techUK

Digital ethics in 2019

Making digital ethics relevant to the lives people lead

In December 2018 techUK held its second annual Digital Ethics Summit. It was an event pulling together experts from industry, government, academia and the third sector to take stock and assess the progress made in the last year to ensure that the UK has the ecosystem – the people, infrastructure, resources and capabilities – to recognise, identify and address digital ethical issues and concerns. Evidently 2019 is the year stakeholders, including industry, must step-up and move digital ethics forward. techUK has therefore published this paper to highlight the key actions we believe must be focused on this year.

Over the 12 months since techUK held the first Summit in December 2017 there has been a significant increase in the amount of activity in the field of digital ethics. This includes the creation of new bodies and institutions such as the Centre for Data Ethics and Innovation and the Ada Lovelace Institute; publication of landmark reports including the House of Lords Artificial Intelligence (AI) report; a significant number of digital ethics conferences and events and practical steps taken by organisations. These included the publication of ethical principles and frameworks[1] [2], across both the public and private sector, in response to public ethical concerns.

In 2018, we also witnessed dramatic events that brought the importance of data protection and digital ethics to life. From Cambridge Analytica to the Chinese Government's push for a Social Credit Scheme, digital ethics went from being a vague concept to headline news. The General Data Protection Regulation (GDPR) entering into force also stimulated a wider global discussion about personal data and privacy. There has been growing public debate about what concepts, such as fairness, equality, morality and agency, mean in an era of algorithmic decision-making. This includes concerns about facial recognition and the implications of deep fakes. Meanwhile, there has been growing scepticism, from some, as to whether digital ethics is really the solution.

While a lot of progress has been made in the last 12 months there is much more to do in the year ahead. In 2019 we must move digital ethics from debate to action. For industry, this means converting ethical principles into tangible actions that make digital ethics relevant and beneficial to the real lives people lead. We also have to address the challenges raised by those who question whether ethics can provide an effective way forward. If we can't demonstrate how ethics can deliver real answers to real concerns the digital ethics debate risks being branded as a distraction.

Right now, in the UK we face some big societal questions we need to answer. If the digital ethics debate can find answers to these questions, we can position the UK as a place where tech pioneers and developers, from around the world, want to come and drive forward ethical and responsible tech innovation that boosts productivity across all industries, creates new jobs and increases overall economic growth.

The window of opportunity for getting this right is narrow. The time to put digital ethics into action is now. techUK has identified the following eight actions in 2019 to move the digital ethics debate forward:

1	Make the digital ethics debate relevant and valuable to people
2	Engage with the public across the UK
3	Industry must demonstrate how ethics is having an impact
4	Think digital ethics not just AI ethics
5	Create a joined-up digital ethics ecosystem through coordination of initiatives and activities
6	Embed ethical decision making in business decision-making
7	Ensure regulators have the capability and capacity needed to consider ethics
8	Ensure the UK continues to play a role in the international ethics debate.

1. Make the digital ethics debate relevant and valuable to people

2019 must be the year that we move the digital ethics out of the conference room and into real life. To do this action is needed in two areas:

Firstly, we must clearly explain that digital ethics is not a point in time solution for a single problem. It is not just about answering the questions being raised right now about the development and use of specific technologies. Digital ethics is a long-term change in approach that embeds ethical thinking into every aspect of the tech ecosystem and the way every technology solution is designed, developed and used.[3]

We also need to be clear about the distinction between the law and ethics. Clearly there is a relationship between the two; the law is underpinned by ethics. But the digital ethics debate is not about legal compliance. It is about the actions being taken that go beyond existing legal requirements. For example, the creation of ethical principles, codes, guidelines, advisory boards and research projects. Digital ethics is not a substitute for the law but is a way to provide ethical foresight as technology continues to evolve at pace. It's about being able to; identify emerging norms and real time concerns where solutions may be needed; identify gaps in existing legal frameworks where new laws may be needed and in finding solutions helping us understand what good looks and what possible new laws should look like. The digital ethics debate will always involve the law but it is more than the law; it is a culture change that ensures ethical foresight is embed into the development and use of technology.

