Plugged In: Accelerating progress in power & utilities IT

Part 2: 2018 Harvey Nash CIO Survey Results on the CIO's agenda for Power and Utilities

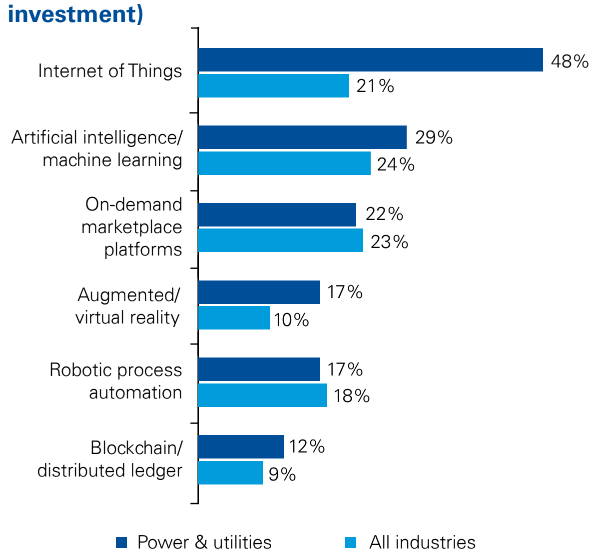
In this edition of KPMG Global Energy Institute's *Plugged In*, we asked Tim Gunter about what the recent 2018 Harvey Nash CIO survey results[1] indicate about the utility CIO's agenda. This is the second part of a two-part interview.

In last month's edition, you discussed the survey results for utility companies compared with other industries. What do these results mean for the future of utilities IT?

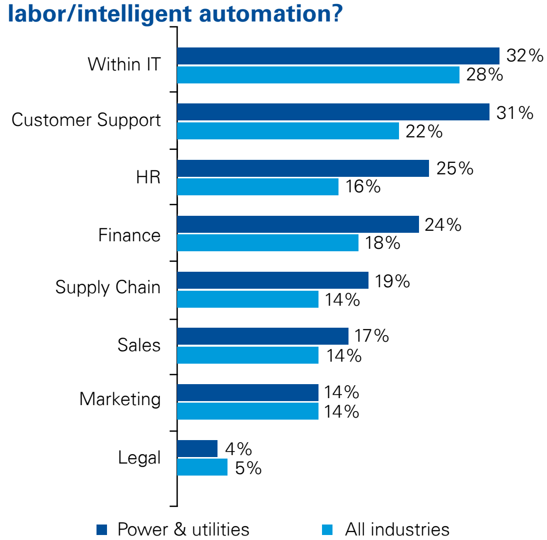
The results are further evidence that traditional utilities are continuing to evolve towards a model we refer to as a network integrator. It's familiar to many IT professionals as it emulates the platform business model that many software companies have adopted. The utility develops and maintains a network that integrates numerous energy-related products and services—including those by the utility itself—but revenue is primarily driven from fees to transact on the network.

One of the foundations of this model is digitalization—the incorporation of technologies to improve communication of data across the network—so it's not surprising to see utilities focused on advancing their digital capabilities. Evidence of adoption of the integrator model is also seen in the areas of digital that utilities prioritize compared to other industries. For example, utilities are ahead when it comes to AI/machine learning and augmented/virtual reality and more than twice as likely to invest in Internet of Things. These results are not surprising given utilities' long history of deploying operational technologies—such as SCADA, substation automation, and smart meters—throughout their transmission and distribution networks. But it doesn't end with operations: Other areas of the business are benefiting from the investments in digital. P&U companies show greater digital labor penetration in Finance, HR, IT, Supply Chain, and Customer.

How would you characterize your investment in the following technologies? (moderate/significant investment)



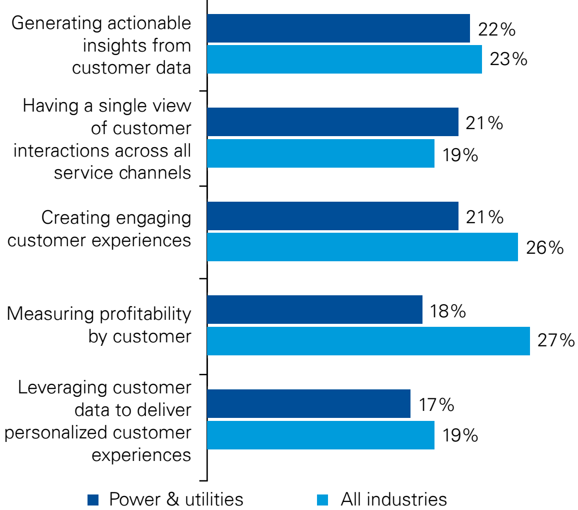
In which functions have you implemented digital labor/intelligent automation?



