VISIT REPORT

SIDO LYON — IoT – AI – ROBOTICS – XR
Lyon
20 et 21 septembre 2023
Cité Internationale

BNB markets

OVERALL PRESENTATION

Pioneering event in Europe on the convergence of IoT, IA, XR & Robotics technologies, SIDO[1] makes the link between technological solutions and Startups, SMEs, mid-size companies and international Groups by facilitating technological partnerships and cooperation in all sectors of activity.

For 9 years, SIDO Lyon is the historical event for all the key players in the IoT, AI, XR & Robotics ecosystem: tech solution providers, industrial groups, research laboratories, local authorities, institutions, etc. As key event in the decision-makers' calendar, SIDO supports companies in their digitization projects by bringing together technological leaders over a two-day trade show: from innovative bricks to complete and ready- to-go solutions, the entire value chain is represented.

Every second, 127 devices hook up to the internet for the first time.

(McKinsey Digital)

Consumers are more connected than ever. Indeed, smart home statistics show that there are plenty of reasons to get excited about what the future holds for IoT.

You may have been asking that all-important question: how many IoT devices are there? Well, remember that in 2019, around 127 new devices per second connect to the web. As you'd expect, this astounding stat is led by the more advanced parts of the world, which have widespread internet accessibility.

Located in the heart of the metropolis of Lyon and the Auvergne-Rhône-Alpes region, SIDO benefits from a powerful and varied industrial fabric: Metallurgy, Plastics, Chemistry, Electronics, Pharmaceutical Industry, Agri-Food, Textile, Machinery and Equipment, etc. For 9 years and with 2 editions per year, SIDO has been THE unmissable event for all business leaders, strategic decision-makers, innovation, and all business line managers looking for long-term growth and value creation.

The number of cellular IoT connections is expected to reach 3.5 billion in 2023.

(Forbes)

Thanks to the combination of AI, machine learning, and real-time data processes delivered by IoT solutions, the number of cellular IoT devices is set to grow substantially. According to current statistics on IoT devices, the number will surpass 3.5 billion by 2023, with Asia leading the charge.

Indeed, experts predict that North East Asia alone will be home to more than 2.2 billion devices by 2023.

---

[1] SIDO (for "Solution Internet des Objets") is a trade show organized by Infopro Digital Trade Shows, a subsidiary of Infopro Digital group, which is a world leader in information and services for professionals. The show focuses on IoT, AI, Robotics and XR solutions and technologies. It takes place at the Cité Internationale de Lyon and is considered the largest European showroom for these technologies. Through thematic routes which will facilitate professional visits, it offers more than 60 conferences or workshops which will allow key subjects of the digital transformation (innovation strategy, process optimization, system interoperability, etc.). More than 300 exhibitors for +7.000 visitors are attending, from most of the French blue chips companies. Thus, innovative companies, start-ups, manufacturers, and other suppliers of cutting-edge technologies for the Internet of Things, AI and robotics gather around numerous exhibitors presenting their products and services working for an effective digital transition.

As very rightly indicated by L'Usine Nouvelle last year, SIDO is intended as the exhibition dedicated to robotics, artificial intelligence, and the Internet of Things. This is a meeting that serves less to conclude contracts than to keep abreast of news, while gaining visibility.

I suggest you take an overview of the show, through this report. After some insights and description of the IoT market, in the first part, you will find the list of more relevant conferences and the topics covered, with for some, personal remarks written following the participation.

MARKET TRENDS

The Internet of Things (IoT) is a term used to describe the growing network of interconnected devices that we interact with in our daily lives. As the Internet expanded, telephones, office equipment like printers and scanners, and industrial machines were integrated into the network. Today, almost any device we use, whether at home, in the office, or on the go, can be connected to the Internet. This has given rise to the concept of the Internet of "Things". The IoT encompasses a wide range of devices and technologies that enable seamless communication and data exchange between physical objects and digital systems.

