

Buildings become a game changer – in multiple areas

Digitalization is transforming buildings from a passive to an active asset

Rapidly progressing digitalization enables us and our customers to turn buildings from a passive asset into an active contributor to our core business. Smart buildings help our customers become even more competitive. The building management industry is now undergoing the same development as Industrie 4.0.

Background:

- Buildings consume 41 percent of energy worldwide.
- 30 percent of corporate real estate portfolios will consist of flexible office space.
- The earth's population will increase from 7.3 billion people today to 9.8 billion in 2050
- 70 percent of the world's population will live in cities (2014: 54 percent).

This results in enormous challenges and opportunities, especially in the building management and construction industry. Future advances in building technologies will have a huge impact on business and society.

Digitalization gives us the opportunity to achieve outstanding productivity by upgrading the efficiency of existing buildings:

- Enhance building performance through the power of data
- Build smarter buildings and smarter infrastructures using the power of digitalization throughout the entire lifecycle of buildings

We create perfect places for different target groups: owners, operators, tenants – and even visitors and users of a building.

- Tenants corporate businesses are interested in increasing the productivity of their employees and providing them with a safe and secure workplace.
- Building operators are interested in increasing operational efficiency and reliability of their facilities.

The Siemens BuillIding Technologies Division (BT) is a leading developer and provider of products, system solutions and services in the areas of building automation, energy efficiency, fire safety and security as well as a pioneer in building digitalization. In 2016, BT employed approximately 27,000 people in more than 400 locations worldwide, generating revenue of 6.1 billion euros.

BIM (Building Information Modeling)

This approach makes it possible to use all the data from the construction and planning phase to create a digital twin of the building. The twin helps automate planning and engineering and can even simulate savings, efficiencies for assets, space and users at all stages of the building's lifecycle.

Siemens Navigator

Navigator is a cloud-based data management platform designed to optimize the performance of buildings. The platform is customizable, allowing companies to achieve energy, sustainability, and system performance targets.



- Owners are interested in reducing their costs, keeping their vacancy rates low and increasing the value of their properties. They also want to show that they are in compliance with regulations, and many want to publish their progress on sustainability goals.
- Visitors and employees, too, are customers as they want to feel welcome, safe and secure, be able to navigate around unfamiliar places and find their destinations quickly.

Significant potential to increase efficiency

Buildings shape the economic future in completely new ways. Three central efficiency levers exist in the field of intelligent building technology:

- 1. Making tenants feel safe and comfortable, and giving them control in an intuitive way by creating a perfect place
- 2. Energy and asset efficiency: Our solutions optimize operational expenses and environmental footprints.
- 3. Space and user efficiency: We support our customers by helping them make more efficient use of their space and allow building users to increase their efficiency every day.

To manage all this, Siemens offers:

- More than 10,000 service technicians at the doorstep of our clients worldwide,
- Over 200 performance engineers,
- 4 MindSphere Application Centers,
- 200 services overall,
- 70 of which are digital

By enabling our customers to become more competitive, we increase the business potential for Siemens. Tapping into faster growing segments helps us to continue growing faster than the market.

Further information siemens.com/innovationday siemens.com/press/inno2017

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