

thyssenkrupp embarks on a digital adventure





Table of contents

- 1 thyssenkrupp embarks on a digital adventure
- 2 Ensuring around-the-clock service reliability with IoT
- 3 Providing first-rate customer care with mixed reality
- 4 Empowering employees with high-tech tools
- 5 Optimizing system performance with digital twins
- 6 thyssenkrupp forges into the future



thyssenkrupp embarks on a digital adventure

With 150,000 employees spread across five continents, thyssenkrupp is one of the most diversified industrial groups in the world. But in the last few years, new and emerging technologies have brought significant changes to manufacturing. To cement its status as an industry leader, the organization needed a fresh, innovative approach to optimize processes, empower employees, and deliver greater customer value.

Partnering with Microsoft, thyssenkrupp embarked on a four-part digital transformation journey—one that would pave the way for the company to create a culture of continuous innovation and make its goals a reality.

From the moment thyssenkrupp put the Internet of Things (IoT) and other revolutionary technologies at the heart of its operations, the enterprise opened up a whole new world of possibilities.

And with Microsoft actively helping the organization guide its digital transformation journey, thyssenkrupp isn't just reshaping its business, it's transforming the world around us.





Ensuring around-the-clock service reliability with IoT

thyssenkrupp made its foray into the digital realm by connecting it's elevators to IoT sensors. This gives the company's 20,000 global service engineers real-time data to improve operational efficiency.

And by combining IoT with machine learning, thyssenkrupp can:



Predict future failures



Fix problems before they arise



Increase overall elevator reliability

A lot of this can even be achieved from a distance. With **Microsoft HoloLens** and **Skype**, now <u>onsite service technicians can better</u>
<u>connect with remote specialists</u> to diagnose and repair issues so elevators stay in working order and riders are transported without fail.

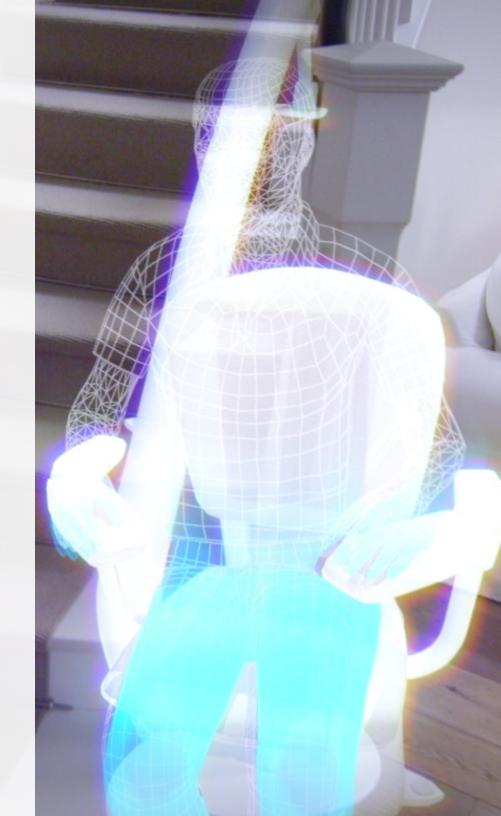




Providing first-rate customer care with mixed reality

After laying the foundation for digital success by equipping its elevators with IoT sensors, thyssenkrupp continued using cutting-edge technology to improve mobility. But this time, it took a mixed reality approach to helping people with physical limitations get around their homes.

Using Microsoft HoloLens, a thyssenkrupp sales rep can <u>digitally</u> measure a customer's house for a new, customized stair lift. By replacing manual processes with an innovative solution, the company has been able to accelerate delivery four times faster and help customers make emotional decisions with newfound confidence.





Empowering employees with high-tech tools

After introducing **groundbreaking technologies** to improve mobility, thyssenkrupp set its sights on transforming other business areas.

Inside its warehouses, employees are empowered to pick, pack, and ship orders more quickly and efficiently. **With Microsoft HoloLens, workers can:**



Optimize their routes to locate parts



Highlight items needed for orders



Accelerate delivery schedules



Increase customer satisfaction

Meanwhile, **putting revolutionary tools in the hands of staff** at manufacturing facilities gave workers the ability to more easily upgrade factory designs, determine when to repair machinery, and collaborate to streamline operations.

What that means in the aerospace sector is that if a grounded aircraft urgently needs a part, workers at an aerospace factory are better positioned to **act fast and deliver**, so passengers can take off for a safe flight without delay.







Optimizing system performance with digital twins

thyssenkrupp began its digital adventure by adopting IoT to improve elevator reliability. Today, it's embracing another innovative technology to take elevators—and the buildings they're in—to new heights.

Using digital twins, thyssenkrupp can safely create and store a digital replica of virtually any built environment to bring together both the static information that's produced during the construction of a building and live, dynamic information from the building itself.

By attaching IoT sensors to a building's systems—from elevators and lighting to heating, ventilation, and air conditioning—thyssenkrupp can collect and analyze real-time data inside a digital twin. All without the expense of trying to find this same, costly information using just the building's physical structure.

Now, building owners, managers, and maintenance staff can use this insight to optimize performance and create consistently pleasant experiences for residents, commercial tenants, and visitors.





thyssenkrupp forges into the future

thyssenkrupp's commitment to reshaping its operations and delivering greater customer value through digital transformation is primed to carry the company forward. And as its partnership with Microsoft blossoms and the organization adopts more cutting-edge innovations, thyssenkrupp is embracing possibilities only imagined just a few years ago.

Find out how your company can deliver new services, optimize operations, empower your workforce, and reimagine manufacturing through technology.

Learn more

