

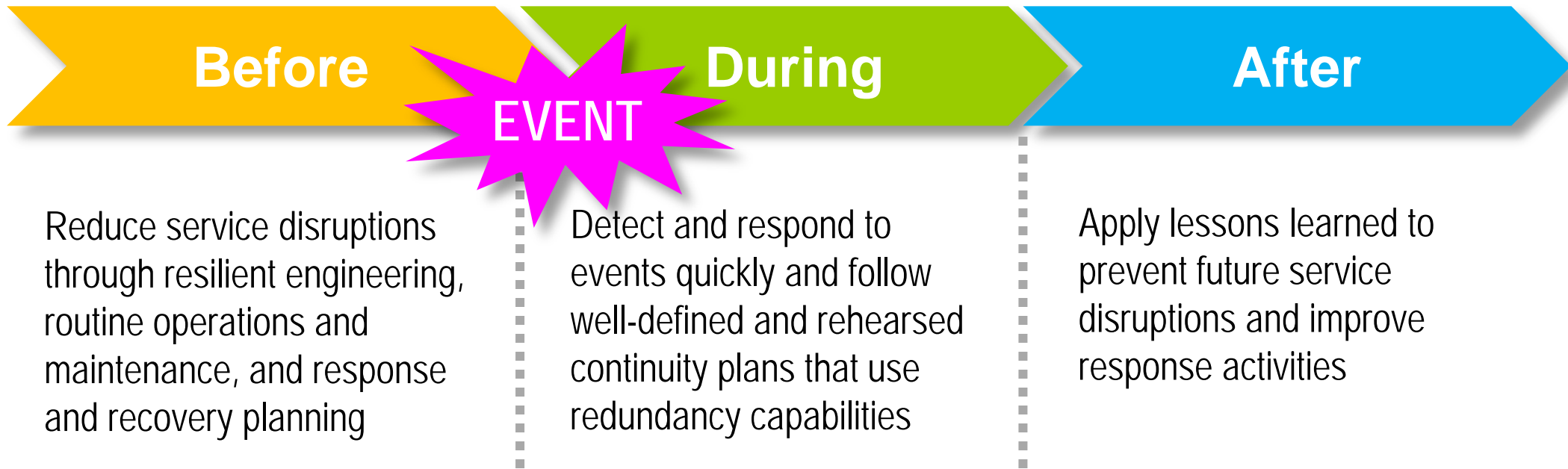
IT and Security Update

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IT and Security Resilience

Strategic Vision: Mitigate service disruption before events, reduce recovery time during events and improve from lessons learned after events.



Goal: Create a network architecture to meet security and compliance standards and requirements

Multi-year effort to **improve scalability, reliability and security**



Replacing aging firewall hardware throughout 2017

Spear Phishing Targeting PJM Members

April 24, 2017

Subject: VERY IMPORTANT NOTICE (PJM)
From: "PJM Member Board"

Two **PJM-themed phishing emails** sent to PJM members



May 3, 2017

Subject: Emailing (550dc) Updated Procurement
From: "Andrew L. Ott"

A large, thick blue circular arrow graphic that starts at the top left, curves around the right side, and ends with a pointed arrowhead pointing towards the center text.

**Day-Ahead
Market
changes have
resulted in:**

- **10.5 percent reduction in solution time** due to upgraded application server hardware in 2016
- **34.5 percent reduction in average data transfer time** due to upgraded database hardware and operating systems
- **Enhanced tools** for faster decision-making and to streamline the clearing process
- **Overall 41 percent reduction in Day-Ahead Market solution times** between Q1 2014 and Q4 2016

Vendor
engagement
for current
system
enhancements

Establish a
hardware
research and
development
lab

Next
generation
markets