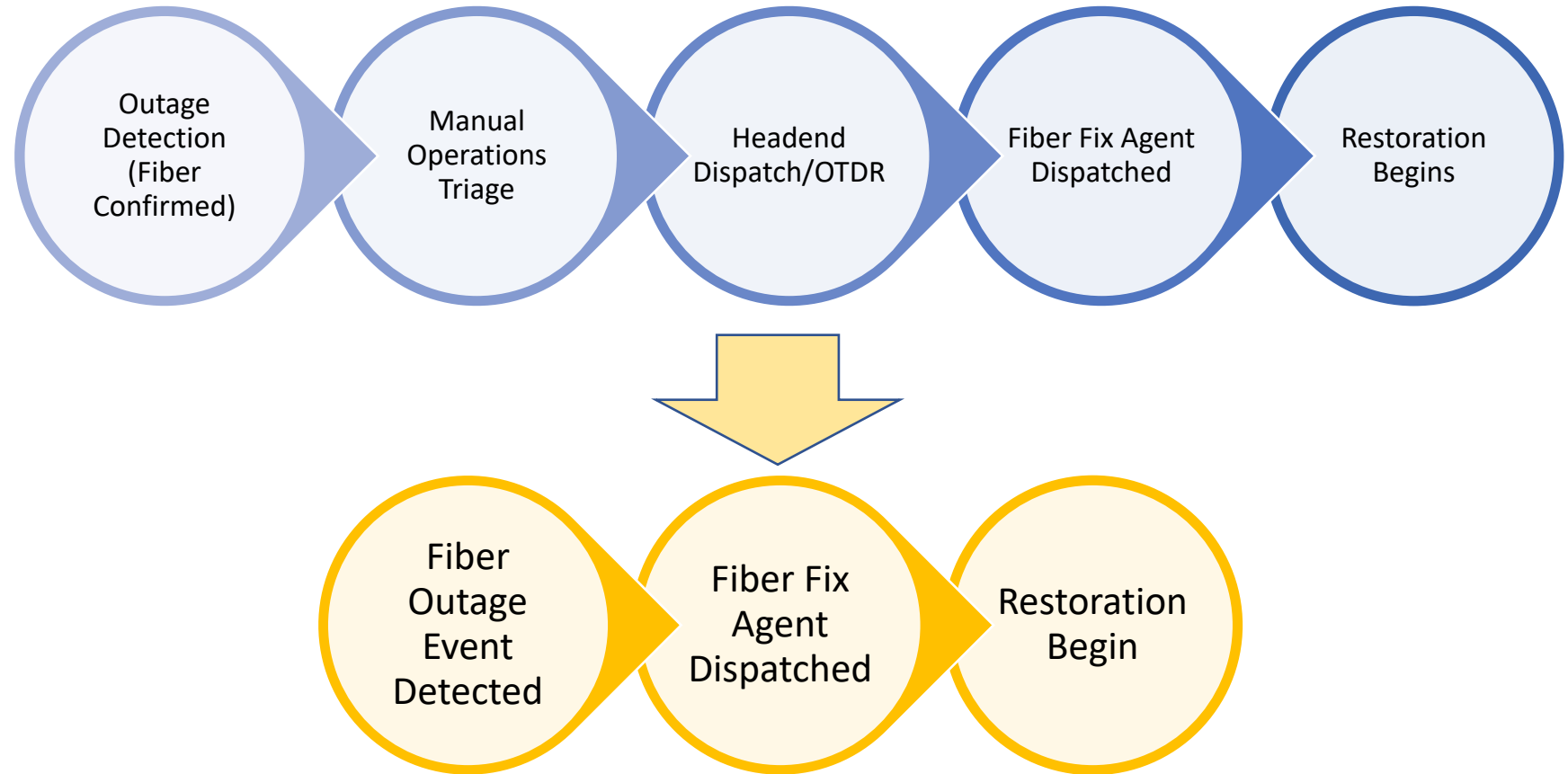


Change Capability

Adoption  
Human Factor

## Detailed Automation Reducing Resolution Time

- 4 manual steps to 2 automated steps
- Estimated fix agent response time reduction of 45-60 minutes
- Estimated fiber event operational triage time reduction of 10-15 minutes
- Operational efficiency
- Optimized customer experience



## Identifying process and tooling change opportunities

- Deploying technology between facilities and then to the access network
- Deploy XMF hardware technology in headends and hubs
- Build real-time data E2E automation

### Process Changes



- Fiber-specific outage alarm creation
- Alarm integration (NWT)
- Auto dispatching fix agents (Fiber Resolution)

### Tooling Changes



## Coherent fiber systems

- DAA Systems
- Converged Access Architecture systems
- Monitoring Access Systems
- Converged Monitoring and Reporting



