

Sous le marrainage d'Axelle LEMAIRE,  
Secrétaire d'État aux Numériques et à l'Innovation

# NETWORKWORLD

FROM IDG

By Jay Gillette

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## Global Forum sharpens focus on smart cities



Credit: Indiegogo

Eindhoven, Netherlands -- The 25th Global Forum, an annual policy and strategy conference sometimes called “the Davos of ICT,” was held this week in Eindhoven, a smart city and technology hub with a rich industrial past.

Eindhoven was the original home and de facto company town of Philips Electronics, one of the world’s leading technology giants. Then, under pressure from Asian and global competitors, Philips began a long process of exiting its historic lines of business.

Eindhoven suffered an economic and psychological blow when in 1997 the company moved its headquarters to Amsterdam.

The resulting economic and social disruption challenged Eindhoven to reinvent itself. The community focused on research and innovation (R&I), and built upon its Philips legacy to become the industrial design center of its country and the European region.

Starting in the 1990s, through the catalyst of a collaborative enterprise called “Brainport Eindhoven Region,” the city built a smart-city future and earned international recognition as Intelligent Community of the Year in 2011.

Now, according to Mark Bressers of the Netherlands Ministry of Economic Affairs, Eindhoven is representative of a nation that has one-third of its economy based on ICT and digitalization. At the national level, the Netherlands is third in the world in ICT research, after the USA and South Korea.

The Global Forum often previews world trends in the information and communication industries. Delegates came by invitation-only from countries representing all the continents.

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Keynote speaker Marta Arsovska-Tomovska, Ministry of Information Society and Administration for Macedonia, said, "Since the year 2000, over 55% of Fortune 500 companies are gone, by digital disruption."

She spoke of Macedonia's population of 2 million people and outlined their ambitious plans to build a digital future.

The Minister says they have four main strategies:

- Digital by Nature
- Digital by Design
- Digital Together
- Digital but Still Human

Macedonia plans to double the number of computer science and engineering graduates rapidly, and increase the quantity and quality of its technology schools and teachers. They intend to orient students to technology from early childhood through university level, including the foundation of a dedicated ICT university.

### **Smart Cities take the spotlight in the global urban future**

As it has repeatedly done in recent conferences, Global Forum dedicated an 11-member panel to Smart Cities. The topic is burgeoning yet becoming more diffuse and in need of strategic focus and concrete demonstration.

On the panel, John Jung spoke on the challenges of managing traffic as cities grow. He is a founder of the Intelligent Community Forum, a think tank based in New York City, which awards the "Intelligent Community of the Year."

Jung lives in Toronto, and notes that gridlock in Canada's biggest city costs its citizens \$11 million annually in lost productivity.

Some solutions may evolve from autonomous transport. Singapore is experimenting with driverless taxis. Eindhoven has a driverless bus under test, which is allocated its own dedicated traffic lane.

Columbus, Ohio, the Intelligent Community of the Year for 2015, has put together a \$140 million transport grant to advance its smart-city status to the next practical stage.

Eric Legale, from Issy-les-Moulineaux in the Paris region, listed the most congested cities in Europe. The five worst are London (33% more congested than any of the others); Stuttgart; Antwerp; Cologne; and Brussels. Moscow is sixth. Paris is 15th, yet they are embarking on "new automated metro lines for more than 200 kilometers and 68 new stations to be built by 2030."

Mika Mannervesi, of the city of Salo in Finland, presented on their project for smart lighting. Salo was the birthplace of Nokia mobile phone manufacturing, and has extensive technical expertise.

Salo has replaced city street lighting with LEDs. For further efficiency, a successful field test programmed the lights to turn off when there is no traffic movement of any kind, "so that empty streets would not be illuminated."

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Eikazu Niwano of NTT in Tokyo said Japan is driving for the realization of Hyper Smart Society (Society 5.0), an initiative by the government of Japan beginning 2016. Society 5.0 is so-named to indicate the new society created by transformations led by scientific and technological innovation, after the hunter-gatherer society; agricultural society; industrial society; and information society.

