EEI/AGA
Digital in Utilities – Sector perspectives and implications for Finance organizations

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Introductions

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This wave of digital innovation is measurably different

**CONNECTIVITY:**
~4x increase in devices
Number of connected devices (B)

**DATA PROLIFERATION:**
A ~40x increase
Data generated in zettabytes

**COMPUTING POWER:**
Exponential acceleration
Calculations per second (B) per $1k

- 2010: 13
- 2015: 18
- 2020: 50
- 2010: 1
- 2015: 9
- 2020: 40

0 1 2 3
1900 1940 1980 2020
Traditional value chain **boundaries are breaking down** and shifting the industry profit pool.
Digital is a central to the utility ecosystem
Distilling it down – the 6 digital themes that matter

**ASSETS**
- Decline of the Peak
  Seamless balancing of supply and demand at every level of the network
- Always On-Line
  Flexible, fully utilized, self-healing assets

**OPERATIONS**
- Factory in the Field
  Production discipline to the job shop, capital filling the labor gap
- Automated and Agile
  Step-function acceleration of the back office

**CUSTOMER**
- One-Click Experience
  Frictionless customer interactions, near-zero engagement
- Promise of Choice
  Product and services delivering value beyond the commodity
The pace of progress in utilities has been slowed by the industry’s “unique” barriers

**Cost of Service economic model**
- Chicken and egg of prudence test, pilots and scalability
- No reward for risk taking and innovation

**Long-lived assets**
- Legacy asset base with 30-50+ year lifecycles
- IT and OT lifecycle of 7-10 years or less

**Structurally sub-scale**
- Operating within national or regional borders
- Cultural bias to customize in-house vs. leveraging global scale and best practice

**Culture of risk reduction**
- Digital requires...
  - ...action in uncertainty
  - ...organizational agility
- Utilities are...
  - ...risk mitigators
  - ...incremental
Digital has been transforming Finance for a long time, but pace of innovation accelerating
Innovation has helped drive significant efficiency improvements

Finance Departments have decreased headcount by 40% over the last decade
But the benefits of Digital in G&A extend far beyond cost savings

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<th>Benefit</th>
<th>Description</th>
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<tr>
<td>Greater customer responsiveness</td>
<td>Customers increasingly demand real-time information, but average Finance department still takes 80 days to produce a budget</td>
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<td>Stronger controls</td>
<td>Analytics can help reduce fraud by two thirds in value and cut in half the time to detect fraud</td>
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<td>Improved decision making</td>
<td>In Finance, only 23% of the effort is spent on generating insights with the rest of time spent on transactional work and controls</td>
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<td>Higher service quality</td>
<td>0 mistakes vs humans who often have 10 errors every 100 steps</td>
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Most companies are investing in new digital technologies

**Analytics/Big Data**
- Not investing: 8%
- Investing, but not enough: 8%
- Investing heavily to get ahead: 92%

**Mobility**
- Not investing: 12%
- Investing, but not enough: 2%
- Investing for today's needs: 88%

**Cloud/Software-as-a-Service**
- Not investing: 13%
- Investing, but not enough: 3%
- Investing for today's needs: 87%

**Robotic Process Automation**
- Not investing: 31%
- Investing, but not enough: 11%
- Investing for today's needs: 69%

**Cognitive Computing and Machine Learning**
- Not investing: 34%
- Investing, but not enough: 14%
- Investing for today's needs: 66%
Finance teams all agree **digital is important, but not yet satisfied** with its impact.

- **84%** agree **digital drives gains over competition**.
- **48%** are not satisfied with the impact of their **digital technology adoption**.
- **9%** have achieved **optimal performance**.
Digital will transform how the Finance function adds value

- ‘Consumer’ experience – intuitive, always available, and seamless
- Better business decisions through predictive insights
- Real-time visibility into the state of the business
- Integrated experiences/‘single pane of glass’
- Self-service options with ability to run reports and analytics
- Global standards and processes
- Finance information securely available anytime, anywhere
Digital can transform nearly every Finance process, but in different ways.

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<th>Finance process</th>
<th>What digital enablement will look like</th>
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<td>FP&amp;A</td>
<td><strong>Automate transactional and reporting tasks</strong> to do work faster and shift focus more to analysis. Integrate internal and external data, often through self-service. More robust predictive analytics.</td>
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<td>Record to Report</td>
<td><strong>Digital transforming R2R for speed, efficiency, and accuracy</strong>. For example in close, 100% automation of standard accruals, 40% of close tasks auto-scheduled with intelligent bots, automation of exception reviews at consolidation, and 75% automation of report generation.</td>
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<td>Order to Cash</td>
<td><strong>Automated process flow</strong> achieving &gt;90% of orders untouched/without manual intervention. Robust analytics to predict customer order issues.</td>
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<td>Payroll</td>
<td><strong>Drive to touchless workflow</strong> from payroll remittances to direct deposit to inquiries. More accessible payroll solutions, in particular mobile. <strong>Payroll less siloed and more connected</strong> with other HR systems</td>
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Successful digital transformations get four things right

- Understand your starting point
- Set a digital vision
- Create a portfolio of digital bets
- Build capabilities to achieve vision