Secondly, projects and initiatives must move on from talking about digital ethics in the abstract and start applying ethical thinking to real world situations and scenarios. Making the case for how digital ethics can make a difference and is relevant for everyone must be a key objective for the UK's digital ethics community in 2019.

To achieve this ethics must become operational and start to provide answers where needed and wanted. For example, this could include addressing concerns about the way data might be captured and used in biometrics for specific contexts. These applications help demonstrate how digital ethics is relevant to and can benefit individuals in their daily lives.

During 2019, techUK will work with other industry trade bodies to identify and explore areas of concern in specific contexts and determine how the operationalisation of digital ethics could make a difference.

On 11 December 2019 techUK will hold its third annual Digital Ethics Summit. It will not only assess the progress made during the year but mark the homework of the digital ethics community in these two areas and showcase examples and results of projects where digital ethics has been operationalised and put into action.

2. Engage with the public across the UK

If we are going to build greater public trust and confidence in technological innovations, we must help more people from all walks of life to understand how digital ethics is relevant to the way they live their lives and engage in this debate.

This issue was raised repeatedly at the techUK Summit in 2018. There is no silver bullet for public engagement that will work for every group of society. However, a possible way forward in 2019 may be to identify specific issues, scenarios or contexts that can be explored in detail with public groups (for example using the citizen jury model) so that specific public questions and concerns can be discussed and addressed.

In 2018, techUK together with the Royal Society and British Academy held a workshop to explore and better understand the term data ownership. This event concluded that, rather than using the term ownership, the focus of the discussion should be on data rights and controls. A similar exercise on other terms used in the digital ethics debate may help to build greater understanding on what these terms mean to people in their everyday lives. The importance of addressing current "ambiguity" around terms used today in the digital ethics debate was recently highlighted in the Nuffield Foundation's and the Leverhulme Centre for Future Intelligence roadmap report[4]. Public engagement could also be useful in exploring terms such as bias and explainability.

Delegates at the Summit in 2018 also asked; "who isn't in the room that should be?" This led to a discussion about the level of diversity in the digital ethics community and the need to ensure people from different ages, genders, ethnicities and demographics are part of the debate in 2019. For example, it was suggested that while some sectors such as financial services are already involved in the discussion, industries such as automotive, who are transforming to become a data and software enabled industry, may not be as engaged.

Public engagement activities should aim to ensure people and communities are engaged across the UK. Events tend to be in London and the South East and there is a need to ensure a more geographical and demographically diverse debate.

In 2019, techUK will continue to play a convening role and will look for partner organisations from other sectors, such as retail, infrastructure, automotive and finance to become engaged in the digital ethics debate. techUK will also engage and partner with key public sector bodies at both the central and local level through the work of its Public Services Board.

3. Industry must demonstrate how ethics is having an impact

Over the last year, many companies across different industries have developed their own ethical principles, codes or guidelines to explain the ethical standards they operate within. Ethics is being seen by business as a responsibility, not a strategy, and a core part of an organisations culture with many already embedding ethical principles into existing company frameworks. Although this approach is a step in the right direction, companies now need to demonstrate how taking an ethical approach is having an impact on the way they operate. This means converting ethical principles into tangible actions that can show how ethics is driving change and making a difference to the way they work.

Businesses need to develop more positive use cases and examples, at both the individual and societal-level, to promote how the operationalisation of ethical processes are benefitting their employees, partners and customers. Similarly, industry should actively reference the key ethical principles and values that are driving change to the way companies are operating in the media. Demonstrating the real-world impact of ethics in action will help to build confidence and trust in the adoption, deployment and use of digital data-driven technologies.

This year, techUK will identify and showcase businesses that are embedding ethical principles into company frameworks and can demonstrate the impact ethics is having to the way they operate.

