THE NEXT GENERATION INTERNET FORUM 2018

13 SEPTEMBER 2018 | PORTO, PORTUGAL

NEXT GENERATION INTERNET FORUM 2018 REPORT

September 2018

Rapporteurs:

Claire Doble, Communication Manager, Martel Innovate
Dr. Monique Calisti, CEO Martel Innovate, HUB4NGI Coordinator

Contributions from: Roman Łapacz (PSNC); Steve Taylor (IT Innovation); Aba-Sah Dadzie (Open University); Stefania Aguzzi (IDC); Peter Van Daele (imec); Margherita Facca (Martel Innovate), Margherita Trestini (Martel Innovate), Timo Lahnalampi (Martel Innovate); Session 1: Chris Haley (Nesta), Felix Szabo (Nesta), Carolina van den Berg (Nesta); Session 2: Marta Arniani (Futuribile), Björn Muennich (Business consulting for Dissemination eU); Session 3: Jim Clarke (Waterford Institute of Technology), Paul Malone (Waterford Institute of Technology), Sara Pittonet (Trust-IT), Andrea M Schillaci (Trust-IT).

NEXT GENERATION INTERNET

ACKNOWLEDGEMENTS

DISCLAIMER

The content of this document is merely informative and does not represent any formal statement from individuals and/or the European Commission, instead is a public document from contributors with visionary perspective and based on years of experience towards Next Generation Internet.

The opinions, if any, expressed in this document do not necessarily represent those of the individual affiliated organisations or the European Commission. The views expressed herein do not commit the European Commission in any way.

TABLE OF CONTENTS

TABLE OF FIGURES

INTRODUCTION

The 2018 Next Generation Internet Forum (NGI Forum) took place at the Alfandega Porto Congress Centre in Porto, Portugal on 13 September, 2018. It was the second annual edition of the event, after last year's first successful NGI Forum in Barcelona. This year's NGI Forum attracted more than 300 registered attendees (198 attended) from 35 countries worldwide. There were 26 speakers, including keynotes and expert panels, and three parallel group sessions. The participants were active, engaged and excited to be part of the growing movement of internet innovators, researchers, policymakers, SMEs and corporations who are building the internet of tomorrow. The event was supported by Porto Digital and was run as a free-entry (with registration), freestanding event, so the fact that so many chose to come and actively participate is a clear indication of the success and growth of both this specific annual event and the NGI Initiative in general.

HUB4NGI, a communication and coordination hub serving the whole NGI community, organised the NGI Forum with support from all other NGI CSAs – Engineroom, NGI Move and SpeakNGI.eu - and had a prominent role in leading the different activities. The aim of the NGI Forum was to gather together those prominent actors that through their work and active engagement in various R&D areas are paving the way to design, build and refine the Internet of Tomorrow. It was also an opportunity to share knowledge with leading experts from across a variety of disciplines, including privacy and trust technologies, decentralised data governance, discovery and identification, edge intelligence, etc.

During the day, many important issues and topics for discussion were raised and debated. This report summarises the highlights, key takeaways and main outcomes of the event.
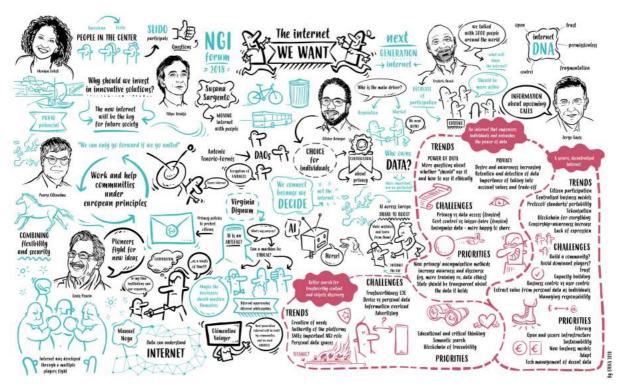

FIGURE 1: THE GRAPHIC ANIMATION OF THE DAY

OPENING: WELCOME ADDRESS

"This is our event, because we all together are the Internet of Humans" said Dr. Monique Calisti, event moderator, HUB4NGI coordinator and CEO of Martel Innovate, in her opening address at the Next Generation Internet Forum 2018 in Porto. Dr Calisti explained that the NGI Forum had been conceived as an interactive event in which participants and not only speakers and panelists play a major role. This reflects the overall NGI spirit and aim to put humans at the centre of the picture and ensure centrality of discussions on how the internet should be reshaped to provide benefits to individuals and society as a whole. Dr Calisti then introduced the activities and agenda of the day, including the keynote speakers.

To increase the outreach of the NGI and of the NGI Forum, a live stream of the event was broadcast and Dr Calisti encouraged participants to actively participate on social media sharing insights, as well as contributing with live questions via Sli.Do.

FIGURE 2: DR MONIQUE CALISTI IN ACTION

HOST ADDRESS: THE NEXT GENERATION PORTO 2025

The first speaker of the day was **Filipe Araujo**, Vice-President / Vice-Mayor & City Councillor for Innovation and Environment of Porto. With an engineering background and having worked for 20 years in telcos, Araujo was well qualified to showcase Porto as a Smart City where innovation is rife. He posed the question:

"What is the role of a city in the context of development of the Next Generation Internet?"

He went on to outline how Porto has invested in developing innovative services for its citizens. This involves smart transport and waste management systems, traffic management and air quality monitoring among other initiatives. With its 2,000 year history, a population of around 250,000 plus vast numbers of tourists arriving daily, and as a major contributor to national exports, Araujo said Porto is constantly responding to changing global demands. He also drew attention to the fact Porto is a university town, a combination of factors, he claimed, that made it an ideal ecosystem for agile, innovative service development, mostly conducted via the city's Porto Digital department.