NTT envisions a “Hyper Smart Society Service Platform using cyber security, IoT, Big Data, AI, Device, Network and Edge Computing.”

Niwano says many Japanese companies are pushing forward on these concepts for ICT-based solutions, preparing for the next 2020 Summer Olympics, which will be hosted by Tokyo.

Dr. Sylviane Toporkoff, president of Global Forum, led the 2016 conference, along with Vice President Sébastien Lévy; Founding Partners of sponsor ITEMS International.

The next Global Forum will be held in fall 2017, probably in Canada for the first time in the 25-year history of the event.

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## Don't Throw The Baby Out With the Bathwater!

Posted by Julie Allen on Sep 27, 2016 4:14:48 PM

<http://insights.brainport.nl/blog-en/dont-throw-the-baby-out-with-the-bathwater>

The 25<sup>th</sup> Global Forum, an annual conference sometimes called “the Davos of ICT,” was held last week at the Evoluon in Eindhoven. Joep Brouwers, Vice Director Brainport Development spoke of the rich technical heritage from Philips; not only in research and engineering but also spin-offs and new companies such as NXP and ASML. Indeed, according to Joep, “without ASML, there would be no silicon valley!”

### Eindhoven: A City Transformed

This company town of Philips Electronics has weathered economic and social disruption in the last 20 years. As an employee of Philips and a resident of the city, I have witnessed first-hand the challenge Eindhoven has faced to reinvent itself. Building upon its Philips legacy of innovation and technical excellence, the region has developed into a new industrial engineering & design centre; embracing all that the digital age can offer. Open innovation, public & private partnerships and excellent educational facilities have paved the way for a new economy. Now attracting international knowledge workers from around the world, Brainport Eindhoven Region earned international recognition as the Intelligent Community of the Year in 2011.

According to Mark Bressers of the Netherlands Ministry of Economic Affairs, the Netherlands has one-third of its economy based on ICT and digitalization. However, 70% of SME's don't have a digital strategy and are not 'digital by design'. Indeed, many of the smaller, more established companies I spoke to admitted that their digitalization tends to be evolution rather than revolution. This contrasts sharply with many of the start-ups and newer companies I have met in the Brainport region, who happily embrace technology and digital strategy as a core element of their overall business strategy.

But what is 'open innovation'? Is it about sharing technology and knowledge or more about choosing the right alliances and partners instead of doing it all yourself? As a company, how open should you be? And can you keep the same strategic vision of the company whilst entering into new relationships? Your company needs to work on being able to answer these questions.

### Challenges Ahead

This transformation into a digital economy is something that many countries - not just companies - struggle with. During the Global Forum, presenters previewed world trends in the ICT world across a vast array of applications. Keynote speaker Marta Arsovska-Tomovska, Ministry of Information Society and Administration for Macedonia, told us that from a population of 2 million people, only 800 ICT engineers are produced each year. The Minister plans to double the number of computer science and engineering graduates but for that of course, they need good teachers. Per Blixt of the European Commission informed us that the EU has the ambition to be a Digital Single Market (DSM) by 2018. At the moment, only 7% of SME's sell cross-border within the EU and only 15% of consumers buy online. Many Dutch people in the audience were surprised by those statistics since we are #1 in the world for internet banking (80% of us use it) and are very comfortable buying online. But when you look at the high cost of sending parcels within the EU, then the figures become more logical. It can often be the case that it is cheaper to have something shipped from the USA or Asia than from a country next door.

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This concern was echoed later in the Forum by Nikolaus Lindner of eBay. He told us that increasing the delivery distance by 10% reduces cross-border sales by 4% within the EU online marketplace. Perhaps the role of culture and nationalistic feelings play a greater role in the purchase decisions of EU consumers.