4. Think digital ethics not just AI ethics

Thus far, the debate has focused largely on the ethical questions and issues raised by the emergence of AI. There has been less discussion on the possible ethical implications and issues raised by existing and future advanced digital technologies such as blockchain, biometrics, the Internet of Things (IoT) and quantum computing.

While these technologies are still nascent and developing, as is AI, they have the potential to bring long-term economic benefits to the UK and be a power for social good. For example, the use of IoT technologies in public service delivery could transform the way the elderly are cared for in our communities. Similarly, the use of distributed ledger technologies can have positive and negative implications for online safety. However, the use of these technologies in these and other scenarios could raise social and ethical questions around fairness, influence and accountability which go beyond issues of data protection and privacy.

In 2019, techUK believes the digital ethics debate should widen from simply focusing on AI and look to identify issues that could arise from the long-term adoption and deployment of other advanced digital technologies whether used independently or in contributions with each other.

techUK will explore this issue with its members to identify current ethical issues or concerns being raised in other technology areas and whether these are similar, or different, to those raised around AI.

5. Create a joined-up digital ethics ecosystem through coordination of initiatives and activities

In 2019, we will see an increase in activity and output by the new bodies, institutions and initiatives created in 2018. However, it is still unclear how the work of these new bodies, such as the Centre for Data Ethics and Innovation and the Ada Lovelace Institute, will fit together and whether there is a coordinated approach being taken by the digital ethics ecosystem that is forming.

As the digital ethics landscape becomes increasingly complex, it is important that there is a mechanism to enable regular engagement and discussion between bodies and institutes so that a shared simple vision and direction of travel emerges. Many of the initiatives and activities that will be developed in 2019 will be complementary and applicable to multiple contexts, sectors and industries. However, without the ability to map and share activity, this could result in duplication of efforts, a lack of sharing of information or dissemination of best practice and a loss of opportunities for progress.

A lack of coordination could also result in key ethical issues being missed. The ability to assess ongoing activities and check whether there are any ethical blind spots that are not being addressed will be vital as the rate of technological innovation continues to accelerate. Creating the right environment for the invention, discovery and design of new technological innovations in the UK is vital to our economic growth and must continue. However, ensuring that technological progress is achieved without moral blindness is vital to realising the wider, societal benefits of our digital future.

To assist in the development of a coordinated approach being taken, techUK will hold quarterly events during 2019 to bring together key stakeholders and bodies to share updates on ongoing and planned activities.

These networking events will seek to identify areas for collaboration and discuss how activities, where possible, could be coordinated so that the development of a functioning digital ethics ecosystem is possible.

6. Embed ethical decision making in business decision-making

The digital ethics debate went mainstream in 2018 at a time when businesses have been focused on complying with the GDPR. Ethics is about good business decision-making. Thinking about the ethical implications of innovation in new technology can, however, still sound difficult and daunting - a mire to get bogged down in. A key focus for 2019 must be to provide practical tools and solutions that will help organisations mainstream ethics into their decision making on the development, adoption and deployment of new digital technologies.

Making digital ethics a boardroom issue is key but not a silver bullet. Ensuring employees across the organisation are involved in the ethics discussion will be key to helping keep businesses on the right track as the adoption of digital technologies increases.

To achieve this in 2019 we must find ways to help businesses of all sizes and in every sector to build ethics into the way they work and think.

This means thinking about whether organisations have the capabilities and capacities needed to identify, consider and address ethical concerns, and the tools and processes that could help to guide ethical decision making. For example, how including ethical questions in the procurement process could support and encourage an ethics by design approach to the adoption and deployment of technologies, products and services.

7. Ensure regulators have the capability and capacity needed to consider ethics

Advanced data-driven digital technologies are already impacting every industry and sector across the economy. We are already seeing AI solutions being developed and used in highly regulated environments such as healthcare, financial services and automotive safety. As advanced, autonomous technologies continue to evolve and mature, building a culture of trust and confidence is key. Ensuring that there is accountability and robust mechanisms to ensure effective governance of these important innovations is also vital.

