

MOBILE WORLD CONGRESS BARCELONA

26. – 29. FEBRUARY

CONNECTING





Smart cities are the future. By providing sustainable smart city solutions for all your needs we help to improve the economic power and quality of life in cities. Deutsche Telekom provides a wide range of smart city solutions and helps you to implement the full potential of digitalization when it comes to building a successful and sustainable future for your citizens, institutions, and industries. We see smart cities as ecosystems made possible by the digitalization of public services with ICT-based solutions. These ecosystems ultimately improve the quality of life for their citizens, attract visitors, and support economic development.

- Industry solutions built on Deutsche Telekom's trusted fixed and mobile networks
- Strong in-house expertise delivering benefits with innovative digitalization use cases
- All our solutions will help reduce operating costs and boost efficiency
- Enhanced experience for citizens and tourists, including those with disabilities
- Solutions making the city more attractive and welcoming
- Sustainable solutions improving the quality of life for citizens





Deutsche Telekom has developed a platform providing a number of solutions to support cities with digitalization to enhance efficiency, reduce costs, and become smart. At the Deutsche Telekom booth our MWC showcase includes city services to citizens where our OneCity platform is designed to enhance the lives of urban residents - streamlining city services, improving citizen engagement, and creating a more connected community. It improves urban life for citizens, businesses, visitors, and public administration by supporting their digitalization through a number of integrated smart solutions. Natural disasters appear to be on the increase so predictions and warnings of occurences are most useful. We can enable a network of IoT sensors providing a natural disaster warning system regarding high water levels influenced by heavy rainfall, melting snow, etc. The resulting hazard maps are created using the sensor-derived data coupled with weather forecast data and AI analysis, meaning action can proactively be taken to reduce damage. Our passenger-centric urban mobility solutions increase the level of efficiency and quality of operations in public transport by integrating ticketing, travel, and creating a user-friendly mobile app experience for customers. Using aggregated and anonymized customer behavior data, we can also proactively plan for upcoming gatherings, e.g., concerts and sports events, and make better strategic decisions going forward. Lastly, we have implemented a waste collection system with aquadrones using Deutsche Telekom's precise positioing system to navigate lakes and ponds and clear them of unsightly plastic waste and other floating debris. All of these solutions are already in use and offer cities and citizens a number of benefits in these challenging times, including increased efficiency, lower operating costs, a better citizen experience, and a higher quality of life for those who live and work in those cities.

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Digitalization of Verticals

Digitalizing the healthcare sector

Making Europe greener and more digital is the key challenge of our times. Deutsche Telekom is not only helping healthcare systems go digital, but also helping develop new e-health telemedicine services, making them available to more and more people. Our solutions portfolio enables you and your citizens to benefit from services such as digital health records for patients, cancer treatment/e-health programs, and hospital logistics. What's more, Deutsche Telekom can also help you strengthen your existing infrastructure and implement other digitalization projects in healthcare, e.g., introducing a standardized hospital information system.

- Industry solutions built on Deutsche Telekom's trusted fixed and mobile networks
- Strong in-house expertise delivering benefits with innovative digitalization use cases
- Digital systems provide better healthcare with faster nationwide coverage
- Solutions reduce operating costs and boost efficiency
- Strong focus on providing an improved patient experience
- Telemedicine stations support seasonal trends caused by an influx of visitors





Visit our Deutsche Telekom booth and take steps towards achieving a healthy future with digital solutions that improve services, support infrastructure, and ensure the well-being of both practitioners and patients. Our MWC showcase includes our overarching e-health ecosystem, which incorporates various digital mobile services including patient-physician telemedicine stations, medical consultant telemedicine stations, and home monitoring systems for patients with chronic diseases. When available to health services, they will provide more flexible, seamless, efficient services where telemedicine stations have the necessary imaging equipment to allow a medical consultant to view the data, vital signs, and images relating to the patient. Another digital e-health service on offer is the e-prescription service, which is a simple electronic way to generate prescriptions through an automated data entry process utilizing e-prescribing software and a transmission network which links to participating pharmacies and examination labs. It

is completely transparent and during the project, our Greek subsidary OTE Group developed paperless e-prescription modules that replace traditional prescriptions with electronic ones via SMS and/or email, which is especially useful for patients with chronic and very infectious diseases. Regarding personalized patient access to medical information, we have implemented digital identities with high security standards to provide patients with an improved experience when accessing their personal health data. Multichannel appointment management expands the communication with end users via a platform using a combination of new and traditional channels (e.g., WhatsApp, Messenger, SMS, Viber, etc.) to enhance the patient experience. These DT/OTE solutions are currently in use in Greece and offer health services and patients a number of benefits in these challenging times, including increased flexibility, efficiency, and performance, lower operating costs, and an improved patient experience in a number of cases.

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Digitalization of Verticals

Digitalizing the financial and banking industry

Nowadays, banks, financial institutions, and insurance companies need to invest in the digital future to master challenges such as winning and retaining customers, reducing operational costs, digitalizing offices, and using data and process automation efficiently. Deutsche Telekom is here to help guide you through your digital transformation and can provide a wide range of reliable technologies. Our banking and financial solutions help you improve your digital customer experience, increase your productivity, and bolster your cybersecurity so you can navigate the digital business world safely and successfully.

