

# SIEMENS BUILDING TECHNOLOGIES LEVERAGES THE INTERNET OF THINGS TO PROVIDE INNOVATIVE ANALYTICS-BASED SERVICES FOR PREDICTIVE MAINTENANCE, SUSTAINABILITY AND ENERGY MANAGEMENT

Capgemini Invent supported Siemens designing and implementing analytics-based services for connected buildings

**The “Way of Siemens” is more than pure energy management. The use of Big Data and Analytics is exactly what today’s market expects.**

Headquartered in Zug, Switzerland, the Building Technologies Division of Siemens is a leading provider of automation technologies and services for commercial, industrial and public buildings and infrastructures across their entire lifecycle. Essential applications include energy efficiency, automation, comfort, fire safety and security. The division offers products, solutions and services that optimize the energy costs, reliability, comfort and performance of buildings while meeting ecological and sustainability requirements. The Division has a broad customer base that includes owners, operators and tenants of public and commercial buildings as well as general contractors, system houses and original equipment manufacturers (OEM).

For the last decade, the market for commercial building automation has been changing significantly. The consolidation of suppliers and service providers drives commoditization, and innovations in the area of connectivity and applications enable new players to enter the market. To reaffirm its position as one of the world’s market leaders in building technologies, Siemens decided to differentiate from competitors by providing innovative analytics-based services for connected buildings. The aim is to successfully respond to future global market trends that influence society’s behavior as well as their demands regarding sustainability, comfort and efficiency.

## **Connecting buildings to provide analytics-based services requires thorough research, expert knowledge and detailed planning**

Together, Siemens and Capgemini went through all steps from strategy and design to implementation of a comprehensive service platform for the Internet of Things. Based on an initial analysis of market trends and requirements, we created and prioritized use cases as well as new innovative analytics-driven services around predictive maintenance, sustainability and energy management.

Siemens and Capgemini translated these services into individual building blocks – described as the business functions and specifications of the new platform. Furthermore, we defined the IT requirements and designed different IT architecture scenarios. Since a transparent customer installed base is essential for many services, we created a concept to harmonize it across different countries and products.

## SIEMENS

### Overview

**Customer: Siemens Building Technologies**

**Industry: Manufacturing**

**Location: Zug, Switzerland**

**Client Challenges / Business Need:**

Provide world-class, innovative solutions for building technologies

**Solution-at-a-glance:**

Implementation of a comprehensive service platform for the IoT

**Results (Benefits):**

Strengthen Siemens’s leading market position; Up- and cross- selling opportunities; Improvement of Customer Systems availability; Decrease of maintenance costs

*“Capgemini uniquely combined strategic vision and technological knowledge to be the ideal partner in this lighthouse project for connected buildings.”*

**Eike-Oliver Steffen,**  
Head Solution & Service  
Portfolio,  
Siemens Building Technologies

Based on these results we set up and managed the vendor selection process for the chosen architecture scenario. As part of the vendor selection process, we designed and managed a comprehensive proof of concept to validate key technical assumptions.

Finally, we supported the calculation of the business benefits and return on investment for selected offerings to identify “low hanging fruits”. After creating the target scenario, we developed a wave-based roadmap to implement this complex business and IT transformation project.

## Results count – Siemens Building Technologies will strengthen its leading position, creating added value for building operators and investors

After the rollout Siemens Building Technologies will be able to differentiate from commodity providers through new services that optimize energy consumption, energy costs and sustainability, thus helping companies to achieve their sustainability goals against the backdrop of increasing energy costs and stringent government regulations. Furthermore, Siemens will be able to harvest insights from the harmonized global installed base for up- and cross-selling purposes and use analytics to optimize service performance.

The Siemens customer’s system availability can be improved through remote fault detection and diagnosis, system availability increases through remote fixes as well as predictive maintenance. Besides these customer benefits the new service platform also decreases maintenance costs for Siemens by avoiding truck rolls through remote fixes and more efficient maintenance.

### About Siemens Building Technologies:

The Siemens Building Technologies Division (Zug, Switzerland) is the world leader in the market for safe and secure, energy-efficient and environment-friendly buildings and infrastructures. As technology partner, service provider, system integrator and product vendor, Building Technologies has offerings for safety and security as well as building automation, heating, ventilation and air conditioning (HVAC) and energy management. With around 27,000 employees worldwide, Building Technologies generated revenue of approx. 6.0 billion Euro.

### The Collaborative Approach:

The Collaborative Business Experience™ is central to the Capgemini philosophy and a pillar of our service delivery.

- A consequent, joint team-set up and a tailored, workshop-based working mode enabled everyone involved to work together in a time-efficient and solution-oriented manner.
- Knowledge holders, Business and IT, from ten locations globally including headquarters and subsidiaries, worked as one team.
- Together, we involved the right people at the right time and right location to develop one common, harmonized, standardized yet flexible approach to conceive and develop the new service platform.
- We used the latest digital tools to connect the global Siemens network with the international capgemini invent network.

## About Capgemini Invent

As the digital innovation, consulting and transformation brand of the Capgemini Group, Capgemini Invent helps CxOs envision and build what’s next for their organizations. Located in more than 30 offices and 22 creative studios around the world, its 6,000+ strong team combines strategy, technology, data science and creative design with deep industry expertise and insights, to develop new digital solutions and business models of the future.

Capgemini Invent is an integral part of Capgemini, a global leader in consulting, technology services and digital transformation. The Group is at the forefront of innovation to address the entire breadth of clients’ opportunities in the evolving world of cloud, digital and platforms. Building on its strong 50-year heritage and deep industry-specific expertise, Capgemini enables organizations to realize their business ambitions through an array of services from strategy to operations. Capgemini is driven by the conviction that the business value of technology comes from and through people. It is a multicultural company of 200,000 team members in over 40 countries. The Group reported 2017 global revenues of EUR 12.8 billion. People matter, results count.

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