Elevate every decision with **utilities** operations

Fast-track to future-ready performance

Voices of **Change**

From insights to action, the path to extraordinary value starts here.

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Contents

The change is here

Utilities worldwide are moving from behind the scenes to take charge and lead the energy transition; all while maintaining their focus on being safe, reliable, affordable—and clean.

Indeed, utilities are well positioned at the center of new and emerging industries, particularly in the era of electrification and distributed energy resources.

But to harness the potential of growth opportunities, while maintaining resiliency in their operations, utilities must reinvent their businesses. This includes creating capacity to intensify the focus on customer solutions, realigning cost structures, and forging new partnerships and alliances across industries.

In Accenture's view, utilities can seize this moment of unprecedented change with a higher degree of operational maturity that adds intelligence, leverages data and applies strategic approaches.

In early 2021, we compared the financial performance of leaders in technology adoption versus laggards.[1] Just 6% of utilities were identified as leaders—compared to other industries that range between 10-18%.

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This low percentage of utilities leaders is notable because COVID-19 accelerated a cultural readiness for technology adoption. Worldwide we see:

• **Growing relevance of electricity in the global energy mix.** Countries are making billion-dollar investments in infrastructure that supports electric vehicle (EV) charging; automotive companies are ramping up EV production.

• **Continued build-out of renewable energy sources.** In our 2021 Digitally Enabled Grid survey,[2] 100% of global distribution executives report already experiencing some form of energy transition-related disruption in their operations.

• **Intensified focus on becoming customer-centric organizations.** The business and residential utilities customer has changed. Forward-looking utilities understand that customers expect a relationship beyond billing; they want value-added goods and services, personalization and new ways to engage. And, with new players entering the market, the competition for customers may intensify.
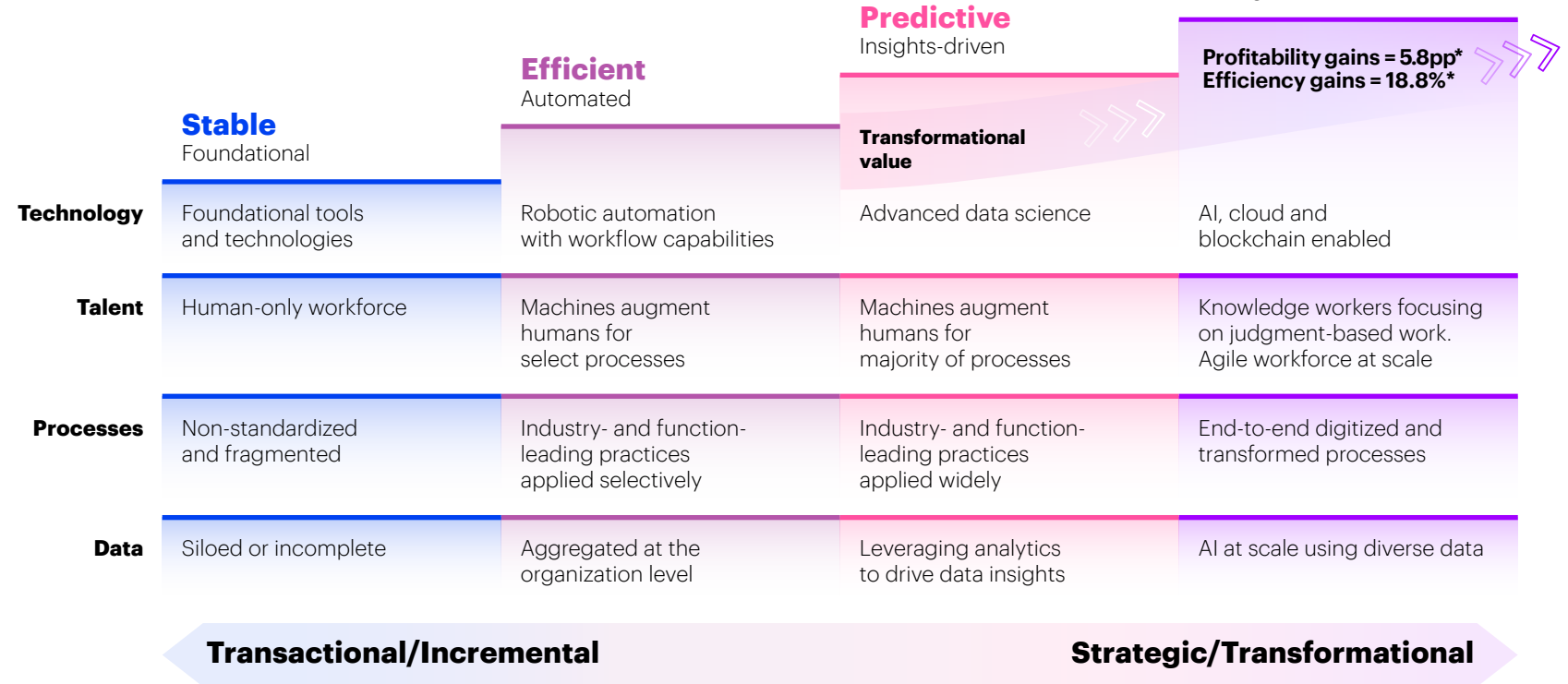

