EcoStruxure™
Innovation At Every Level

DIGITAL

Building smarter machines to maximize profitability

Berto Coffee Roaster - Jakarta, Indonesia

Better productivity through visibility with EcoStruxure Machine

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Seizing new opportunities

Before they became a leading company in Indonesia's food processing sector, Berto Industries began as a small manufacturing company founded by Robert Patilaya in 1984. More than 30 years later, he and his son, Marcel, recognized a huge opportunity in the local coffee industry and decided to focus on building high-quality coffee roasting machines, which they have been doing since 2017 as Berto Coffee Roaster.

To maintain their position as a leading local coffee roasting machine builder, they understood that they needed to continually innovate. They looked for a strategic partner to help them realize the full potential in their coffee roasting machine through the application of digital technology. Their journey to revolutionize the coffee processing industry led them to Schneider Electric.

Embracing Industry 4.0

The Berto Coffee Roaster R series is a big convection roasting machine capable of roasting large quantities of coffee beans. Since it was all manually controlled, though, the process would take hours even with a skilled operator checking every step. This resulted in a lot of wasted time in the production process.

With the arrival of Industry 4.0, the market demanded a fully automated coffee roaster that required minimal operation and low maintenance costs while also increasing production output, quality, and consistency. It became critical for Berto Coffee Roaster to add more value to their roasting machines designed for the export market.

Digitization is the answer

First, to optimize and provide automation capability, Schneider Electric integrated the Altivar Machine ATV320 variable speed drive into Berto's roasting machine. Combined with the Modicon M221

Goal

Develop a fully automated coffee roaster that improves production output, quality, and consistency, adding value for export market

Story

Berto Coffee Roaster turned to EcoStruxure Machine solutions to maintain market leadership by digitizing their coffee roasting machines, and increasing profitability

Solution

Full EcoStruxure Machine solution, including Digital Services, that fully automates and digitizes coffee roasting machines to stay competitive in a growing market

Results

- Increased profitability by selling complete solution, bundling software, apps, and services
- Potential ROI up to 173%
- Maintenance time reduced by 50%

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> "We trust Schneider Electric as our partner because of their expertise and integrated EcoStruxure solutions that help us leverage the latest IIoT technologies."
>
> — *Marcel Patilaya, General Manager, Berto Coffee Roaster*

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logic controller that makes the system faster and more reliable, the output quality has significantly improved - giving consistent and repeatable results throughout every operation.

Better visibility into the machine's condition and performance is also key to maintaining quality and production output. EcoStruxure Machine SCADA Expert and EcoStruxure Machine Advisor provide the best solution to tackle those challenges. With both technologies, operational technicians can diagnose machine performance virtually and in real time, using a tablet, without having to open engine components manually.

Using EcoStruxure Augmented Operator Advisor, they can conduct predictive analysis and uncover potential issues before they occur and cause expensive downtime. To make it easier to control the machines and view their status, Schneider Electric also equipped them with a Magelis HMI.

Smarter machines, better results

Thanks to Schneider Electric's EcoStruxure Machine, Berto Coffee Roaster is now able to increase their profitability by selling a complete solution, bundling with software, apps, and services.

The solutions have significantly improved Berto's coffee roasting machines' performance and productivity, speed up maintenance time by 50%, minimize human error, and reduce machine maintenance costs by up to 20 percent, potentially reaching an ROI of up to 173%.

"We trust Schneider Electric as our partner because of their expertise and integrated EcoStruxure solutions that help us leverage the latest IIoT technologies," said Marcel Patilaya, General Manager, Berto Coffee Roaster. "With all these advantages, we are looking forward to the continued growth of the coffee industry and are doing our part to ensure that coffee lovers everywhere enjoy the best quality coffee."