Having well informed regulators that have the capability and capacity to understand and keep pace with how these advanced digital technologies are developing and being used is key to building trust. The Information Commissioners Office (ICO) is an example of best practice given its work exploring the ethical issues raised by big data and AI. The ICO has a key role to play in the digital ethics debate, as it is the regulator for data protection and privacy. However, given the reach and scope of advanced digital technologies, now is time for other regulators to also become informed and active in the digital ethics debate.

There is work underway to support regulators to consider issues and questions that could be raised by the increased development and adoption of advanced digital technologies. The recent announcement by the Department of Business, Energy and Industry Strategy (BEIS) of a £10 million Regulators' Pioneer Fund[5] to help ensure rules and regulations keep pace with technological advances is hugely welcomed by techUK. The funding of 15 two-year projects to help support regulators is a good move forward. However, the purpose of this fund is not to support regulators to develop the capability and capacity needed to identify, discuss and consider the ethical implications of new technologies in their area of responsibility.

techUK believes there is a role for the Centre for Data Ethics and Innovation to help. Once set-up, the Centre should prioritise establishing and enshrining relationships with a range of regulators, including the Financial Conduct Authority (FCA), the Competition and Markets Authority (CMA), Ofcom and the ICO.

It is essential that the Centre has a clear, distinct role from these regulators and that there is clear blue water between the functions of the Centre and the ICO, for example. The Centre should support, complement, build on and bolster the work of existing regulators in a way that avoids any duplication of activities.

In the meantime, regulators should look to build their own capability and capacity to better understand and consider digital ethics issues in their specific domains. Time and resources should be allocated by regulators to identify and consider ethical issues raised in their domains and determine any gaps that may exist in their powers where action may need to be considered in the short, medium or long term.

techUK stands ready to support regulators as their thinking evolves.

8. Ensure the UK continues to play a role in the international ethics debate

During 2018 there was a significant increase in digital ethics initiatives and activity within individual countries and at the supranational level. Countries, such as France[6], released their AI strategies which focused heavily on the importance of ethics. Organisations including the Institute of Electrical and Electronics Engineers (IEEE)[7] released ethical codes of practices and digital ethics was the theme of the UN's AI for Good event [8] and the International Data Protection Commissioners Conference held in Brussels.[9] The European Commission's AI High Level Expert Group also released its draft Ethics Guidelines for Trustworthy AI in December.[10]

Digital products, systems and services developed around the world could one day be adopted and deployed in the UK. Therefore, the way individual countries, and the international community, begin to develop and adopt different ethics by design approaches could have an impact on people in the UK. As the international digital ethics discussion continues to develop, it is important that the UK digital ethics community remains aware of, and up to date with, the approaches taken in other countries.

During 2019 as well as continuing to monitor and input to the work of the EU's AI Alliance, techUK will seek to develop engagement with similar technology industry trade associations and bodies outside of Europe to facilitate the sharing of insights and information on the digital ethics discussions happening in other countries.

The UK must also continue to have a strong voice in digital ethics discussions happening within multinational fora including the World Economic Forum, G20, World Trade Organisation, International Organization for Standardization (ISO), UN and IEEE.

techUK would like to see the UK government, specifically the Office of AI and Centre for Data Ethics and Innovation allocate resources to being active and visible in the international digital ethics debate. A key role for the UK should be to encourage greater collaboration and consolidation of the different approaches to ethics being taken by individual countries.

Timeline for UK, EU and International Digital Ethics Activities in 2018.

