

CEO FORUM 2018 EDITION

INSIGHTS INTO THE DIGITAL TRANSFORMATION

BY

**TODAY'S & TOMORROW'S
BUSINESS LEADERS**

VIVATECHNOLOGY.COM



The pace of technological change is already faster than ever and forces us to rethink and redesign our future.

This booklet is about the latest insights, key ideas, bold moves, and striking initiatives presented by thought-leaders and business pioneers during the CEO Forum at VIVA Technology.

Leading companies, startups, and local authorities share their vision about how digital is not only reshaping the future economy, transforming organizations and business sectors, but also society and human beings. The following topics were highlighted during the CEO Forum.

How digital transformation is being strengthened by the deeptech wave (artificial intelligence, IoT, robotization, augmented & virtual reality) for which everyone needs to prepare. From now on, all of an industry's success partly depends on their capacity to combine traditional activities with this new technological dimension. Artificial intelligence emergence impacts companies' growth strategy by requiring continuous innovation to compete in their respective market, while global hyper-automation is radically changing the way we produce and use our equipments.

foreword

We are here to understand:

How companies are reinventing themselves by developing new ways of working, upskilling their available pool of competences and taking into account the drastic changes of consumer behavior.

How to forge fruitful, sustainable, and efficient collaborations between very different stakeholders involved in the innovation process: private and public sector, large companies and startups, users and citizens.

How companies can leverage these new technologies to fulfill humanitarian goals in a "tech for good" perspective, by putting human beyond digital.

The human role has emerged as one of the most prominent challenges of the digital era and the key to unlock value and ensure long term change. The issue is to find the right place where human can stand by technology and not be exceeded by it. Society needs empowering diverse and inclusive voices...

To be better prepared for the numerous upcoming changes, everyone should participate in these reflections, regardless of age. But is the viewpoint of the new generation on social, and economic

transformations in line with the decisions of today's leaders?

Wavestone offers in this report to consolidate the forward-looking vision of today's leaders by collecting the ideas developed during the VivaTech CEO Forum and the views and expectations of tomorrow's leaders, thanks to a panel in partnership with the associations "Elles bougent", "Villebon" and "Nos quartiers ont du talent."

So, let's plunge into tomorrow's world.



Julie Ranty and Maxime Baffert,
Co-Managing Directors, VivaTechnology.



Xavier Metz
Partner, Wavestone.

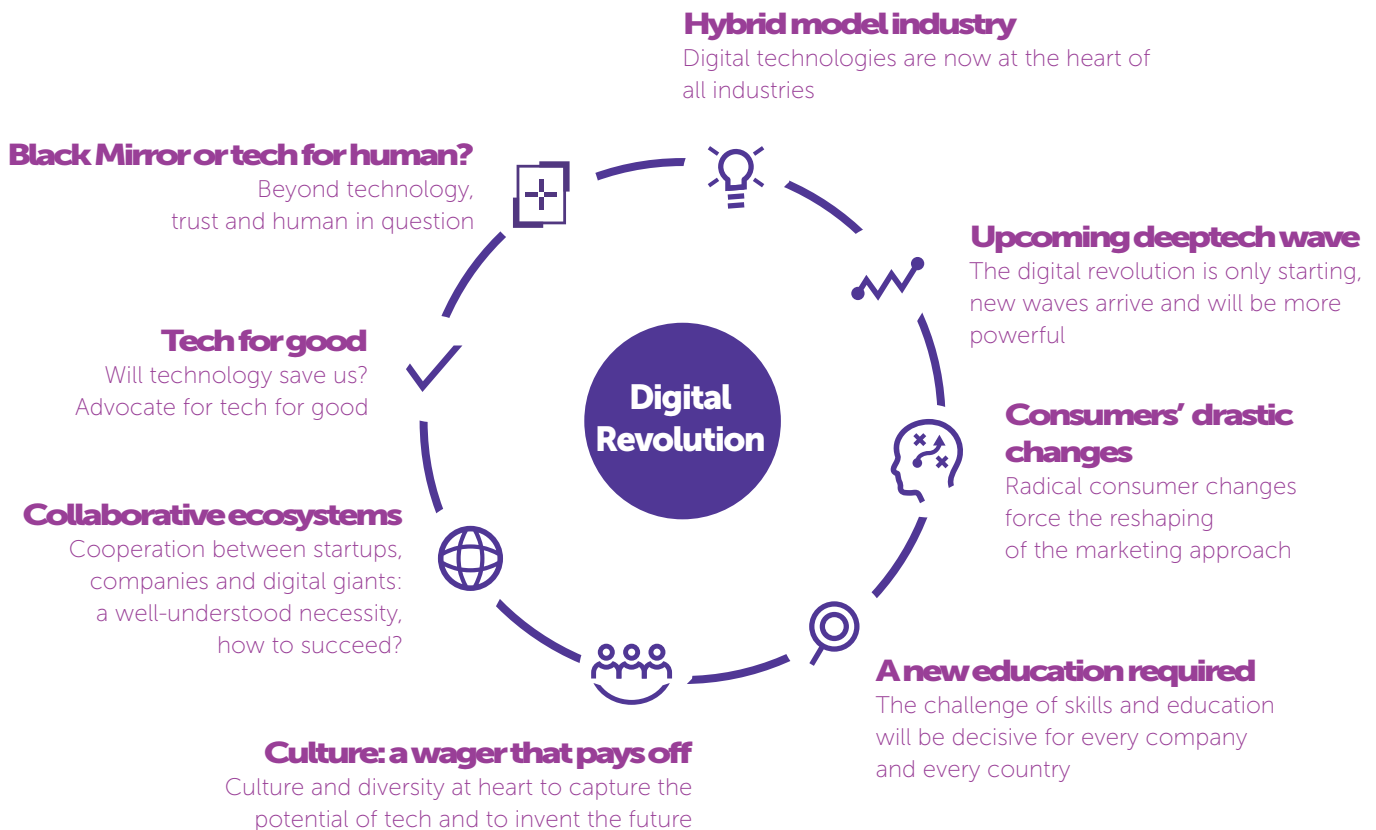
METHODOLOGY:

A survey was conducted on a sample of 455 young people under 26 part of the Wavestone firm, the Institut Villebon and the associations "Elles bougent" and "Nos quartiers ont du talent".

They were asked 17 questions on their vision of digital transformation in society and the answers were used to develop this publication. Furthermore, around twenty young people representative of this sample attended the VivaTech CEO Forum and shared their impressions of the arguments heard.

INSIGHTS INTO THE DIGITAL TRANSFORMATION

By today's and tomorrow's business leaders



HYBRID MODEL INDUSTRY OVERVIEW

Nowadays, mastery of digital technology extends well beyond tech companies, but to all business sectors. In opposition to the traditional model,

companies are moving towards a hybrid system that combines long-standing core businesses and digital technologies. Their success will entail

reinventing their business models, and combining their industrial capacity with the use and integration of digital technology.



“Before, applications were there to support the business, now applications are the business”

Eric Greffier
Cisco



“Tech is our DNA”

Rachel Picard
Voyages SNCF



“We have to totally reinvent our business model”

Nathalie Collin
Le Groupe La Poste



“The digital health revolution is going to change healthcare”

Ameet Nathwani
Sanofi

Analysis

Hybridization is a boost for business growth strategies and a lever for:

- / **Successful sectorial transformation:** digital technology represents the “green fuel” for the energy industry’s revolution. It plays a major role in energy suppliers’ two main challenges: decentralization and decarbonization of energy production. Its value lies in facilitating energy management steering, environmental quality control, predictive management of equipment, etc.
- / **Upstream value chain activities:** Sanofi’s term “Drugs +” describes its service-oriented strategy that combines drug manufacturing and digital platforms for improved access to health issues and assessment of environmental risks.

/ **Rethinking core businesses:** for example, the French Postal Service strives for diversity to make up for the inescapable decline in postal mail. Upholding its values of universal service and competitive neutrality, it provides clients with new digital services: access to a secure digital platform to store their health records. Raised with budding digital technologies (cell phones, internet, social media), tomorrow’s leaders see hybrid models as self-evident and in line with their everyday lives.



UPCOMING DEEPTECH WAVE

OVERVIEW

The digital revolution is only beginning. It gains momentum every day, is a source of profound transformation in

our daily lives and drives us to push the limits of our ambition.



