How to Seize the Value of the Data Economy

Explore

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Implications of the data economy
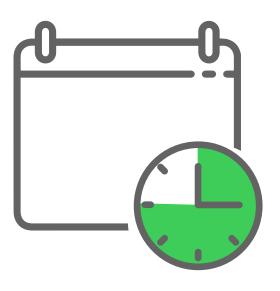
The influx of data: People and machines

The global COVID-19 pandemic has accelerated the massive migration to digital technologies. Businesses across industries are digitizing their operations at speed and scale, in order to enable growth and gain resiliency in times of crisis.

At the same time, research by PwC Research shows that the importance of robotics, machine learning, and automation in factories will continue to rise, and machines will be increasingly vital when controlling for speed, quality, and budget[1].

▶ Over five billion devices will require data processing solutions by year-end of 2020 in order to receive operations-essential real-time data.

All of this change points to one undeniable fact: **Your customers and organization with be generating richer data than ever before, and it's up to you to take advantage of it.**
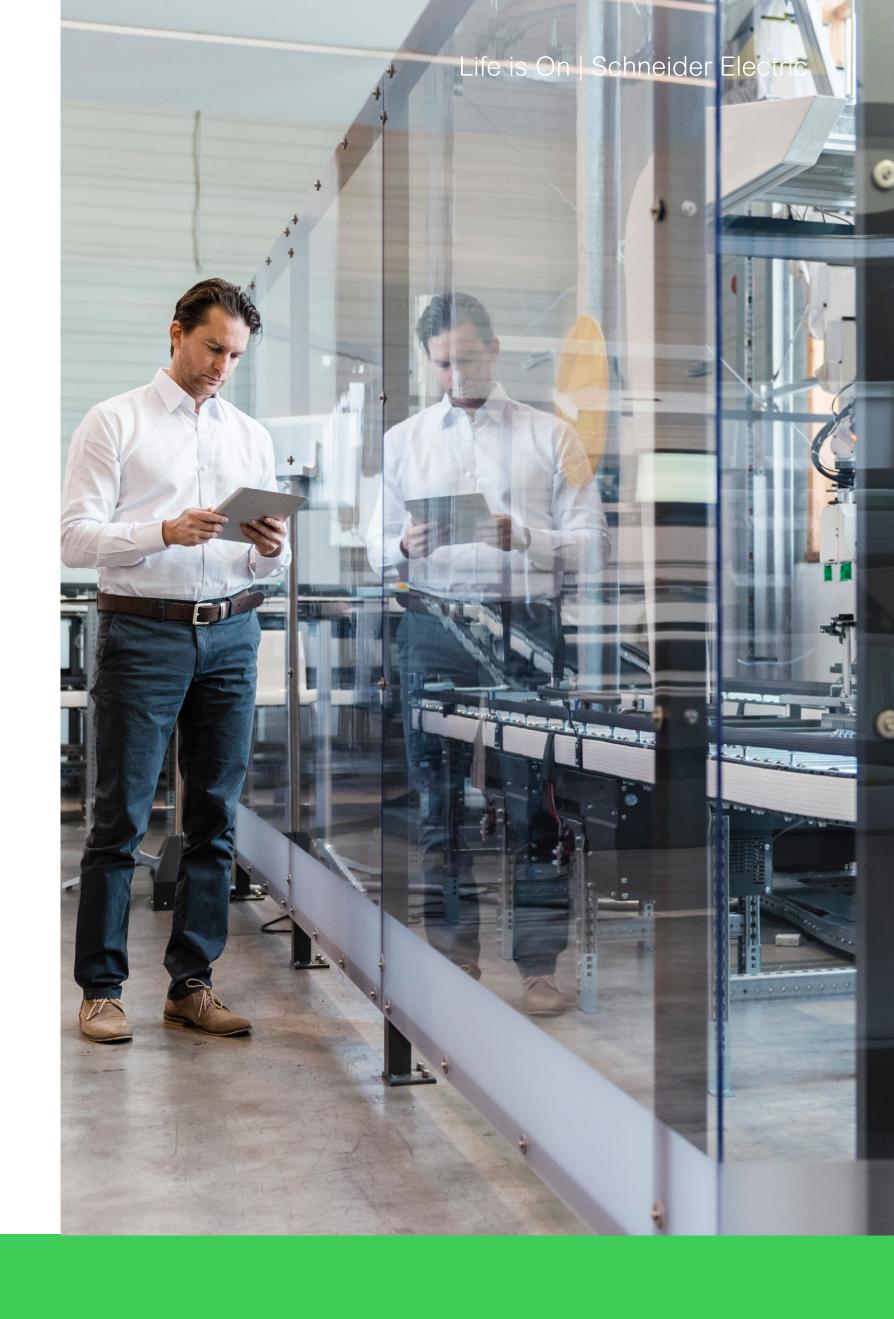
According to McKinsey & Company, the world has vaulted

