'Towards a Magna Carta for Data' Workshop Report

17 September 2015, RDS, Ballsbridge, Dublin 4

Insight hosted the first of a series of workshops to examine the ethics of Big Data and to work towards a Magna Carta for Data that would balance the rights of all stakeholders in the data age.

A key priority for Insight is to draw in a wide diversity of voices and to examine data ethics in the broadest possible context. The first workshop, held in Dublin, featured five speakers from a range of disciplines with perspectives on the ethics of data use. The event was attended by stakeholders from a range of areas including industry, research, law, media and civil society, many of whom also made valuable contributions to the workshop.

This report gives an overview of the speakers' contributions and an account of the key themes that emerged in the floor session that followed.

The workshop was chaired by Professor Barry O'Sullivan, director, Insight Centre for Data Analytics, and facilitated by Kalpana Shankar of the School of Information and Communication Studies at UCD.

Overview of Speaker Contributions

Pauline Walley SC - specialist in privacy and data protection law

Pauline Walley has considerable expertise representing clients who have fallen foul of social media. She described some of her recent clients as 'the cyber fodder' of the 21st century and said that, as with motoring, laws will have to be developed to protect all road users from harm.

Ms Walley has represented both victims of social media unlawful abuse, and internet intermediaries, so has a perspectives on the issues on both sides.

When the 'cyber self' is violated and damaging material is posted by another party, it has so far proven prohibitively complicated and expensive to vindicate one's good name. Unlike traditional libel, whereby a newspaper editor or programme producer is answerable to the charge, libel online is very difficult to pursue. It requires significant resources to go after a major multinational social media organisation that does see itself in the role of content steward. Meanwhile, damaging material posted online can be republished to a limitless extent by third parties, potentially destroying careers, relationships and reputations.

In cases of online harassment, the old model of victim pursuing the harasser directly do not apply, she says.

Ms Walley cited a number of recent cases where significant damage was caused to an individual through cyber harassment.

She stressed that she was at all times referring to unlawful abuse, material which is defamatory, harassing or breach of confidence. Material which is offensive or merely abusive but not unlawful is perfectly permitted under our laws, Ms Walley clarified.

'That which is unlawful in the offline world should be unlawful in the online world. People thought post-Google Spain that data protection laws would cover every case of unlawful abuse but that is simply not the case,' she said.

Pauline Walley described as 'extraordinary' the lack of real consultation the issue of cyber rights up to this point, especially in Ireland where so many major global data players now base their European operations. She described Irish and international law as 'totally out of date' and ill-equipped to deal the many 'new ways of causing damage' ushered in by the data age. Ms Walley does not believe that current legal structures are sufficient to cover online harassment or defamation.

'Cyber is different' was a key message. Ms Walley instanced the following unique features of online activity:

Viral publication of false/private/damaging facts

Anonymous. Invasive. 24/7

Permanent postings unless ISP take it down

"Takedowns" and legislative inactivity

Mass surveillance/Snowden revelations

Dark net and criminal wrongdoing

Surveillance by state and private interests

Erosion of rights by cyber trolls

New kinds of infringements e.g. revenge porn.

Ms Walley spoke of a 'transition period' ushered in by new technology that we need to take hold of to ensure that 'ideas do not become the purview of the privileged'.

Otherwise, she warned, we are 'sleepwalking into the future in terms of protecting our rights'. She called for a multi-layered approach, a 'bill of rights that lays out what people are entitled to expect in terms of rights and privacy'.

Otherwise, she warned, 'We are entering a Faustian pact every time we download an app or visit a new website".

In reality, what is needed is a global treaty for cyber rights and responsibilities, and a Bill of Rights.

Ireland can occupy key role as a place to digital resolve disputes with a tiered service, focused on problem solving, Walley said.

Dr Simon Foley - Insight@UCC, data security expert

Simon Foley is a Statutory Lecturer in Computer Science at University College Cork where he lectures and researches in computer security.