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Fast-track future-ready performance

Our global cross-industry research[3] demonstrates the link between business operations maturity and performance.

The research identified four levels of operations maturity: Stable, efficient, predictive and future-ready (see Figure 1).

Figure 1.
Advancing operations maturity enables data-driven decision making and increases business resiliency.

	Stable Foundational	**Efficient** Automated	**Predictive** Insights-driven	**Future-ready** Intelligent
			Transformational value	**Profitability gains = 5.8pp*** **Efficiency gains = 18.8%***
Technology	Foundational tools and technologies	Robotic automation with workflow capabilities	Advanced data science	AI, cloud and blockchain enabled
Talent	Human-only workforce	Machines augment humans for select processes	Machines augment humans for majority of processes	Knowledge workers focusing on judgment-based work. Agile workforce at scale
Processes	Non-standardized and fragmented	Industry- and function-leading practices applied selectively	Industry- and function-leading practices applied widely	End-to-end digitized and transformed processes
Data	Siloed or incomplete	Aggregated at the organization level	Leveraging analytics to drive data insights	AI at scale using diverse data

Transactional/Incremental → **Strategic/Transformational**

*Accenture Research and Oxford Economics Intelligent Operations Survey, 2020

Accenture experience shows that additional productivity and efficiency gains up to 50% can be seen in organizations displaying future-ready characteristics.

A majority of organizations have made dramatic progress toward next-level maturity over the past three years.

But most (93%) have further to go to reach the future-ready level. In our experience, the utilities industry operates at the stable and efficient levels and is striving to achieve predictive levels of operational maturity.

Organizations realize distinct advantages in being future-ready:

1.7x

higher efficiency
levels for future-ready
organizations*

2.8x

boost in corporate
profitability for
future-ready
organizations*

*Future-ready organizations exhibited 6.4 pp higher profitability and 13.1% greater efficiency, on average

Source: Accenture Research and Oxford Economics Intelligent Operations Survey, 2020

In today's digital-first world, utilities with future-ready operations:

- Successfully create personalized customer experiences
- Automate repetitive tasks and focus their workforce on more strategic, judgment-based activities
- Continually develop the talent and cultural readiness for technology adoption
- Leverage ecosystem partners to access the latest in technologies and capabilities

7%

of organizations
report a high level
of maturity as their
current state; we call
them "future-ready"

US$5.4T

added profitability available
globally, if all organizations had
moved from the stable, efficient
or predictive levels to become
future-ready by 2020

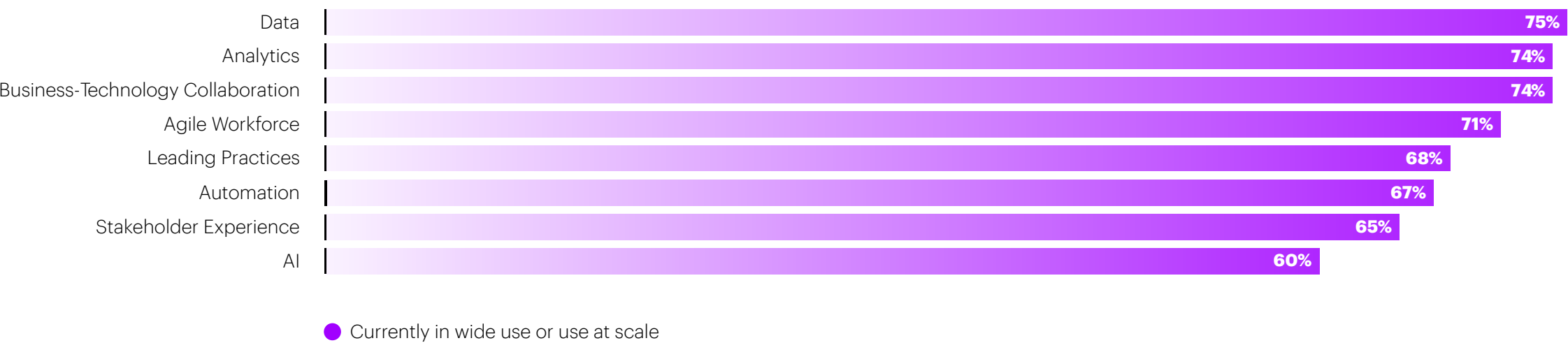Source: Accenture Research and Oxford Economics Intelligent Operations Survey, 2020

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Key future-ready capabilities

Consider how we measure future-readiness and why it matters.