5 years forward

in consumer and business digital adoption
in a matter of around

8 weeks[2]

Data and economic growth

The World Economic Forum estimates that **70% of new value created in the economy over the next decade will be based on digitally enabled platform business models.**[3]

The data economy is changing the competitive landscape, providing opportunity for market power and economic gains.

60%

Global GDP digitized
by 2024
World Economic Forum[4]

This guide will give you a foundational understanding of the transformational impact of the data economy on your business and industry, with best practices on leveraging data to drive growth and resiliency. It will also help chart your course to reach digital maturity with focus on the rising subscription economy, digital services, and data-as-a-service.

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What does the data economy mean for your business?

The influx of data generation and the rise of the data economy have implications for the ways that many of us do business; supercharging data-as-a-service (DaaS) for markets that benefit from widespread connectivity and efficiency — such as manufacturing, automotive, healthcare, and emerging technologies.

The data economy also calls for new, digitally enabled business models that boost profitability and resiliency throughout an enterprise.

According to the MIT Sloan School of Management[5], companies can take three approaches to data and deriving value from it:

1. Improving internal business processes and decisions

2. Wrapping information around core products and services

3. Selling information offerings to new and existing markets

To unlock the opportunities that lie ahead you should prepare your organization using proven best practices for leveraging data.

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Learn from digitally enabled businesses

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Snapshot: Opinum

New capabilities in the subscription economy

Opinum Data Hub enables monitoring of building operation metrics such as occupancy rate, energy consumption, inside air quality, and beyond. This information helps building owners drive energy efficiency, but it isn't easy to report on the savings — especially with constantly changing building usage patterns.

Opinum reached out to Schneider Electric to perform such complex energy savings calculations and add customer value. They created a connection between their offer and the algorithm and are now piloting the offering with their customers through a subscription model.

With this new capability, building owners will be able to drive better optimization of the energy consumption and carbon footprint. Opinum now provides an important additional feature in their product without the cost of developing it.

Schneider Electric Exchange

Discover a new open business platform that unleashes the infinite possibilities of a global and innovative digital ecosystem.

Learn more

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Snapshot: SOMIC

Access to real-time information across the operations

SOMIC is an international mechatronics company specializing in developing machines to build innovative packaging. With an eye toward emerging technology and high-performance packaging to reduce environmental footprint, SOMIC sought to reduce costs and reaction time on customer requirements.

Building smart packaging requires smart machines, and SOMIC had the goal of creating the most compact and high-performance machines possible, as well as having the functionality to incorporate preventative maintenance.
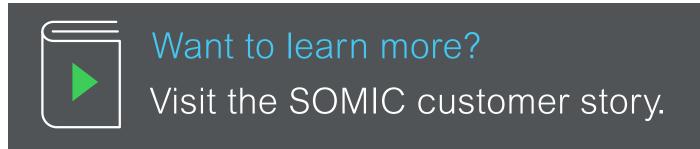
Reliability, production security, and high availability were also factors prioritized by SOMIC to keep pace with client and market expectations.

SOMIC partnered with Schneider Electric by employing EcoStruxure™ Machine, which allowed them to build a high-performance coffee capsule machine with 76 motion axes. By using a digital twin simulating real performance, they were able to design and build the machine without the need for any tools at all. A Schneider controller and EcoStruxure Machine Expert allowed them to work virtually for added flexibility while ensuring key milestones were reached. EcoStruxure Augmented Operator Advisor helps SOMIC conduct machine diagnosis and maintenance through the use of augmented reality.

Want to learn more?
Visit the SOMIC customer story.