'The enemy knows the system'. Simon Foley focused his address on the challenge of creating secure systems and on new ways of viewing security in the absence of guarantees. He spoke of how all security systems can

potentially be bypassed and that the information we share as citizens goes out of our control once it passes into system we know little about in terms of their accessibility by third parties.

"We sign up to an app to become a product, is that the same as consent?" he asked.

Dr Foley spoke of how the acceptable use agreements of major social media companies were becoming lengthier and more involved while providing less privacy for the user. Privacy enhancing technologies, he said, are not widely used and there is general innocence of data systems among those whose data is feeding those systems.

Even for tech-users, securing data is very difficult, if not impossible, and Dr Foley instanced just a selection of the many data breaches that have taken place, to our knowledge, in recent years.

He also pointed to the growing role of the data broker, who collects all our information without our say-so or even awareness.

"If a system knows about people, then people need to know about the system," he said. So, rather than concluding with the maxim that 'the enemy knows the system', we should ensure that the public knows about the system too. Access to knowledge about the system is itself a data right.

Dr Vivien Rooney - UCC applied psychologist and specialist in consent

Vivien Rooney is a research psychologist. Her area is the application of qualitative research methods to understanding human experience, particularly with technology. She has a particular interest in security and how the understanding and practices from the area of applied psychology can provide insights into the development of systems with better security

No discussion of data ethics is complete without a thorough examination of the idea of consent, and this is a well-developed field of inquiry. We have much to learn from the existing scholarship around consent in other contexts. Researchers in psychology rely heavily on robust consent procedures, developed over generations, and yet even these procedures are not failsafe, as Dr Vivien Rooney explained in her presentation.

Psychological research adopted a flawed model, according to Dr Rooney, undermined by problems with detail, risks and jargon.

Psychology researchers, like data analysts, are human beings and are motivated at least in part by a desire to capture the data necessary to advance their analysis. While initial 'formal consent' might be easy to achieve, in the form of a document signed or a box ticked, securing ongoing, 'informal' consent is 'much more complex than we realise', according to Dr Rooney, even when the interaction is direct.

In the medical or academic context, the research subject has the right to withdraw data, but may be unaware of that fact. It is not always in the interest of the researcher to make it apparent, said Dr Rooney. Even where the subject is aware of his/her rights, he/she may be reluctant to pull away from a researcher with whom a relationship has developed. How do these impulses inform our understanding of the 'consent' required in the Big Data context? What's the human "nitty-gritty" as Dr Rooney describes it, behind the ticking of the box that says 'I Agree'?

In this context, achieving ethical practice in consent is 'challenging', says Dr Rooney.

"Between the researcher and the participants there are messy tensions. Informed consent is a process of ethical engagement."

Dr Heike Felzmann, NUI Galway, lecturer in ethics

Heike Felzmann is a lecturer in Philosophy/Ethics in the discipline of Philosophy at the School of Humanities, NUI Galway. She is affiliated to the Centre of Bioethical Research and Analysis (COBRA) at NUIG. Her area of specialisation is Bioethics, with focus on research ethics, health care ethics and most recently information ethics. She also works in moral theory, with focus on theory in/of Bioethics and has an interest in feminist ethics.

Data ethics covers individual rights, but also societal rights, according to Heike Feltzman. It's a broad process and a priority in Europe (H2020, Responsible Research and Innovation).

She quoted the following: "RRI can be understood as a shift in responsibility: the shift from thinking in terms of individualist and consequentialist notions of responsibility to thinking in terms of collective and distributed responsibility and processes." (http://www.rri-tools.eu/about-rri)

Commercial values need not be threatened by ethical values, but should be integrated into overall system of values, Dr Felzman said.

Quoting Vom Schomburg she said that what is required is "a transparent, interactive process by which societal actors and innovators become mutually responsive to each other with a view to the (ethical) acceptability, sustainability, and societal desirability of the innovation process and its marketable products (in order to allow a proper embedding of scientific and technological advances in our society)."

