

DIGITAL TIMES

CREATIVE. KNOWLEDGEABLE. FEARLESS.

WINTER 2019

THE DATA EDITION

Written, edited and compiled with the children and young people of the 5Rights Foundation Data Literacy Commission

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Data commissioners come to Parliament

Six months, seven workshops, and dozens of activities later, the Commissioners from the 5Rights Foundation Data Literacy Workshop make their way to Parliament to give their verdict to the Foundation Chair, Baroness Beeban Kidron.

The young people, 18 of them 13-or-under the rest under-17, made their way through historic Westminster Hall to the committee corridor, the venue of so many reckonings between the public and parliamentarians.

Normally Peers would occupy the horseshoe of seats while visiting witnesses take their seats at the end in full view. On this occasion it seemed only right for the Commissioners to do the interrogation, while Baroness Kidron sat, only slightly intimidated, in the witness chair.

First up, the Commissioners wanted to express their views on some pretty specific issues. "It's not really informed consent, they've got our permission but in name only. Morally its wrong, but they don't use morality." "They can take our patterns of behaviour and apply them to other groups" - just

two of the many fascinating observations.

The question was asked – what could politicians do? "We need laws in place that stop companies profiting from extracting people data. If there wasn't a correlation between stealing data and revenue this would create a change within the companies themselves – they wouldn't have a need to grab data from people so therefore they wouldn't have the incentive". One couldn't help thinking that Commissioner might have a career in politics herself.

What about the tech companies? "Make it fair, something beneficial for creators and users" offered one Commissioner. "How about a social media platform that doesn't steal unnecessary data?" another chimed in. In fact, the visitors had quite a lot of advice, and some ground-breaking design ideas for tech innovators. "Protect the young generation in ways we'll understand, because people don't like things they don't understand, so if you let them understand they'll appreciate what's being done." "Introduce questions from services before posting; Can we store this? Who would you like



Commissioners call for politicians and tech companies to make the internet a fairer place

to see this?" "How about an app which stores your privacy preferences, then if you install a new app it sets your privacy settings from that automatically".

Overall the Commission was deemed a huge success, but what most preoccupied the Commis-

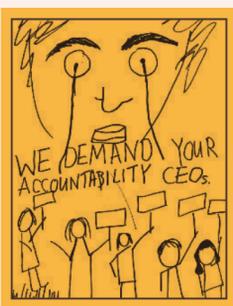
sioners was the question - what comes next?

The Commissioners were invited to become 5Rights Advisors, a role that involves meeting politicians, tech companies, businesses and civil society groups who want - or need - to hear directly from

children and young people. It also gives the opportunity to meet 5Rights Trustees and contribute to the work of the Committee on the Rights of the Child in updating the Convention (UNCRC) for the digital world.

As the Commissioners left Par-

liament, the Lords were starting the business of the day. Perhaps one of the questions we should be asking them is why all UK school pupils are not taught Data Literacy. Perhaps the new 5Rights Commissioners will be the ones who do the asking. ♦



Tech Companies sacrifice kids for cash

Distressed to find that technology companies put their profits ahead of the needs of children and young people, the 5Rights Commissioners suggested that children need their own newspaper – "The Voice of Children: The Rights of the New Generation". It is unclear if it will be in print or online only, but whichever is decided, there is no doubt that young people want a say. ♦

Simpler Terms & Conditions

Our commissioners get pretty heated about terms and conditions.

WHAT THE INTERNET KNOWS —"It makes me feel a bit scared and a bit dangerous. A bit shocked. Because I didn't think the internet knows that much about you". "I'm scared that they think they know something about me that's not true".

Everybody agreed they just tick a box so they can carry on with what they are doing and don't really think about what it means. "Yeah... it's one of those things, out of sight out of mind you know".

WHAT ARE YOU AGREEING TO?

Sort of everything. By accepting their terms you have agreed that they can know where you are, where you have been, who you are with, maybe what you are discussing (if you have sent an email saying why you are meeting up).