Many discussions centred around the fear most countries have of massive job losses due to an ever increasing digital world. It's true that jobs for life are a thing of the past and that robots will play a more dominant role in our lives moving forward. But as the Brainport region has demonstrated, innovation and the ability to reinvent oneself will secure an economic future. People need to innovate themselves by building on the talents that they have and learning new ones. Recruiting and retaining good ICT talent is still a big issue for many companies. So there are lots of jobs out there – they're just different to what you do now.

### **What Makes Smart Cities Smart?**

Smart Cities is a topic that gets more and more traction, yet is becoming difficult to define. Panel members spoke of examples and projects they have deployed to test both technology in the field and human responses to it. 'Fix My Street' is an app from London that allows residents to quickly and easily report problems such as broken street lights, holes in the road etc. Pictures can be taken and seamlessly sent to the correct department. The pilot has proved successful and is now being deployed in Brussels.

In Groningen in the Netherlands, 42 households are using Solar Photo Voltaic panels (SPV) to generate energy. The smart part lies in the fact that they can make choices about when and how to use the energy that is stored. For example, if you are away, you can choose to give the energy for free to your neighbours, or only let the washing machine run when the batteries are fully charged.

Managing traffic as cities grow is another pressing issue. Singapore is experimenting with driverless taxis and Eindhoven has a driverless bus under test which has its own dedicated traffic lane. Although Paris ranks 15th of the most congested cities in Europe, they are planning more than 200 kilometres of automated metro lines and 68 new stations to be built by 2030. Also many cities are using the benefits of digitally addressable LED lights to save even more energy by turning the lights off when no-one is around.

In every city, every day, new apps are popping up. City planners and policy makers will be faced with trying to make sense of what is the right choice and how to balance big data with the privacy rights of its citizens. New economies will replace the old and the transition will sometimes be painful. Care must be taken to carefully select what path to take. But as in the example of Eindhoven, don't discard the strengths and infrastructure that is already there. Build on what you have with a clear vision of where you want to go. As we say in English "don't throw the baby out with the bathwater".

*Julie Allen is Executive Director of the Netherlands-Canada Chamber of Commerce, and a business consultant and trainer.*

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## The Global Forum: IBM's Julia Glidden and Global Leaders Share Open Innovation Best Practices

09/28/2016 02:47 pm ; Marquis Cabrera, Tech Entrepreneur

[http://www.huffingtonpost.com/entry/the-global-forum-ibms-julia-glidden-and-global-leaders\\_us\\_57ebfc4ce4b0972364dea9a7?](http://www.huffingtonpost.com/entry/the-global-forum-ibms-julia-glidden-and-global-leaders_us_57ebfc4ce4b0972364dea9a7?)

The 2016 Global Forum – an invite-only event in its 25th year – brought together government leaders, academics, world-class experts, distinguished entrepreneurs from Italy, Finland, France, Greece, Canada, UK, Japan, Taiwan, US, and other countries. This global meeting of the minds displayed how digitization can create economic growth and improve citizen service delivery.

The event held in Eindhoven, Netherlands featured keynote speeches, presentations from global leaders, including: Anne Carblanc, Head of Digital Economy Policy Division at the OECD; Hiroyuki Hishinuma, Director of Global ICT Strategy Bureau in Japan; Per Blixt, Adviser to the European Commission; and Mark Bressers, Director of Enterprise and Innovation Regulatory Reform for the Netherlands. These talks were designed to highlight challenges to citizen-service innovation and how digitization can positively affect citizen service delivery.

In her welcome address, the Vice-Mayor of Eindhoven Mary-Ann Schreurs said: “Innovation is about knowledge, marketing, and design.” The City of Eindhoven has future plans to launch an open data site, a dashboard of sorts that showcases its rich collection of geographic data. Eventually, the open data site will enable citizens to add data, check service provider quality in real-time, and— City officials hope data entrepreneurs, developers, and innovators will use this data to build apps that improve the quality of life for its citizens. This is one example of the many innovative efforts that were showcased.