This points to the importance for companies and innovators of TAKING responsibility for the data ethics process.

We need to establish the fundamental values that underlie our data practices. Dr Felzman quoted Batya Friedman saying; "typical values might include human welfare, ownership and property, privacy, freedom from bias, universal usability, trust, autonomy, informed consent, accountability, courtesy, identity, calmness, environmental sustainability…"

Dr Felzman also pointed to the issue of bias in technology, such as technologies embodying pre-existing biases, e.g. gender bias, technical bias (limitations of computer tools, algorithmic interpretation); bias towards graphic rather than text based interface (e.g. problem of accessibility re bandwidth dependence or use for visually impaired users) and emergent bias in new context of use.

Ultimately distributed responsibility is the big data ethics challenge, she said.

Professional ethics tends to focus on individual responsibility, but problems arise in relation to interactions between agents and organisations in relation to data. Organisational ethics and societal perspective needs to complement individual ethics to ensure trustworthy data flows.

Structural points of breakdown of accountability chains need to be identified (e.g. secondary data use contracts) and there need to be clear mechanisms of transparency and accountability in any data ethics framework.

Professor Rob Kitchin, NUI Maynooth

Rob Kitchin is a professor and ERC Advanced Investigator at the National University of Ireland Maynooth. He is currently a principal investigator for the Programmable City project, Digital Repository of Ireland (DRI), All-Island Research Observatory (AIRO), and the Dublin Dashboard. He was the 2013 recipient of the Royal Irish Academy's 'Gold Medal for the Social Sciences'.

Professor Kitchin started by reminding listeners that our phones are 'effectively open', providing frequent information about our whereabouts and many other data. He said the issue of data ethics is now a far bigger one than privacy and security. It is also about philosophy, ideology, politics, surveillance, intrusion, social profiling, exclusion and many other factors.

He spoke of how ideology feeds into data ethics, and how each philosophy leads into a 'particular kind of Magna Carta. He cited:

Egalitarianism -- equality in power/rights regardless of ability and inheritance
Utilitarianism -- the greater good for the greatest number
Libertarianism -- prioritises the value of the individual over the state and society; free-market is inherently just
Contractarianism -- seeks to find a position that all involved considers just (not equal)
Communitarianism –- promotes ideas of community, and community ways of life with common shared practices and shared understandings

He spoke about the technical aspect of data ethics, and how poor technical application could lead to unethical outcomes. Examples at the capture stage included data quality and provenance: veracity, uncertainty, error, bias, reliability, calibration and lineage. At the analytics stage quality, veracity and transparency need to be considered along with ecological fallacy and interpretation issues.
There could be downstream consequences of data uses on poor quality data, he said.

Addressing the issue of a Magna Carta for Data, Prof Kitchin asked what form it might take – a set of general principles, or a voluntary code, for example.

He pointed to the Fair Information Practice (FIP) principles, developed and adopted by the US Federal Trade Commission in 1998, and subsequently adopted and further developed by the OECD, the European Union and the Council of Europe.

FIP, briefly, covers the following:

Notice – data collectors must disclose their information practices before collecting personal information from consumers
Choice – consumers must be given options with respect to whether and how personal information collected from them may be used for purposes beyond those for which the information was provided
Access – consumers should be able to view and contest the accuracy and completeness of data collected about them
Security – data collectors must take reasonable steps to assure that information collected from consumers is accurate and secure from unauthorized use.
Enforcement - the need for enforcement mechanisms to impose sanctions for noncompliance with fair information practices

Prof Kitchin asked if a Magna Carta for Data might be an updated and extended version of FIP.

He posited the idea of a set of high level principles rather than nitty-gritty rules and practices within domains, which would not mitigate the need for standards, protocols, regulation and legislation, but could help to guide and frame debates.

He said that designing a Magna Carta for Data would be an exercise in negotiating the politics of data and philosophy/ethics.

