



The event will showcase industrial solutions for the adoption of disruptive technologies

# IOT Solutions World Congress 2022 gives new impetus to the digital transformation of industries

The IOT Solutions World Congress (IOTSWC), the largest international event devoted to industry transformation through disruptive technologies, returns in 2022 to give new impetus to the digital transformation of businesses and companies. In its sixth edition and under the theme *Game-changing technologies for industry transformation*, IOTSWC gathers from May 10 to 12 at Fira de Barcelona's Gran Via venue 310 exhibitors to showcase to showcase technological solutions that provide an edge to companies across many industries and 200 speakers to discuss the latest trends in digital transformation through disruptive technologies.

Organised by Fira de Barcelona in partnership with the Industrial Internet Consortium® (IIC™), the 2022 edition of IOTSWC will showcase the solutions of companies such as ABB, Altair, Amazon Web Services, BrainCube, Crowdstrike, Deloitte, Device Authority, EMnify, Faircom Corporation, Fiware, Hornet Security, Huawei, Kaspersky, KNX, Libellium, Palo Alto, Richardson RFPD, Relayr, Siemens, Sternum and Trellix, TXOne Networks. All of them will display examples of how the Internet of Things, Artificial intelligence, Digital Twins, Blockchain and other technologies have the potential to transform entire businesses.

The Director of IOTSWC, Roger Bou, says: "IOT Solutions World Congress 2022 will be a critical milestone for the ecosystem of business transformation technologies. After two years of being apart, companies, thought leaders and innovators will finally be able to get together. This will surely provide a much-needed push to relaunch collaboration and joint initiatives in a field where multi-actor projects are key in the development of new solutions capable of being scaled worldwide."

Along these lines, the President of the IIC, Bill Hoffman emphasises the practical focus of the event, which showcases not only the latest advances in the Industrial IoT but also the enabling technologies that will drive the transformation of multiple industry sectors. "IOTSWC aims at companies who are looking for these technologies. At the event they will not only be able to learn from fellow users about how they have successfully adapted and implemented some of them, but they will also see at our exhibition floor some of the most innovative trials being conducted worldwide."

#### Industry transformation reimagined

IOTSWC will structure its congress program in five themes that express a new cross-industry approach: Business optimization, Artificial Intelligence, Connectivity, Security and Customer Experience. Moreover, the conferences and sessions will focus on use cases that provide clear examples of how disruptive technologies are capable of changing businesses.

The list of speakers is headlined by Ann Dunkin, Chief Information Officer (CIO) at the US Department of Energy and author of *Industrial Digital* 

IOTSWC features 310 exhibitors and over 200 speakers headlined by Ann Dunkin, CIO at the US Department of Energy

The event includes a
Testbed Area with
examples of solutions
that combine several
disruptive technologies,
a start-up competition,
and the Industry
Solutions Awards

The 2022 edition is jointly held with Integrated Systems Europe, the world's leading professional AV and systems integration show

Transformation: Accelerate digital transformation with business optimization, AI, and Industry 4.0, and includes, among others, Hiroshi Yamamoto, Corporate VP of Digital Innovation Technology Center and Corporate Digitization at Toshiba; Mark Geckeler, DPP Alliance Head at the Volkswagen Group; Gunter Beitinger, Senior VP of Manufacturing & Head of Factory Digitalization at Siemens; Stuart Bashford, CTO at Buhler Group, Matthias Kuss, CEO, FMC Data Solutions at Fresenius Medical Care, Juha Pankakoski, Chief Digital Officer at Konecranes, Nicole Raimundo Coughlin, CIO for Town of Cary (USA), and Jesper Toubol, VP of Operations – Moulding Production at Lego Group.

#### **Testbed Area**

Providing tangible examples of successful combinations of these technologies is also key to drive innovation. In 2022, IOTSWC will bring back the testbed area that has become a trademark of its own. A jury comprised of industry leaders selected a total of 10 initiatives that will show at a central location within the exhibition floor how new services and solutions can be developed, tested in real life conditions, and deployed in a scalable manner. Among the examples selected are solutions for the Automotive, Construction, Food, and Urban management sectors including a smart refrigerator that uses Al cameras to reduce food waste and apply dynamic pricing, a digital twin service designed to implement a pay-per-use service for the Construction industry, and an intelligent heritage conservation system capable of anticipating asset maintenance needs through virtual reality and remote monitoring.

