



# Artificial Intelligence: Regulation Can Support Innovation

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# **Artificial Intelligence: Regulation Can Support Innovation**

**Karina Piser** [00:00:09] Artificial intelligence has become a fundamental feature of contemporary life, whether we know it or not. From the GPS apps that help us navigate our daily lives to the advertisements we see online. We can't escape it. And when so many decisions are made by algorithms, we may start to feel like we've lost control. So what can we do? How can we make sure that new technologies actually benefit us?

**Karina Piser** [00:00:32] In April, the European Union unveiled a proposal for unprecedented regulation on the use of artificial intelligence, with implications for companies, governments and citizens alike. The tide seems to be shifting in terms of regulation, with tech companies facing increasing scrutiny from governments around the world. But with that in mind, can we make sure that these new regulations don't stifle innovation?

**Karina Piser** [00:00:55] Welcome to OECD Podcasts. This episode is the second in a series on artificial intelligence brought to you by the OECD Global Parliamentary Network and the European Parliament's Panel for the Future of Science and Technology. Also known as STOA. STOA brings together 27 members of the European Parliament from various committees to examine developments in science and technology. I'm Karina Piser and today we'll seek to unlock the mysteries of artificial intelligence and map out what's at stake moving forward.

**Karina Piser** [00:01:25] What can governments do to ensure societies reap the benefits of artificial intelligence without compromising privacy or deepening biases based on gender and race? And what role will international cooperation play? AI is already deeply entrenched in our daily lives, but how exactly? I asked Andrea Renda, a senior research fellow and head of global governance, regulation, innovation and the digital economy at the Centre for European Policy Studies.

**Andrea Renda** [00:01:52] Well, whenever we Google something, we use AI because there is a very powerful artificial intelligence behind the search engine that Google uses or any other major search engine uses. Whenever we use maps, we are using an AI system. So these are things that we do every day. And whenever we have access to new movies on the platform where we find our movies could be Disney or Netflix or others, we have recommendation engines that recommend the next movie. These are based on artificial intelligence and there are countless examples of this.

**Deidre Clune** [00:02:24] Key to it is data and the quality of the data. And the more you have, the better results you have.

**Karina Piser** [00:02:31] Deidre Clune is an Irish MEP member of the Committee on the Internal Market and Consumer Protection and rapporteur of the Resolution on Shaping the Digital Future of Europe, removing barriers to the functioning of the digital single market and improving the use of AI for European consumers. She gave us a sense of how AI actually operates from its role in health care to autonomous cars.

**Deidre Clune** [00:02:52] Decisions are taken based on previous experiences that you've built up and you build up and you build up and you can get a perfect solution some better than humans, because we don't have the capacity to process all that information in short periods.

**Karina Piser** [00:03:10] Data, lots of data.

**Karina Piser** [00:03:12] As abstract as it sounds, the capacity to process massive quantities of data has concrete benefits. Deidre Clune and Andrea Renda give me a sense of what that entails.

**Deidre Clune** [00:03:22] One that really strikes me as the benefits in farming and the whole agriculture sector. If you think of crops or animals rearing animals, producing animals for food, the benefit to the farmer and understanding the soil and social conditions, how much fertiliser to use or not, how much pesticides do you use or not, you can really reduce the impact on the environment and of course, the cost to the farmer and produce a better crop and a better outcome from a simple AI application. Dealing with animals is the same thing. If you look at milk output, what's the output, what's the input, how can you control the inputs to maximise the output.

**Andrea Renda** [00:04:00] AI as health pharmaceutical companies, and that is a major benefit, in coming out with simulations on what approaches would be best to develop a vaccine. That has been, I think the major contribution of A.I. A.I. has been used in things like contact tracing, user profiling and sometimes in a borderline way by governments. But certainly AI has done other very interesting things. We have now discovered that there are A.I. systems that can recognise Covid infected individuals remotely by simply listening to forced cuts, for example. And it gives us an idea of what is the promise of remote health care provision in the future. Thanks to A.I.,

**Deidre Clune** [00:04:41] You know, in health care, we've seen how it can benefit in Covid, but you can use it for early diagnosis of Alzheimer's now. It's been seen to be effective. We need the cure for Alzheimer's as well. Yeah, but certainly early diagnosis, early intervention can really benefit patients, their carers and their family members. So it that can be important in the operation theatre. AI can be very important as well. You know, you see a particular situation, maybe a tumour or deterioration in an organ. What's the best intervention that we can use in this time based on all this world wide experience and data that we have access to? So the benefits are enormous. We need to use it wisely.

**Karina Piser** [00:05:22] We do need to use it wisely. In fact, many people are worried about his darker side effects. When you use machines that are so powerful, there are a number of ways that things can go wrong.