"Porto is a resilient city, meeting challenges in an innovative way".

The NGI Forum would like to thank Porto Municipality, through Porto Digital for hosting the event.

FIGURE 3: FILIPE ARAUJO SPEECH

KEYNOTES: PEARSE O'DONOHUE AND LOUIS POUZIN

CREATING THE FUTURE TOGETHER: AN INTERNET OF HUMANS

Pearse O'Donohue,
Director Future Networks, DG CONNECT, EC

Pearse O'Dohonue from the European Commission arrived fresh from European President Jean-Claude Juncker's annual *State of the Union* address the day before and he drew attention to Juncker's and the Commission's view that only a strong and unified Europe can master the challenges of global digitisation. O'Donohue's speech confirmed that NGI is a key platform for Europe's plans and therefore the right initiative at the right time. He quoted Juncker:

"It is because of our single market (the largest in the world) that we can set standards for big data, artificial intelligence and automation. And, because of that single market, that we are able to uphold European values, rights and identities in doing so."
EU President Jean-Claude Juncker, State of the union speech, 12 Sept, 2018.

FIGURE 4: PEARSE O'DONOHUE

However, O'Donohue also said the EC can only do so much. It was now up to the Next Generation Internet community to take an active role as doers and consumers of the internet.

"We need partnerships to benefit from the Digital Single Market."

He said it was now crucial that the NGI vision quickly translates into some very concrete things in terms of research innovation and implementation. To set the standards required, communities need to work together and build the next generation internet with European values and identities at the heart. This is the time for Europe to assert its sovereignty.

"Rules and regulations can only go so far. [Because] rules will never be able to catch up with the technology… We have to have tools that anticipate and work on behalf of the individual, that have design principles that allow us to ensure the internet is working on behalf of society and the individual. That requires involvement of all stakeholders and bottom-up creation."

He encouraged the NGI to empower other groups and communities, involve citizens and use technologies that will ensure openness.

FROM TIME SHARING
TO THE NEXT GENERATION INTERNET

Louis Pouzin
internet pioneer

Internet pioneer and founder of Open Root **Louis Pouzin**, who made a surprise guest appearance at last year's NGI Forum, was back to speak again. He gave an entertaining and informative talk, saying pioneers are 'crazy people' in a positive way. He gave a short history of internet solutions and said that now, much like when the internet was in its infancy, we are once again disrupting existing systems and the existing industries:

"Many of the protocols used today are outdated"

In context of a future internet, Pouzin said we need to start thinking about it now and history teaches us a lot about how attitudes and thinking can change. Something to keep in mind as we build the next generation internet.

FIGURE 5: LOUIS POUZIN

KEYNOTE TESTIMONIALS & ROUNDTABLE DISCUSSION

The focus of the next session was "Building the Next Generation human-centric Internet". This was an interactive format with five, 10-15 minute "expert testimonials" including live questions from the audience and via Sli.Do. The session was moderated by Dr Monique Calisti.

The expert keynotes were:

Professor Susana Sargento from University Of Aveiro and Co-founder of Veniam, spoke on the Internet of Moving things. Humans are constantly on the move, so we need an internet that moves with us, Sargento said. For example, bike sharing systems in cities and mobile hotspots to collect information from environmental sensors. She highlighted the Smart City platform in Porto that was evolving to be able to send realtime information to passengers on buses, for example. Sargento noted that, as well as benefiting local residents, systems such as this can boost tourism.

Antonio Tenore Fornes from Complutsense University of **Madrid** talked about Blockchain-based Architectures. He said blockchain technology is opening up ideas around infrastructure challenges, centralized/decentralized data, governance and economics.

"[We're seeing] a new generation of collaborative economy. Is it democratic? [Blockchain can] change the rules of the game to move from centralised monopolies to decentralised ecosystems."

He said there's an opportunity to encode democratic methods with blockchain and to provide models that other communities can use.

Professor Virginia Dignum, Umea University, Chair of Social Artificial Intelligence, talked on Social Artificial Intelligence. She said responsible AI is in the realm of philosophy and ethics as well as technology. We need to optimise systems to what we feel is right – putting ethics in design, including ethics by design and providing ethics guides for design(ers). Dignum also drew attention to the different flavours of 'ethical AI', e.g. an autonomous vehicle built on utilitarian ethics might behave differently to one built on Kantian ethics.

Manuel Noya Marino from Linknovate discussed Data Analytics on NGI Research Trends. He said data protection, privacy by design and notions of differential privacy have been growing massively over the past five years. Privacy is a big trend, the EU has been putting money behind privacy-tech for the last five years and US organisations are even more active in this area. And, as the results of the NGI Forum poll (see page 23) show, "Privacy abuses" is far and away the biggest perceived threat to people and society caused by emerging trends and technologies in the Internet.

Clementine Valayer from Gartner Research could not attend in person but appeared via live voice feed where she presented the results of Gartner's latest report on the next generation internet: *Building the NGI 2025 with the Community*. The report asks how the internet needs to evolve strategically to face the technical debt and meet the high demands of the future – in terms of preparation, funding and making the internet ecosystem NGI friendly. Valayer said

human-centricity is key, and there were three main drivers for change: the need for resilience, trustworthiness and sustainability.

"The internet community is important, we need the main actors on board from the start to participate in funding and research. We also need ideas that stem from the community and that go into the wider ecosystem."

The report also identified topic clusters for upcoming Horizon Europe calls and topic areas for upcoming research calls.