The IoT is a trend that is driving the digitization and datafication of society in many new and exciting ways. Connected devices such as autonomous cars, everyday objects, autonomous manufacturing robots, and remote medical devices that enable doctors to diagnose patients and even perform surgical procedures are all made possible by these networks of connected objects. Let's look at some of the most important drivers and innovations in this field that are likely to emerge in the coming years.

IoT in healthcare has emerged as one of the most active areas of development in recent years, driven by various factors. The broad scope of health-related use cases includes monitoring social distancing in public spaces using cameras, tracking lifestyles and promoting telemedicine and remote healthcare through fitness bands and trackers. Specialized medical equipment such as blood pressure monitors, heart rate monitors, insulin pumps, wheelchairs, defibrillators, and oxygen pumps are now frequently connected. This connectivity enables them to collect data that helps doctors gain a better understanding of patients' conditions and lifestyles. Additionally, these devices can work autonomously to enhance users' quality of life.

Health IoT devices offer healthcare professionals the ability to collect patient data without the need to bring together large numbers of potentially infectious individuals. Beyond pandemic response scenarios, they also enable doctors to examine, diagnose, and treat a larger number of patients. Furthermore, they facilitate the expansion of healthcare services to regions where physical access to doctors or hospitals is challenging due to remoteness or limited accessibility.

Security. The rapid growth in the number of devices connected to the internet has led to an increase in the number of ways our technology can be hacked or exploited by those with malicious intent. The number and size of cyberattacks are increasing every year, with Kaspersky security researchers reporting 1.5 billion attacks on IoT devices in the first half of 2021 alone 1. It is easy to predict that these figures will continue to rise in 2022 and 2023. IoT devices often provide access points to our personal networks because they are not as secure as devices traditionally used to store sensitive data, such as computers or smartphones.

Another threat vector comes from the fact that IoT is made up of "things" - sometimes very small, lightweight things - that can be lost or stolen, requiring an additional layer of security to protect against unauthorized users who have acquired physical data. However, things are starting to change. Manufacturers are showing signs of cleaning up their act when it comes to shipping devices with default passwords, and consumers are developing a better understanding of the risks involved. Common attacks include denial-of-service (DDoS) attempts by overloading systems with connection requests, causing them to break and possibly expose data. Another common attack is "hijacking" the computing power of devices, which may be used to create botnets that attack other systems or simply mine cryptocurrencies. However, IoT is not just a security threat: by collecting data on network traffic and usage, connected devices provide fuel for algorithms used to predict and prevent cyberattacks.

Edge IoT. Edge computing and IoT go hand in hand. Simply put; this means building devices with built-in analysis capabilities, so that the calculation is performed as close as possible to the source of the data being analyzed. This only really makes sense in the context of cloud computing, where data is collected by essentially "dumb" sensors, such as basic cameras or microphones, and sent to the cloud for analysis.
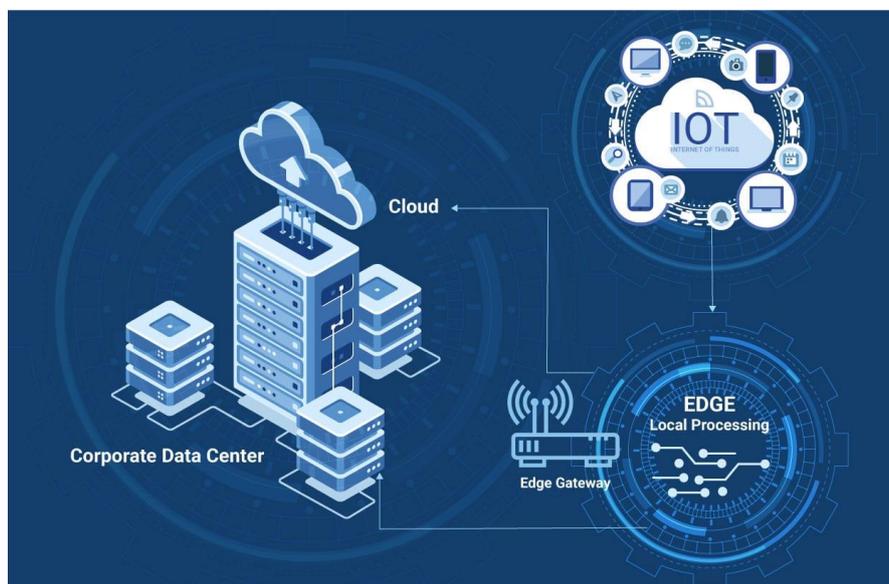
CUELOGIC © 2023