#### **IOT Awards and Startup Competition**

Distinguishing the exceptional work of IOT and digital transformation in specific fields and highlighting the results that transform industries through greater efficiency, sustainability and connection to the people is the goal of the Industry Solutions Awards. In 2022, the accolades will be given in a total of six categories: Security, Connectivity, Customer Solution, Optimization, Intelligence, and a special Game Changer of the Year Award. This last recognition will go to an industry pioneer an individual who has been a role model key for the promotion and implementation of technology solutions in vertical industries. The award is open to audience nomination so the ecosystem can name its very own heroes every year. The winners will be announced during a ceremony held on Wednesday May 11.

But innovators taking the firsts steps in the industry will also be brought into the spotlight during IOTSWC through the Startup Competition. The aim of the contest is to provide global visibility to these companies and to do so the event has selected the best 5 startups in two categories: Stage One entrepreneurs who have developed a Minimum Viable Product and the Stage Two Entrepreneurs who have built out minimal elements needed for scale and commercialization. The competition will be held in person during the IOTSWC and the winners will be announced at the end of the competition itself on May 12.

#### **IOTSWC** and ISE join forces

On 2022, IOTSWC will be jointly held with Integrated Systems Europe (ISE), the world's leading professional audiovisual (AV) and systems integration show. The simultaneous celebration of the two events will provide a unique opportunity to explore the crossroads between two different sets of disruptive technologies and highlight the two events' common ground, offering new ideas and means of collaboration for all attendees and exhibitors.

IOTSWC will bring to the table leading experts and companies working on Artificial Intelligence, Digital Twins, Internet of Things and Quantum Computing and ISE will deliver leading companies from the professional AV industry as well as international experts in the field of systems integration in numerous industries. The agreement will allow visitors of these events to access both exhibition areas at no extra cost, whilst delegates registered to the IOTSWC congress program will benefit from a 50% discount if they wish to register for any ISE conferences - and vice versa.

### **Barcelona Cybersecurity Congress**

Cybersecurity has become a critical field within the technology landscape as an essential layer for every solution. To underline this importance, the Barcelona Cybersecurity Congress will be jointly held with the IOTSWC. The third BCC will address the need for all industries to increase their security levels to avoid or minimize the effects of an attack by cybercriminals. The event organized by Fira de Barcelona and the Agència de Ciberseguretat de Catalunya, the body responsible for cybersecurity in Catalonia for both society and the public administration, will feature conferences, an exhibition and activities area, and a symposium for startups. The BCC will also have an exhibition area, an Innovation zone, and a Hacking Village that will host workshops and a hacking competition where 45 hacker will have two hours to neutralize the Mummy Spider trojan virus.





May 10 to 12, 2022 www.iotsworldcongress.com

The congress program will include over 200 experts from companies as Airbus, Lego, Siemens and VW

## Ann Dunkin, CIO of US Department of Energy to headline at IOT Solutions World Congress

The IOT Solutions World Congress (IOTSWC), the largest international event devoted to industry transformation through disruptive technologies, will feature Ann Dunkin, Chief Information Officer at the US Department of Energy as the featured plenary speaker for the 2022 edition. From May 10 to 12, the event will feature over 310 exhibitors and over 200 experts taking the stage to speak about disruptive solutions that are transforming industries.

Organized by Fira de Barcelona in partnership with the Industry IOT Consortium® (IIC™), the 2022 edition of IOTSWC will structure its congress program in five horizontal tracks aimed at providing a new cross-industry approach: Business Optimization Solutions, Artificial Intelligence Solutions, Connectivity Solutions, Security Solutions and Customer Experience Solutions. The conferences will feature leading experts presenting use cases that provide examples of how disruptive technologies transform businesses.

Among the featured speakers is Ann Dunkin, Chief Information Officer (CIO) at the US Department of Energy and author of *Industrial Digital Transformation: Accelerate digital transformation with business optimization, AI, and Industry 4.0.* Ms. Dunkin has experience both in the public and private sectors having served in the Obama Administration as CIO of the United States Environmental Protection Agency and as Chief Technology Officer and Strategist at Dell. Prior to that, she was the Chief Information Officer (CIO) for the County of Santa Clara, California. In 2016 she was named one of ComputerWorld's Premier 100 Technology Leaders, and one of Washington DC's Top 50 Women in Technology both in 2015 and 2016.

World-renowned innovator Lucien Engelen will also speak at IOTSWC. With a wide experience and knowledge of the Healthcare industry, his work looks at how new technologies can change patient care models in the context of rising demand for healthcare, shortages of skilled staff and restrictive budgets. Former director of the REshape Center at Radboud University Medical Center, Mr. Engelen is also a faculty member of Exponential Medicine at Singularity University in Silicon Valley and has advised many companies in business transformation through his company Transform.Health.