ROUNDTABLE DISCUSSION WITH KEYNOTE EXPERTS AND PEARSE O'DONOHUE

The experts were then joined on stage by the EC's Pearse O'Donohue for a roundtable discussion moderated by the European Commission's **Olivier Bringer, Deputy and acting Head of NGI Unit, DG CONNECT/E.3.** There were also questions from the audience and Sli.Do. The first question was from Bringer:

"NGI is a very noble goal, we want to build an internet of humans that maximises the benefits for society, and we want to develop technologies for that. However these technologies must also survive market tests. What do you see as the main drivers to promote privacy (and ethics) by design? Demand, supply, regulation… how can we deal with that?"

On **privacy**, one of the key issues of the day, **Manuel Noya** said the main driver comes from the market. **Susana Sargento** said it was important that in the overarching need to exchange data for services, we are careful not to disclose private information.

Talking about **regulation** and the market, **Virginia Dignum** said it's not about one or the other, we need both. "*We tend to see regulation as negative, as something that will cap possibilities. But the EU is doing something positive*" She said regulation could be a driver for innovation, because technologists often had to work around it, which can result in better products.

Pearse O'Donohue said the EC wanted to continue the situation where choice is maximised and the rules and regulations act as "outer limits". **Virginia Dignum** added we also need trustworthy **certification**.

"What is the role of a city, and of humans to develop the next generation internet. For example, how could blockchain be used for a decentralised internet?" – Olivier Bringer

Antonio Tenore Fornes said it's not about whether the technology can deliver decentralisation, because that possibility already exists. The question is whether as a society we are going towards that. If we aim for monopolies, and always want to maximise profits, that won't work with decentralised technology. To build collective intelligence in cities, it always depends on the people.

Susana Sargento talked about the role of public authorities to support the implementers and give access to build overall crowd sourced services.

There was also discussion about the **internet and creativity**: the internet is a tool and an enabler, rather than an end point.

Data ownership: a difficult issue, especially in terms of decentralisation. Whoever is providing the means to synthesise the data will almost inevitably end up with a lot of power. The EC position is that the issue of data ownership and public policy around it still needs more work.

"If the internet was a teenager, how would you help it grow?"

Susana Sargento - be disruptive

Antonio Tenore Fornes – the internet should be fun, shouldn't feel creepy – create your own rules

Virginia Dignum - make mistakes and learn from them

Manuel Noya - be creative

Pearse O'Donohue - know what you think is important, be true to it and be able to justify why it's important

FIGURE 6: ROUNDTABLE

INTRODUCTION TO DEMO STANDS

Before the lunchbreak, Timo Lahnalampi from Martel Innovate and HUB4NGI introduced the showcase/demo stands. This is where all attendees had a great chance to get in touch with practical NGI offerings/tools by NGI Coordination and Support Action (CSA) projects:

➔ **NGI Map** - Show your expertise/offering and show you belong to NGI Community! - map.ngi.eu

➔ **Survey4NGI** – Have your say in NGI survey https://consultation.ngi.eu/ngi-survey

➔ **NGI Photobooth** - Take a snapshot and share it to your followers

➔ **Global Internet Policy Observatory (GIPO)** - observatory.giponet.org

➔ **Consultation platform** - consultation.ngi.eu

➔ **NGI Awards** - awards.ngi.eu- Rewarding and promoting NGI excellence

➔ **The NGI Game** by Engineroom www.nesta.org.uk/project/next-generation-internet-engineroom/

Additionally, innovative Portuguese Startups/SMEs were present as follows:

➔ **Codavel** - www.codavel.com – Provides faster products for wireless communication

➔ **Fyde** - www.fyde.com – Offers trust, security, privacy services

➔ **Jscrambler** - www.jscrambler.com – Provides SW solutions enabling maximal speed, for any user, any device, any content

➔ **LOQR PT** - www.loqr.io – Works with authentication technology

➔ **Ubiwhere** - www.ubiwhere.com/en/ – Provides smart SW solutions for SmartCity environment

FIGURE 7: TIMO.LAHNALAMPI PRESENTING THE DEMO STANDS

KEYNOTE: FRÉDÉRIC DONCK

DIGITAL TECHNOLOGIES AND SOCIETY: WHICH FUTURE?

Frédéric Donck
European Regional Bureau, Internet Society

Frédéric Donck from the Internet Society gave a keynote on Digital Technologies and Society. He outlined his society's 2017 report on the internet in five to seven years' time. It defined six drivers of change including IoT/AI; cybertax, cyberwars, cybersecurity; consolidation, and the impact of media and culture 'bubbles'. He identified the strengths of the internet as the fact it's shared, with no central control, open, collaborative, transparent, best effort, and user-centric. Threats are fragmentation into local intranets or trying to create 'borders' and a lack of trust. His conclusions for NGI are

➜ human values must drive internet development. Including agreement on ethical standards

➜ users' control of data is fundamental

➜ close the digital divide, we are not there yet globally

➜ security and collaborative approach is too important to leave only to government, all people should discuss

"There is a role for all of us to be ambassadors to try to involve our communities. We believe we should continue to engage with all aspects of society, but we only can address [the issues] if there are people in the room."

FIGURE 8: FRÉDÉRIC DONCK SPEECH

PARALLEL SESSIONS SUMMARY

During the afternoon, attendees split off into three parallel sessions on NGI. The wrap-up of this session was led by **Richard Stevens** from IDC and a HUB4NGI Expert. Stevens reported great collaboration and progress on the theme. Key findings were as follows:

Session 1: An internet that empowers individuals and unleashes the power of data. *Led by Engineroom*

This session talked about the value of data, trends, challenges and priorities. Engineroom led the session, which took the form of a board game that captured the key elements of NGI and allowed the participants to think about the issues in new and creative ways, which provoked much interesting debate.