2X

output with 1/2 footprint

per 1,400 SOMIC coffee capsules
produced per minute

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Snapshot: Nemours Children's Hospital

Data-driven decisions with quantifiable real-life impact

In healthcare, it's critical to insightfully anticipate and manage both everyday matters and extraordinary events.
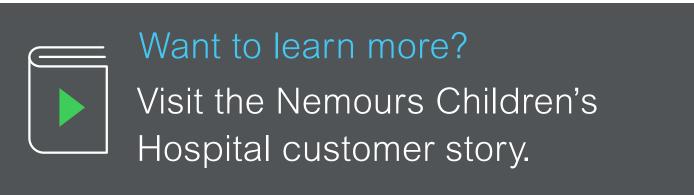
For Nelson Roque, Facilities Director at Nemours Children's Hospital, a connected workplace is essential for the children and families that rely on him every day. With more than 20 years of facilities management experience, Nelson knows that power reliability and in-the-moment information are critical to success — especially when it comes to providing for children at Nemours.

EcoStruxure's IoT-enabled, plug and play architecture and platform provides the facilities team with a master view of IoT connectivity inside the hospital, as well as real-time insights on efficiency and operational analytics. This same connectivity and automation also jump-starts the backup power system in an emergency, ensuring that patient care is never disrupted.

Through data from critical sensors powered by a cloud infrastructure, the facility can see everything from radiology to top floor meetings.

From top to bottom, data will improve and enhance every step of the process.

Want to learn more?
Visit the Nemours Children's Hospital customer story.

Up to
30%
increased operational efficiency
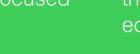
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CHAPTER 3

Best practices for leveraging data

You already embrace the digital world …

… now it's time to reach digital maturity.

Digital maturity plays a key role in the data economy and is a measure of the quality and reliability of an organization's digital assets. Digital maturity also means real-time accessibility of key digital information through cloud operations and a fully connected organization.

Key benefits:

Utilize the insights that are needed in the moment, and present that information to the key personnel that need it — accurately and in a timely manner.	Ensure business operations through predictive analytics and address irregularities with real-time response.	Stay competitive via new business insights and transformative data and capitalize on new digital opportunities.

The last decade provided us with data. The next decade is about learning to use data wisely.

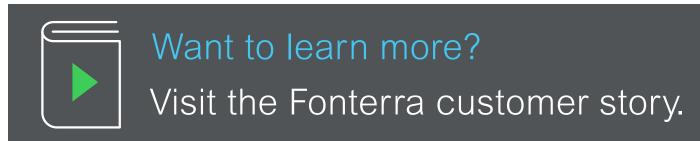# Snapshot: Fonterra

Redefining efficiency for a dairy giant

One organization embracing digital maturity is Fonterra, the largest dairy producer in New Zealand.

Fonterra is pushing the limits on scale for dairying and looking to increase production and efficiency — without sacrificing quality. Through Fonterra's partnership with Schneider Electric, they are able to continually track how much energy is needed to maintain production goals without wastefulness or excess, and control for safety and cost. Through analytics and interconnected systems, Fonterra has been able to exceed goal metrics, and stay on track for budget, safety, and health for both employees and customers.

"Schneider Electric's role is understanding how to control and provide enough energy into a plant so that we can maintain the quality of our output and do it all in a sufficiently cost-effective way and, most importantly, do it safely."

Glenn Sullivan, *Group Manager of Electrical Engineering, Fonterra*

Want to learn more?
Visit the Fonterra customer story.

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Sharing data as a resource

Maximizing the value of data through a community

Capitalizing on the data economy is not just about putting your data to work. It's also about collaborating outside of your organization — sharing data with customers and partners while addressing their needs.
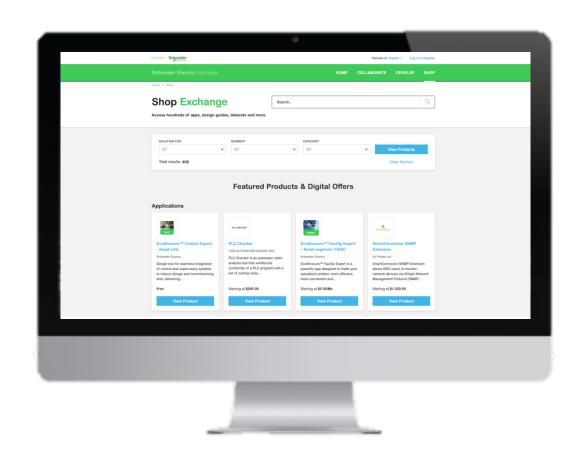
Sharing data among companies can likely unlock more than $100 billion in value just from improved operations according to the World Economic Forum.[6]

Schneider Electric Exchange provides a space to connect with other organizations. Whether you're seeking solutions, or have products, services, and advice to share, we'll help you connect with peers, technology partners, and experts to gain a competitive edge.

