

# Smart energy, fueled by data

CenterPoint Energy is leveraging innovation, including using smart meters and smart grids, to improve the quality of its energy services. But IoT systems and complex customer transactions generate enormous amounts of data. CenterPoint needed HPE solutions and expertise as big data becomes central to its strategy, operations, and even identity.

AT A GLANCE

# From the heart of US oil country, CenterPoint serves the energy needs of 28 states

Houston-based CenterPoint Energy employs 7,400 people and has been in the energy delivery business for over 140 years. The CenterPoint operation distributes electricity to 2.3 million customers in the Houston area and distributes natural gas in six states. Its recent acquisition of the retail energy services business, Continuum, has increased the size of its operating footprint from six states to 28: CenterPoint can now competitively sell natural gas in over half of the United States.

**\$22B**

assets

**7,400**

employees

**2.3M**

smart meters



**“We’re moving to an all-digital operation, from the way we monitor energy consumption and prevent outages, to the way we listen and respond to customer needs.”**

Steve Pratt, Chief Technology Officer, CenterPoint Energy

## **The goal: bring data into every decision**

The IoT and changing customer expectations put big data demands on CenterPoint’s operations

CenterPoint once read 80,000 meters a day manually by sending meter readers into the field on foot. Today, its smart grid enables the company to perform 221 million meter-reads a day automatically.

But collecting that data is only the first step. CenterPoint must ingest it and turn it into actionable information. It must pair data the sensors and remote control devices that are now part of its grid systems with robust, high-speed analytics that allow the company to detect outages quickly—or better yet, prevent them from occurring at all.

The company must also adapt to changing consumer expectations. Today’s consumers increasingly prefer to do business online or with their smart phones. CenterPoint must respond with services such as mobile energy monitoring and always-on Internet access to energy usage.

And CenterPoint must be more agile to take advantage of fast-emerging opportunities to launch new services and service innovations. The number of applications it develops and supports has grown; it must integrate these new applications with its legacy systems. And it must leverage automation and other efficiency-boosters to ensure its staff can innovate more quickly—without putting CenterPoint’s foundational business processes at risk, many of which are subject to regulatory oversight.

# 837%

increase in data in 5 years

# Tailored solution for analytics

## Hardware built for analytics paired with services to make it work

Recognizing that big data capabilities are central to its long-term success, CenterPoint decided to implement SAP HANA.

The company then evaluated six different hardware vendors, ultimately replacing its legacy IBM Lenovo platform with the **HPE ConvergedSystem 900** for SAP HANA as its platform. CenterPoint selected the HPE solution because it is factory-configured as an SAP HANA platform, which promised a smoother implementation and reduced risk of business disruption during the transition. The solution is also designed to simplify data management. CenterPoint valued this as a way to minimize the resources it must allocate to managing its big data systems, an approach that supports better long-term ROI while freeing staff to focus on more strategic priorities.

HPE Pointnext services assisted Centerpoint with the design, implementation, and support of the new platform.

### SOLUTION RECIPE

**Performance and scalability are key to maximizing the value of IoT**

HPE Hardware

**HPE ConvergedSystem 900 for SAP HANA**

HPE Pointnext services

**Data Center Consulting Services**

**HPE Proactive Care**

Transformation Solutions

**Enterprise Private Cloud**

**Infrastructure Consolidation and Virtualization**

**Empower with SAP HANA**

**Enterprise-grade Hadoop**



**“HPE took the time to understand our aims and what we did as a business and they built a plan around meeting those goals. They brought in subject matter experts who dealt with real-world problems and were able to apply their expertise to our situation.”**

Steve Pratt, Chief Technology Officer, CenterPoint Energy

# Energized by data

Data-driven insights improve customer satisfaction, efficiency, and regulatory compliance

CenterPoint can now leverage the data it collects from its smart grid and smart meters to improve its services to its customers and boost operational efficiency.

The company can detect outages more quickly—which means it can respond more quickly to get the outage resolved. In some cases, it can even prevent outages from occurring in the first place.

Over time, this means fewer power outages for CenterPoint customers. More than a matter of convenience, CenterPoint customers will be safer, because there is reduced risk to systems they depend on: that traffic light at the busy intersection, the dialysis machine running in a customer's home, or that security system protecting a business.