The crossroads between healthcare and technology innovation is the domain of Shafi Ahmed, a colorectal surgeon at The Royal London and St Bartholomew's Hospitals and one of IOTSW's keynote speakers. A multi award-winning surgeon, teacher, futurist and innovator, Dr. Ahmed has explored the use of augmented and virtual reality as tools to improve healthcare delivery and teaching, and works with governments, universities, and global companies on the digital transformation of healthcare. He is member of the NHS assembly and was awarded The Future NHS award by members of the UK Parliament.

## Industry transformation reimagined

To tackle some of the key topics on business transformation, IOTSWC will feature representatives from some of the most innovative companies worldwide. Some of these include Hiroshi Yamamoto, Corporate VP of Digital Innovation Technology Center and Corporate Digitization at Toshiba; Mark Geckeler, DPP Alliance Head at the Volkswagen Group; Gunter Beitinger, Senior VP of Manufacturing & Head of Factory Digitalization at Siemens; Marco Ferrogalini, VP and Head of Modelling and Simulations at Airbus; Stuart Bashford, CTO at Buhler Group, Sultan Aziz, Senior Director, Product Supply Strategy & Management at Johnson & Johnson, Matthias Kuss, CEO, FMC Data Solutions at Fresenius Medical Care, Juha Pankakoski, Chief Digital Officer at Konecranes, Nicole Raimundo Coughlin, Chief Information Officer for Town of Cary, NC, and Jesper Toubol, VP of Operations – Moulding Production at Lego Group.





The applications include solutions for the Automotive, Construction, Food, and Urban management sectors

## IOT Solutions World Congress will feature a Testbed Area with real examples of disruptive solutions

A smart refrigerator that uses AI cameras to reduce food waste and apply dynamic pricing, a digital twin service designed to implement a pay-per-use service for the Construction industry, and an intelligent heritage conservation system capable of anticipating asset maintenance needs through virtual reality and remote monitoring. These are some of the projects featured at the IOT Solutions World Congress (IOTSWC) Testbed Area. Held at Fira de Barcelona's Gran Via venue from May 10 to 12, the event will display 10 testbeds showing how the IoT will reshape the global economy.

Reducing food waste through dynamic pricing is the goal of smart commercial refrigerator developed by GFT IT Consulting for the retail industry capable of using computer vision and IoT to track stock and apply dynamic pricing for products based on sell-by-date. The solution showcases the possibilities of IoT, Artificial Intelligence (AI) and Edge technologies for tracking products, stock levels and energy usage as well as improving user experience.

Efficiency is also among the key elements of the second testbed focused on the food industry. iFishCan is a cognitive Industrial IOT platform designed to improve the efficiency of the fish canning industry. It consists in a low-cost sensor network connected through an industrial IoT system, which collects data, in real time; an advanced Al-engine coupled to a customized control software allows to predict different process indicators. This enables prompt corrective actions to improve sustainability.

### Digital twins for the city

Virtual Reality (VR) and Digital Twins (DT) will also prove as critical assets for Contruction and urban management solutions. The SMART WORLD by FIWARE reshape crane and elevator use at construction sites through DT technology. The crane and the elevator are provided as a Smart Service in a pay-per-use model capable of reducing costs and enhance performance.

ISH is an intelligent heritage conservation system developed by Integra, Microsoft, LoRaWAN – Semtech and Libelium that takes advantage of IoT technologies, virtual reality and LoRaWAN communications. It creates a digital twin of the heritage asset that allows predictive conservation through remote and centralized monitoring using IoT capable of providing advanced knowledge and information that also enables cost reduction.

Improving urban liveability is the main goal of the two testbeds chosen from Zariot's vadeCity. The vadeBike parking brings together personal bike and scooter riders, sharing platforms, and even city-run mobility solutions, while a new high-security internet platform will try to improve citizen well-being by creating outdoor safe work environments that will make it possible for anyone to work outdoors, through remote attestation that provides data privacy and security.