Edge devices use smart sensors such as cameras equipped with computer vision capabilities or microphones with natural language processing functions. The obvious benefit is that this means computation can take place much faster, and another benefit is that reducing the amount of data transmitted to the cloud and back relieves network congestion.

Another benefit becomes clear when considering the privacy implications of widespread IoT: if a device collects personal data, users have peace of mind knowing they can obtain the information it contains without even having to leave their individual custody. A key factor here is the increasing amount of computing power that can be delivered in ever-smaller, more energy-efficient devices, thanks to more efficient battery and user interface designs.

Resilience is a priority after the unprecedented disruption of the past three years, and IoT technology offers great opportunities to build more robust, disaster-resistant organizations. This encompasses more than security (covered above) as it also includes provisions such as ensuring a business has the appropriate skills to deal with widespread changes such as the move to home and remote working that

we have seen in 2020 and 2021, as well as guaranteeing it does not lose due to the activity of competitors or markets.

Supply chain resilience can be strengthened through IoT. For example, by tracking the movement of inventory between a business, its suppliers, and its customers, organizations can anticipate where delays may occur and provide contingency measures in the face of global problems.

Monitoring tools that track staff movement around facilities and monitor workforce efficiency can be used to understand workplace churn and anticipate where skills shortages or shortages may occur. This helps businesses identify potential issues before they become significant problems. IoT solutions designed to help businesses predict and respond to disruptions from many different sources will undoubtedly continue to be a major source of innovation throughout 2023 and beyond.

IoT in Business and Industry. IoT has huge implications for how we manufacture goods, provide services, sell to customers, and follow up with support. Smart factories and logistics factories are becoming increasingly automated, and the availability of robotics and IoT infrastructure "as a service" means that more small businesses will begin to take advantage of the opportunities this offers in 2022.

Integrating IoT automation into business models gives businesses the opportunity to benefit from increased efficiency by gaining a data-driven understanding of their operations and processes. Wearable devices such as augmented reality (AR) and virtual reality (VR) headsets will increasingly be used for a number of use cases including training, equipment maintenance, and process simulation via "digital twin" methodologies.
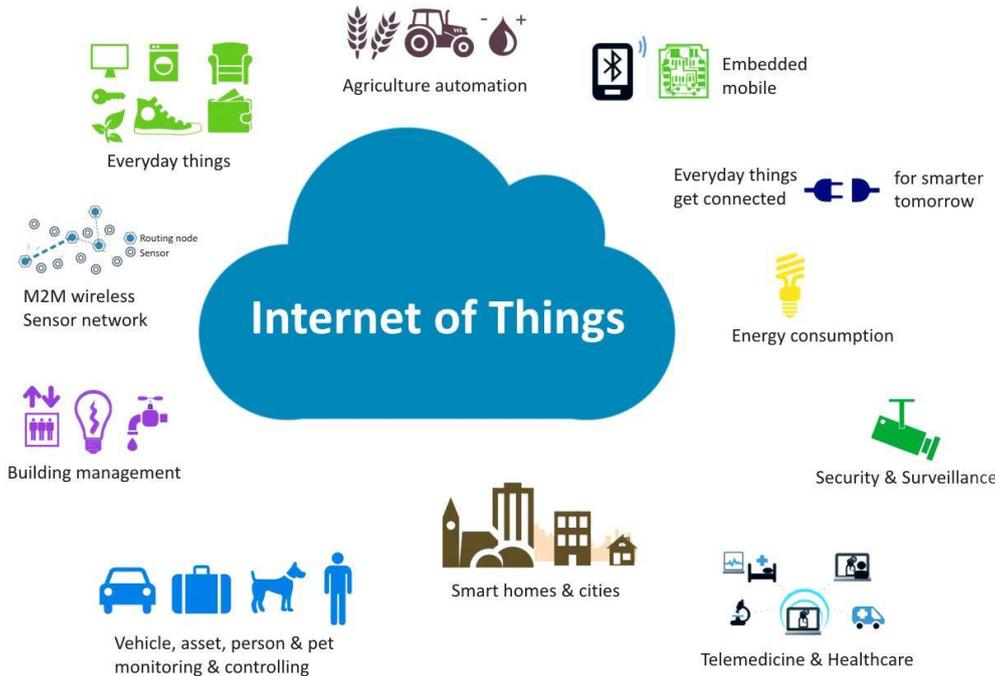
In manufacturing operations, IoT technology includes sensors installed on machines to measure performance and enable predictive maintenance – predicting where breakdowns and failures will occur before they occur to replace and repair defective equipment more efficiently. IoT tools also cover

