Better Operational Excellence through connected machines

Coffee Machine provider, Thermoplan heeded the call to provide connected and intelligent business services to its customers via the cloud to improve operational excellence and ensure better analytics on the usage of its coffee machines. Using Microsoft Azure as a cloud platform, Thermoplan developed a solution that enabled them to remotely monitor and gain deeper insights on the statistics for every coffee machine used by its customers. The company's clients are able to enjoy benefits such as proactive stock control, better maintenance of machines via predictive analytics and enhanced operational excellence. Thermoplan's ability to adapt to the changing needs of its customers has ensured sustainable success.

Customer
Thermoplan
Website:
www.thermoplan.ch
Country: Switzerland
Industry: Manufacturing
Company size: 300 employees

Customer profile
Thermoplan has been in existence since 1995, with 300 staff members. It services the hospitality industry and distributes its products across 72 countries.

Software and services
Microsoft Azure

Thermoplan developed IoT enabled machines, which connect to the cloud and collect data, bringing significant improvements such as reduced product wastage, and automatic tracking and recording of all the machine's activities.

Thermoplan, which was established in 1974 in Switzerland, develops and produces fully automatic coffee machines of the highest quality for businesses. It distributes its products in more than 72 countries and holds an impressive variety of clients such as Starbucks, Nespresso and Costa Coffee.
The company works with a long list of clients in the restaurants industry including: quick service restaurants, baking chain stores and food station chains.

With technology changing the business landscape, companies are seeking innovative ways to increase customer loyalty and stay competitive. As an innovative company Thermoplan understands its customers' needs, and through a Microsoft certified partner, found a fitting cloud architecture that would bring about enough flexibility for the company to easily adapt its solution.

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Optimizing machines for better products and business processes

"Previously we did not have our coffee machines connected to the cloud and could not receive data that would help us track any possible issues with the machines. We relied heavily on time based maintenance to keep them running. The move to an IoT-based solution was driven by a request from one of our key accounts, expressing the need for a cloud connected machine that can give valuable insights," explains Rolf Hochstrasser, Project Manager at Thermoplan.

Thermoplan's migration to the cloud came with help of company's long-term Microsoft partner, bbv Software Services. Thermoplan went through an eight-month pilot, where eight of its machines were connected to the cloud, collecting important data and receiving remote updates. The data consists of information such as product results, which include the recipe and the machine's operation hours amongst other things, which can be used by customers for analysis. The data also reveals the duration of the grinder, the pressure as well as how much coffee was consumed for a certain period. Each machine sends approximately 4 KB of data to the backend of each product, including the corresponding recipe, the different amounts of water, coffee and milk as well as multiple quality metrics. Additionally, the status and machine event data are sent. The user can also remotely update the Operating System, Software and Configurations including recipes in a safe and secure way.

Thermoplan's service partners are able to clean and maintain coffee machines in a timely manner, as the information needed is readily available. The customers receive cleaning reminders and statistics from the machine. This helps them to better plan for maintenance and stock management.

■■ Microsoft

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Rolf Hochstrasser, Project Manager, Thermoplan

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During service maintenance, Thermoplan's service partners had been able to access the information on the health of the machine and pass it onto Thermoplan. Since connecting its machines to the cloud, Thermoplan is able to readily get information on the health of the machines without relying on service partners' feedback. The technicians receive updated feedback on the machine even remotely, which is convenient for most operators and cuts commuting costs to the stores where the machines are located.

Thermoplan has a long-term relationship with bbv, the Microsoft certified partner who assisted with implementing the project. "bbv currently supplies Thermoplan with a wide range of experts, including cloud engineers, front-end engineers, a solution architect, requirements and user experience engineers. We implemented Thermoplan's backend, including the cloud-side IoT parts, the Big Data parts, security and the device management and supported them with the connectivity on the device side", says Roland Krummenacher, Software Architect and Microsoft Azure MVP at bbv Software Services.

"Microsoft's Azure IoT has many great features such as flexibility, scalability security and is in many ways reliable. It's great that we can rely on Microsoft's innovation and not have to build our own platform. This allows us to sorely focus our efforts on the user interface for our partners and customers, while a Microsoft partner from a service perspective handles the backend," concludes Martin Ulrich, Area Sales Manager at Thermoplan.

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customers.microsoft.com

Partner: bbv Software Services

Partner Web Site: www.bbv.ch

Digital transformation to:
- Empower employees
- Engage customers
- Optimize operations
- Transform product
- Transform business

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