DIGITAL LEADERSHIP

An interview with
Neelie Kroes
Vice President of the European Commission

Putting Digital at the Heart of Europe
There is no room for complacency in the fast-moving digital world.

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The State of Digital Europe

Capgemini Consulting: How would you rate the digitization of European public sector? Are you happy with the progress, or do you think we are still scratching the surface?

Neelie Kroes: Tremendous progress has been made in the past few years. Nine of the 10 countries with the most broadband access are European. In Denmark, for example, all communications between businesses and public authorities are now conducted online and it is becoming the norm for citizens as well. Denmark now reports that interacting with citizens online is 30 times less expensive than face-to-face interaction. Italy is another example: the introduction of electronic medical prescriptions alone is saving the national budget 2.5 billion per year. Spain is the European leader in Massive Open Online Courses, showing that education is now part of this digital revolution.

However, there is never room for complacency in the fast-moving digital world, and we recognize there is still a lot more to do. One example is digital citizen engagement. According to the recently published eGovernment Benchmark 2012 Report, less than half of internet surfing EU citizens (46%) use eGovernment services and satisfaction with eGovernment services lags behind that of eCommerce services.

Capgemini Consulting: What do you think European governments should do to fight any complacency?

Neelie Kroes: I believe we should focus on three areas: open data, collaboration, and cross-border connectivity.

First, we need to facilitate the re-use of public sector information (PSI). Opening the wealth of data held by public bodies to third parties creates new business opportunities, estimated at €40 billion in direct economic value. This could provide valuable information and new, value-added services to all Europeans.

Neelie Kroes Digital Heroes

I particularly admire the way Estonia has embraced the digital challenge and has managed to embrace digital technology and make it work for its people in just a few years.

I also find inspiring the way people in the village of Alginet, near Valencia, have used an EU-funded research project, NOBEL, to help them become the owners of energy distribution in their area. They have installed smart meters in all homes in their village. To manage the data coming from the smart meters, they started using the services provided by the local telecom operator; but very soon they also became Internet service providers themselves in order to be independent from and to beat the prices of the operator.

Another interesting example is the “Digital Poland of Equal Chances” program, which uses “Digital Lighthouse-keepers”. These are 2,600 volunteers/scouts – in effect local digital champions – who have been recruited to draft Local Plans for Digital Education. This program is the result of a Broad Alliance for Digital Skills in Poland, involving government, civil society and the private sector.
Neelie Kroes

European governments should focus on open data, collaboration and cross-border connectivity.

Second, as public services need to become more efficient and effective, governments have to consider innovative ways of developing and organizing the public sector for creating public value. At the same time, the younger generation is leading the way towards a collaborative and participative society. We have to transfer this mindset to the public sector and encourage technology-enabled collaborative production of public goods and services.

Third, to increase the take-up and usage of eGovernment services, we need to ensure that services are digital by default and also work cross-border by default. This is why the EU and member states have worked together to establish a core set of digital service infrastructures for online public services, such as interoperability of eID, eSignature and eDocuments. The financial support for the Digital Services Infrastructures (DSI) is part of the forthcoming EU-funded Connecting Europe Facility (CEF), which has allocated up to 1 billion euros over seven years to support platforms providing seamless digital public services in Europe.

Capgemini Consulting: How about the private sector? How do you think it has approached digitization?

Neelie Kroes: Similar to public sector, I believe a lot of progress has been achieved. Digital manufacturing technologies are radically transforming manufacturing and will have a major impact not only on efficiency and sustainability, but also on the geographical distribution of industrial production world-wide. However, again, this positive image is not uniform across Europe. In fact, the considerable progress already achieved could have been a lot greater had it not been for the lack of a digital single market in Europe.