"I would certainly be a worthwhile exercise, but will not be a panacea to evolving big data ethical issues," he concluded.

KEY THEMES

A number of central themes emerged over the course of the five presentations and the Q&A discussion that followed. The workshop was attended by a diversity of stakeholders with interests in law, industry, government and civil rights, and further value was brought to the session by their inputs. The following areas were explored and will feed into the next iteration of the Magna Carta discussion document

CONSENT

A clear definition of what constitutes consent will be an important part of any Magna Carta for Data. Existing scholarship on the issue describes a complex field. In the Q&A after the speaker session, a number of attendees raised the consent issue.

Professor Eoin O'Dell of Trinity College Dublin

'Vivien Rooney was talking about consent, and it became clear from her presentation that getting consent is hard. However, Rob Kitchin says that [in the online context] harvesting consent is easy.
Simon Foley says breaches of consent are common. Pauline Walley says the EU is thinking of making informed consent the heart of the data protection regulation. Clearly consent is fundamental to data rights and yet the Magna Carta discussion document as it stands does not have consent at its heart.

'[A Magna Carta] should be a document of rights – it shouldn't be a document about data. The way you respect rights is by respecting consent. This issue needs to be brought in from the start.'

Professor Barry O'Sullivan, Insight
'This issue needs to rectified in the next revision of the document. It was written by a computer scientists, mathematicians, statisticians."

Dr Heike Felzman, NUI Galway

'Consent is really difficult – the pure focus on how to improve notice will not be enough either. The entire burden should not fall to the individual when it comes to consent. We need additional safeguards that don't leave the responsibility and the burden on the individual. We cannot have a scenario where the data collector can say: You didn't have due diligence. Tough on you. That won't work.'

Prof Rob Kitchin, NUI Maynooth

'Consent is difficult and it is not going to be made easier with various devices all across the city, CCTV, sensor tracking. You simply can't consent for the number of systems you interact with on an everyday basis. One of the struggles is how do you protect people and their data in the absence of consent?'

Professor Barry O'Sullivan, Insight

'Biomedical research should be treated as a unique case when it comes to consent. At EU level, the biomedical research community are objecting to have consent as part of the privacy regulation currently in train. They want an exemption for biomedical data for research purposes. Consent to study tissue sample, for instance, shouldn't die with the patient. They say there are mechanisms and structures already in place for biomedical research that are robust.'

Dr Vivien Rooney, UCC

'When you talk of consent (in the online context), people don't understand. If you are non-tech you have no idea of how messy software and hardware is. The onus is on all of us to make that clear. Who would consent to anything if that's not clear?'

EUROPEAN IDENTITY AND VALUES

A theme that emerged over the course of the session was the specific position that Europe might take on data ethics, given Europe's explicit and expressed ideologies in ethics generally, as laid out in the Constitution of Europe. Legal responses to data challenges in Europe have moved the union in a different direction to other jurisdictions. Notions of ownership are already somewhat different between the EU and the US. Data has no borders, does that mean that we must acquiesce to global norms on data use, or can we take a position in Europe that will inform global norms? In the context of the TTIP negotiations does Europe have clear principles on the rights stakeholders in Big Data? We need to develop data rights in line with the ideology of Europe.

Prof Barry O'Sullivan, Insight

'The Magna Carta for Data project is not envisioned to be an Irish initiative as such. It is important for us in Insight to extend this project as widely as possible.
However, Ireland is home to most of the world's big data companies and it's important to see Ireland talking about this. Across Europe the conversation has been defined by tax and data protection issues.'

Simon McGarr, Solicitor, Digital Rights Ireland

'Nobody has yet touched on the Constitution of Europe – the Charter of Fundamental Rights. Whatever data regulations are produced they cannot run counter to what the Charter says. Exemptions cannot apply, as they wouldn't withstand scrutiny from Luxembourg.
The Charter is only in place two years, it must be examined. There is an amendment coming to the Europe Convention on Human Rights that will include a distinct data right.'