Get the support and learn alongside tech companies, system integrators, consultant engineers, and plant managers and learn more about APIs, capabilities, and digitizing your operations.

"To attain the strongest competitive position, you need both data and network effects — a dual accomplishment that very few companies manage to pull off."

Harvard Business Review[7]

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Enhancing the customer experience

The introduction of new and meaningful data provides an opportunity to reinforce or even reimagine your end-to-end customer experience. When your customers gain a deeper understanding of how their facilities function and how to operate more efficiently, you become an integral part of the future success. Your ability to provide reliable data and operational insight for customers allows clients to benefit directly from your partnership.

"Our customers are challenging us to provide more value from our energy and automation solutions.

We do this by connecting equipment and software to the cloud using IoT technology. We're leveraging big data, analytics, and mobility to provide customers with actionable information to optimize operations."

Cyril Perducat,
*Executive Vice President of
IoT and Digital Offers,
Schneider Electric*

Turning raw data into insights

Less than ½ of an organization's structured data is used in making decisions.

<50%

Transform captured data into additional business insights with cloud-based analytics.

IT/OT convergence across the network.

Capture and analyze data close to its source for real-time decision-making based on edge analytics.

Integrating new business models

Increased product longevity is an enticing benefit of data-driven offerings. Unlike the method of creating new products to replace older models, tomorrow's data-driven products will no longer be sold and then abandoned.

As products evolve and emerge through the discovery of data insights, your organization will find new business models that allow for exciting growth. Analytics offered as a companion or an à la carte service bundled with personalized insights is key.

The flexibility of a data powerhouse with your current business capabilities provides an opportunity to rethink or expand current business models.
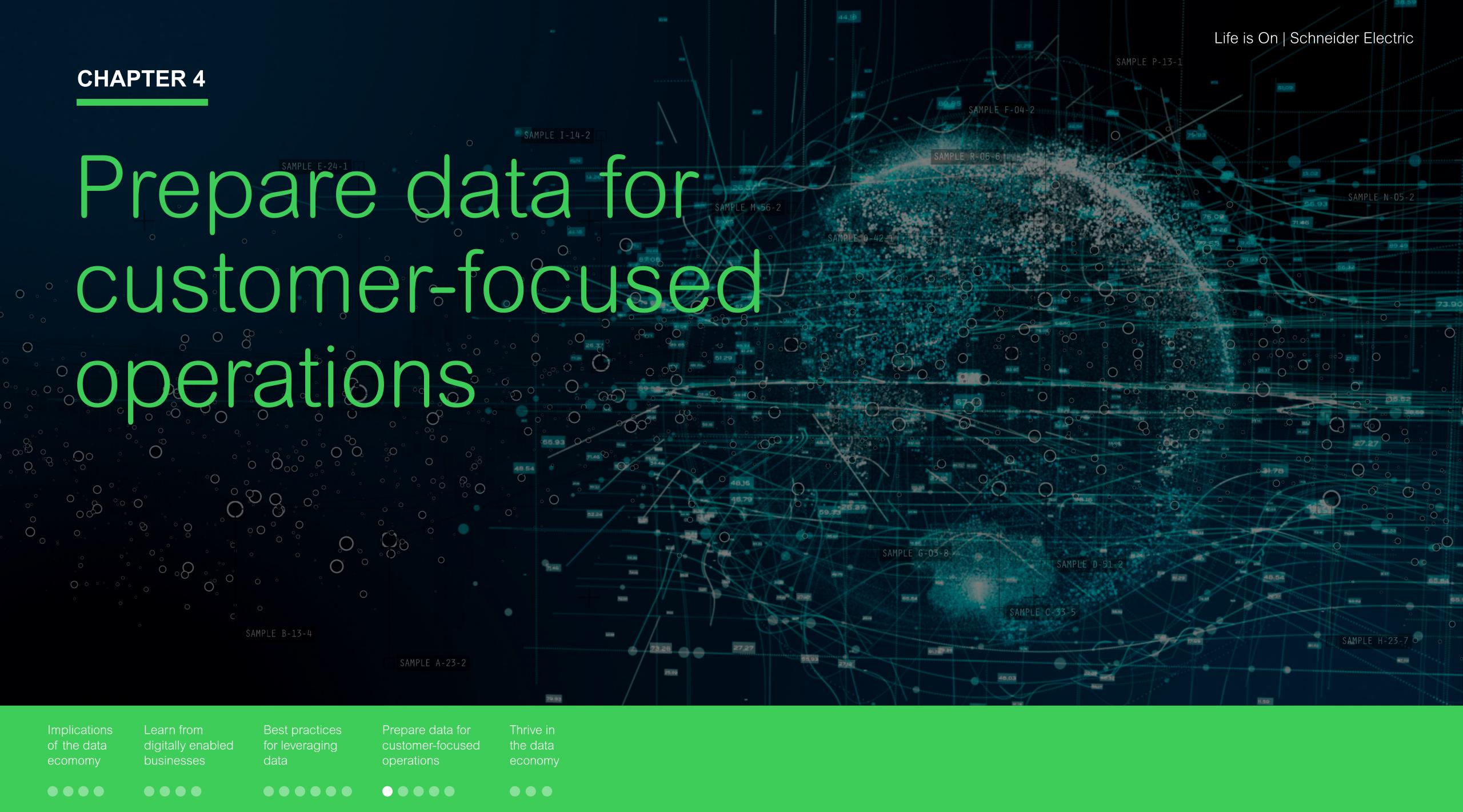
Consider new ideas to have stickier relationships with customers and provide high-end executive services for today's leading organizations.