#### **Automotive and manufacturing solutions**

The remaining testbeds cover different solutions for the Automotive, Retail and manufacturing industries. Autonomous driving will revolutionize the mobility industry in a very short time. Ensuring cybersecurity for connected and automated vehicles is the main goal of CARAMEL, an Al-based solution developed by i2Cat, Deutsche Telekom, Capgemini Engineering, Eight Bells, Ubiwhere, Cyberlens, Greenflux Assets, Sidroco Holdings Limited, Infinity Limited, Uk University of Cyprus, University of Patras, Idneo Technologies, AVL List, Panasonic Automotive Systems Europe, Electronics and Telecommunications Research Institute, Korea Automotive Technology Institute, Mobigen Co Ltd, and Atos. CARAMEL tries to

demonstrate the effectiveness of onboard Intrusion Detection Systems as a layer of protection directly over the Electronic Control Unit, enabling the safety of the vehicles against different types of cyberattacks. The ultimate objective is to offer automated anomaly and fault detection, while being an inviolable and reliable black box for CAN-bus data collection.

The Car control and traceability system powered by Integra, Sigfox, Microsoft and IBM tackles the need of the automotive sector to efficiently locate assets. The Movertia solution developed for BMW, is an intelligent system of asset location that allows to optimize the work time and the space, as well as to increase the efficiency of the processes of management of vehicles in a dealership.

Cybersecurity is the main focus of TXOne Networks, a joint venture between Trend Micro and Moza, aimed at ensuring the reliability and safety of Industrial Control Systems (ICS) and Operational Technology (OT) environments through the zero trust methodology. TxOne has developed solutions for both network and endpoints that integrate with the layered arrangements and varied assets common to work sites, providing real-time, defense-in-depth cybersecurity to both mission critical devices and the OT network.

The last testbed showcased at IOTSWC is a DT for pick and place with highspeed automation developed by Aingura IoT and Vicomtech. In the testbed, a conveyor will move parts until they reach the working range of a Remote-Controlled Robot. A full virtual immersive environment will enable a remote operator to handle the robot, pick parts and face them to a camera. Images from the camera will be transmitted by 5G technologies and the remote operator will decide if the part is valid.

#### Testbeds as examples of real uses

Testbeds are experimental platforms designed to implement innovative solutions and test them in real-life operating conditions. These tests explore new technologies or combinations of existing ones with the aim of creating ground-breaking products or techniques with the potential to generate new international standards. The practical applications showcased at the IOTSWC have been coordinated and supervised by the Industry IOT Consortium® (IICTM).

Barcelona, May 2022





The two events will be held at Fira de Barcelona's Gran Via venue from May 10 to 13

# IOT Solutions World Congress and ISE team up to reimagine cross-industry digital transformation

IOT Solutions World Congress (IOTSWC), the largest international event devoted to industry transformation through disruptive technologies, and Integrated Systems Europe (ISE), the world's leading professional audiovisual (AV) and systems integration show, have agreed to join forces this year and provide an unparalleled ecosystem for digital transformation to professionals from many industries. IOTSWC and ISE will be held at Fira de Barcelona's Gran Via venue on May 10-12 and 10-13 2022, respectively.

The joint celebration of the two events will provide a unique opportunity to explore the crossroads between two different sets of disruptive technologies. IOTSWC will bring to the table top experts and companies working on Artificial Intelligence, Digital Twins, Internet of Things and Quantum Computing and ISE will deliver leading companies from the professional AV industry as well as international experts in the field of systems integration in numerous industries. The goal of this co-operation is to highlight the two events' common ground that offers new ideas and means of collaboration for attendees and exhibitors.

The agreement will allow visitors of the events to access both exhibition areas at no extra cost, whilst delegates registered to the IOTSWC congress program will benefit from a 50% discount if they wish to register for any ISE conferences - and vice versa.

The director of IOTSWC, Roger Bou, says: "We are very excited about this agreement. At IOTSWC we believe that some of the key technologies we have been showcasing such as Artificial Intelligence, and the Internet of Things have an incredible transformational potential for the professional AV industry and likewise the AV and systems integration industry can help to develop disruptive new solutions for the digital transformation ecosystem."

In addition, the director of Integrated Systems Events, Mike Blackman, says that "AV and IT convergence has been the single most important industry trend at ISE over the past decade and the inspiring innovations happening in IOT take this to another level. With our two events now happening at the same time and place this May, it is very exciting to be able to work together and explore even more areas of collaboration. The exciting world of pro AV and the inspiring innovations in IOT make all sorts of possibilities a reality."

## The meeting point for the AV industry

ISE is a joint venture between AVIXA® and CEDIA™ – the two leading industry associations for the global audiovisual industry. This year, ISE returns in May 2022 with a vibrant and inspiring edition, a redesigned show floor and new demonstration areas guaranteed to enable exhibitors to 'Rise Up. Reimagine. Ignite the Future'. With over 700 exhibitors, including innovators such as Barco, Crestron, KNX, Kramer, LG, Panasonic, Samsung, and Sony to name just a few – the show floor has been redesigned and will also feature a brand-new Discovery Zone, highlighting 40 new companies exhibiting for the first time.