You have given permission to check your searches, purchases, look at your contacts, see where you live and who you live with – and importantly as well as the exact information, you give them permission to make assumptions about what kind of person you are and how, when and what your responses to various questions might be. So, they might know if you are a morning or night person, what fashions or foods you prefer, music or games you might like – some of which is really useful to them. But it might also be the colour of your skin, your sexuality, if a member of your family is in jail, when your period is.... The list is endless.

One of the spookiest workshop moments was showing how we could work out where each of the

participants lived. Another was looking up on Wikipedia just how many times you have 'just by ticking a box' given permission to let them have a microphone and listen in. "I need to turn that off" exclaimed one young person. "You become complacent".

WHAT CAN YOU DO? —Well, you could read the terms and conditions and see if you really agree with them. But while most of the Commissioners had a go, they quickly realised that it wasn't much of an option – much like Alex Hern, the Guardian's Chief Technology Correspondent, who decided to read the T&C's of every service he was using for a whole week. The headline of his story was – "I read all the small print on the internet and it made me want to

die" – and he was getting paid!

The Commissioners did not think the deal with terms and conditions was fair or transparent.

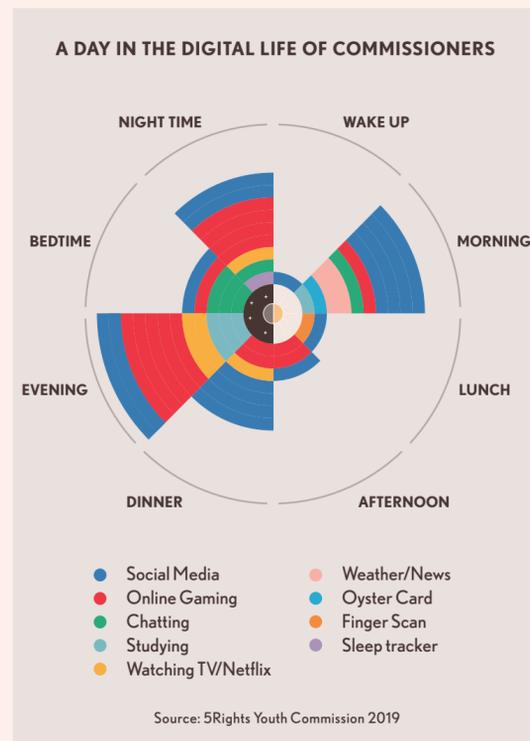
"I didn't know the internet knew that much about you. I thought it's just what you put out there". "I'm shocked that just signing up tells them so much" "It makes me quite worried – 3rd parties are actually using it – they could do some scary things with your data" were typical responses across all the groups

COMMISSIONER'S DEMANDS —"Give us an information pack about what young people can expect about their information if they are worried, provide someone they can call". And in a hundred ways or more they demanded shorter, clearer, to the point, fairer Terms and Conditions. ♦



Giving Mark Zuckerberg a piece of his mind about Instagram's terms and conditions

Digital Forecast Report



ISSUE

No 1

Printed in London

5Rights Foundation

Working with children and young people to create a digital world fit for childhood.

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NATIONAL

Parent's Survey

More data protection for our children

Parents want rules that protect children to be set by an official regulator and for the government to make companies check the age of the children before letting them use their sites – a recent YouGov poll finds.

Parents are being denied the right conditions to parent online. The vast data collection and the aggressive design of services to attract and distract are increasingly making it difficult to parent. A recent YouGov poll commissioned by the 5Rights Foundation showed that parents believe online companies should be compelled to support parents to parent, by providing a more regulated and protective environment.

Ninety percent of parents want clear rules that restrict the use of children's data and the ways in which online services, such as apps, platforms, games, search engines and streaming services, engage with children.

YOUNGOV POLL OF UK PARENTS

- 90%** of parents think it is important that internet companies are required to follow rules to protect children online
- 76%** say internet companies should establish people's ages to enable child specific protections to be put in place
- 78%** think that regulation on the use of children's data should apply to all online services likely to be accessed by children, rather than just online services that are targeted at children
- 67%** of parents think an official regulator or government should decide the rules for how internet companies should use children's personal data
- 82%** say companies should be held accountable in law for how well they uphold to their community guidelines and terms & conditions.