79%
of executives believe their industry is moving to offering more variety in ownership models for their connected products and/or services.[8]

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Prepare data for customer-focused operations

Data readiness

Ensuring data accessibility and accuracy is a priority. This often involves a specially trained person to monitor complex information and ensure data quality. This special team validates that incoming data stream is flowing, accurate, and without corruption or interference.

Data transformation is the secondary role of a specialized data engineering team where the engineering team works to unify sources of data to create a single unified contract. Parsing data requires powerful processing as well as a quality-assurance oriented team. Creating unified, business-relevant data insights through specialized teams and investing in data science ultimately pays in dividends.

80%
of organizations are sitting on unstructured and inaccessible data.[9]
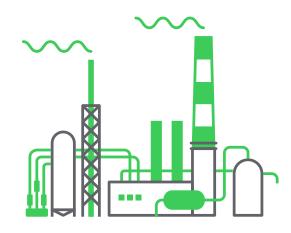
Data packaging

Once data is transformed and qualified, data scientists join the data engineering team to better understand the business opportunities based on customer needs. Data scientists create machine-learning models that provide business insights, predict and mitigate risk, and safeguard industrial-scale landscapes. They have the tools to create functional artificial intelligence (AI) models to produce predictive insights and provide statistical validation to quality control. They also allow data scientists to help predict and identify faulty data within your organization.

More than
90%
of businesses
expect easy-to-use
digital services with
holistic security.[9]

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Data positioning

The final step in bringing together your data house is to position data strategically within your market. Leading organizations are using analytics as a service to create new revenue streams and provide meaningful information to new and existing customers.

What are your opportunities for offering digital services to manufacturing customers in the OEM space?

Is there opportunity to create a new and competitive revenue stream from your organized data?

Digital services are also helping customers and clients manage costs[10]. By opting for subscription digital services that serve an organization's latent data needs, leadership now has an idea of how much they will spend and what they will receive in return.

Rather than variable or per-project costs, digital services in the form of subscriptions allow providers an opportunity to cement recurring revenue for scaling future efforts.

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Long-term trust and data privacy

In order to create mutually beneficial long-term relationships with current and future clients, privacy protection must be a top priority for your business operations. Here are the Schneider's guiding principles to foster long-term trust:

Complete data privacy compliance

- Consumer data privacy should be protected under law and complete compliance with privacy legislation must be transparent.

