Technology and Politics

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Morning Keynote by Kent Walker, SVP Global Affairs, Google

It's an honor to join the 2019 Digital Summit, and I want to thank An Taoiseach and Minister Breen for their government's tremendous leadership on digital issues.

That leadership has positioned Ireland as a strong voice in privacy, data governance, and digital policy. It's drawn in talented workers from all across Europe. And it's a big part of why Google has hired more than 8,000 people right here in Dublin.

The tech community works closely with the Irish government, and governments across Europe and around the world, both to make sure our products comply with local laws, and to support laws that help tech benefit everyone.

I'd like to talk today about the broader relationship between technology and politics.

Because, after all, if technology is the engine of progress, then politics is the rudder. Teknos and politikos have been in a dance since before Guttenberg invented his printing press. What are the challenges, and the opportunities, in that relationship?

How will that dynamic play out in developing areas like AI and privacy?

And what are the next steps in the dance, the best way forward?

The relationship of technology and politics is too important to take lightly…and too important to get wrong.

How do we make sure that relationship is healthy and strong, laying the best foundation for open and democratic innovation that benefits everyone?

Looking back, every time the world has developed new tools of communication - from the printing press, to radio, to television, to the internet - we've needed to develop not just new laws and regulations, but also new business practices, new cultural conventions, and new social institutions.

That's never been more true than with the rapid social and technological changes we've seen in recent decades.

Let's start by talking candidly about the challenges.

While a few years ago you read nothing but glowing stories about how technology could do no wrong, today we see headlines about techlash and tech panic. Stories about privacy, competition, disruption, controversial content.

And there's real substance to many of these concerns.

While much of the content on the internet is educational and much of the communication helpful, the rise of social media has mirrored - or at times exacerbated - social, cultural, and electoral challenges.

While the internet has given everyone a printing press, it has also given terrorists a new way to spread hate speech.

And while technological innovation has helped consumers through lower prices, more choice, and greater convenience, it has also disrupted existing businesses and raised new questions about privacy and data.

Meanwhile the expanding world of artificial intelligence raises new issues around discrimination, transparency, and the future of work.

All these new technology challenges come against a backdrop of a growing lack of trust in society's bedrock institutions - in academia, the press, the military, religion and even government.

Businesses, and certainly tech businesses, aren't exempt from those questions of trust. While people value our products, they also want a deeper understanding of our work, and deeper assurances about how we operate.

These concerns are very real, and we face a shared challenge in engaging with them, and a shared interest in maintaining people's trust.

So there are the issues and the challenges. But let's now also talk about how technology is transforming people's lives, helping people in ways small and incredibly large.

Because even as the pendulum swings, it's critical that we not forget the benefits that technology has brought to those of us in this room and to people around the world. And then to turn to the task of crafting the right regulations and building the right social and cultural institutions for a new digital century.

We sometimes take for granted how the rise of the internet has benefited people's daily lives.

Whether you travel the globe or have never left home, you now have access to history's most valuable resource —— Information.

We have vast computing power at our fingertips. We get answers to almost any question at the touch of a button. We have realized the age-old dream of a digital library of Alexandria.

Millions of kids, including yours and mine, do their homework online. Small businesses from bakeries to bike shops reach far-away customers. And doctors and scientists instantly learn from advances anywhere in the world.

When surveyed, people say that they would pay thousands of euros a year for services that they get today for free.

But those developed world benefits, while important, aren't technology's biggest benefits.

Around the world, we have seen incredible increases in living standards, with the United Nations estimating that over one billion people have come out of extreme poverty in the last thirty years — a development unparallelled in human history, and one largely attributable to the twin rise of trade and technology.

While some can afford to pay close to 1000 euros for a fancy new phone, people in low-income countries can now buy a smartphone for as little as 40 euros, giving them unprecedented access to information.

That's millions of farmers who have learned how to grow better crops. Millions of fishermen who've learned where to sell their catches at a better price. And millions of parents who have found medical advice to help them care for a sick child even when the nearest doctor is 100 kilometers away.

And perhaps even those remarkable benefits aren't the biggest global promise of technology.

As a species we face incredible challenges — climate change high among them. But also questions about how to produce enough food and energy for an expanding population, how to stop the spread of epidemics, and how to create a culture of global abundance that helps us deal with the dilemmas posed by globalization and immigration.