**Deidre Clune** [00:05:33] In the employment area, if you're looking at CVs, scanning CVs, you could build in bias in terms of gender or race bias. You could build that into the tracking system, the identifying systems, and that's important. We need to be very conscious of bias.

**Andrea Renda** [00:05:48] Basically, we already know that while that there is a lot of talks about the potential impacts of A.I. on discrimination, especially when AI uses data that are already perhaps overrepresented or underrepresented in specific groups or discriminations in terms of gender discrimination, in terms of ethnicity and so on and so forth.

**Deidre Clune** [00:06:07] And, you know, if you build it now today, it'll be there forever. It's a challenging one. Being aware is one thing and how you deal with this and can push back and all the time and keep watching the data and make sure you're not building in a bias into automated decision making because it can be really a severe drawback.

**Andrea Renda** [00:06:26] A.I. applications can sort of compress things like freedom of expression. They can compress the rights to a good administration and good governance, the rule of law, the rights to move freely and assemble. Depending on how you use AI, you can really damage fundamental rights in various ways.

**Karina Piser** [00:06:44] And those aren't the only possible misuses of AI. Lena Gálvez, a member of the European Parliament representing Spain who serves as vice chair on the Committee of Industry Research and Energy, STOA member and rapporteur for the Employment Committee's opinion on ethical aspects of artificial intelligence, robotics and related technologies, explains what's at stake when it comes to regulating A.I. from ethical questions to the labour force.

**Lena Galvez** [00:07:06] There are also risks related to the impact or possible impact of artificial intelligence in the world of work and also in labour demand in general. It will finally decrease. We don't know yet in other technological revolutions at the long term, we have seen also the creation of new jobs, but in the short term we have seen the destruction of many jobs. So we have to realise that it could have an impact on the overall labour demand and also in the way we work. So we really need to know much better in order to regulate data.

**Karina Piser** [00:07:51] Regulating AI is urgent, especially as technologies evolve so rapidly. But what role can government play when we're talking about a private industry that's surging ahead and continuing to innovate? How can we retain a sense of agency?

**Andrea Renda** [00:08:09] Government has traditionally stayed away from digital technologies, especially in the Internet age. For like three decades, we have let the Internet flourish without interfering too much under the belief that this idea of the more anarchic, if you wish, permission, less innovation, as we call it, was a good thing and had no shortcomings. Well, well, it was a good thing. We're now seeing the shortcomings. There's a lot of inequality, market concentration in these fields and a lot of the big tech giants that use AI are basically regulating the Internet themselves because they have become so institutionalised and so embedded that it's very difficult for government to have a say on the rules of cyberspace because this big private giants dictate the rules through their own algorithms. Think about what happened on the 6th of January with the attack on Capitol Hill and how the governance of content and speech on the Internet is completely privatised. Many, many countries have started to rediscover that the role of government in setting some rules or at least some boundaries for cyberspace. And today, I think everybody agrees.

**Andrea Renda** [00:09:17] We have congressional hearings in the US, we have sanctions on Alibaba in China, and we have a lot of new legislation being proposed at the EU level that does not try to sort of completely weaken cyberspace and its revolutionary credentials, but at least give some direction on how digital technology is in general, but in particular, the use of AI can really contribute to prosperity in the medium term for our society. So one of the key roles of government is to ensure that the way in which it is

used is not only respectful of fundamental rights, but to the extent possible, it's also oriented towards the greater good because this is what AI can do. And so this is what we should do with AI.

**Karina Piser** [00:09:58] There are so many complex AI technologies that for most of us are a bit difficult to understand. But at its core, AI is a technology produced by humans that should ideally be kept human centric to the best of our ability.

**Deidre Clune** [00:10:11] We need to build in transparency to understand how these algorithms are developed, who developed them and what inputs are there, and traceability so that if there is an issue, you can go back and look at it. Human oversight, as I said, they're not covered in the current legislation, so that needs to be in place. Human centric artificial intelligence is what we want.

**Karina Piser** [00:10:35] Effective AI regulation demands international cooperation because technologies don't limit themselves to national borders and a patchwork of regulations seems like it will inevitably leave gaps. In recent years, the European Union has really emerged as a world leader in technology regulation. And in April, the European Commission proposed an ambitious package to regulate AI. Why is it so important that the EU in particular makes sure that these technologies that we use in our day to day lives aren't harmful?

**Andrea Renda** [00:11:06] Well, it's important because the EU is a big single market and products that are developed and offered in different parts of the EU meet a common market so that the products that are authorised in one market can then circulate into other markets. There's no intention of the EU level to fragment the single market. So a couple of years ago, when the EU institutions realised that France, Germany, Finland, they were all going to be their own AI strategies in completely different directions. The European Commission took the initiative to coordinate the work of member states. And I think today we have the preconditions for having a much more integrated market. To some extent, if you allow me, I would say actually that limiting ourselves to the EU level is insufficient. We actually should go at the higher, more global level in regulating and regulating and imposing risk assessment on this, because this would create a much bigger market, many, many more eyes looking into what is done with AI and so a much better coexistence between mankind and the emerging AI systems.