Source: YouGov poll commissioned by 5Rights Foundation, June 2019

They want those services held accountable in law for complying with their own published rules, including age, content restrictions and privacy. Three-quarters of the 1000 parents surveyed wanted any service that children use to protect their data whether or not the service is specifically aimed at under 18's.

Meanwhile young people repeatedly say that they would like more help from their parents to manage their online lives, but they have conditions. "Don't take away our phones, understand there are social rules and be sympathetic not angry." They also want parents to worry less about the dramatic news headlines and pay more attention to the everyday issues like social pressure, image management and the demands for attention - above all they want parents to change their own device settings and online habits. "If they spent a bit less time with their phones and a bit more understanding the way they are addicted, they might be better position to help me when I feel out of my depth" said one young person.



IF [PARENTS] SPENT A BIT LESS TIME WITH THEIR OWN PHONES AND A BIT MORE TIME UNDERSTANDING THE WAY THEY ARE ADDICTED, THEN THEY MIGHT BE IN A BETTER POSITION TO HELP ME WHEN I FEEL OUT OF MY DEPTH"

Children want help from parents, parents want help from online services and the government. We asked the Internet Association, which speaks on behalf of tech companies in the UK, including YouTube, Instagram, Snap, Facebook, Twitter and Google, why they have been reluctant to introduce special protections for children's data. So far, they remain silent.

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Surprised? Phone use and gaming dominates young people's time



group of 13 year olds recorded how they spent their day and were 'unsurprised' to find it was dominated by time spent on their phones, averaging 4.9 hours per day. Several of the 24 young people pointed out they might be using the phone to listen to music, so double counted that time. Others were pretty certain they had underestimated the time on their phone and overestimated their time doing homework. It was possible that during that homework time they had just had a quick look at their phone - from time to time!

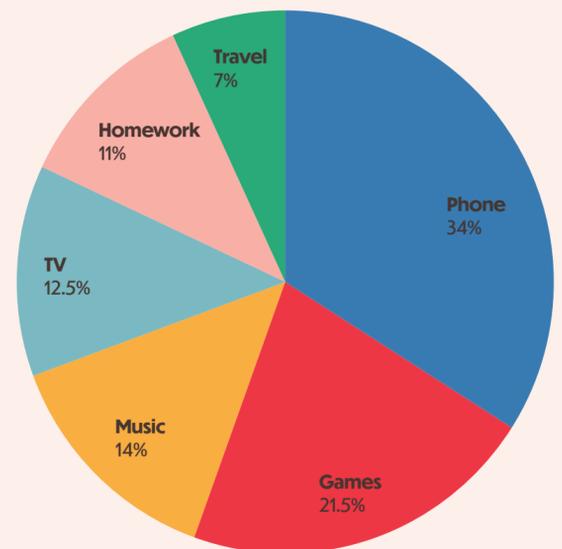
Young people pointed out that they have a lot of competing calls on their time - school, family, friends, travel, homework, entertainment, just to mention a few - but the group were concerned that they also had the feeling of lost time. They explained that they picked up their phone and then spent hours scrolling doing "I don't know what actually". It was a similar story with gaming, where one hour often turned into several more than they intended as each new level was reached and another immediately offered. Tired-

ness or staying awake at night was mentioned as a problem by several. "It's made for you to waste your time like that. I can play Fortnite from 1am until 5pm".

Many were keen to point out that they enjoy much of what is available online. "You're constantly feeling good on your phone. I'm not going to lie. I'm dying to go on my phone right now". But they also felt strongly that the tech companies should have more responsibilities. "I find it pretty weird how companies really want your attention because it makes them money. Now I know they make a profit from my attention I understand all these red notifications".