Take the case of the healthcare industry. As a result of the current fragmentation of a continent that should be fully connected, we often see health authorities, hospitals, even doctors introducing their own systems, ignoring useful eHealth tools and services that could communicate with each other and draw on others’ experience to achieve better results. In fact, a survey on eHealth shows that hospitals are not yet deploying technology to their full potential; although most hospitals are connected to broadband, only 4% of them grant patients online access to their medical data. We are currently implementing a dedicated eHealth Action Plan that, by 2020, should allow Europeans to reap the vast potential ICT can bring to health systems, including in the area of mobile health applications. Digitization not only cuts costs for the health systems, it makes access to healthcare much easier and faster, which is especially important for the chronically ill or patients living in remote areas.

Capgemini Consulting: Let’s talk specifically about the manufacturing sector. It has been quite slow to adopt new digital technologies. How can the EU encourage key sectors to leverage digital technologies to transform?

Neelie Kroes: It is true that some member states have lost a big part of their manufacturing base and their economies have experienced more significant declines than others. This is largely due to the traditional way manufacturing is organized. Less developed regions thus had little chance to participate in value creation. Digital technologies reverse this trend; they allow the creation of ‘virtual’ value chains independently from the geographical location of its actors, which means exploiting the potential of skilled labor forces in other regions, often at lower cost. In this context, the member states have a strong incentive to adapt their regional policy and to support EU-wide platforms, which can make them part of Europe’s wider manufacturing base. So yes, I do believe there are huge challenges ahead and the manufacturing sector is far behind exploiting the full potential of the digital factory.

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However, I also believe the EU is already doing a lot to reverse the declining role of the manufacturing industry. We have launched a series of initiatives (see insert) to achieve this. I believe Europe can build on its world-leading position in many areas such as industrial robotics and factory automation, embedded digital systems, enterprise and design software, and 3D- and laser-based manufacturing.

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How Digitization Can Help
Unlock the Potential of the EU Economy

The Digital Goldmine

- Open data can create €40 billion in direct economic value every year
- e-Procurement can save €100 billion a year
- Additional 10% broadband penetration can deliver 1% of EU GDP

The Challenge

- Only 4% of hospitals grant patients online access to their medical data
- Only 46% citizens use e-Government services
- By 2015, there will be a shortfall of 900,000 digital (ICT) professionals

Key EU Digital Initiatives

- €9.2 billion to provide fast broadband access to 45 million households
- €77 million to help SMEs benefit from latest digital technologies
- Grand Coalition for Digital Jobs to produce more digitally skilled professionals
- Startup Europe to help web entrepreneurs start their own business

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Digital innovation

Capgemini Consulting: What is your view on startups in Europe? What is the Commission doing to encourage their creation?

Neelie Kroes: We’ve already seen, and, indeed, I believe we will keep seeing, brilliant Europeans gain international acclaim thanks to their innovative ideas. Skype, Dailymotion, Rovio, Kiara or Withings are some examples. Take the case of Rovio. It reminds us that Web companies create economic impact through both direct effects (as a result of their day-to-day operations within Europe), and indirect effects (by accruing to third parties that work in the same business ecosystem). Rovio is a company that recruited 625 employees, but which works indirectly with 30,000 other people. This creates significant global impact and economic value through enabling ecosystems.

Neelie Kroes: How is Europe positioned in fast-growing areas, such as Big Data and 3D manufacturing? Do you believe Europe has a realistic chance of wresting back the initiative that it has lost in Web technologies?

Neelie Kroes: Big Data is like the tide that lifts all boats: because the scope of the opportunity is growing very quickly, there is a lot of space for multiple companies to come in and generate value for themselves and their customers. And we see a lot of European businesses that already thrive in this field. For example, we see European businesses making the first steps towards a business model where mobile telephone operators don’t just sell minutes to consumers, but also sell consumer insights to marketers.

We’d like to see more such companies grow. That is why, a few months ago, the European Commission launched Startup Europe, an initiative that aims at helping Web entrepreneurs start their own business in Europe and flourish in doing so. We’ve also taken other steps in this direction, such as the Europioneers Challenge and Tech All Stars, which awards Europe’s best technology entrepreneurs and start-ups. We also have the Leaders Club, an independent group of tech entrepreneurs who act as role models to European Web entrepreneurs, providing networking and other activities such as studies and research.