For example, healthcare patients can access their electronic health records from home in Sweden. The COO of Datamation talked about how his organization is using mobile and tech to improve women's health conditions in India. Finland implemented “Living Labs” — in the future, they will become “Networked Hubs — that foster cross-sectoral collaboration and connect people and companies to resources. A collaboration between Taiwan and France led to the creation of 100s of apps. The International Corporation held a series of ‘Information Day’ to share experience and best practices around the world.

The Director of ICT for Japan Hiroyuki Hishinuma spoke about how the Internet of Things (IoT) is helping aging populations to age-in-place, and, surprisingly, farmers to manage their livestock. Instead of IoT, we will have the Internet of Everything (IoE) because 37 billion new things will be connected by 2020.

What is more, IBM's Global Government General Manager Dr. Julia Glidden keynote highlighted a partnership with Sesame Street that will leverage cognitive to enable the personalization, customization of educational content for kids to better learn. Glidden also said: “We have so much data; we don't know what to do with it; we're in a data tsunami. Watson turns data into insights. Watson can help predict and prevent which child – and veterans – will commit suicide.” Beyond using technology and crowdsourcing methods to improve the government team's culture, IBM is putting on a hackathon to crowdsource innovations to curb the Zika virus. Dr. Glidden said, “Open Innovation – put it out there and the whole becomes better than the sum of the

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parts.” These were some of the most powerful examples of new tech capabilities presented at the 2016 Global Forum.

The breakout sessions were just as powerful as the keynotes. Global leaders on the digital health panel spoke about mHealth, e-Patients, precision and connected health, wearable computing, and privacy & access to health and wellness data. A system architect from the Netherlands told us how to prevent chronic disease using activity trackers. For example, light wearables can be used to track sleep apnea, instead of wearing clunky devices to sleep. What is more, Sweden developed Blue App to ask structured questions and follow up questions via digital system to leverage digital to improve mental health diagnoses and treatments. IXICO is developing a digital health platform for patient-generated data for brain diseases in the UK. Senegal is using SMS to inform diabetic patients during Ramadan. JAMK in Finland is co-creating mobile health apps with social service providers. Academics and government officials turned intrapreneurs and entrepreneurs helped to develop the aforementioned healthcare innovations.

Global Forum delegates were reminded of the cybersecurity risks in the digital and sharing economies. For example, digital health gurus told digital health panel participants to demand that suppliers of soft-reliant IoT systems are responsible for building safety and security into their processes, for then healthcare providers buying can send a strong market signal for cybersecurity in network-connectable devices.

The CEO of SecureNinja Shakeel Tufail also highlighted in his presentation: “90% of reported cybersecurity incidents occur due to the exploration of software defects,” but there’s both human and machine weakness when it comes to cybersecurity. This is why organizations must have an accident response test for cybersecurity. Attaché to the Director General of France David Kibler said, “Cybersecurity is changing the world of the diplomat,” and, most importantly, the privacy of the citizen’s personal information.

The World Bank published Digital Dividends, which is the first major headline report on how digital affects economies and people. “To create more digital change, we need the tech, but also innovative business models,” said Minister of Information Society and Administration for Macedonia Marta Arsovska-Tomovska. “We must be digital by nature; digital by design; digital together; and digital, but still human.”

Open innovation requires building trusting relationships, especially since the European Union is promoting a single digital market. Suvi Linden, former Finland Minister, said: “Network technology evolution continues to expand human possibilities.” To advance digitization, Netherlands Director Mark Bressers said, “We need smart business, smart government, smart infrastructure, and smart people.” I wholeheartedly agree with Mr. Bressers, and further believe his statements capture the essence of the 2016 Global Forum.