the emerging area of additive manufacturing techniques, such as 3D printing, which will provide increasingly innovative ways to build and create products while minimizing waste.

IoT-based environmental monitoring and clean technology can support the detection of harmful pollutants and other environmental hazards, enabling governments and industries to clean and protect our air, soil, and water. IoT environmental monitoring sensors and connectivity provide an effective, efficient way to monitor and support a healthy environment, providing the tools for analysis, preventative detection of contaminants, and energy conservation to reduce our carbon footprint.

The applications of IoT in environmental monitoring are broad, including environmental protection, extreme weather monitoring, water safety, endangered species protection, commercial farming, and more. In these applications, sensors detect and measure every type of environmental change. IoT technology can also be used to strengthen supply chain resilience by tracking the movement of inventory between a business, its suppliers, and its customers to anticipate where delays may occur and provide contingency measures in the face of global problems.

CONFERENCES AND BUSINESS PRESENTATIONS

Satellite IoT – Combining technologies to monitor large-scale natural phenomena linked to water and their industrial impact

Florian Hoorelbeke - Business Developer Hydrology - Kinéis
Ulrick Mondongue - Business Developer, Hydrology application, Satellite Telemetry CLS - CLS
Jean-Christophe Poisson - Co-founder & CTO - Vortex

As large-scale natural phenomena intensify and recur, it is becoming crucial to monitor the water cycle more effectively, even in the most remote areas. VORTEX.IO provides a unique, global solution for monitoring rivers and streams for those affected by floods and droughts, thanks to the Kinéis satellite IoT constellation. Combining data from different technological vectors (in situ sensors, satellite observation, drones) is one of the keys to meeting the colossal challenges linked to water resources.

ADDED VALUE OF KINEIS CONNECTIVITY

Redundant communication networks:
Ability to guarantee information transmission.

Reduced installation costs:
No need to deploy private terrestrial networks as with other solutions.

Extended Coverage:
By utilizing satellite connectivity, Vortex can expand its monitoring capabilities to cover previously unreachable watercourses.

The objective is to be able to provide hydrological data with a unique precision everywhere on the planet, hence the use of Kineis.

Guillaume Valladeau,
CEO at VorteX-io

BNB markets. A very interesting presentation on water management, water resources and different weather conditions. The proposed sensor is managed like a satellite. As a reminder, Kinéis offers spatial IoT connectivity for humans and their environment. It offers global, low-speed, low-consumption, simple and reliable connectivity. The Kinéis project is the continuation of the Argos system existing since the 1980s. The presentation presents an application for water management, a crucial area today which will be even more so in the years to come. To explore the subject further, a white paper has just been released and covers technologies to better manage water.