“We are facing a Revolution, nothing less than a revolution”

Marc Fontaine
Airbus

“IA doesn’t just change the potential speed of business, it changes the nature of it”

Keith Strier
EY

“Edge computing is going to be a big thing tomorrow. It’s going to get bigger”

Gilles Thiebaut
HPE

“With digital technology, the world we are living in is definitely moving much faster than ever before”

Florent Menegaux
Michelin

The next deep tech wave will permeate our everyday lives and transform:

/ **Our daily practices, e.g.:**

- Advancements in voice research, especially with connected speakers, will give way to conversational commerce, which enterprises believe will define upcoming consumer habits. Today 20% of Internet queries in the US are done vocally.
- Revolutionized mobility due to electric vehicles, connected and autonomous vehicles, and shared mobility platforms. Valeo expects taxi robots to appear this year.
- 56% of our panel is enthusiastic about such changes, 21% is indifferent and only 22% fear what they believe to be an "intrusion". Younger generations who favor the deep tech wave will make it spread.

/ **The value and performance in the workplace.** Today AI can exceed human capabilities in 2 out of 6 skill areas: learning and task performance. New criteria are needed to assess human added value in the workplace. A new education is required.

/ **The world exploration by revolutionizing space travel.** Robots replace humans in discovering the universe. They are capable of more efficient learning, observing and building at a lower cost.

We cannot yet grasp the speed at which the deep tech wave transforms everything.



CONSUMERS' DRASTIC CHANGES

OVERVIEW

Consumers' radical changes entail an overhaul of marketing approaches. Consumers' profiles and habits are continuously and very rapidly changing. As they evolve in a global and borderless

environment where services and products are instantly available, today's extremely mobile and connected consumers aspire to enjoy the same services as those delivered around the world.

And yet they want those services to be highly and increasingly personalized. Such changes affect how companies create, improve and market their offers.



"B2C is now really representing the big C of Consumers which is the much younger generation of chinese consumers"

Andrew Wu
LVMH



"You have to develop your empathy and your emotional intelligence to stick to the usage and the preferences of the consumer"

Maud Bailly
AccorHotels



"Since the 1950s, we have lived in a certain world of mass market, mass consumers, mass marketing; and we are enjoying now a completely new era that is only beginning"

Jean-Paul Agon
L'Oréal



"The customer experience is the new battlefield"

Sophie Heller
BNP Paribas

We [the younger generation] are used to instant results and immediate pleasure
Guillaume Manderscheid, Millenial

Analysis

Thanks to AI, **mass marketing gives way to precision marketing** for personalized customer experiences and revamped offers:

- / Highly personalized customer experience and services, along with **premiumization**, which permits to offer high value-added services, have become key notions. L'Oréal is one such example. The company's ambition is to invent the future of tech beauty thanks to the wealth of data.
- / **The way of considering and approaching consumers is evolving.** Companies, like AccorHotels for example, are taking "emotional empathy" into account to fully meet consumers' needs.

/ **Customers are no longer exclusively consumers at the end of a chain**, but are now co-building offers. Examples include the French national rail company SNCF, which involves customers in design workshops; or Orange and BNP Paribas, which place their customers' feedbacks at the heart of their product and service improvement, and innovation process.

/ **Innovation combines a global and local approach.** For example, Orange designs its offers like modular blocks to better fit local specificities during roll out.



NEED FOR A NEW EDUCATION

OVERVIEW

Skills and education will be key challenges for every company around the world. In addition to impacting consumer products and services,

the digital transformation will create new needs for enterprises and offers on the job market. It will entail the development of new skills and it will

bring new training and education challenges that companies and governments will have to address.



“They [past industrial revolutions] have always been accompanied by education and skills revolutions”

Jonas Prising
ManpowerGroup

“The only thing that is worse than training your people and see them leave, is not training them and see them stay”

Thomas Chamorro-Premuzic
ManpowerGroup

“Today, what is at stake is training. Training, training [...] it is a major stake we have to deal with”

Juliette Jarry
Auvergne Rhône-Alpes Region

“Besides being a dynamic enterprise on the cutting edge of technology, I find Google attractive because it makes it a point of honor to develop its employees' skills.”

Michaël Doré – Millenial

Not rising to the skills challenge would mean failing the digital transformation and therefore condemning companies to disappear.