**Deidre Clune** [00:12:07] But we really need a European approach, one system in place that's recognised across Europe, because that's really important for developers, for those that would be using it, that they know that if they're moving and using and operating within the single market across Europe, that they have the one system that's recognised and that meets European standards. It's a bit like you're selling a, I don't know, a plastic toy that has the C label on it. The Certified in Europe label. It's the same thing, European label, it's safe and it's regulated and it's supervised for use with European citizens across Europe. And that could go as well for any product coming in from outside Europe as well, that they would have to meet these European standards. If you want to avail of the single market, the digital single market in Europe and, you know, single market and having one system in place is much better from a business point of view. It makes it more efficient. Absolutely. You're not dealing with 27 different regulatory requirements and it'll also encourage innovation and encourage developers to get involved more.

**Karina Piser** [00:13:09] Around the world, and even amongst EU countries, there isn't always consensus when it comes to AI regulations.

**Lena Galvez** [00:13:16] As you know, there are many different interests within the European Union.

**Karina Piser** [00:13:20] MEP Lina Gálvez points to some obstacles that could slow down this process.

**Lena Galvez** [00:13:24] And I'm not related only on business, on other interests, but even different member states are in different positions. And obviously there are different political groups represented at the European Parliament. And so we need to reach agreements and sometimes it's not easy. But I think we are dealing with all this risk and obviously trying to profit from the benefits.

**Lena Galvez** [00:13:55] I think we should arrive to a world consensus, a general consensus, since it is a common challenge. There are many global initiatives like the one the OECD is carrying on. I'm participating in other fora that are trying to put together a legislature for many different parts of the world in order to find a consensus. But I have to say that the Chinese legislators are not included normally in this forum. So we already don't have a convergence there. There is a kind of divide, a divergence. This is important because China is probably one of the most advanced countries in the world regarding artificial intelligence, so I think we should work not too deep this divergence, this divide that is between China and the U.S. and, you know, many countries.

**Karina Piser** [00:15:02] Speaking of the U.S. and China, some argue that AI regulations could put the EU behind these countries when it comes to innovation. The argument is that further restrictions could restrain European companies ability to develop new technologies. Is there a risk that the EU could lose out in the end?

**Andrea Renda** [00:15:21] I don't think so. I think this is a little bit of a misconception that regulation always has to pay lip service to innovation and also that regulation is an enemy to innovation. I think a lot of the academic literature, but also a lot of the empirical evidence testifies that when it's well written and adequately timed and stringent, regulation is actually a blessing for innovation, meaning that it gives direction to innovation and it helps innovation be socially relevant.

**Lena Galvez** [00:15:50] The problem with technology in general, obviously in innovation is that it's continuously changing. But this one is exponentially changing and it is changing effectively very, very, very, very fast. Of course, it was difficult. We need international spaces for them in order to discuss continuously how everything is changing. For that, we need very good information. We need a good studies. We need to work also with those businesses that are, you know, doing all these technologies. But with democratic control.

**Karina Piser** [00:16:30] Europe could very much lead the way towards an artificial intelligence that is beneficial and respectful to citizens.

**Deidre Clune** [00:16:36] We are going to be to the forefront in this in Europe.

**Karina Piser** [00:16:38] MEP Deirdre Clune feels very strongly about that.

**Deidre Clune** [00:16:41] As we go over GDPR, it was much criticised at the time. General data protection regulation was seen as being, you know, was going to hold Europe back. We're going to be in a different place to the rest of the world. But now I think I certainly the feedback I'm getting and reading and understanding is that that has been extremely successful and recognised that citizens need to be protected and that they depend on their regulators to do that for them.

**Lena Galvez** [00:17:04] It is true that the European Union is ahead of this regulation to artificial intelligence. It will not only have an impact on the European Union market, consumers, citizens, business and so on, so forth. But because there is something that we call this Brussels effect, it could have an impact in many other places. Now, there is a great divergence between the self regulated to the US models have regulated four companies and the Chinese model, which is more government driven. In a way, what we are doing is trying at the European Union is to stay in the - not in the middle, but to find out how good a good regulation.

**Karina Piser** [00:17:52] Regulations can only really make a dent in AI's functioning if citizens are actually involved in the process and aware of what's going on and what these regulations entail. I asked Andrea Renda what the general public is most concerned about when it comes to artificial intelligence.