## GF 2016 FLASH REPORT

30<sup>th</sup> September 2016; by Jean-François Soupizet, Advisor Futuribles,

The 25<sup>th</sup> edition of the Global Forum, shaping the future, an international think-tank which gathers every year about three hundred people from public and private sectors coming from Europe, North America, Asia, Africa and the Middle East took place on September 19<sup>th</sup> and 20<sup>th</sup>, 2016 in Eindhoven (Netherlands). It was dedicated to the global transformation in relation with the increasing digitalization of the world. The exchanges concerned a wide range of subjects: some directly connected to the IT industries, as the infrastructures, the cyber-security, the revolution of the data or the regulatory policies; others in connection with fields of application as health, industry and supply chains, intelligent cities or digital communities.

Without surprise and in line with the introductory addresses, all speakers pointed out the pursuit of the movement of digitalization and the speed of the current mutations. The impacts on almost all sectors are such as a participant spoke about a new convergence between economy and digital technology and many evoked the opportunity to lead disruptive changes and the need to be prepared to. We are not witnessing a sector-by-sector transformation, but a global reorganization of the economy towards a new information environment, made of ecosystems piled up according to the geography of data. This reality pushes aside the traditional actors and favours newcomers raid.

Many leaders remain confident in capacity of the digital technology to face the economic, social or environmental challenges; for instance it could dope the growth in Europe, mitigate the effect of the ageing of the population in Japan or contribute to limit the ecological footprint of cities. The European Union develops measures to make succeed the European Digital Single Market and carries out a new revision of the telecommunication regulatory framework. These orientations are shared in North America, even if the US electoral context led some participants to limit themselves to the reminder of fundamental principles, including their attachment in free trade.

The Forum was also an opportunity to show multiple concrete digital projects, since the increasing sophistication of the smart networks in the field energy, the use of the data to better manage the urban traffic or improve the lighting, the breakthroughs regarding health or the progress of the artificial intelligence with the Watson project developed by IBM. And the initiatives bloom often carried by start-up as the one who in the Netherlands is dedicated to the personal digital identity.

But beyond the consensual speeches many speakers predicted times of turbulences. Indeed, this growth of the digital technology is not without paradoxes.

For instance, regarding infrastructures of communications, if the national offer was never so rich and diversified for the consumer, the international communications and quite particularly the submarine cables are threatened for lack of investments. At the same time access providers offer more and more telecommunications services without having the regulatory constraint of the sector and threaten to destabilize this one. And telecoms operators rise against the amount of the bids which the governments organize for the frequency allocation in particular of the 5G, they consider that it is so many resources which will not go into R&D activities or the roll out of the new networks.



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Moreover, the difficulty that meets the regulation was underlined; notably the temporality: the technological waves follow one another in intervals of a few years and the process for the adoption of an European regulatory framework for example requires approximately five years. This situation nevertheless classic in which the regulation runs behind the technical evolutions turns out to be critical in the context.

Other aspects of the public action were also discussed in domains as cyber security where the governments impose limitations regarding encryption in the name of the National Security and thereby restrain the capacities of companies to organize their own protection. Moreover in this respect it is interesting to notice the evolution of the Chinese authorities which in the law on the National Security in preparation seem to have given up requiring foreign companies implanted on the territory the supply of the information of encryption which they use, measure which appeared in the first legislative project.

In addition, the promises of an open, reliable and accessible Internet for all may be jeopardized; threaten which result first of all from States by the national security measures which they adopt and more still maybe of the private sector by the marketing strategies of very big firms which by offering very low-cost packages including access threaten to privatize whole pieces of the net.

And what to say about our public policies which promise us that economic recovery will come from the innovation and which have to backtrack when the impact of this one pushes aside the existing social or economic balance?

In conclusion, the digital technology remains the first engine of the innovation and its impacts on our economic and social organization are multiple. However, it questions all of the sectors of the economy to and including in the definition of their object. A transformation process is at work; it is doubtless more a matter of a metamorphosis than a transition, which it would be possible to plan. It explains that if the premises are visible there, the final panorama between actors' games and technological breakthroughs seems very difficult to decipher.