[1] Now in its 20th year, the Harvey Nash/KPMG CIO Survey is the largest IT leadership study in the world, with almost 4,000 respondents across 84 countries, representing over US$300 billion of IT budget spend.

However, Customer is the area in general where utilities are the farthest behind compared to other industries. They report significantly lower effectiveness in, for example, enhancing the customer experience, understanding profitability by customer, and growing revenue from existing customers. These results make sense in a network integrator model in which customer relationship management is often the responsibility of other companies transacting on the network. Like other platform players, the utility should focus its investment on improving network reliability—which attracts new participants—and efficiency—which grows the bottom line—and we are seeing this emphasis in the survey results.

How effective is your organization at each of the following capabilities? (very/extremely effective)

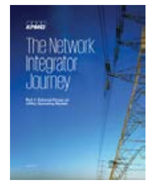


Utility CIOs are less optimistic about their budgets increasing over the next 12 months, but they should not be overly concerned. The investment in digital technology is not limited to the IT organization but is also spread across the enterprise as both information and operational technologies are imbedded in the back, middle, and front offices. Overall tech spending is increasing in power & utility companies; it's just not happening entirely in the traditional IT organization.

This trend actually bodes well for the future of utilities IT. They are playing an integral and indispensable role in digitalizing the business and will evolve into their own network integrator model—one in which they connect and govern communities of technology talent from across an increasingly automated business.

Additional resources

The Utility as the Network Integrator



The Network Integrator Journey, Part 1: External Forces

The Network Integrator Journey, Part 2: Management Challenges

The Network Integrator Journey, Part 3: Planning Framework

Winning the race for the customer

Network integrator

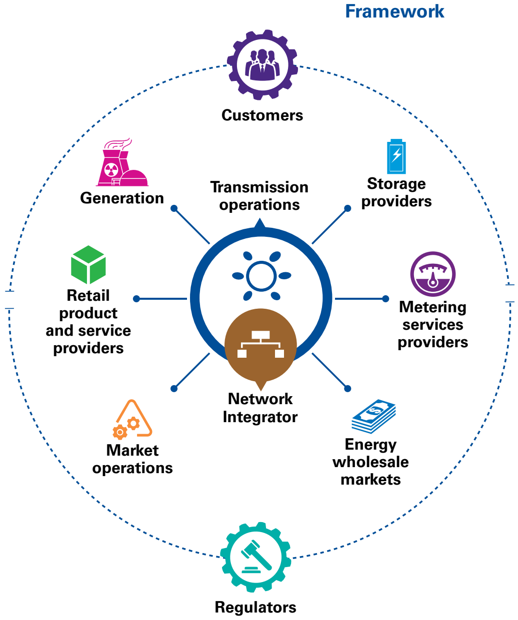
Customers
Consumers of power as a commodity, as well as new product and service offerings from retail providers

Generation
Including traditional, renewable grid-level, distributed generation, customer generation

Retail product and service providers
Marketers and sellers of power as a commodity, as well as "new" products and services

Market operations
Traditional ISOs and RTOs that manage grid interconnections and perform energy market settlement and other activities

Network integrator
The "transformed" distribution utility that will serve as the integrator of the diverse mix of generation entities, transmission entities, and retail and customer demand



Transmission operations
Traditional high-voltage, interstate transmission grid operator

Storage providers
Both grid-level and local storage, such as battery, compressed air, thermal, and other storage technologies

Metering services providers
Including metering and device maintenance, service connects and disconnects, and meter data storage and analytics

Energy wholesale markets
Including wholesale operators, utility traders, investment banks, and financial traders that participate in energy markets

Regulators
Government regulatory commissions, inclusive of new or transformed regulatory bodies at the federal, regional, and state level

About the Global Energy Institute The KPMG Global Energy Institute (GEI) is a worldwide knowledge- sharing forum on current and emerging industry issues. Launched in 2007, the GEI interacts with its over 30,000 members through multiple media channels, including audio and video Webcasts, publications and white papers, podcasts, events, and quarterly newsletters. To become a member, visit **www.kpmgglobalenergyinstitute.com**.

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