- / Facilitating human and technological interactions not only requires training employees, but also **upskilling and reskilling them to adapt to continual innovation**. A number of companies are investing resources in this direction. For example, SNCF makes it a point to train its employees in new technologies such as virtual reality.
- / **Soft skills and “learn to learn” will be crucial as technology becomes increasingly important** in the workplace, a reality millennials are acutely aware of: 64% of them are enthusiastic about the fact that their future jobs will depend less on their acquired skills than on their ability to learn.

The necessity to adapt learning methods to meet current and future technological advancements in the workplace is a view shared by a large number of actors. It raises the question of educational reform to ensure the success and well-being of tomorrow’s workers in their professional environments. Digital transformation is certainly a major lever to improve current educational techniques such as teaching mathematics and science. It is also an opportunity to increase the presence of women in STEM fields and address preconceived notions. Seemingly in line with such views, more than 41% of millennial respondents consider the under-representation of women in large technological enterprises to be a great risk for humanity’s progress.



CULTURE: A WAGER THAT PAYS OFF

OVERVIEW

Enterprises are convinced they must rethink their working and organizational methods to meet new cultural and technological challenges. The main principles of New Ways of Working are: value

initiative, avoid a permanent control mindset, and promote the idea that "it's ok to make mistakes". Such a profound cultural change is a formidable challenge. Enterprises are

embracing profile diversity, information transparency and continual learning to foster their employees' development and innovation.



"It's about fail fast, learn fast and growing up fast"

Maud Bailly
AccorHotels



"Culture is the strategy. [...] Everyone thinks of changing the world, but no one thinks of changing themselves"

Jean-Philippe Courtois
Microsoft



"Diversity at every single level is critical to find solutions that are as inclusive as possible and have a sustainable vision of tech"

Sébastien Missoffe
Google

Culture is at the core of enterprises' strategic reflection. Google's secret recipe: culture at its core, a flat organization and diversity. Why should companies bank on cultural change?

/ **Attract and retain talent:** Enterprises in which 54% of millennials hope to land their next job are striving to meet the young generation's needs. The culture revival and the roll out of new work tools (remote collaboration, information sharing) are a must. 78% of them look positively upon the increasing robotization processes in their work environments. At Microsoft, enterprise culture transformation means simplified tools and reinforced coaching.

/ **Embrace new technologies' potential:** Culture drives innovation. Cisco stresses the importance of defining a digital roadmap that upholds values like dexterity and agility so as not to be left behind amidst rapid change.

/ **Experiment to meet market needs:** Enterprises are becoming increasingly creative to meet new consumer needs. They test their ideas by experimenting with limited target scopes and gaining knowledge from field feedback. Nevertheless, Thales finds it difficult to value risk taking in business contexts where safety is at stake (air traffic controllers have zero margin for error).

By inventing and implementing new ways of working, enterprises can ensure continuous innovation and performance, both determining factors in employee engagement.



COLLABORATIVE ECOSYSTEMS

OVERVIEW

Today, ecosystem integration is a must for enterprises. Establishing partnerships is a way to benefit from technological innovations and keep ahead of new actors.

Confronting organizational and cultural models can sometimes prove difficult. Yet, it is in enterprises' best interest to strike the right balance by adapting their

interaction modes to the likes of agile small structures. Today, collaboration, skill sharing and reciprocal learning take multiple forms.



"We need to create an ecosystem between corporate, academics, employees and startups"

Catherine Guillouard
RATP Group



"We are making a lot of money by learning / we are learning by making a lot of money"

Jacques Aschenbroich
Valeo



"We believe that nobody has the monopoly of good ideas"

Lubomira Rochet
L'Oréal



"Through data integration we are resolving the contradictions we have been trying to resolve for the last 30 years: how to be big and powerful and to connect with the small; how to be complex and fast; how to protect yourself and share"

Marc Fontaine
Airbus

In previous years, enterprises have acquired multiple partnerships with startups. To collaborate efficiently, they have developed the following strategies:

- / **Cultural adjustment:** Wanting to limit incomprehension, enterprises such as SNCF, have adapted themselves to startups' potential. Instead of trying to solve previously existing issues, they give free rein to young entrepreneurs.
- / **Partnership variety:** Collaborations can be financial (investments, stake sharing...) or intellectual (shared expertise or resources, data bases...). RATP has rolled out a support program for startups that includes investments, purchasing innovative services and jointly developing new services.
- / **Reciprocity:** While startups rely on large companies' strike force, the latter rely on startups dynamic culture. Valeo, for example, backs more than 1,600 startups, whereas AccorHotels highlights how partnerships can anticipate emerging uses.