Blockchain and industry: new technologies use cases

Edouard POGU - Blockchain Business Manager - iExec
Sébastien RAYNOIRD-THAL - CEO - OXIWIZ - WEB3 INNOVATION
Thierry ALVERGNAT - Externalized COO - acuYtiv
Ramzi LAIEB - CEO - CARBONABLE

By using blockchain, businesses can create immutable and verifiable records, making it easier to trace products throughout the supply chain. This can be particularly beneficial in sectors such as food, health, or luxury, where trust and authenticity are essential. In addition, the blockchain makes it possible to simplify the verification and validation processes, eliminating intermediaries and automating transactions. This can lead to significant efficiencies and cost savings. Nevertheless, the

use of blockchain in industry also raises challenges: The scalability and performance of blockchain to improve, standards and regulations to frame and interoperability between industrial players.

BNB markets. A conference to address blockchain in the industry. The traceability of products and equipment is also addressed, with the advantage of more difficult identity theft when blockchain is involved. Blockchain also allows for more visibility over the entire process. <u>Which can be an interesting marketing argument.</u> We also mention interconnection of different suppliers, leading to greater operational efficiency. One of the blocking points of this approach is obtaining everyone's support. The blockchain is therefore a tool which guarantees the traceability, verification and auditing of announcements is thus greatly facilitated. However, the sending of data in the blockchain must be secure, with the regulations in force. We often start from the use case to define the regulations and the contours in this case. It is also necessary to integrate the accounting rules so as not to have any unpleasant surprises when it comes to the categories of different expenses.

AI solutions and perspectives for industry

Sophie Guicherd - Digital and AI law Specialist - Guicherd Avocat
Philippe Rambach - Chief AI Officer - Schneider Electric
Thierry Ménissier - Professor of Political Philosophy and Director of the Chair of Ethical AI at the MIAI. - Université Grenoble Alpes
Philippe Wieczorek - Innovation Director & AI Expert - Minalogic
Julien NICOLAS - Corporate Digital Director - Groupe SNCF
Xavier PERRET - Azure Director - Microsoft France

Artificial intelligence is transforming all industries, and impacting on everyone's daily life, sometimes without their users even being aware of it. The transformation is global, and not all regions of the world have the same approach to the adoption of this revolutionary technology. This plenary session will focus on the specificities of Europe in the implementation of AI, and will allow to cross regulatory, legal, ethical, sovereign and even philosophical points of view, by placing at the center of the exchanges the trust that the actors place in AI in its industrial uses. The panelists will be able to debate the founding principles of the European AI Act, discuss the emergence of the first solutions for trusted AI, and share the vision of a major industrial company, which is the only major group to have a Chief AI Officer on its global board, in the person of Philippe Rambach, with whom you will be able to discuss during the SIDO.

BNB markets. An conference to understand the challenges of AI and its multiple applications. We are obviously talking about the AI Act[2] (the use of artificial intelligence in the EU will be regulated by the AI Act, the world's first comprehensive AI law) and its upcoming application. It is interesting to note that we generally start from the use case to then define the legislation and not the other way around. We don't legislate technology. AI is identified today as the solution to all the problems we encounter.

---

[2] As part of its digital strategy, the EU wants to regulate artificial intelligence (AI) to ensure better conditions for the development and use of this innovative technology. AI can create many benefits, such as better healthcare; safer and cleaner transport; more efficient manufacturing; and cheaper and more sustainable energy. In April 2021, the European Commission proposed the first EU regulatory framework for AI. It says that AI systems that can be used in different applications are analyzed and classified according to the risk they pose to users. The different risk levels will mean more or less regulation. Once approved, these will be the world's first rules on AI.