Taking advantage of the large, modern Gran Via venue, ISE will premiere a new approach to the show floor with six Technology Zones, set out over five halls, grouping together exhibitors in the major technology areas, making it simpler for delegates to plan their visit and find and compare the wide variety of solutions they need for their integration projects. The six zones are: Unified Comms & Education Technology, Residential & Smart Building, Multi-Technology, Digital Signage & Digital Out-of-Home, Audio, and Lighting & Staging.

#### Digital transformation of businesses and companies

Organised by Fira de Barcelona in partnership with the Industry IOT Consortium® (IIC™), IOTSWC will hold its sixth edition under the theme *Game-changing technologies for industry transformation*. The event will gather the leading suppliers of industrial solutions and information technology providers to showcase the latest trends that are providing an edge to companies across many industries and promote collaboration in the tech solutions ecosystem.

With over 200 exhibitors including ABB, Altair, Amazon Web Services, EMnify, Fiware, Hornet Security, Huawei, Kaspersky, RFPD, Relayr and Siemens, that will showcase examples of how the Internet of Things, Artificial Intelligence, Digital Twins and other technologies can transform entire companies and businesses, IOTSWC will structure its congress program around five themes – Business optimization, Artificial Intelligence, Connectivity, Security and Customer Experience – and feature speakers from companies such as Airbus, Bühler, Dow, Johnson & Johnson, LEGO, Nestlé, PCL Construction and Volkswagen.

January 2022, Barcelona

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May 10 -12, 2022 www.barcelonacybersecuritycongress.com

The growing digitization of the industry enables the increase of actions by hackers

# The third Barcelona Cybersecurity Congress to focus on cyberattack prevention

The third edition of the Barcelona Cybersecurity Congress (BCC), an international event focused on the field of cybersecurity that will take place from May 10 to 12 within the framework of the IOT Solutions World Congress (IOTSWC), will address the need for all industries to increase their security levels to avoid or minimize the effects of an attack by cybercriminals. The event organized by Fira de Barcelona and the Agència de Ciberseguretat de Catalunya, the body responsible for cybersecurity in Catalonia for both society and the public administration, will feature conferences, an exhibition and activities area, and a symposium for startups.

Hall 4 of Fira de Barcelona's Gran Via venue will host the third edition of an initiative that aims to focus on the need for companies to have reliable protection systems in place, given the rising connectivity in all industries. Thus, the BCC will have as its core a congress that, curated by the International Society of Automation (ISA), will discuss cyber threats, the IoT and the manufacturing and automotive sectors.

Highlighted speakers include Frank Courbon, Security Lead at Churchill College; Elliot Lear, Principal Engineer at Cisco; Rob Dobson, Vice President of Device Authority; Francisco Garcia, Director of Digital Plant - Industrial Automation Cybersecurity Solutions at Schneider; and José María Cavanillas, Director of Worldwide IoT Partner Management at Atos, among others. Also noteworthy is the participation of speakers from leading companies such as Fortinet, Nespresso and Volvo.

The BCC will also have an exhibition area with around thirty companies that will showcase the most innovative solutions in cybersecurity, organize workshops, and activities to publicize new products and services.

### Ethical hacking and startups

The event will also have an Innovation area where different activities will be carried out to highlight the need and difficulty of having protected systems and reliable communications in any economic sector. To this end, a Hacking Village will be organized in which workshops will be held as well as a hacking competition where 45 hackers will try to neutralise a virus as harmful as the Mummy Spider Trojan in less than two hours.

The Mummy Spider virus is a banking Trojan that appeared in 2014, infecting devices and then using them simultaneously and in a coordinated way – structure known as a botnet - to attack banks. It took an international effort to take it down, and now new versions have reappeared. The goal of the participants will be to find vulnerabilities in the malware and stop its proliferation. The competition is supported by the American cybersecurity technology company CrowdStrike.

On the other hand, to promote the recruitment of new professionals, the BCC will present a talent market in the form of a startup competition in which entrepreneurs in the field of cybersecurity will meet investors, and an investment seminar, organized by the European Cybersecurity Organization (ECSO) in collaboration with the Agència de Ciberseguretat de Catalunya. The two best companies participating in this session will be nominated for ECSO's European Cybersecurity STARtup Award 2022.

Barcelona, May 2022