Apps, Analytics & Services		
	EcoStruxure Augmented Operator Advisor	EcoStruxure Machine Advisor
Edge Control		
	Modicon M221 PLC	EcoStruxure Machine SCADA Expert
Connected Products		
	Altivar Machine 320 • PowerTag • TeSys Contactor • Magelis HMI	

EcoStruxure™ Machine Architecture

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Eco🔁truxure™
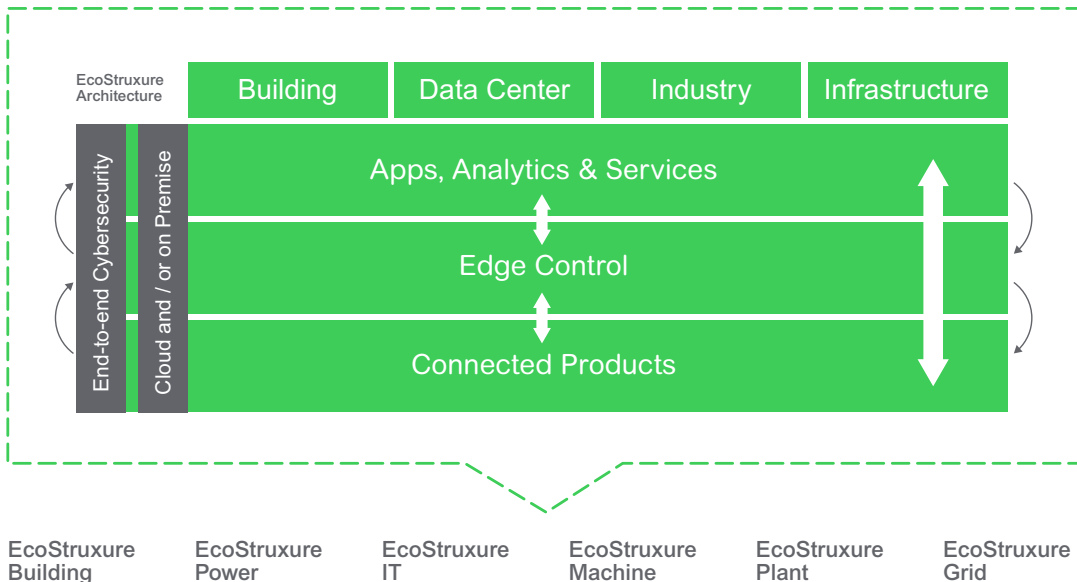## Innovation At Every Level

IoT-enabled solutions that drive operational and energy efficiency

EcoStruxure is Schneider Electric's open, interoperable, IoT-enabled system architecture and platform.

EcoStruxure delivers enhanced value around safety, reliability, efficiency, sustainability, and connectivity for our customers.

EcoStruxure leverages advancements in IoT, mobility, sensing, cloud, analytics, and cybersecurity to deliver Innovation at Every Level including Connected Products, Edge Control, and Apps, Analytics & Services. EcoStruxure has been deployed in 450,000+ installations, with the support of 9,000 system integrators, connecting over 1 billion devices.

One EcoStruxure architecture, serving 4 End Markets with 6 Domains of Expertise

EcoStruxure Architecture	Building	Data Center	Industry	Infrastructure

End-to-end Cybersecurity | Cloud and / or on Premise

- Apps, Analytics & Services
- Edge Control
- Connected Products

| EcoStruxure Building | EcoStruxure Power | EcoStruxure IT | EcoStruxure Machine | EcoStruxure Plant | EcoStruxure Grid |

Connected Products

The Internet of Things starts with the best things. Our IoT-enabled best-in-class connected products include breakers, drives, UPSs, relays, sensors, and more. Devices with embedded intelligence drive better decision-making throughout operations.

Edge Control

Mission-critical scenarios can be unpredictable, so control of devices at the edge of the IoT network is a must. This essential capability provides real-time solutions that enable local control at the edge, protecting safety and uptime.

Apps, Analytis & Services

Interoperability is imperative to supporting the diverse hardware and systems in building, data center, industry, and grid environments. EcoStruxure enables a breadth of agnostic Applications, Analytics, & Services for seamless enterprise integration.

Find out more about EcoStruxure

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Intuitive Industries - Digitized!

Discover EcoStruxure™ Machine

Learn about complete automation solutions for food & beverage machinery

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Contact us to start your journey: customercare.id@se.com

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