"Because you can't always just pick one option, you often need to find a good compromise," according to **Felix Szabo from Engineroom.**

Full report: https://www.ngi.eu/news/2018/09/21/ngi-forum-2018-fun-games-values/

Session 2: A secure, decentralised internet. *Led by NGI Move*

This group discussed not only decentralisation but a meta discourse on decentralising government funds. They identified that citizen participation is growing and censorship and freedom of expression are trends to watch. A challenge is how to build a community of peers and avoid domination by the big-players, one answer is to make the internet more user-centric. They also talked about timelines, both in terms of funding and regulation. It was suggested that new business models and funding mechanisms could be adopted around decentralised data using blockchain.

"In terms of funding, we need to think about how to go from 24 months to deliver funds to 24 weeks. It's also important to think about how the speed of regulation affects the individual," reported **Marta Arniani from *NGI Move***

Full report: https://www.ngi.eu/news/2018/09/13/ngi-forum-porto-session-2/

Session 3: Better search for trustworthy content and objects discovery. *Led by SpeakNGI.eu*

The third session categorised their topic around the human values being addressed by NGI and linked them with the challenges, potential solutions, known initiatives addressing those solutions and also gaps and research & innovations needs that address the identified gaps. The search and discovery topic was addressed from four different perspectives: SMEs role in NGI, semantic technologies for data and content discovery, interoperability and open data portal from Slovenia, and tackling online disinformation. NGI R&I topics identified included tools for semantic data organisation linked by their semantic "meaning", especially considering human values like privacy and fairness and adhering to GDPR requirements; Remote / Automated enforcement of data handling rules, using AI to extract semantic meaning and innovative solutions to contextually manage data release; and Ensuring correctness and authenticity of entire value chain verification mechanisms to guarantee accuracy of online information.

Jim Clarke from *SpeakNGI.eu* finished up by encouraging NGI members to join the ongoing discussion by contributing papers, and articles to build a knowledge base and concentrate consultation platform efforts at https://consultation.ngi.eu/channels.

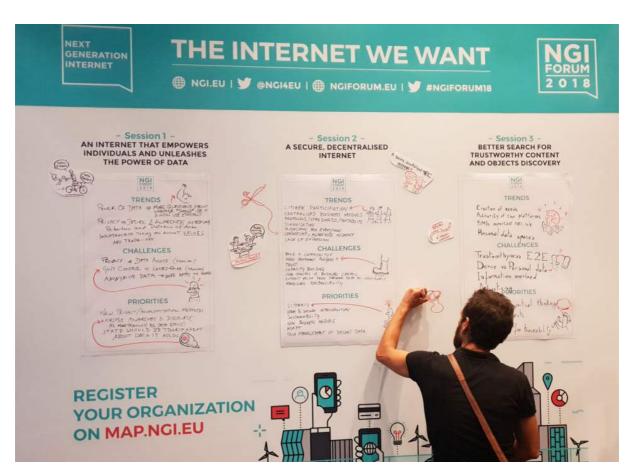Full report: https://www.ngi.eu/news/2018/09/21/report-session-3-better-search-trustworthy/

FIGURE 9: THE NGI BILLBOARD

FIGURE 10: RICHARD STEVENS WITH MARTA ARNIANI

UPCOMING NGI CALLS AND OPPORTUNITIES

The EC's **Jorge Gasos**, NGI Unit, DG Connect/ E.3 outlined the upcoming calls and funding opportunities, including R&I project implementation through sub-granting and/or cascade funding. He outlined 2018's CSAs in both NGI and EU-US partnerships and talked about what lies ahead for Horizon Europe.

Looking ahead

2019

Call open in October 2018 (deadline March 2019) first call for sub-grantees: Q1 2020 with 3 areas defined:

➜ **Area 1:** Internet trustworthiness with electronic identities

➜ **Area 2:** Service and data portability

➜ **Area 3:** Open internet renovation

Further planning

In 2020 a new round of calls for projects will be launched. Topics to be published in 2019

Horizon Europe

➜ Horizon Europe will include an activity on NGI as a continuation of the NGI activities in H2020.

➜ The skeleton is already defined, now the Commission is working on details.

➜ The new programme "Digital Europe" will complement by focusing on capacities and roll-out.

FIGURE 11: JORGE GASOS

CLOSING

Dr Monique Calisti wrapped up a successful and informative day: *"The NGI forum will come back next year and I hope that the family will grow."* She also welcomed **Pearse O'Donohue** to the stage to give his closing remarks. He used the opportunity to highlight the EC's commitment to increasing digital literacy and encouraged those working in NGI to work on this too.

"The digital divide – is it too obvious to us? We need to work to make the internet for humans, especially those who economically socially or through human nature are inhibited or prevented from accessing the internet. "

Pearse O'Donohue ended by encouraging people to go out and spread the word and convert the uninitiated.

"We have to remember that we need to explain. The communities working [to close] the digital divide are also those working in NGI."

FIGURE 12: THANKS TWITTERCARD

NEXT APPOINTMENTS AND JOIN THE NGI

➔ **Web Summit 2018 Lisbon** - https://websummit.com/speakers?gclid=EAIaIQobChMIipum16zE3QIVHpSyCh1bjgJB EAAYASAAEgIHZfD_BwE

➔ **IGF 2018 Paris** - https://www.intgovforum.org/multilingual/content/igf-2018-0

➔ **ICT 2018 Vienna** - https://ec.europa.eu/digital-single-market/en/events/ict-2018-imagine-digital-connect-europe

➔ **Join the NGI** - https://www.ngi.eu/contact/

STAY UPDATED AND GET INVOLVED!