## Power of convergence



Advanced system delivery



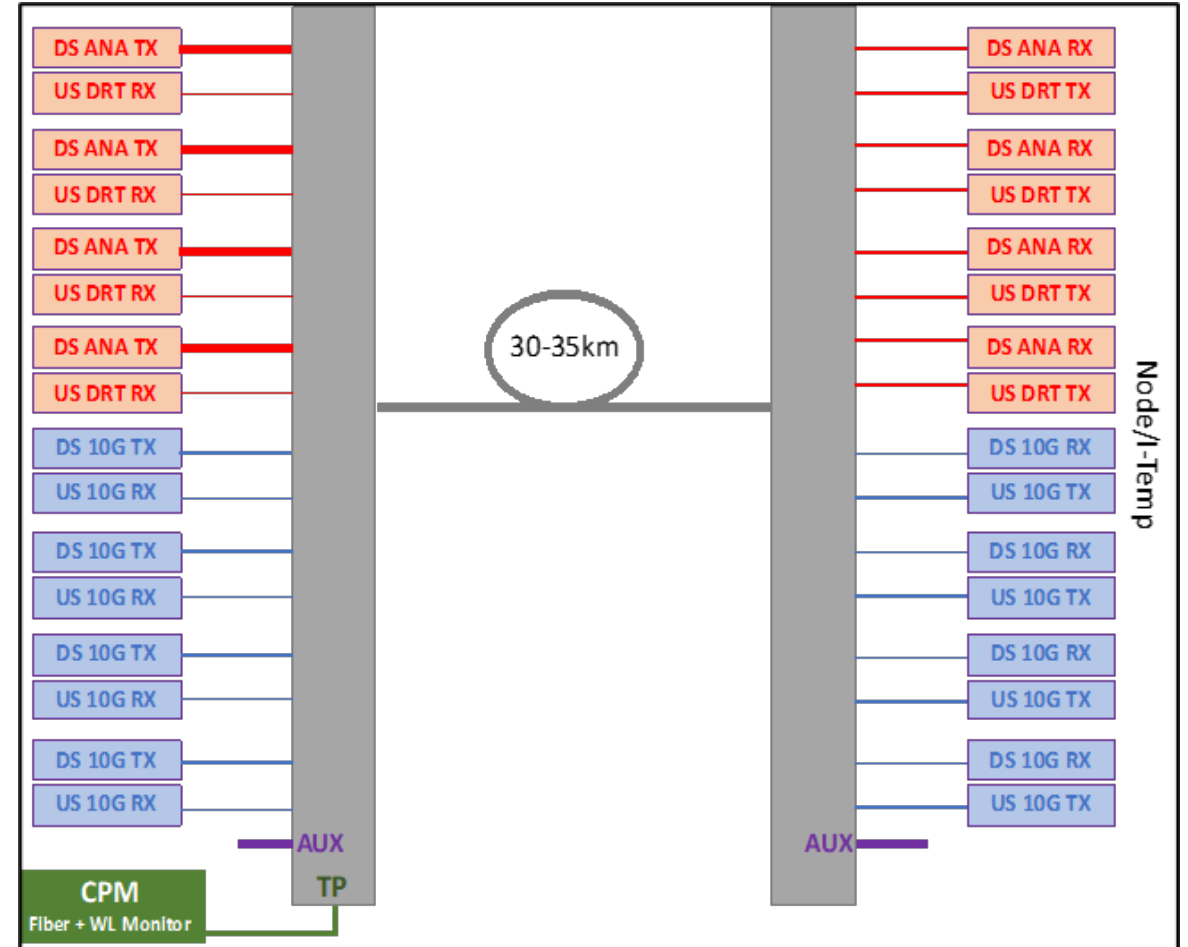
Deeper fiber networks



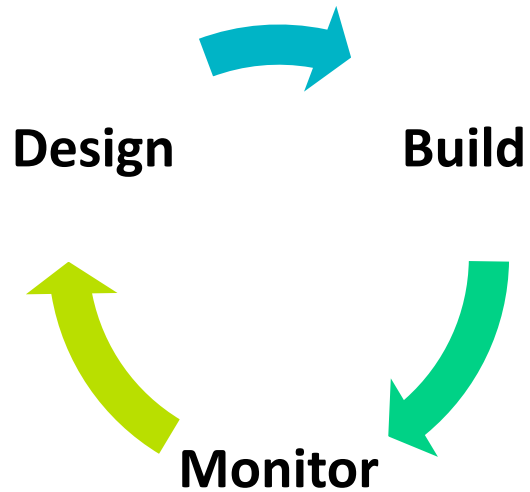
Paving the way for 10G



Optimizing system architecture



## DAA w/ XMFR Architectures



- DAA Systems
- Converged Access Architecture systems
- Monitoring Access Systems
- Value Add, a new record keeping

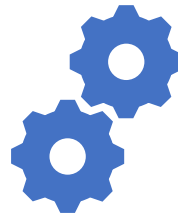


## Organizational change driving evolution



### Development and implementation

Engineering-Operations partnership  
Hardware commitment



### Operational Integration

Equipment functionality validation  
Alarm and automation integration



### Proper change implementation

Understanding the drivers of change  
People adoption

## Transforming and optimizing technology

Technology innovation

Operational logic and integration

Capacity at scale

Real-time continuous improvement

Change transformation





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Thank You!

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