Being future-ready reflects an organization's ability to scale eight characteristics of operating model maturity (see Figure 2). You can find a definition of each in the Appendix.

Figure 2.
Cross-industry view of capabilities currently in wide use or use at scale.

Capability	Percentage
Data	75%
Analytics	74%
Business-Technology Collaboration	74%
Agile Workforce	71%
Leading Practices	68%
Automation	67%
Stakeholder Experience	65%
AI	60%

● Currently in wide use or use at scale

*Accenture Research and Oxford Economics Intelligent Operations Survey, 2020

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Our research shows that globally, organizations are succeeding in some key capabilities but not in others. Data and analytics are in wide use, whereas the innovative areas of AI and automation lag behind.

Conversely, utility companies have more work to do to capture the benefits of data and analytics. In our experience, utilities struggle to perform advanced analytics and generate actionable insights from their data. We see this in Customer Care and Billing, for example, where more personalized experiences could improve customer satisfaction, reduce cost and inform potential growth opportunities.

It is our view that utilities would benefit from assessing and identifying opportunities to progress these capabilities in their operations.

Achieving growth and cost objectives for utilities

For utilities, the global energy transition represents a significant opportunity and would require a focus on achieving growth and cost objectives, while maintaining safety, reliability, and affordability.

Future-ready operations support the imperatives of being low cost and meeting stakeholder needs. Moving to a more competitive cost structure sets the company on a path to drive growth in its core business and build out new adjacent revenue streams and models:

- Free organizational and financial capacity to make strategic investments

- Ensure the ability to sustain growth through additional revenue

- Remain relevant and competitive and scale growth in new areas

- Create the capacity to innovate—build an innovation capability to unlock value in core business and seize new opportunities

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Three ways for utilities to become future-ready

Future-ready organizations are best positioned to achieve their growth and cost objectives, delivering value for their customers, employees, shareholders and communities.

01
Know the ultimate goal

Think big and define aspirations

Organizations tend to approach operations improvements too incrementally.

This can be countered by thinking big and starting with the end goal in mind. Conceptualize what a future-ready state looks like.

For instance, what advances in operations would new technologies facilitate? Set that point as an aspirational goal, then consider the bold moves it would take to achieve (something our research shows many don't do).

Utilities, too, are starting with the end goal in mind. Accenture recently surveyed 100 US utility executives[4] and found the top three goals are: Faster speed of product and service innovation; operational efficiency; and improved business value from data.

Among the future-ready organizations in our study:

82%
expect to scale leading practices across the enterprise within the next three years

86.3%
expect business and technology functions to collaborate fully during that period

Source: Accenture Research and Oxford Economics Intelligent Operations Survey, 2020

Know the goal—a case study

Large, international utility

A large, international utility owns and operates the transmission system in two countries and is the Electricity System Operator (ESO) for its region. The ESO committed to operate a zero-carbon electricity system by 2025, while a country regulator significantly reduced the allowed rate of return for a large portion of the utility's business.

The utility joined forces with Accenture to scale an offshore engineering services function that can deliver new and existing capabilities at a fundamentally lower cost.

As the utility manages a digital twin of its transmission system, Accenture augments the internal teams with offshore resources. The collaborative onshore/offshore team blends engineering, automation, process excellence, data management, dashboarding and data science skills.

Value delivered:

40-50%

direct cost savings realized

Continuous

improvement and automation are integral to service delivery, reducing operational risk and unlocking further efficiencies.

02
Know the key steps

Automate, augment
and be data-driven

There are many steps between one level of maturity and the next, but some can't be skipped. Here are three that Accenture recognizes as crucial:

Automate at scale

Among organizations with future-ready operations, 38.4% are scaling AI, with 63% planning to have scaled AI in three years' time. In stark contrast, just 1% of efficient organizations are currently scaling AI, and 19.5% expect to have scaled AI in three years' time.

only 1%

of efficient organizations are scaling AI today

Augment human talent with technology

By fostering a human+machine workforce where technology helps people (not the other way around), organizations can allocate work to realize efficiencies. Then, people would be freed up for more creative and critical thinking—the best way to identify new sources of value.

only 2.5%

of efficient organizations have adopted agile workforce strategies at scale

Commit to data-driven decision making—using better, more diverse data

By using diverse data and elevating data quality, executives could combine the best of both in a continuous feedback loop.

only 2.5%

of efficient organizations are using analytics at scale

Know the key steps—a case study

Canadian multinational energy company

A Canadian multinational energy company partnered with Accenture to deliver a Digital Customer Experience Transformation Program to deflect calls, increase adoption of e-billing and reduce resource requirements.