Responsible and sustainable technological innovations in areas like artificial intelligence and machine learning will play a critical role in solving many of these intractable problems. And the biggest questions for policy makers will be how to incentivize, promote, regulate, and disseminate those innovations.

As one example, let me go deep on the rise of artificial intelligence.

For years, economists debated whether computers had led to productivity improvements. One American economist quipped that "you can see the Information Revolution everywhere … but in the productivity statistics."

Well, not only are we now seeing lower prices, greater choices, and more innovation, but we're on the cusp of the biggest payoff of all.

You may have heard of Engel's Pause — Friedrich Engels' idea that it often takes 20 years or more for the benefits of new technologies to work their way through an economy. That's because few innovations stand by themselves, but instead exist in a market ecosystem of complementary innovation.

For example, it took 20 years or more between the commercialization of electricity and the development of home appliances and factories designed to take advantage of abundant power. It took 20 years or more between the development of gasoline-powered farming equipment and the explosion of agricultural productivity that helped feed the world — because first you needed complementary innovations of new crops, new ways of harvesting, and new ways of storing and transporting food.

Well, we're now seeing the end of the latest Engel's Pause. Innovations and investments from the 1990s and early 2000s in cheaper processing, cheaper transmission, and cheaper storage are now paying off in the form of machine learning and artificial intelligence.

We think of AI as new. It's not.

If you use Google Search or Translate or Gmail, you've been using AI. AI has helped you get better results and protected you from spam and scams.

By recognizing patterns and projecting outcomes, AI can look into the seeds of time and say which will grow and which will not.

The implications across many fields — from democratizing access to healthcare to making agriculture more productive — are remarkably promising.

Of course some people think AI is just about data. It's not.

Data is of course useful. But it's also plentiful. We developed Google Translate based on public data, including speeches at the United Nations.

Beyond data, AI is about the quality of the algorithms. Data is like the ingredients in a kitchen where a lot depends on the recipes. The focus is less on big data, than on smart data.

Machine-learning increasingly requires less and less human data to be more and more useful to humans.

The algorithms behind Waymo's driverless cars rely far more on computer-generated simulations - "synthetic miles" - than on the mostly boring miles driven in the real-world.

DeepMind's AlphaZero beat the world's Go and chess champions without ever studying a single human match.

And through cutting-edge tools like transfer learning and data augmentation, our AI tools - trained on as few as 270 scans - have learned to detect cancers more accurately than human doctors. We've only just begun this work, but the future opportunities are incredible.

So let's pause to take stock.

No one wants concerns about abuses of technology to keep us from realizing the growing promise of technology. How do we address real concerns while still taking advantage of the opportunities technology offers?

There's obviously no simple answer. The pursuit of silver bullets almost always leads to unintended consequences.

Instead, we need a mix of direct action by companies, multi-stakeholder agreements, and smart regulation.

Let's start with what tech companies can do. And, to be clear, we, our engineers, and our scientists, not only recognize that we have a responsibility, but we all very much want to be part of the solution.

While some might argue that the notion of "responsible innovation" has an inherent tension given the disruptive nature of innovation, we believe that innovators must consider not just the immediate uses, but the wider social impact of their work. Not just focusing on the user, but focusing on society. Not just innovating for the few, but progressing open, accessible frameworks that benefit everyone.

That's in fact the best way to build social trust and confidence in new technologies.

When it comes to privacy, for years we've talked about "privacy by design" — but that goes far beyond building better user interfaces, to embrace new concepts of privacy at inception, privacy by innovation.

We have both developed and open-sourced tools like federated learning and differential privacy that preserve functionality while dramatically reducing the amount of data collected, used, and stored. (In fact, a recent headline read: "Google Wants to Help Tech Companies … Know Less About You.")

Sometimes you may feel more comfortable, more private, searching for something online than asking a neighbor. To help secure users' data, we're using double-blind encryption and we've probably invested more than any other company in creating new tools to comply with the high standards set by the GDPR.

As a company, we don't believe that privacy is only for people who can afford expensive devices. Privacy is not a luxury good -- privacy should be for everyone.

The same goes for access to great content.

There should be a range of ways - subscriptions, ad-support, and more - to give people access to the information they need to be informed citizens in a democracy. And at the same time, advertising offers critical support to the diverse open web of publishers who make quality content available to everyone.

But the abundance of information online shouldn't result in a poverty of credibility.