The group tried to find words for how they feel when they're online, and most striking was that none felt all good or all bad, almost everyone found that the words that came to mind had both positive and negative meanings. Some words came up repeatedly, the most popular feeling was 'happy', beating 'distracted' by only one vote. Both words were significantly more popular than any other word, and overall positive feelings outweighed the negative ones by a small margin.

HOW WE SPEND OUR TIME

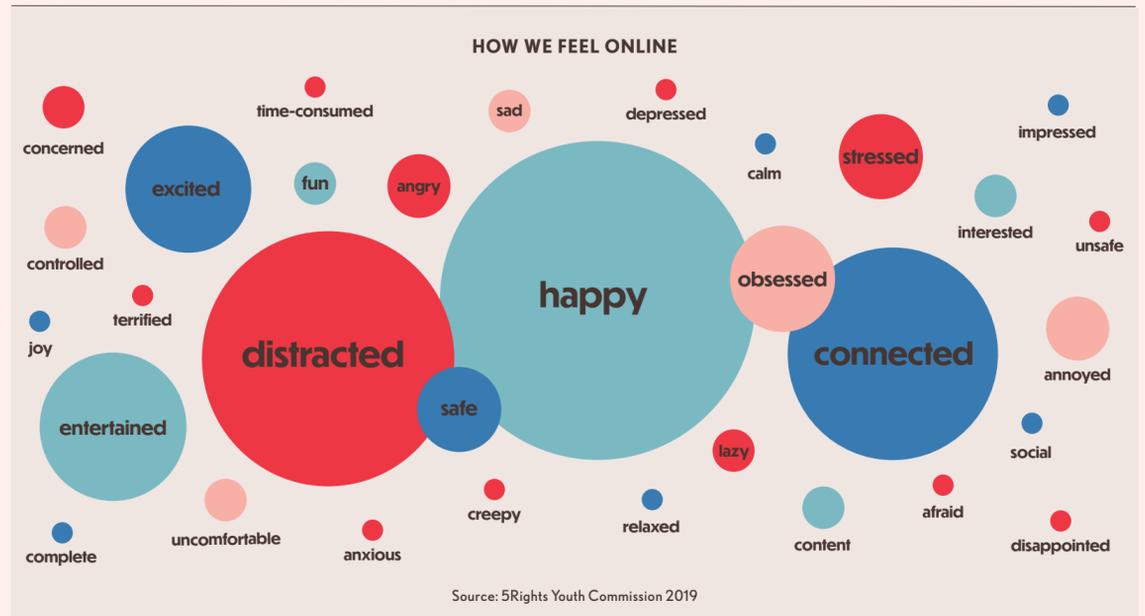


Source: 5Rights Youth Commission 2019



I FIND IT PRETTY WEIRD HOW COMPANIES REALLY WANT YOUR ATTENTION BECAUSE IT MAKES THEM MONEY. NOW I KNOW THEY MAKE A PROFIT FROM MY ATTENTION I UNDERSTAND ALL THESE RED NOTIFICATIONS.

HOW WE FEEL ONLINE



Source: 5Rights Youth Commission 2019

YOUTH COMMISSIONERS PRIVACY POLL



Source: 5Rights Youth Commission 2019

Children's Survey

Singing not snogging

Survey reveals young people don't want to share their personal information - unless it's their favourite band



Young people, when given the survey to choose what information they would be happy to share with online services, mostly chose only to share their taste in music.

The survey listed a number of data points that an online company could capture or infer about them, including how much money their parents earn, the colour of their skin, what they eat, what they drink, or if they are awake or asleep at certain times of the day and night. Those taking part consistently rejected the opportunity to share their data - with the exception of their favourite band. The information considered most intrusive was whether or not they had a family member in jail. Most of the young people felt shocked that these are the sorts of things that a company could 'infer' (assume) just from their behaviour

online. They pointed out that in e-safety lessons a huge emphasis was put on the information they share - for example, school uniform or phone number - and they unanimously felt that they should have greater understanding of what information was being collected about them by online services. One Commissioner drew a picture with the slogan "You can assume, but you can never know" - this cleverly summed up a sense of discomfort amongst the young people in the workshop, that data was being used to profile them and that it might be wrong.