- We helped build the foundations of the channel strategy and customer journey, and defined the technology architectures required to deliver program value.

- For back-office optimization, we deployed: Improved interactive voice recognition (IVR); a newly redesigned and re-platformed web experience; an AI-powered virtual assistant; a new robotic process automation and a redesigned paper bill.

- For new and improved channel enablers, we deployed new customer monitoring to keep a real-time pulse and new omnichannel analytics capabilities to optimize the customer experience.

Value delivered:

Calls

119%
increase in self-serve IVR

>30%
reduction in call volume

Billing

38%
increase in active e-bill customers

>97%
reduction in billing exception volumes

Full-time equivalents (FTEs)

21-26%
reduction in front- and back-office resource requirements

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03
Know how to leapfrog maturity levels

Advance with ecosystem relationships

Future-readiness brings organizations a competitive edge and agility. But efficiency and profitability in the short term are not enough.

Being future ready requires a flexible operating model—an optimized combination of multidisciplinary teams and technologies on demand that work across a broad ecosystem of partners.

The goal is to deliver exceptional business outcomes at scale, from anywhere, anytime.

Ecosystem partnerships bring complementary skillsets and more diverse data. Together, they foster continuous evolution instead of one-time, project-focused improvements, and offer advanced technologies such as AI and blockchain.

Critically, they also spark innovation. Partnership models, anchored by a shared vision and mutually beneficial commercial terms, help deliver transformational value and experiences.

77%

of future-ready organizations expect to scale ecosystems in three years

22%

of efficient organizations expect to scale ecosystems in three years

Source: Accenture Research and Oxford Economics
Intelligent Operations Survey, 2020

Know how to leapfrog—a case study

Large, Asia-Pacific telecom

One of the largest telecommunication companies in the Asia-Pacific region established its own global services centers where it cultivates the latest technology skills, guiding its talent toward new and relevant capabilities, roles and ways of working.

It also uses strategic partners to provide complex data, reporting and analytics support.

The partnership ecosystem gives the telecom:

- Access to intelligent automation expertise

- Critical services to drive growth, innovation and optimization

Outsmart, outperform, outpace

The journey to becoming future-ready by applying intelligent operations isn't straightforward. Nor is it the same for everyone.

As utilities reinvent their businesses to lead the energy transition—driving value for their stakeholders on the path to net zero while enabling others to do the same—Accenture sees intelligent operations as the fast-track to becoming a future-ready utility.

Now is the time to make your move to intelligent operations. Here's how:

- **Think** big and go beyond incremental change

- **Enhance** intuition with the highest-quality, diverse data

- **Scale** automation and analytics, AI and integrated solutions with leading practices

- **Foster** a human+machine, specialized workforce

- **Put** cloud infrastructure at the heart

- **Build** complementary third-party and ecosystem relationships

25

We defined the four levels of operations maturity based on respondents' assessments of eight characteristics:

Analytics

Covering the discovery, interpretation and communication of meaningful patterns in data to provide superior insights for business decision-making. Analytics includes multiple levels from basic descriptive reporting to more predictive and prescriptive actions which can be applied to business processes.

Automation

Sets of technologies that perform repetitive rule-based tasks. Robotic process automation (RPA), one of the most frequently used examples, increasingly includes multiple solutions such as workflows, platforms and software-as-a-service that further digitize the process.

Data

The quality, scope and depth of structured and unstructured data (for example, video, Web content, voice memos, and so on) from diverse internal and external sources, including what is embedded in internal processes.

Stakeholder experiences

The overall engagement experience across all stakeholders of an enterprise including customers, end clients, suppliers, partners and employees.

Artificial intelligence

The ability of a machine to perform cognitive functions like sensing, comprehending, acting and learning. AI capabilities (for example, natural language processing, machine learning) enable computers to make decisions and identify patterns and insights for future decision making.

Business-technology collaboration

Comprising IT and business functions with joint governance models, enabling integrated ecosystem partners and driving the organization's strategic road map.

Functional and industry leading practices

Ways of doing business within a function, organization or industry that are recognized as enabling best-in-class performance.

Workforce agility

Encompassing two key elements: on-demand, collaborative workforce strategy and a work environment where humans and digital machines work together to drive the best outcomes.

26

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