Technological advances are helping us do pioneering work against disinformation, create more transparency about the sources of information, and avoid electoral manipulation. We are seeing cutting-edge machine-learning tools help remove terrorist content. And we're working with authoritative newspapers and publications to find ways to support and promote great journalism.

On competition, tech companies need to focus on delivering great value to consumers, and are increasingly partnering with others in the ecosystem to do that. Consumers should have choices, and we years ago founded the Data Liberation Project, breaking the chains of data and making it easy for users to export their content.

And when it comes to AI, we have hundreds of people doing industry-leading work, a lot of which is published and open sourced, on ML fairness, explainability, privacy, security, and other ethical issues.

But no company acts alone in this space. Sometimes we need to act together to be effective. That's why we and other leading tech companies co-founded the Global Internet Forum to Counter Terrorism and the Global Network Initiative — working with other companies, NGOs, and governments to promote responsible content online, and encouraging international agreement around robust access to information.

Companies are increasingly working together with governments to tackle shared challenges. Leading tech companies signed onto the EU's Hate Speech Code of Conduct, and a network of European NGOs regularly monitor our ability to meet commitments to remove flagged hate speech.

But going beyond co-regulation, we look to traditional law. Of course no one is above the law. No product or person, no company or technology, is above the law. Aristotle said that politics is the highest art, because it orders all the rest. And companies are increasingly supporting governments in their efforts to craft better laws and smarter regulations.

Of course the easy thing would be to regulate in response to headlines. As Wikipedia's Jimmy Wales says, it's tempting to say "something must be done. This is something. Therefore this must be done."

Working together, we can do better. We can build on and improve the existing array of international laws that already apply to the internet. There is great opportunity for effective and smart regulation.

In our view, smart regulation has three key elements:

- First, defining the problem carefully, so that we're treating causes rather than symptoms.

- Second, crafting narrowly tailored solutions — avoiding under-broad and over-broad impacts — and doing it at the right time in the development of a new technology. (With regulation, as with most things, timing can be everything.)

- And third, and perhaps hardest, anticipating the unanticipated consequences, the second- and third-order fall-out from new rules. That's a particular issue for fast-moving technology fields, where it's best to focus on regulating specific applications and outcomes, rather than trying to regulate the future in ways that risk deterring transformational research.

These elements sound easy, but they are remarkably complex. They require us to think through social implications and cultural dynamics, recognizing that many technologies have collective as well as individual benefits and are part of intricate ecosystems.

The obvious thing, the easy thing, is to set forth principles. We set forth our own AI Principles, and other companies have followed suit.

The harder thing is to recognize that none of these principles is absolute — in fact, many of them conflict. There can be a tension between democratizing AI and ensuring that it's used safely... between having humans in the loop and protecting privacy...between requiring explainability and saving lives.

These tensions raise profound questions.

It would be trite to say that we don't have the answers. It might be both more accurate and more encompassing to say that no one has the answers — and that answers will evolve only over time, through lived experience, democratic debate, continued technological progress, and thoughtful engagement with ideas at conferences like this one.

If I'm optimistic that we'll find balanced and thoughtful answers to these questions (and I am!) it's because, in democracies, the relationship between technology and politics has a long history of progress.

After all, it's the leaders of modern democracies who have created the space for technology to thrive. Policymakers' support for the free flow of goods, services, and ideas has created a larger, more diverse, more inclusive digital economy, where individuals can get compelling content, new products, and wider access to knowledge, while entrepreneurs and small businesses can reach customers around the globe.

People don't often talk about that. About how thoughtful policymakers and good policy frameworks have enabled the spread of technology. But history is a patient storyteller, and I believe that in years to come people will recognize that this historic intersection of technology and politics has laid the foundation for a new digital century.

We will best meet our challenges by working together, not as adversaries but as allies in the cause of progress. Technology and democracy can and should complement each other in making life better not just for the few, but for the many.

The tech community is prepared to step up and do our part, working with NGOs, and supporting governments in developing balanced and thoughtful frameworks - smart regulations - that support shared prosperity, that promote open, democratic, and responsible innovation, and that address the misuses of technology while still fulfilling the remarkable promise of technology in ways that benefit everyone.

As a famous Irish-American president once said, a rising tide lifts all boats.

And, in the end, that rising tide is the story of our work together. It's a story about the most constructive relationship in human history--the story of technology and politics in a democracy.

The next chapter of that story speaks to the living history that now rests in our hands, and to our common purpose in coming together to build a better future...for everyone.

Thank you.

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