- The types of data collected must be disclosed and organizations and customers must be able to access or delete their data.

Privacy-by-design

- Products should be developed and streamlined with privacy as a founding priority.

- Privacy improvements should be the guiding principle for plans and innovations.

A privacy ecosystem

- Everyone in the organization and the digital ecosystem, from vendors to partners, should have the same high level of privacy certifications.

CHAPTER 5

Thrive in the data economy

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SAMPLE M-56-2

SAMPLE Q-42-1

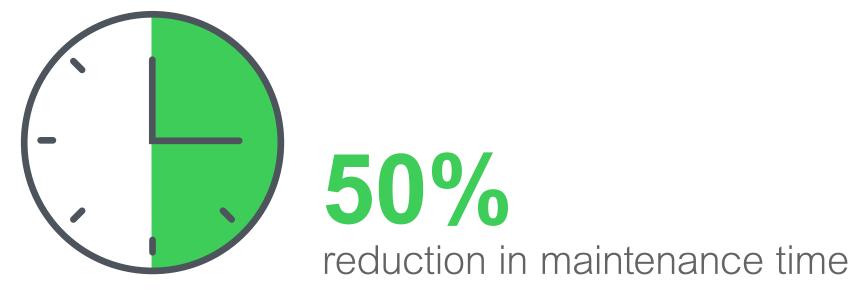| Implications of the data ecomomy | Learn from digitally enabled businesses | Best practices for leveraging data | Prepare data for customer-focused operations | Thrive in the data economy |

Snapshot: Berto Coffee Roaster

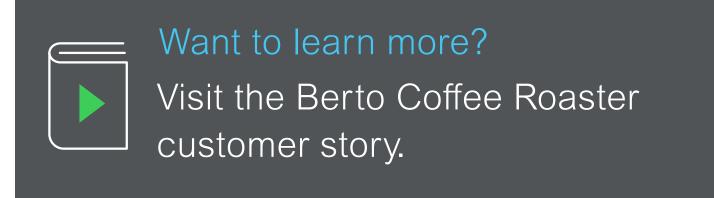Digital solutions and services maximize productivity

We draw inspiration from industrial pioneers like Marcel Patilaya, the General Manager of Berto Coffee Roaster, a global food production company. Marcel made the decision to supplement traditional coffee roasting production by investing in automation technology that assists operators in roasting beans with reliable and consistent results. By working with human machine interface (HMI) technology, Berto's management team monitors real-time productivity. With the addition of cloud-based capabilities, Marcel can monitor all machines remotely, determine their status and immediately detect interference to reduce downtime.

The result of these efforts?

50%

reduction in maintenance time

This is just one way that Berto Coffee Roaster is leading the way on reducing waste, super-charging productivity, and taking advantage of unprecedented data visibility.

Want to learn more?
Visit the Berto Coffee Roaster customer story.

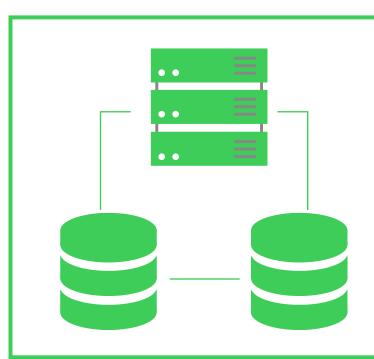| Implications of the data ecomomy | Learn from digitally enabled businesses | Best practices for leveraging data | Prepare data for customer-focused operations | Thrive in the data economy |

Future-proof your business

Digitization will continue to impact all areas of your business, from what you produce to how you produce it and the efficacy of that production all the way down through your ongoing relationships with clients, partners, and customers.

By investing in an infrastructure that looks towards a digital economy and allows your organization to be the master of its own data, you can create value and future-proof your business.

Through the knowledge gleaned internally from your data, you'll be best prepared to create digital services and seize opportunities for recurring revenue in the industrial subscription economy.

Finally, you will be able to maximize the value of your data through a community and participate in an ecosystem of digital collaboration.

The result?

An efficient, open, data-savvy organization that thrives in the data economy.

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Life Is On | Schneider Electric

To learn more about EcoStruxure, visit Schneider Electric

se.com