- Industry solutions built on Deutsche Telekom's trusted fixed and mobile networks
- Strong in-house expertise delivering benefits with innovative digitalization use cases
- All our solutions will lead to reduced operating costs and greater profitability
- Enhanced customer experience for bank customers and less fraud
- Multichannel communication for a smoother customer experience
- Improved customer satisfaction by the use of new technologies such as AI





At the Deutsche Telekom booth, you can experience which technologies are available and how these can be used to enable new, or improve existing, business use cases. Our MWC showcase includes our multichannel banking services, which expand the communication with end users via a platform using a combination of new and traditional channels (e.g., WhatsApp, Messenger, SMS, Viber, etc.) to enhance the customer experience. Another showcase is fraud protection with mobile network attributes, which reduces the risks to banks and their customers by detecting suspicious behavior. Based on the unique usage of mobile phone positioning in our lives, it can be used as a trust bearer in the process of strong customer authentication, which financial institutions need to use for their customers. If unusual behavior is detected such as "line busy" during a wire transfer, "number not verified," or "new SIM card present," then transactions can be blocked and possible fraud prevented. Lastly, virtual

assistant bank contact entries are presented where AI takes a significant workload off the people working in the contact centers with automation and digitalization. Via an AI-based voice assistant, banks are now able to provide a human-like experience for customers for a number of use cases, e.g., IVR functionalities and call routing, updating account details, balance and statement queries, card services, payment issues, etc. The solution increases the profitability of banks, reduces customer and staff churn, and improves banks' NPS scores by over 40%. All of the Deutsche Telekom solutions are already in use and offer customers a number of benefits in these challenging times, including greater efficiency, lower operating costs, and extended automation, in turn leading to an improved allocation of resources, and energy savings that help create an overall more sustainable business operating model.

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More than ever before, companies in the manufacturing industry are having to adapt to new technologies. They need to go digital, automate processes, and create a new way of learning to optimize efficiency as well as improve customer experience. But how can companies manage all these factors? That's simple: Deutsche Telekom's trusted manufacturing digital solutions provide the perfect basis for efficient and sustainable production.

Conscious manufacturing that leverages the latest technologies helps production facilities boost efficiency, cut costs, shorten lead times, and increase operating capacity. Deutsche Telekom can help you achieve all these objectives.

- Industry solutions built on Deutsche Telekom's trusted fixed and mobile networks
- Strong in-house expertise delivering benefits with innovative digitalization use cases
- Solutions that help cut operating costs and boost efficiency
- Many solutions providing energy savings
- Recurring quality improvements on production lines
- Sustainable solutions supporting ESG directives and targets





At the Deutsche Telekom booth, you can discover comprehensive solutions that support manufacturing industries with digitalization to enhance efficiency, cut costs, and remain competitive. Our MWC showcase includes our Connected Factory, where various customer use cases can be deployed under a 5G campus network with an associated collected data platform. Related use cases include mixed reality assembly, visual recognition services (management and quality of welding robots) and digital twin-based predictive maintenance. Another showcased manufacturing solution is production line digitalization, where monitoring the production line by the quantification of materials, inventory,

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processes, and outgoing parts and products optimizes the associated processes and required resources. Lastly, asset condition and inventory monitoring are showcased, where the digitalization of processes from the incoming goods quantity and quality inspection to asset tracking for warehouse and production lines are implemented. All of these Deutsche Telekom solutions are already in use and offer customers a number of benefits in these challenging times, including greater efficiency, lower operating costs, and extended automation, in turn leading to an improved allocation of resources, and energy savings that help create an overall more sustainable business operating model.

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Digitalization of Verticals

Digitalizing the transport and logistics industry

Globalization and digitalization have made the world increasingly interconnected and interlinked. For transport and logistics processes to run smoothly, all the elements in the process need to work together seamlessly. With our digitalization solutions for the transport and logistics industries we will help you to grow your business with resilient connectivity, intelligent data analytics, and AI automation. As a trusted partner for digital transformation in a variety of industries, Deutsche Telekom offers a range of solutions that increase efficiency, customer convenience, and security, as well as cutting costs and enabling profitable business growth.

- Industry solutions built on Deutsche Telekom's trusted fixed and mobile network
- Strong in-house expertise delivering benefits with innovative digitalization use cases
- Solutions that help cut operating costs and boost efficiency
- Multichannel communication enhancing customer experience
- Route optimization solutions cut fuel costs and emissions
- Sustainable solutions supporting ESG directives and targets





At the Deutsche Telekom booth, you can experience a number of solutions to support the transport and logistics industries with digitalization to enhance efficiency, reduce costs, and remain competitive. Our MWC showcase includes our multichannel communication for last-mile delivery, which expands the communication with end users via a platform using a combination of new and traditional channels (e.g., WhatsApp, Messenger, SMS, Viber, etc.) to enhance the customer experience. Another showcase is low-carbon mobility management, where the consumption and emissions of vehicles are measured, collected, and combined in the cloud with other relevant data. Improvements, feedback, and suggestions, e.g., route optimization, are sent to the driver via an app. Our passenger-centric urban mobility solutions increase the level of efficiency and operations in public transport by integrating ticketing, travel, and creating a user-friendly mobile app experience for customers. Using aggregated and anonymized customer behavior data we can also proactively plan for upcoming gatherings, e.g., concerts and events, and make better strategic decisions going forward.

Deutsche Telekom also provides solutions for digitalizing airports and their operations, enabling improved services such as ground handling, which greatly enhances airport services and improves the airport customer experience. Lastly, asset condition and inventory monitoring are showcased, where the digitalization of processes, from the incoming goods quantity and quality inspection to asset tracking for warehouses and production lines are implemented. All of these solutions are already in use and offer customers a number of benefits in these challenging times, including greater efficiency, lower operating costs, and extended automation, in turn leading to an improved allocation of resources, and energy savings that help create an overall more sustainable business operating model.



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