'I own my data. If Facebook collects it they control it but if I want to I can remove my data from FB control. People think that companies own the data when they collect it – they don't. If they behave as if they do they will break the law. There are only seven exceptions to that, such as national security. I can't imagine any commercial use of personal data that would override that ruling. Facebook is a controller on my behalf. If they want to do something with my data it and I don't like it I can whip it back. Facebook originally said they would close the account and keep the data. Now they have to strip it out. They will do it but they are not happy about it, but this only applies in Europe.'

SECURITY/TRUST

Can data ever be secured? Is public trust in data harvesters ever warranted? If there is no such thing as failsafe security, does that change the conversation on privacy, protection and ethics generally? Is it simply a case of 'data provider beware'? If so, what are the implications for transparency, public education and sanctions when breaches occur? Attendees raised the following points.

Dr Simon Foley, UCC

'There are lots of rulings that refer to data breach. We are always learning that rulings are being violated and nothing is done. '

Pauline Walley, Barrister

'The greatest incentive to bring in the monoliths is money. Article 7 and Article 8 of the European Constitution create a right in relations to data protection since 2009. Only in Google Spain did lawyers in Europe woke up and hear that data protection is a fundamental right in the European constitutional framework. And yet, if a client comes into your office with the intention to sue Google, I have to advise them that their house is on the line.

'In time the charter will become the most important instrument. It took five years for that court to say that, even though Simon McGarr says that the protection was there all along.

In the case of Vidal Hall, an important decision in the UK, Google had interfered with the Apple browser and was hoovering data of iPad users. That is not the full substantive hearing, that was an application by Google to strike out the claim as having no basis in law in UK. Still substantive action to come. Google and all the others will put a lot of money into defended that to kick the can down the road. We need a takedown procedure that doesn't go near the courts. In that dialogue the courts have often been fobbed off with technological arguments.'

Antonella Ferrechia, Insight

'At the moment we don't know where our data is stored. We should be given information about where the data are stored. It's important to know local data storage infrastructure.'

Prof Rob Kitchin, NUI Maynooth

'I don't see why it matters where the data is stored except from a legal perspective. All this stuff is travelling around and can be intercepted all over the place. It's vulnerable in lots of different ways. You breach one thing you breach everything. It's good to have transport, utility etc. separate because you don't want the whole lot to collapse.'

Dr Simon Foley, UCC

'My view of the world as a security practitioner is threats. I start to talk and people glaze over. It's like selling a car. To tell a buyer that a car has seven airbags and that makes the buyer feel safe. However, if you start to go through all the potential injuries you won't sell any cars. We trust the manufacturers. There has to be some way of achieving trust between the people and the users when it comes to data.'

THE ROLE OF GOVERNMENT/LEGISLATORS

So far the data age has been industry and research-led. Policy makers are struggling to keep pace. Our contributors asked; what role, if any, should governments and the legislature have in the management of the data of its citizenry?

Simon McGarr, solicitor, Data Right Ireland

'The Vidal Hall judgement in the UK stated that for every single data breach affecting a citizen that citizen now had a right to monetary compensation whether or not they had suffered financial loss. That would mean a big cost for leaving a laptop on the train. I think there will be nothing more effective in policing and effecting ethics than saying; if you drop the ball you will pay. The courts will police that, as people will sue.'

'There is a proposal to make it compulsory to notify an instance of data breach. Some form of class action should be made possible. If you've accidentally lost 5m people's data, a 5m class action will crush a country. There is no such thing as a class action in Ireland. In Europe we are hostile to the notion of the power a class action gives a group of people."

Andrew Moore Farrell (attendee)

'Here in Europe there is a welfare system. Data is being harvested and companies make the money. People become the product. There is a cost to having data. Until there is a recognition that physical data is driving economy – you have to acknowledge that. Companies are charging ahead, the ability for people to interface with companies they are interacting with don't have access to the data – perhaps there should be a central repository where that info is locked down. There is a cost to that, the State needs to accept that.