**Andrea Renda** [00:18:10] I think the public is most concerned, we see results from the polls and the surveys about violations of privacy, mass surveillance in particular through technologies such as remote biometric identification systems and so on. And there is obviously a fear of losing agency, losing control. The fact that someone cannot talk to a human being, even if human beings sometimes make horrible mistakes. But the fact that someone interacts with a chatbox is absolutely rigid. And it's not going to understand the specific reasons if you're trying to put forward the fact that an algorithm will decide whether you will be the one that takes the vaccine or not or whether you're going to be the one that receives the next organ if you're waiting for one. This is something that scares many people because it gives the impression of a gradual, steady loss of control and the loss of ability to participate in social life more generally.

**Karina Piser** [00:19:06] To make their voices heard and to feel empowered, citizens need to understand AI, at least to some extent, it's called digital literacy, and it's a challenge, especially when technologies are getting so sophisticated and so complex.

**Andrea Renda** [00:19:19] One thing that we probably need to do is to ensure that digital literacy and in particular on AI, is much more widespread. So they have been good cases, for example, to the Elements of AI course that was developed in Finland originally has been translated and has been spreading throughout Europe. It's a very simple but very well designed course for whoever wants to learn the basics of AI. So that's a precondition for participating, right? I don't think citizens should have necessarily a big role in the technicalities of A.I., but in choosing the priorities, the safeguards and how AI interact with us, whether there should be a human in the loop, whether there should be governance arrangements, whether



there should be a redress possibility for citizens so that A.I. does not become something that is done to us. But it's actually something that we embrace because it empowers us.

**Karina Piser** [00:20:09] So AI literacy is important. But how much of it do we really need? Do we need to understand exactly how phone apps operate in order to say whether or not we agree with their conditions?

**Lena Galvez** [00:20:19] I think it is very important to improve our digital literacy because it is not only a question of having the technical skills in order to be able to use this technology, but to know what it means and what it means for our rights, for our privacy, for our opportunities, for our daily lives. And most of the society don't know how these technologies are influencing their lives and even limiting their lives. So in a way, opening many spaces and aspects of the life, but also limiting them. And for that, I think the role of public sector and regulation is important because is the only way we could do it with democratic control over the process.

**Andrea Renda** [00:21:19] Greater AI literacy is needed, but to the extent that it helps people make the most of these systems and understand what an AI system is behaving in a way that goes beyond what is expected of that A.I. system. I would not go as far as saying that greater literacy is needed so that people understand how algorithms work, because just like we use the washing machine and trust that it's been certified and tested. So we don't need to know exactly how to operate it. I don't think the ordinary citizen should be necessarily an expert in algorithmic design.

**Deidre Clune** [00:21:57] Some people want to know everything about everything that's going on, every detail. And others just want to know they're happy that there's legislation in place that is supervised and that they're quite happy that regulators and legislatures have looked at this. And it's not a complete free for all that there are controls in place. So people would be happy with that as well. It takes all sorts.

**Karina Piser** [00:22:19] Getting into all of the technical details of AI can feel a bit overwhelming and in fact, we don't need to understand every technicality in order to develop an opinion on these technologies and to say yes or no to what apps and websites do with our data and how they use it. So I guess the question is, what exactly can we say no to?

**Andrea Renda** [00:22:41] Well, it depends on the circumstance. I mean, when AI is using personal data or is inferring your gender or inferring your opinions for them, I don't know, facial expressions and so on, the system has to inform you that it's doing this. The system and the user interface needs to inform you that you are not dealing with a human being, which is revolutionary, because so far what we have done is on the Internet, we humans have to declare that we're not robots, but the opposite never occurs. Right? So now this is going to be the case also for robots having to declare that they are not humans whenever a confusion is possible. So what can you say no to? I think in principle you can say no to anything that reduces your control of the situation, your agency, as we call it normally. And that is, I think, the much more complicated issue, because A.I. systems will operate in a way that is so diffuse and pervasive that simply say no to one of them might be difficult in some circumstances.

**Deidre Clune** [00:23:42] You have a right to say no if you're using an app or a web system now, you've a right to say no to cookies. You've a right to say no, I don't want my information shared. I understand what

you're going to use the data for. I don't want you to use that data. We have those rights and what we want in the built into the new regulations when it is being used would be you'd be saying, you know, you're going to use the system. Do you understand decisions will be taken based on artificial intelligence? And you want to know more about this and how it has been developed or the inputs there. So you have the opportunity to do that. It'll be challenging for some systems. Where do they really want to know that? But I think it's important that they have the option. Absolutely. And I think all these situations are going to be important to building trust in artificial intelligence.

**Karina Piser** [00:24:31] Thank you for listening to OECD Podcasts. To learn more about the EU Parliament panel for the future of science and technology, work on A.I., to to STOA at the European Parliament's website. To learn more about the OECD work on AI, go to [OECD.ai](https://oecd.ai).

**Outro** [00:24:49] To listen to other OECD Podcasts on iTunes, Spotify, Google Podcasts and SoundCloud.com/OECD.