Collaboration with digital giants, such as GAFA or BATX (Baidu Alibaba Tencent Xiomi), is nevertheless not to be shirked. Orange asserts its interest in working with startups that know how to adapt to consumer-specific needs; the big ones offer must-have services.

A systemic vision has its virtues for enterprises, as it allows them to broadly transform their environment. For example, Airbus's connected aircrafts give way to connected aviation.



TECH FOR GOOD

WILL TECHNOLOGY SAVE US?

OVERVIEW

Disruptive technologies are coming. They will have a growing impact on our daily lives. There is no debate about it. However, the question is: will it be for better, or for worse? The success of the digital revolution probably lies on how people will use new technologies to improve their life. This means we should do

business differently. This is not about re-thinking how to innovate, but why. The aim of technological innovations has a greater purpose than just making extra financial value and delivering higher quality products and services to customers. It's about empowering citizens, reducing social inequalities, fighting against

climate change, giving everyone access to healthcare and education... In short, unlocking the incredible and scalable potential of technology to make our world better and more desirable. Tech for Good can give rise to the human side of technology for positive social change.



“Digital is the green fuel for the energy revolution. It’s good for the battle against climate change. And it will lead to a more peaceful world”

Isabelle Kocher
ENGIE

“We need to make sure that innovation can be done by people for people, that it brings something positive”

Mari-Noëlle Jégo-Laveissière
Orange

“The human dimension is at the heart of what we do, and at the heart of who we are”

Denis Machuel
Sodexo

“Smart City is not just about technology. It’s about people and the needs of people. [...] A Smart City is before all a question of a people project about quality of life. The technology is serving this project”

Carmen Munoz-Dormoy
Citelum, EDF Group

Technology is a powerful tool to leverage big-systems shift and address global challenges in many business sectors, such as:

- / **Energy:** new technologies such as IA and IoT facilitate to better produce, distribute, and consume energy, and by doing so, help fight efficiently against climate change. 90% of millennials consider that Data can help us improve our energy consumption, thanks to smart meters like Linky for example. According to ENGIE, while 1.2 billion people still don't have access to energy yet, smart and micro grid solutions using solar energy, could offer flexible, local and decarbonized solutions in Africa.
- / **Transport:** optimize and reduce urban transportation thanks to smart traffic control and Mobility-as-a-Service solutions. Improve air quality in cities with innovative public transport offers and the development of electric vehicles, and secure roads with autonomous cars.
- / **Healthcare:** improve, equalize, and make more accessible healthcare in every part of the world. "We have been able to shorten data processing for blood test, genom sequencing and brain scans from 20 minutes to 2s in order

to help scientists to cure Alzheimer disease" says Gilles Thiebaut, France's CEO of Hewlett Packard Enterprise. New technologies bring much better understanding of diseases and change the relationship with patients: online trial engagement, communities of patients, real-time access to diagnosis via smartphone, personalized treatment, predictive healthcare... Digital has brought much more shift in the health business model than genetics.

Yet technology will unlock its potential only at the condition to seek the common good. Market penetration of new technologies will depend on their ability to demonstrate their usefulness for society and human beings. Make no mistake! Technology is very powerful, but it's still just an enabler. Technology can stimulate, slow down, or amplify changes, but it has neither self-consciousness nor inherent value.

So, technology cannot save us; only humans & ethics can. And now more than ever, we probably need innovation to follow values, instead of value following innovations. In the end, as Hervé Le Gavrian (MICHELIN) predicts, "only companies with a meaningful purpose for people will survive".



BLACK MIRROR OR TECH FOR HUMAN?

BEYOND TECHNOLOGY, TRUST AND HUMANS IN QUESTIONS OVERVIEW

Would you accept to board on an autonomous plane? Impressive and outstanding technologies are already out there, making things we couldn't even dream of a few years ago. But to be used and adopted by the majority, businesses

and tech companies will have to reassure people. Counter intuitively, even millennials are quite concerned and sometimes scared about new tech. Thus, the question isn't about technology readiness, but rather about users' acceptability and

trust. The digital revolution cannot move forward if we give in to fear. But we need to ask the right questions! Yes, AI can be dangerous. But not for the reasons one might think. So, let's fear the right thing... and enjoy the rest!