Industry 4.0: circular economy for logistics and spare parts

Jérémie Dalibot - Business Creation Manager - EIT Manufacturing West
Ronan Le Roy - CEO - GloodFloow
Ronan LE GOFF - Manager of R&D Programmes - IPC Centre
Technique Industriel de la Plasturgie et des Composites
Séverine Raimondi - Marketing and Sales Director - Kheoos

Learn how Kheoos and Goodflow, two innovative and French startups, are leveraging technology to drive waste reduction and reuse in supply chains. Also discover the RhePlaCe project and how the industrial technical centre IPC wants to maximize the number of recycled materials in the plastic manufacturing chain.

BNB markets. The circular economy in logistics, a very current subject. We talk about dormant stocks, which can be used by an actor, thanks to technology and ultimately, tend towards a zero safety stock. The decompartmentalization of activities thus becomes an achievable reality. It should also be noted that the priorities of recycled parts must be as good as new parts, which is a significant obstacle. This positive approach should not slow down the company economically. The key is to offer reusable products less expensive than disposable products. And have a community vision.

Gain efficiency and accelerate your IoT projects with the new IoT Continuum kits

Nicolas DAMOUR - Senior Director, Strategic Partnerships -
SIERRA WIRELESS (Groupe SEMTECH)
Barbara LUCESOLI - Acting Director of Enterprise IoT - Orange
Grégoire LANAUD - IoT Business Architect - LACROIX
Pierre-Yves BERGER - Strategic Marketing Director - STMicroelectronics

The IoT Continuum partners: Lacroix, Orange, Sierra Wireless (Semtech group) and STMicroelectronics present two new tools to better accelerate the deployment of your solutions. So, whether you are a laboratory manager, or a business team manager, we now have dedicated solutions for you. For developers to quickly prototype an application that meets your needs using pre-integrated and pre-validated IoT Continuum technology bricks. For businesses, turnkey solutions to quickly launch field trials for pre-industrialization and future deployment.

BNB markets. As Barbara Lucesoli, Director of Enterprise IoT at Orange Innovation, explains: "Technical and operational complexity arises from the fragmentation of technologies and the market itself. The leader of a project may find himself having to choose between different building blocks within a fragmented ecosystem – communication modules at X, sensors at Y, a microcontroller at Z, – all without guarantee of interworking and compatibility. And if one manages to develop a prototype, there will be no certainty that the selected components can be reused for the pre-series production phase. And, it will still face the same uncertainty when it comes to moving to the large-scale industrialization phase. Out of a hundred projects, less than ten will succeed. »

This promise of continuity will be accessible to project leaders, whatever their entry point into the process, at the Start, Prove or Deploy & Scale stage. The offering of hardware and software solutions advanced by IoT Continuum is also associated with support in the form of technical expertise.

Furthermore, the very nature of the initiative, which brings together solid, recognized, long-term and interconnected partners from the IoT ecosystem, constitutes in itself a guarantee of speed and the assurance that a project will be studied and carried out in a joint and coherent manner.

Des kits IoT Continuum :

Pour la phase initiale de Start, un kit de développement ou « **Dev Kit** » approuvé par IoT Continuum est proposé. Destiné à réaliser rapidement un prototype fonctionnel en laboratoire, ce kit permet de :

- valider la faisabilité technique d'un projet en quelques semaines et même quelques jours ;
- tester la connectivité cellulaire via le réseau LTE-M ;
- développer sa propre application.

Pour la phase de Prove, est proposé le « **User Kit** », un dispositif hardware clé en main, intégrant une carte électronique dans une mécanique étanche, sur lequel il est possible de brancher des capteurs additionnels. Il permet de :

- valider les hypothèses d'un cas d'usage directement sur le terrain, très simplement ;
- faire la preuve du bon fonctionnement dans des conditions réelles ;
- optimiser le design du device cible.

With great achievements, IoT Continuum continues to support companies in the implementation of their projects. More broadly, the program aims to meet the needs of major verticals affected by the development of cellular IoT, such as logistics and transport, smart buildings and industry 4.0.