January | Theresa May announces that the UK will be joining the World Economic Forum's new council on AI during Davos 2018 speech

March | The Nuffield Foundation announces new £5million Ada Lovelace Institute

March | Cambridge Analytica whistle-blower describes how firm compiled user data to target American voters

April | Matt Hancock launches the UK Government's AI Sector Deal

April | The UK Government launches the AI Sector Deal, including the establishment of the new AI Council, the Office for AI and the Centre for Data Ethics and Innovation

May | IBM launches their Trust & Transparency Principles for AI

May | The EU General Data Protection Regulation (GDPR) comes into force

June | The European Commission appoints expert group on AI and launches the European AI Alliance

June | London Tech Week takes place from the 11-17 June

June | Cogx18, The Festival of AI and Emerging Technology, takes place in London

June | IBM announces upcoming release of data set to advance study of fairness in facial recognition systems

June | A new council is set up to advise the Singapore Government on the ethical use of artificial intelligence (AI)

July | House of Lords AI Select Committee publishes "Ready, Willing and Able?" report

July | Cisco and UCL announce new UK Artificial Intelligence Research Centre

July | Matt Hancock delivers speech at the Digital Colloque in Paris

August | Chair for the Centre for Data Ethics and Innovation, Roger Taylor, is appointed

September | IBM launches tool aimed at detecting AI bias

September | Digital Catapult launches its Machine Intelligence Garage Ethics Committee

September | Doteveryone launches 'Regulating for Responsible Technology' report

September | IBM launches 'Everyday Ethics for Artificial Intelligence: A practical guide for designers and developers'

October | The UK Parliament's All-Party Parliamentary Group on AI launches 'Artificial Intelligence Industry in the UK 2018' report

October | techUK, The Royal Society and the British Academy host a joint event on Data Ownership Paris

November | The Centre for Data Ethics and Innovation (CDEI) announces its board members.

November | The 40th International Conference of Data Protection and Privacy Commissioners takes place in Brussels

December | The Ada Lovelace Institute launches its prospectus and appoints its first board members

December | techUK, The Royal Society and The British Academy launch their report 'Data ownership, rights and controls: Reaching a common understanding"

February | Accenture launches new Artificial Intelligence Testing Services

March | Microsoft Face API launches

March | French President Emmanuel Macron announces plans to invest €1.5 billion into AI research until 2022

April | The European Commission announces €20 billion AI strategy

April | Mark Zuckenberg testifies in front of Senate for Facebook's role in 2016 election

May | China's Social Credit System blocks millions of flights and train trips for individuals with poor credit

May | The United Nation's 'AI for Good' event is hosted in Geneva

June | CognitionX launches report for the Major of London, 'London: The AI Growth Capital of Europe'

June | The Consumers' Association Which? launches 'Control, Alt and Delete' report

June | Google releases their set of ethical principles

June | The Government Digital Service (GDS) publishes their updated Data Ethics Framework

June | Digital Secretary, Matt Hancock announces three AI leadership appointments: Dr Demis Hassabis, adviser to the Office for AI, Tabitha Goldstaub, chair of the new AI Council and Professor Dame Wendy Hall, Skills Champion for AI in the UK

July | The Royal Statistical Society establishes its Data Ethics Special Interest Group

July | The ICO publishes its "Democracy Disrupted" report on political campaigning

August | Sage publishes its "Building a competitive ethical AI economy" report.

September | Doteveryone, Civil Society Futures and the Ada Lovelace Institute, host Society in the Loop event

September | SAP announces set of ethical guiding principles for AI development, along with the creation of a new Ethics Advisory Panel for Artificial Intelligence

September | IBM releases AI Fairness 360 Kit to the Open Source Community of Europe'

September | China's president, XI Jinping, calls for global collaboration on AI ethics and law

October | The Institute for Ethical AI in Education is launched (IEAIED)

November | The Centre for Data Ethics and Innovation (CDEI) announces plans to investigate online targeting and bias in algorithmic decision making, as part of the UK Government's 2018 Budget.

November | The 2018 Canada-UK Colloquium (CUKC) focuses on "Artificial Intelligence & Society: Choices, Risks & Opportunities"

December | The EU Commission's High-Level AI Expert Group draft Ethics guidelines for "Trustworthy AI" released for consultation

December | Canadian and French Governments announce plans for the International Panel on Artificial Intelligence (IPAI)

December | techUK hosts its second annual Digital Ethics Summit

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