[Maybe governments should consider a] welfare system – like housing etc., we need a system for the integrity of data. A welfare system, a fund allocated to protect and store that person's data. If it is not accurate there should be a mechanism for people to go in and correct that.'

Dr Simon Foley, UCC

'It is technically near impossible to set up a centralised data store that anyone could stand over. So many systems have been proposed – the larger the system more attractive it is as a target. A federated identity service – what confidence could we have that this infrastructure would be truly secure?'

NEXT STEPS FOR THE MAGNA CARTA PROJECT

Is the Magna Carta project worthwhile? How would it contribute to the development of Big Data? What direction should its development take? What, if anything can we learn from the original Magna Carta?

Niall O'Brolchain, DCU

'I think that the whole idea of the MagnaCarta is a good one, but we need to examine how it would come to pass, what would the process be. I was involved in drafting the European Charter of Human right – it was decided there was a need for such a document and it went into the Lisbon treaty. How would we take it from a workshop in Dublin to point where the the European Union takes ownership?

'Looking back at the original Magna Carta, it was drafted by the archbishop of Canterbury. It was a scattergun document written in Latin – very much a top down document. We are not clear here what the driver of this is, other than a lot of different people.'

Prof Barry O'Sullivan, UCC

'This can't be top down. Irish taxpayers have put a lot of money into insight. The biggest public question is on the rights side. We have a responsibility in this regard.

'It's good for Ireland and the EU to be talking about these things. We have put it out there that there should be debate around a document that states the rights of individuals – that's the vision. We are revising the discussion document, the purpose of today is to get to know people who regard themselves stakeholders, bring them into the document. This has to become a bigger thing. We are in negotiation with the European Commission at the moment, that they would take the Magna Carta process and start and Europe-wide debate around what this would be.

'As I see it Digital Rights Ireland and other groups around Europe would contribute to an independent panel of experts, and would come together to distil a document that would bear the European Commission stamp. There is a willingness to do this is Europe. The institutions of Brussels are concerned about this, concerned about citizens.

Pauline Walley, Barrister

'The importance of the original Magna Carta, was not necessarily in the original document. There was a lot of stuff in Magna Carta about the right of the privileged, but buried in there is a core value that is now is common law – habeus corpus, you couldn't be imprisoned without a fair trial. That's the reason that the document still resonates: in the idea that that was the first document that ever brought the idea of people's rights into consciousness. It was in the implicit and explicit recognition that people matter and that liberty mattered. Whatever shape the Magna Carta for Data takes, to me matters less than the consciousness raising, that there are human values that we aspire to in this area.'

Prof Barry O'Sullivan, UCC

'We need serious backing from the European Commission to make the Magna Carta happen.
It requires relationship building: who are the people to ally, with, who is going to help us, we are happy to take advice in Insight.'

Kalpana Shankar, UCD (Workshop facilitator)

'The commitment to talk to people outside of this process one of the reasons this workshop is important. It goes beyond data protection and privacy into bigger issues such as consent and curation. These are moving streams of data - you can't go back to an archive and show me your quote.

'One of the things that comes up for me: we don't have shared language around this. Civil society needs to be engaged as well as the commercial sector, often different groups are using the same terms for different things or vice versa. Rather than focusing on the negatives of ethics, we need to create a more virtuous circle. How do we engage all these stakeholders to move towards good? A lot of Rob Kitchin's writing on this looks at issues, for example, or inclusion and exclusion. People who shouldn't be counted are counted in Big Data, and people who should be counted, are not. Equity of access and equity of representation in BD is vital. A great first step to raise consciousness. The original Magna Carta was not the first document nor the last. There were numerous versions, but it raised consciousness of these are fundamental issues. Each society has this as a lens to engage with social values.'

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