CONFERENCES AND PRESENTATIONS THAT MAY REQUIRE FOCUS

Data & IoT for energy transition
Benjamin BUSCAYRET - Director, Account Management - KORE Wireless
Tim BLAAUW - Merchant Care specialist - Ease2Pay

The energy sector has been rapidly evolving as the world looks to shift to newer, sustainable sources of energy. The emergence of smart energy and IoT in utilities has the potential to improve efficiency, increase revenue, and conserve resources. Low power wide area (LPWA) networks, as well as eSIM, are two opportunities within the energy and utilities industry to help create widespread infrastructure of smart metering and smart grids for several key reasons. Looking further out, IoT can enable deep analytics through artificial intelligence that can handle the load on grids with minimal intervention. The more intelligence derived from IoT solutions, the greater the visualization on solution performance is and the more data-driven decisions can be made.

Evaluate your IT/OT from a Cybersecurity perspective
Bruno Mussard - Security Marketing Manager - STMICROELECTRONICS
Antoine CAMUS - Directorr Pole Cybersecurity and Defense - MINALOGIC
Jean-Christophe Marpeau - Systems Engineer - CAPTRONIC
Jérôme HAMEL - Director of Cybersecurity department - LCIE Bureau Veritas

The threats in terms of cybersecurity on IT/OT environments are numerous and constantly evolving (targeted cyberattacks, unpatched vulnerabilities, social engineering, MITM, malware, etc.). IT/OT security requires a holistic approach that combines technical, organizational and human measures to mitigate these risks and ensure business continuity. In addition, by October 2024, compliance with the European NIS2 regulation will be mandatory for certain manufacturing companies. Discover through this round table the keys to evaluating your IT/OT system.

Transformation, reindustrialization, and neo-industrialization

**Catherine Simon - Digital Industry Advisor - France 2030,
Secretary General for Investment
Vincent Charlet - La fabrique de l'industrie
Christian Bruere - Founder - MOB-ION
Julien Devaureix - Podcast creator - Sismique
Anne-Sophie Bellaiche - Editor in chief - Usine Nouvelle
Christophe GEOURJON - Regional Councillor, Chairman of Committee C07 -
Economy, relocation and regional preference - Région Auvergne-Rhône-Alpes**

Transformation and reindustrialization are at the heart of current economic challenges. In a context of globalization and increased competition, neo-industrialization is positioned as a relevant response to strengthen the attractiveness and competitiveness of our territories. The introduction of digital technologies, the modernization of production tools and the upgrading of team skills are keys to success in accelerating this movement. How can companies seize these opportunities to operate their transformation? What are the tools and action levers to be mobilized to make this change a success? Discover the answers to these questions and the challenges of neo industrialization in this opening plenary!

Accelerated development of private satellite networks – What are the benefits for companies?

**Sandrine Lafont - Head of Digital and Telecom Markets and Uses - CNES
Laurent GINESTE - Technical Director - Exotic System
David GAL-REGNIEZ - Technical Director "Contents & Uses" - Minalogic
Rémi FERRIER - Director of Products, Innovation and Sustainability - KINEIS**

The accelerated development of private satellite networks has several benefits: global coverage and all types of use, such as surveillance, communications and data management, high-speed, low-latency connections for all Internet uses (voice, web browsing, videoconferencing, etc.), and low-power connections for connected objects. Greater communication security, great flexibility for adding new features and updating existing systems, better reach of rural or remote areas, useful for companies in the field of mobility, logistics, or public services.

Why and how to enhance your connectivity?

**Franck LELONG - Responsable de l'IoT pour le domaine commercial - Orange Innovation
Michael MARET - Directeur Commercial - Adeunis
Thierry GAILLET - B2B partnerships manager - ORANGE**

Would you like to simplify and accelerate the deployment of your connected equipment? Would you like to optimize their management and maintenance, make them more reliable and future-proof? Find out how Adeunis was able to reduce the volume of data transmitted by its Comfort Serenity air quality sensors by a factor of 10, while cutting their consumption by a factor of 3. You too can optimize your IoT fleet management, with the LwM2M device management solution offered by Orange with its Live Objects platform.