3D manufacturing is another fast-growing area. Europe is currently strong and dominant in specific 3D manufacturing technologies, such as medical devices. So, although competition from the US, Japan and China is strong, Europe is in a good starting position to exploit its leadership at least in these specific areas and capture 30% or more from the worldwide market.

Key Initiatives for Spurring Digital in the Manufacturing Industry

- Factories of the Future public private partnership - It consists of a research program of €1.2 billion to support the manufacturing industry in the development of new and sustainable technologies
- A €77 million innovation initiative called i4MS (innovation for manufacturing SMEs) for the manufacturing sector, and in particular its high-tech small and medium size enterprises (SMEs), to profit from newest advances in digital technology.
- European Electronics Strategy, to maintain Europe at the leading edge in the design and manufacturing of micro and nanoelectronics, and to provide benefits across the economy.

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More than 80% of jobs need digital skills these days.
Hurdles and Way Ahead

Capgemini Consulting: The shortage of digital skills in areas such as Big Data is a major issue for both European governments and companies. What are the measures you are taking to address the digital skills gap in the EU?

Neelie Kroes: Indeed. We’re facing a situation where more than 80% of jobs need digital skills these days, and there will soon be one million ICT vacancies in Europe. That’s crazy at a time of high unemployment. It has to be tackled at all levels.

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The Digital Agenda for Europe recognized the growing policy importance of lacking digital skills for growth, employment and inclusion by devoting one of its seven pillars to policy and actions in this area.

In 2013, the Commission launched a “Grand Coalition for Digital Jobs”, bringing together important stakeholders from government, industry, education providers and so on to take direct action to alleviate the growing shortage in qualified ICT professionals. This coalition has attracted a lot of interest and 40 pledges from companies and training organizations.

Capgemini Consulting: Beyond skills, what are some of the other key challenges holding back Europe in its Digital Agenda?

Neelie Kroes: In addition to the shortage of digital skills, there are a number of other challenges restraining Europe’s wider digital economy in the global race: fragmented digital markets, a lack of interoperability, rising cybercrime and low trust, insufficient R&D and fragmented answers to societal challenges.

That is why we are introducing a series of measures aiming at making Europe a truly Connected Continent. In this package, we are simplifying regulations, so that telecom operators can offer services anywhere in Europe dealing with one regulator and one set of rules. We are offering Europeans more spectrum so that telcos can develop pan-EU business models. We are facilitating new harmonized “access products” that should allow companies to obtain a similar access to fixed networks in member states where they do not have their own network. We are promoting an open Internet, which will safeguard innovation, competition and choice. We are doing away with roaming, which could help the market grow by giving consumers something they really value. And finally we are enhancing consumer protection, where plain language allows for more comparable information and greater rights to help people switch if they want to. I am really looking forward to working on implementing this ambitious package, which could finally offer Europe a true digital single market.

Illustrative Benefits and Savings from eGovernment services

- The adoption of e-invoicing in public procurement across the EU could generate savings of up to 2.3 billion per year.¹
- Switching from paper to fully automated invoicing can cut the costs of receiving an invoice from 30-50 to 1.²
- Contracting authorities that have made the transition to e-procurement commonly report savings of between 5 and 20% of their procurement expenditure (i.e. each 5% would save 100 billion per year).³
- The UK has estimated savings of nearly £2 billion per year thanks to the introduction of online service delivery by default.
- Up to 300 billion of economic value per year and 0.5% of annual productivity growth can be realized over the next 10 years through use of open and big data in the Public Sector.
References

Neelie Kroes
Vice President of the European Commission

Neelie Kroes is Vice President of the European Commission, leading the flagship Digital Agenda for Europe program. The Digital Agenda for Europe aims to help Europe’s citizens and businesses to get the most out of digital technologies. Neelie Kroes is a strong advocate of using digital technologies to put Europe at the forefront of economic and inclusive growth. Capgemini Consulting spoke with Neelie Kroes to understand how companies in Europe have approached digitization and some of the key initiatives that the European Commission is taking to drive the digital agenda.

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