🌐 ngi.eu

🌐 map.ngi.eu

🌐 consultation.ngi.eu

🐦 @NGI4EU

📘 @NGI4EU

📷 @ngi4eu

in /groups/2206279

▶ /channel/UCafmIQ_fwe_FiwiiYj6QLUA

THANK YOU!

NGI FORUM STATS & FINAL CONSIDERATIONS

The graphic below shows some key stats for the event. However, it would be a mistake to judge its success on the number of physical attendees and/or registrations alone. The reach of an event like this goes far beyond the people in the room, with information and outcomes disseminated widely among the NGI ecosystem and beyond both via word of mouth, media coverage and social media.

That said, NGI is about building an internet of humans, and it is undeniably important for humans to meet, in person, and network, discuss and debate the issues. The level of engagement and connections made and strengthened gave a palpable 'buzz' to the NGI Forum 2018.

Likewise, the location of Porto, a Smart City in action, tied perfectly into the NGI Initiative by giving attendees a tangible example of what can be achieved, as well as allowing them to meet and network with key players in building and maintaining the city's digital infrastructure.

Therefore, while the figures for registration, attendance and engagement are important, beyond the numbers, we also need to consider the intangible benefits as outlined above. Events such as the NGI Forum should be looked at as a highly engaging marketing tool for the NGI Initiative as a 'product', where the initiative is discussed, used, tested, and trust is built.

Organisations registered on NGI Map – 175
Physical number of attendees – 198

KEY TAKEAWAYS

NGI Forum 2018 key takeaways

"NGI will never be finished, and it always changes. We are in a permanent process. And we don't want great ideas that bottleneck other great ideas."
Pearse O'Donohue, *Director Future Networks, DG CONNECT, EC*

➜ A great start has been made, the NGI Initiative is growing. Last year's NGI Forum had 160 registered participants, this year it was more than 300.

➜ Focus still very much on connecting humans with technology. Human values and ethics must drive technical development, not the other way around.

➜ The internet needs to evolve strategically to meet human needs.

➜ Important to move quickly from a "vision" of the Next Generation Internet to concrete actions.

➜ Open consultation with the community is key.

➜ The EC will be spending even more on Digital Literacy and the Data Economy.

➜ The NGI "offering" must become more concrete to engage players all around Europe: Open Calls and more consistent funding for research and innovation work will be key to grow and sustain the NGI initiative.

Cities

"What is the role of a city in the context of development NGI?"
Filipe Araujo, Vice-Mayor & City Councillor for Innovation and Environment of Porto

➜ For smart cities to work, citizens need to see the benefit *and* be reassured of data protection. Both are vital because citizen engagement is key.

➜ Neutral infrastructure is an important factor for efficient development of novel connectivity solutions in the future.

Data & Privacy

"Blockchain allows decentralisation and decentralised autonomous organisations."
Antonio Tenore Fornes – Complutense, University of Madrid

➜ Data protection, privacy by design and the notion of differential privacy have been huge growth areas over the past five years.

➜ Technology such as blockchain is allowing us to change the rules of the game with data, to move from more centralised monopolies to decentralised ecosystems.

➜ 'Privacy abuses' seen as no. 1 threat to people and society caused by emerging trends and technologies in the internet in the NGI Forum 2018 poll (27% of respondents),

followed by Too Much Control by US Corporations (12%) and Any Move Away from Net Neutrality (10%). *See the full survey results on page 23.*

Challenges/ Conflicts

"Speed of regulation and involvement of individuals are the two big elephants in the room to move towards a more secure and decentralised internet."
Richard Stevens, IDC & HUB4NGI Expert

➜ The NGI community must be aware and ever vigilant of the 'digital divide'.

➜ As a community, NGI professionals need to convert the uninitiated: "The communities working [to close] the digital divide are also those working in NGI." – Pearse O'Donohue

➜ Need to address a lack of trust caused by situations such as Cambridge Analytica/ Facebook.

➜ Monopolies vs. decentralisation: an area where EU funding is important because it lessens the need for NGI technologies and developments to pursue a huge market share.

➜ Regulation vs. market: important because the market is not necessarily ethical.

➜ Regulations can set the "outer limits" but within them there's room for choice and autonomy.

➜ Data privacy/ ownership and data protection vs. open data: The EC has put forward a policy on the data economy and more work needs to be done on this now.

➜ Truly decentralised / autonomous systems vs. a degree of control, regulation, ethics.

➜ Certification and regulation can be a force for good, driving innovation.

➜ IoT might be the next big threat, or opportunity indeed.

➜ Synergies across related EC initiatives, such as 5G PPP, IoT, BDVA, European AI Alliance, Blockchain Observatory, etc. should be pursued.

➜ Citizen participation is growing, censorship and freedom of expression are trends to watch.

➜ Need to consider the impact on individuals of increased speed to regulation, time to market, etc.

➜ The EC can only go so far, need genuine partnerships and communities to spread the word/ do the work.

NEXT
GENERATION
INTERNET

NGI FORUM POLL RESULTS

During the NGI Forum, there was a survey concerning Societal Impact of the NGI and what Support is needed for NGI Research & Innovation. It contained 4 questions (3 multiple choice and one open-ended), and the results for each are shown below. For the multiple-choice questions, votes for the options are shown as bar graphs, and for the open-ended question, quoted responses are shown, grouped into themes. There were 140 participants in the survey.