Produce better, Produce useful, Produce less
Bastien Spinella - Design for Tomorrow Manager - Altyor
Eleonore Blondeau - Head of new projects - Eternity Systems
Thomas Gauthier - Associated Director - Altyor
Stéphane Gendrot - Vice president of Business Development - Lacroix

Whether we are ordinary citizens, committed activists or industrialists, we are all aware today of the climate and environmental emergency that surrounds us. Whether it's reducing our greenhouse gas emissions or reducing the pressure on mining, we, as companies, need to rethink our production methods. In this round table, we want to look at 3 levers for action:

- Produce Better: Eco-design, use of recycled materials, etc… there are now ways of designing and producing products that limit their environmental impact.
- Produce Useful: Does my IoT product serve a purpose? Does it solve an environmental or social problem? How can IoT meet these challenges?
- Produce Less: What if, in the end, to reduce the pressure, we simply had to produce less? But how can I sustain my company and my hardware business in a world that produces less?

Smart sensors and sensor fusion for industry
Pierrick AUTRET - AI Solutions Marketing Engineer - STMICROELECTRONICS
Gildas HENRIET - Product Marketing Manager - STMICROELECTRONICS
Brice MAY - Innovation Lab Manager - ALTEN

This workshop will discuss the evolution of sensors in industry which, over time, have become more and more precise and interoperable. Machines have become connected (IoT, IIoT), which has made it possible to collect data on a large scale. But collecting, processing and storing all this data can be very expensive in terms of energy, bandwidth and storage. To continue to take advantage of all the data connected by the sensors, it is possible to embed intelligence "at the EDGE", i.e. directly in the sensors themselves. This reduces the amount of data to be transmitted, minimizes latency and improves machine security.

New technos : understand the coming future
Christophe BATIER - E-learning consultant - EvidenceB
François BOCQUET - Consultant - ASKA-SE
Amine LAZREQ - Founder - Reality Makers
Jonathan METILLON - New Media Consultant - MainBot
Sébastien MEUNIER - Entrepreneur - Medialab Factory

The meteoric progress of new technologies, particularly in areas such as the metaverse and artificial intelligence, has the potential to transform our lives in unprecedented ways. While the social, ethical and legal challenges raised by these emerging technologies are difficult to anticipate and fully understand, it is clear that they will have a significant impact on our daily lives. How can we project our world 10, 20 years and beyond? What major trends can we imagine for 2050?

Blockchain in the supply chain: how to enhance food safety while meeting consumer expectations in terms of quality

Maxine Roper - Co-founder - Connecting Food
Frédérique BIENNIER - Professor and Head of Oriented Computing - INSA LYON
Steven Dolbeau - Associate Director - Anima Conseil

The agri-food sector faces many challenges, such as reducing food waste, traceability and food safety, as well as reducing environmental impact. Production methods and the supply chain must therefore be rethought. Bulk, lockers and short circuits are emerging solutions to meet these challenges. Bulk makes it possible to reduce packaging and thus limit waste, while deposits make it possible to recover packaging and reuse it. Short circuits, meanwhile, reduce transport time and therefore the environmental impact while promoting local products. New technologies, such as the blockchain, make it possible to strengthen the traceability and transparency of the supply chain. Collaboration between industry players, from production to distribution, is also essential to create a sustainable and efficient supply chain. Come and attend this round table which will bring together actors who deal with these issues in an innovative way.

Thank you and see you soon!

Lionel Touchart

Note: This report was originally written in French and translated into English with the help of magnificent tools provided by Google and Microsoft. Thank you, reader, for your indulgence towards these American translators and towards the French editor.

BNB markets

BNB markets supports high-tech, electronics and semiconductor companies with outsourced B2B marketing services. We carry out market research, benchmarking on a technology or product and market oriented, marketing automation, content marketing, market research and we also work on more relational marketing, such as research information on exhibitions or through targeted conferences. BNB works with different structures for the industrial world, the space sector or even the medical sector.