“Digital is becoming the new oxygen of our lives. It brings freedom to move, freedom of expression, freedom of information. But these precious freedoms for citizens must be based on the understanding and the trust in the technologies we all rely on to help our customers to make the world go round”

Patrice Caine
Thales

“Big data is not removing any human capability at all. It is simply giving the humans all of the data and augmenting human beings' capability at the same time”

Brian Duffy
SAP

“Mankind is at the origin and at the core of the digitalization process”

Yves Meigné
VINCI Energies

“A number of speakers began their presentation with persuasive topics about technology's positive impact. For example, Microsoft and the blind, HPE and Alzheimer, SAP and cancer in India. The fact they greatly insisted on the virtues of digital demonstrate they must convince people of technology's goodwill practices”

Eléonore Guermonprez – millennial

Paradoxically, people are both increasingly dependent on, and distrustful of, digital technology. Sébastien Missoffe (General Director, Google France) highlights this situation: the French use digital tools more than in other countries, but at the same time “remain vigilant and express a reserve and greater mistrust of the risks of invasion of their privacy”. People in our culture are wary. In a way, we are of a practical nature rather than true believers. Autonomous vehicles are a telltale example. Jacques Aschenbroich (VALEO CEO) reminds us “95% of traffic accidents are due to human error” like fatigue, speed, and alcohol. Yet, 50% of millennials in our panel stated they would rather trust an unknown carpooler than AI to safely arrive at their destination. What is to be done?

/ **Become aware** that it is not accurate to think of a man-machine competition. Mankind is building and designing technology; it's not the other way round. Along the same lines, AI is reinforcing the past because algorithms are learning from past data. We need to be aware of bias and strive for balance of data sets. Otherwise, we are condemned to repeat past mistakes and incapable of foreseeing new trends.

/ **Fear the right thing.** AI must be seen as “Augmented Intelligence” rather than “Artificial Intelligence”. It can do things mankind will nevertheless not know how to do anyway. Rather than replace it, AI enhances our intelligence. For example, Augmented Intelligence will allow humans to take better decisions in increasingly complex situations and at decisive moments, in different sectors where people life is at stake, such as ground transportation, air traffic control, space and defense. The majority of millennials seem to agree with this vision, as 75% of them perceive digital tools as a way to boost human capabilities, 20% as a substitute to mankind or a technological dependence, and 5% as a dehumanization.

/ **Be transparent and point out benefits.** Manpower transparently measures employee performance for a win-win situation. Providing staff with information leads to mutual understanding and satisfaction from both company and employees. Thanks to data bases, Manpower can better and more objectively evaluate its employees.



Co-organized by Publicis Groupe and le Groupe Les Echos, VivaTech is the world's rendezvous for startups and leaders to celebrate innovation. It's a gathering of the world's brightest minds, talents, and products taking place in Paris on the 16th–18th of May 2019. More than 100,000 visitors attended the 2018 edition which took place on May 24th – 26th, marking a 47% increase in attendance in just one year. Next year builds on that success as startups, business leaders, investors, academics, students, and media from around the world descend on Paris for three packed days.

More information at
www.vivatechnology.com
and @VivaTech

thanks

This publication is the result of a collaboration between the Wavestone and Vivatech teams. We would like to thank in particular the following people for their strong involvement:

/ Xavier Dorange
Creative Production Director
(Viva Technology)

/ Nicolas Douchement
Head of Operations (Viva Technology)

/ Dorothée Pineau-Valencienne
Co-Head of Program
(Viva Technology)

/ Laure Wybo
Head of Key Accounts
(Viva Technology)

/ Léo Bouffier
Consultant (Wavestone)

/ Louise Lehuger
Consultante (Wavestone)

/ Aurore Macek Yverneau
Consultante (Wavestone)

/ Sylvain Masserot
Consultant (Wavestone)

/ Guillaume Maréchal
Consultant (Wavestone)



WAVESTONE

www.wavestone.com

Wavestone is a consultancy firm, formed by the merger of Solucom and Kurt Salmon's European business (excluding retail and consumer goods outside of France). It is a leading independent player in European consulting.

Wavestone's mission is to enlighten and guide its clients in their most strategic decisions drawing on its threefold functional, sectoral and technological expertise.