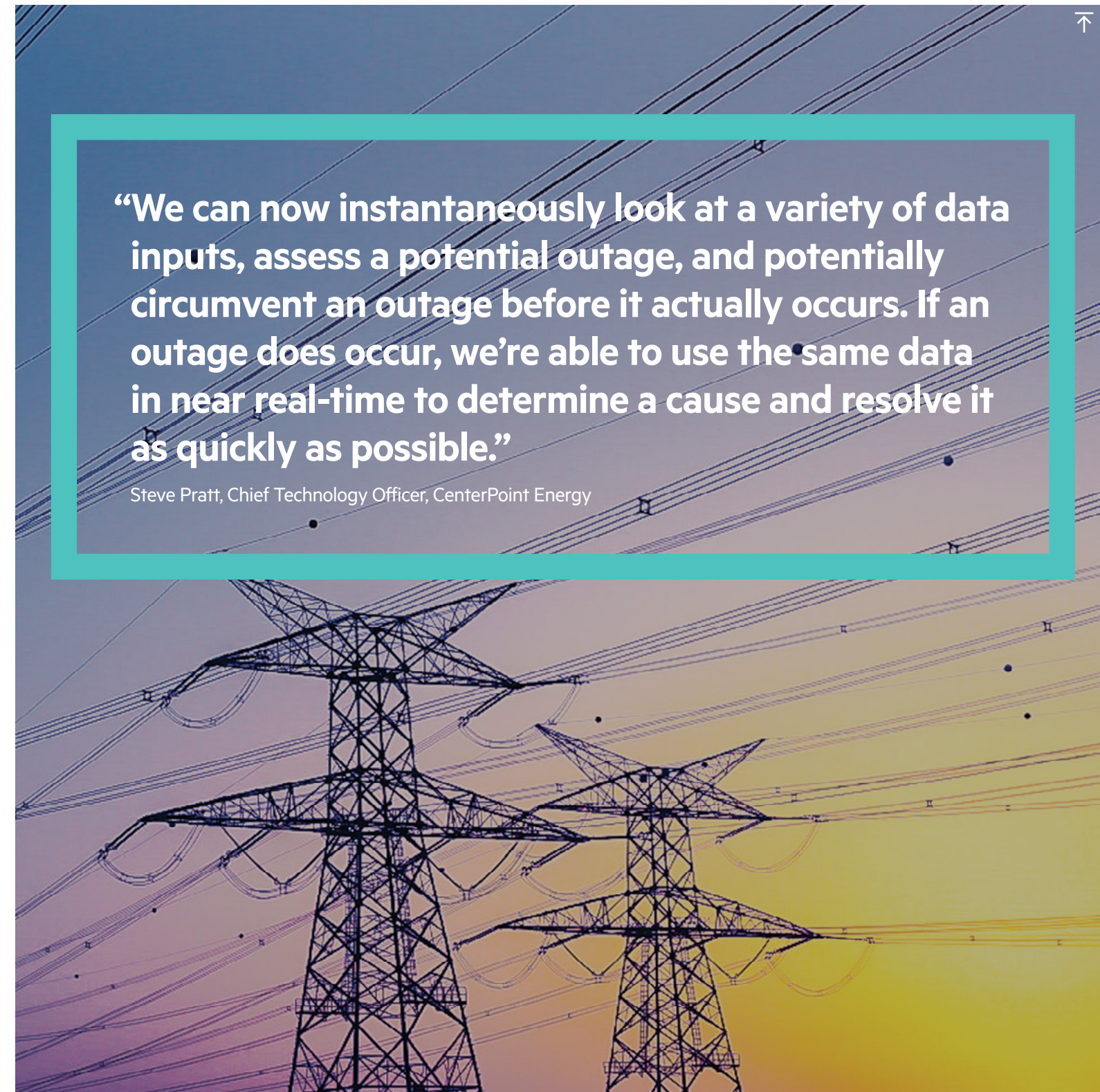
The big data platform also helps CenterPoint achieve operational efficiencies. It's able to troubleshoot more issues centrally, for example, which reduces the need to deploy trucks to its customers. It can also merge smart meter data with information on approaching weather to assess the potential impact of bad conditions, decide where to position its crews, and if necessary re-route power.

# 10%

Improvement in customer satisfaction due to faster resolution of power issues and usage questions

# Thousands

Fewer truck rolls annually since implementing smart meters and analytics



**“We can now instantaneously look at a variety of data inputs, assess a potential outage, and potentially circumvent an outage before it actually occurs. If an outage does occur, we’re able to use the same data in near real-time to determine a cause and resolve it as quickly as possible.”**

Steve Pratt, Chief Technology Officer, CenterPoint Energy

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CenterPoint Energy & HPE**

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