Q1: What do you think is the greatest *threat* to people and society caused by emerging trends and technologies in the Internet? (multiple choice – select one)

Threat	Votes %
Privacy abuses	27
Too much control of the Internet by a few large US corporations	12
Any move away from net neutrality	10
Exclusion of non-tech-savvy (e.g. older) people	7
Unverified information passed off as facts (e.g fake news)	7
Malware / ransomware / spyware	7
A highly efficient communication vehicle for extreme / antidemocratic factions	5
State censorship of Internet content	5
The human race's dependence on the Internet as a vulnerable critical infrastructure	5
Dark web supporting social evils	5
Deluge of information	2
Invisibly-biased & prejudicial AI & intelligent algorithms	2
Search engines manipulating search results in an opaque way	2
AI-powered robots taking over the world	0

Q2: What do you think is the greatest *benefit* to people and society caused by emerging trends and technologies in the Internet? (multiple choice – select one)

Benefit	Votes %
Easy access to more & diverse information than ever before	28
Opens the door to a whole new economy	20
Fast, ubiquitous & inexpensive mass communication worldwide	15
Millions of online communities covering every subject you can think of	10
Educational potential through information ubiquity	10
AI advances supporting critical services such as cancer detection in healthcare	8
Supports social & professional relationships - connects people when they are physically far apart	5
Potential for online collaboration with people you have never met	3
Time & labour savings – e.g. shop online rather than travel to shops	3
Ubiquitous availability of entertainment & cultural content	0

Q3: Apart from funding, what else can the EC do to support the benefits and combat the threats of the Internet? (multiple choice – select one)

EC Support	Votes %
Support multidisciplinary collaborations	29
Support cross-border collaborations	22
Provide large scale shared data repositories	17
Policy that rewards innovation	17
Provide experimentation infrastructure & tools	15

Q4: Are there any specific Internet research areas that you think the EC should support in the future? (open-ended)

Education & Support for Creativity

➔ "Education"

➔ "How the tech education for kids are being done and should be done. I see a great focus in the language for development discipline, but we need to increase their creativity with methods to identify and solve a problem, and it is not a matter of code only."

Censorship

➔ "reject #UploadFilters, #SaveYourInternet"

Decentralisation

➔ "Personal clouds that make it easy for nontechnical individuals and organizations to use free/open source software to move away from proprietary and centralized web applications. Not just personal data lockers, but personal app clouds too."

➔ "Content discovery, thematic Internet, creation and publishing of content that is not controlled by large platforms, private social networks"

Privacy, Transparency & Trust

➔ "How to make it transparent where my personal information is used and stored"

➔ "Transparency tools to deal with information and data overload providing security, trust and privacy preservation and putting the user in control of their information and data across all the NGI technologies, e.g. IoT, AI, search and discovery, social media technologies of the future, etc."

➔ "Trust in the internet and society"

➔ "Privacy awareness // cybersecurity"

➔ "How to make it transparent where my personal information is used and stored"

➔ "responsible AI"

Liberty

➔ "Net neutrality combined with privacy. Freedom on the internet brings much more good than evil. Thank you!"

Technology

➔ "Technology to enable NGI. 5G and beyond. Not only software and services."

➔ "Blockchain"

Communities, Environments & Support

➔ "Foster a 5G based economy and industry creation"

➜   "Living labs as drivers of applied research"

➜   "Gender equality in internet industry"

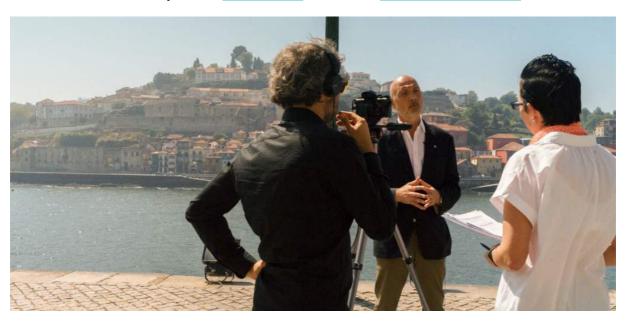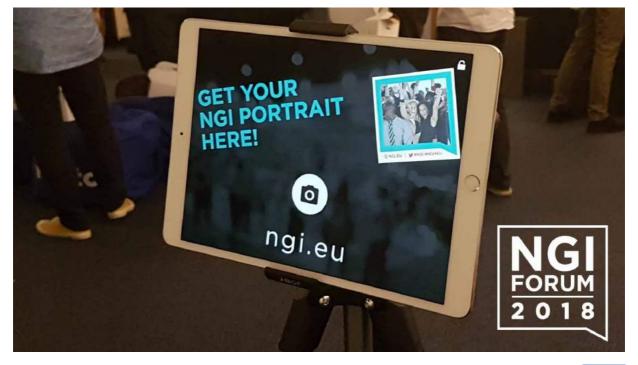FIGURE 13: A WORD CLOUD OF THE MAIN TOPICS DISCUSSED THROUGH SLI.DO

AGENDA, VIDEOS, LINKS & MEMORY BYTES

➔ To see the NGI Forum 2018 agenda and for links to the presentations, visit the NGI Forum website or the NGI website.

➔ Videos from the NGI Forum 2018, including exclusive interviews with the speakers, will be available shortly on the NGI website and on the NGI Youtube channel

➔ Selected pics from Photobooth on the NGI website.

➔ Selected pics from the NGI Forum 2018 on the NGI Forum website.

➔ NGI Twitter moments https://twitter.com/i/moments/1040163459999125504

NGI FORUM 2018 REGISTRATIONS DATA

The demographic breakdown of registered participants was as follows:

We had **302 registrations**.

