



# Innovation for a Smarter World: ITU Telecom World 2018

**C**reativity and innovation have driven human development throughout the course of history. From agriculture to industry to the information age, revolutionary innovations in technology have marked major leaps forward in the development of our societies. As the pace of technological innovation increases, the gaps between those revolutions reduce, so that today, just ten years after the arrival of the smart phone, we are already on the cusp of the next major leap: the smart revolution.

Two aspects of the smart revolution stand out as significantly different. It provides the possibility for less developed markets and nations to leapfrog in developmental terms, not just to leap *forward*. And the creativity and innovation driving it will not only be human.

Artificial intelligence (AI) is one of the great enablers of smart society. AI is a blend of advanced analytical and machine learning applications which can perform processes or actions that would traditionally require human intelligence – and at an often greatly accelerated pace.

The use cases and benefits of AI are multiple, varied - and developing rapidly, with tremendous potential to serve

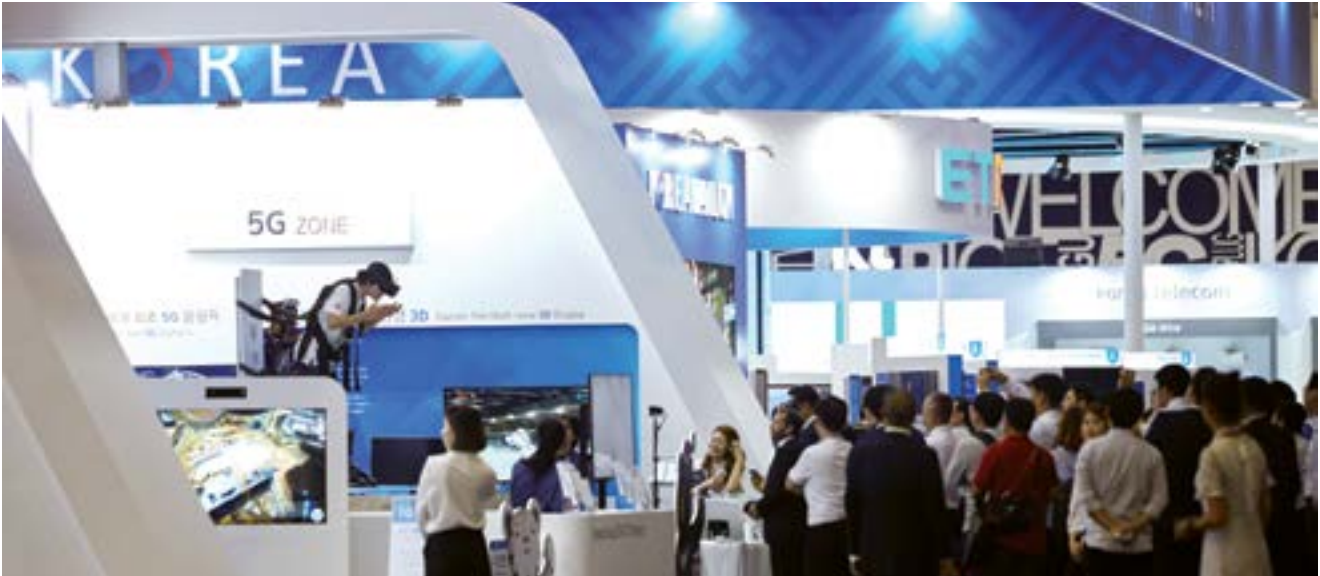
purposes and provide solutions to problems we are not yet aware of, in ways we cannot yet imagine.

One key aspect is AI's ability to swiftly and effectively analyse the ever-increasing wealth of sensor data available as the growing power and falling costs of computing provides for much faster and richer data analysis. Practical outcomes include identifying and treating disease, accelerating financial and machine to machine transactions, enhancing public safety, and improving city services, from provision of utilities to driverless public transport and city management. The aim is to save energy, time and lives through AI-enabled smart solutions.

AI will not be working alone, however. The data it feeds from is set to grow exponentially in volume as the Internet of Things continues to connect billions of sensors and devices to each other, to the internet and to humans. As the IoT develops and refines, it opens the door to innovation across all vertical sectors, including health, media, transport and energy – and manufacturing, as the paradox of personalized mass production increasingly becomes a reality.

Innovation needs new tools to thrive, and 5G software-defined networks promise a rich playing field for creative





minds. The exponential increases in bandwidth, speed, reliability and flexibility offered by 5G will create a powerful critical infrastructure capable of providing solutions to the economic, social and environmental needs of an expanding and increasingly urbanised global population.

Our smarter world will be enabled by these three key technological developments, in parallel and in overlap: AI, IoT and 5G. Three acronyms driving innovation, with the potential to drive human development at a greater speed and with greater impact than ever before. In developing markets and nations in particular, smart can power the leapfrog effect, bypassing earlier stages of development, taking villages in Asia or Africa straight from no connectivity to 3G or 4G networks, from no access to education or health to world-class professionals available online, providing entry to the knowledge economy for the millions of digitally disenfranchised.

But for innovation to flourish, it needs to work in a supportive and positive environment. And for innovation to be fair, it – and the services, applications and products it ultimately produces – must be open to all.

Providing modern and fit-for-purpose regulatory frameworks as far as possible throughout the world of tech is critical to the success of smart innovation. Taking ideas to scale and maximising impact can only happen with international standardization. Privacy, security, trust and reliability are all huge issues when discussing or dealing with data as the life blood of innovative products and services. And the debate on ethical and regulatory frameworks for AI has only just begun.

Making a smarter world for all, not just for the elite minority, is an even greater, multi-faceted challenge. It starts, of course, with connectivity for all as a basic human right. Just providing access to the internet and the benefits of the services, applications and knowledge it offers, is not enough, however - even if this can be done at affordable prices, with available devices. There is an urgent need to create awareness of, and demand for, the internet; to provide apps and services in local languages, with local contexts and the

needs of local communities at the forefront; and to train, educate and develop the skills to use the internet and bring whole new populations and generations online, releasing untapped human potential for innovation across the world.

Exploring the innovations in technology, policy, and strategy that are driving a smarter world – and the challenges we face in getting there - is at the heart of ITU Telecom World 2018. The leading tech event for governments, large businesses and SMEs, it is organized each year by ITU, the UN's key agency for ICT matters. This year's event will be held at the Durban International Conference Centre, Durban, South Africa, from 10 – 13 September, 2018.

The event features an international exhibition of tech solutions and projects, a world-class forum of interactive, expert-led debates, a networking programme connecting organizations, individuals and ideas, and an acclaimed Awards programme recognising innovative ICT-based solutions with real social impact.

As an important regional commercial hub with a diverse, multicultural outlook and a dynamic, growing economy, Durban offers an invaluable perspective as a venue for experts and leaders from public and private sectors around the world. And given ITU's key role in allocating spectrum and establishing international consensus on industry standards, as well as supporting the critical role of ICTs and smart technologies in meeting the UN's Sustainable Development Goals, the event is certain to provide informed, interesting and valuable input on the power of innovation to drive a smarter world.

ITU's authority and expertise enable it to convene a unique and influential global audience. Heads of state and government will come together with ministers, regulators, leading industry CEOs from major players and SMEs, organizations, associations and consultants. As a UN event, it delivers a truly international perspective on innovation in technology, policy and regulation from emerging and developed markets from all around the world.

Visit [telecomworld.itu.int](http://telecomworld.itu.int) to find out more ITU Telecom World 2018 and how to take part in Durban this September.