GENDER		
Women	Men	Other
101 (34%)	196 (64%)	5 (2%)

TYPE OF ORGANIZATION			
European Commission	8		
Large Company	25		
Local- National Government and Public Administration	49		
NGO, charity, association	25		
SME	117		
Other	78	Academic/University	37
		R&D	15
		Generic Education	7
		Freelance	6
		Other	13

ARE YOU INVOLVED IN ANY EC FUNDED PROJECT?	
YES	NO
109	193

COUNTRY	
Afghanistan	1
Austria	1
Belgium	17
Brasil	11
Bulgaria	1
Croatia	1
Denmark	1
Ecuador	1
Estonia	2
Finland	4
France	13
Germany	7
Greece	3
Ireland	7
Israel	1
Italy	10
Kenia	1
Latvia	2
Liberia	1
Lithuania	1
Luxemburg	2
Malta	1
Montenegro	1
Netherlands	4
Norway	2
Poland	5
Portugal	152
Slovenia	2
South Korea	2
Spain	14
Sweden	2
Switzerland	7
Turkey	4
UK	13 (2 from Channel Island - Jersey)
USA	2

NEXT
GENERATION
INTERNET

NGI FORUM 2018 MEDIA COVERAGE

PRESS RELEASES

A press release went out about NGI Forum prior to the event. It was also translated into Portuguese and distributed to local press by Porto Digital. The press release was published on http://www.ngi.eu

The EU also put out a news item: https://ec.europa.eu/digital-single-market/en/news/next-generation-internet-forum-2018

NGI FORUM 2018 PRESS COVERAGE

The NGI Forum 18 got a wide spread of coverage in the media, both as event listings, articles about the event and interviews with key speakers and stakeholders. The following shows where previews of the NGI forum appeared online.

JP.pt

https://www.jn.pt/inovacao/interior/porto-acolhe-forum-sobre-a-internet-do-futuro-na-quinta-feira-9835188.html

LAVANGUARDIA

https://www.lavanguardia.com/vida/20180912/451776615110/el-futuro-de-internet-a-debate-en-el-foro-ngi-que-acoge-manana-oporto.html

LUSA.pt

https://www.lusa.pt/article/24793346/porto-acolhe-fórum-sobre-a-internet-do-futuro-que-será-mais-segura-e-humana
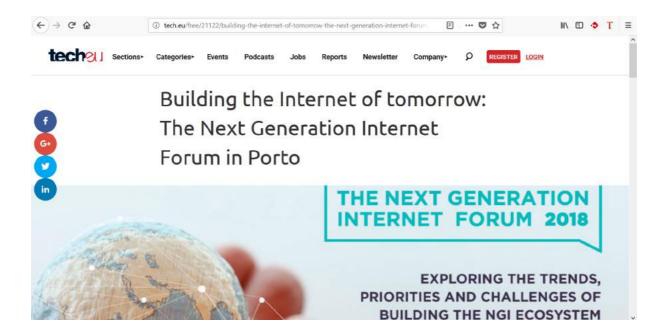

Tech.EU (story + newsletter banner ad)

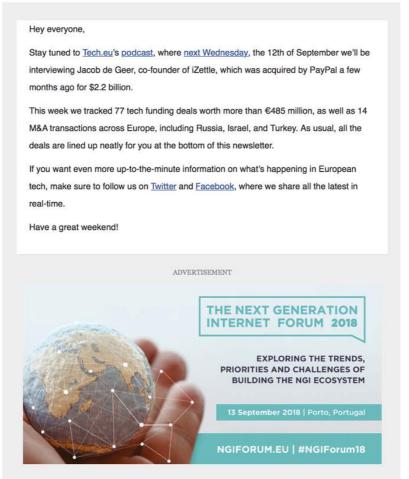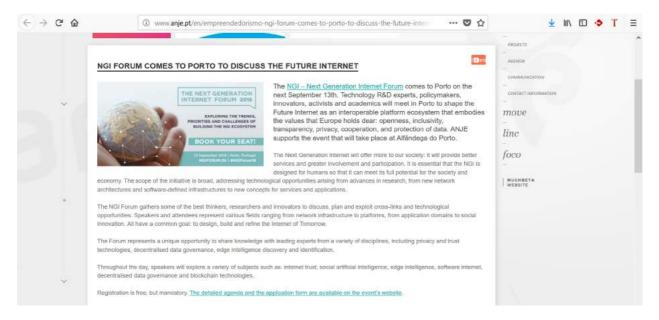http://tech.eu/free/21122/building-the-internet-of-tomorrow-the-next-generation-internet-forum-in-porto/

NEXT GENERATION INTERNET

tech.eu/free/21122/building-the-internet-of-tomorrow-the-next-generation-internet-forum

tech.eu   Sections▸   Categories▸   Events   Podcasts   Jobs   Reports   Newsletter   Company▸   🔍   REGISTER   LOGIN

Building the Internet of tomorrow:
The Next Generation Internet
Forum in Porto

THE NEXT GENERATION
INTERNET FORUM 2018

EXPLORING THE TRENDS,
PRIORITIES AND CHALLENGES OF
BUILDING THE NGI ECOSYSTEM

tech.eu

Your weekly digest of all things EU tech for *Friday, 7th September* 2018

Hey everyone,

Stay tuned to Tech.eu's podcast, where next Wednesday, the 12th of September we'll be interviewing Jacob de Geer, co-founder of iZettle, which was acquired by PayPal a few months ago for $2.2 billion.

This week we tracked 77 tech funding deals worth more than €485 million, as well as 14 M&A transactions across Europe, including Russia, Israel, and Turkey. As usual, all the deals are lined up neatly for you at the bottom of this newsletter.

If you want even more up-to-the-minute information on what's happening in European tech, make sure to follow us on Twitter and Facebook, where we share all the latest in real-time.

Have a great weekend!

ADVERTISEMENT

THE NEXT GENERATION
INTERNET FORUM 2018

EXPLORING THE TRENDS,
PRIORITIES AND CHALLENGES OF
BUILDING THE NGI ECOSYSTEM

13 September 2018 | Porto, Portugal

NGIFORUM.EU | #NGIForum18

ANJE.pt

http://www.anje.pt/en/empreendedorismo-ngi-forum-comes-to-porto-to-discuss-the-future-internet

Irish Tech News

https://www.prosyscom.tech/social-media/flagship-ngi-forum-event-in-portugal-in-september-will-help-design-an-internet-of-human-values-social/

Original story here:
https://irishtechnews.ie/flagship-ngi-forum-event-in-portugal-in-september-will-help-design-an-internet-of-human-values/
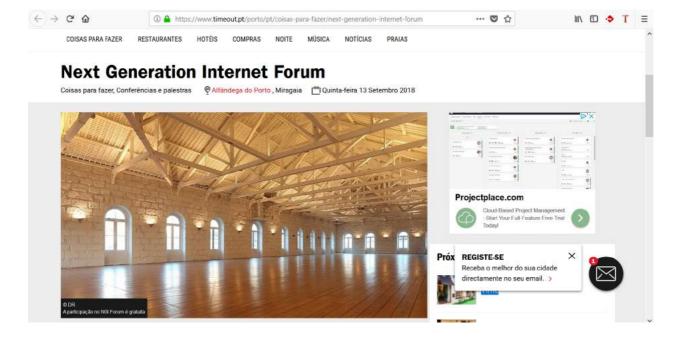
Vilnius University

Time Out Porto

https://www.timeout.pt/porto/pt/coisas-para-fazer/next-generation-internet-forum

NEXT
GENERATION
INTERNET

NCP Flanders

https://www.ncpflanders.be/news/focus-ngi-next-generation-internet

NEM

https://nem-initiative.org/what-you-missed-on-the-debate-with-the-ec-about-ngi-and-calls-for-proposals/

I-Inc-eu

https://www.i-linc.eu/en/web/portal/events;jsessionid=BE8C29D6B9B57538D156089223E11295

NGI Germany

https://www.ngi-germany.org/ngi/news

Porto News

http://www.porto.pt/noticias/porto-recebe-em-setembro-forum-europeu-sobre-a-internet-do-futuro_2?lang=en

Aster

EU Monitor

Synchronicity

Ideal-ist.eu

Montesquei

https://www.montesquieu-
institute.eu/id/vkmz4e1d80zo/agenda/ngi_forum_2018_porto?ctx=vg9pj7ufwbwe&tab=1&star
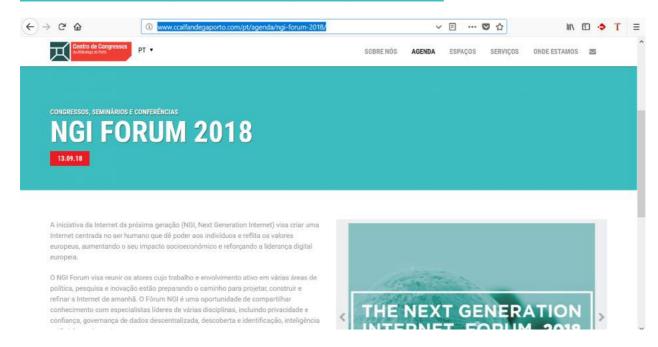t_tab1=28

FIWARE

Scaleupporto

http://scaleupporto.pt/event/ngi-forum-2018/

Centro de Congressos – Alfandega Porto

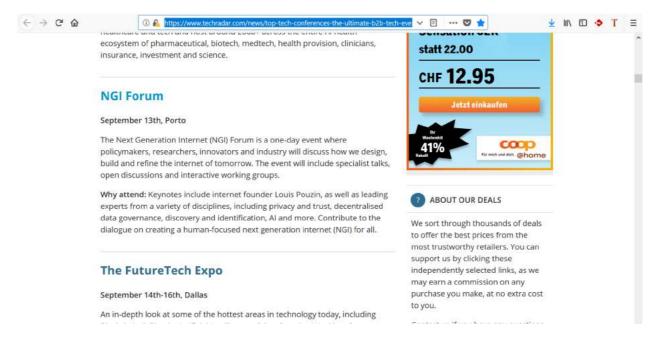**http://www.ccalfandegaporto.com/pt/agenda/ngi-forum-2018/**
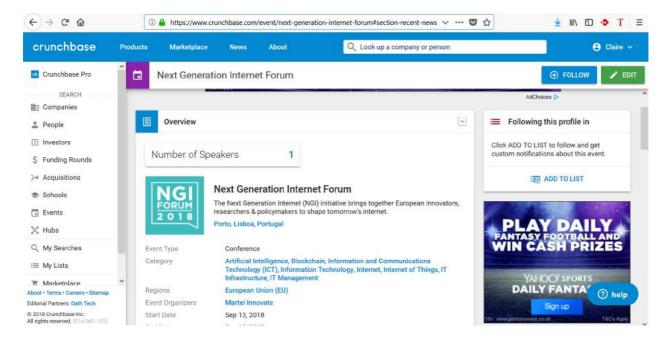
Tech radar

https://www.techradar.com/news/top-tech-conferences-the-ultimate-b2b-tech-events-and-show-guide-for-2018

Crunchbase

https://www.crunchbase.com/event/next-generation-internet-forum