On the whole the survey was good news for Spotify but not such good news for the young people, who expressed considerable concern at the idea that a social media company might know where they live, if they have visited a sexual health clinic, if they are asleep, or who they fancy.

INTERNATIONAL

The Emojis marching on China's classrooms

How to teach children is a big question for any country, but when facial recognition was introduced in a school in China, eyebrows were raised.

Using classroom-based CCTV, the facial recognition system scans students' behaviour every 30 seconds. It recognises 7 different expressions: neutral, happy, sad, scared, disappointed, angry and surprised. The system called the Intelligent Classroom Behaviour Management System also captures 6 types of student behaviour among which are reading, writing, raising hands and listening. Teachers use the data to analyse student behaviour and monitor attendance. The data is kept in a private database so it is not widely shared. Teachers say it helps them improve their teaching methods. The 5Rights Commissioners were not so sure.

"It's not right because you might be having a bad day – the machines aren't always right", "Who says they will help you if you're in trouble?", "I don't want them to know what I'm thinking" were just some of the immediate responses to the news. However, it was acknowledged that the information could be put to good use - "if someone is frequently in a bad mood you can talk to them about it so you can help them in that way".

Facial recognition in schools is part of the wider use of surveillance data on China's population. The government introduced Social Credit which gathers a broad spectrum of data on individuals that adds up to a personal rating. The Chinese government was widely criticised for the idea behind Social Credit - it seemed to many people that giving people points for certain behaviours like buying healthy food, or taking points away if you fail to cross a road at a pedestrian crossing, is too restrictive. What if people with low scores end up being



Intelligent Classroom Behavior Management System in use at Hangzhou No. 11 High School. Images from Techjuice



IT'S NOT RIGHT BECAUSE YOU MIGHT BE HAVING A BAD DAY – THE MACHINES AREN'T ALWAYS RIGHT

punished for small infractions, or people who pretend to be good in public have privileges they don't deserve?

China seems far away to many young people, but what struck home was not so much the differences as the similarities with their

own experience. Whether buying lunch, "When I pay for my lunch [at school] I use my fingerprint. It is not kept anywhere, but it is creating data" or going for a run, "It surprises me how much data is collected about you every day and how much they know about you.

What struck young people was not so much the differences as the similarities with their own experience.

I wasn't expecting that when you go for a run, it can tell what you do and where." Whilst the impact on pupils in China led to a heated discussion of the benefits and costs of privacy at school, the young people were more shocked at how much they contribute to their own social graph. ♦

The USA's COPPA Rule

New Order for the Age of Consent?



For the last 20 years – almost the entire history of the internet – children's experience of the digital environment has been dictated by one rule more than any other. That rule – the

'COPPA Rule' – is now set to be reviewed and updated. COPPA stands for the Children's Online Privacy Protection Act, and the 'COPPA Rule' refers specifically to the requirement that websites, apps, and platforms must have the consent of a child's parent before collecting or using that child's data. In practice, however, the impact of the Rule is much wider.

Ever wondered why 13-years-old is the minimum age limit for so many online services (many of which don't feel that appropriate for kids)? The reason is the COPPA Rule, which defines a 'child' as anyone under the age of 13. If a website wants to collect the data of anyone younger than that, they have to get a parent's permission.

This is just one example of the details that are up for review. America's Federal Trade Commission (FTC), which is the institution responsible for enforcing the COPPA Rule, says 'rapid technological changes' in recent years mean the Rule might need updating.

It follows increased efforts by the FTC to crack down on companies that are misusing children's data. In February, the FTC hit the short-form video-sharing platform TikTok with a \$5.7million fine for collecting data from underage users, the largest ever fine under the COPPA Rule.

If that tougher stance is anything to go by, the review of the COPPA Rule could spell an end to the questionable practices of many online services when it comes to children and the protection of their data. If the last 20 years are anything to go by, the impact of these changes could be felt in every corner of the digital world. ♦

Out-smarting Snap

A US Senator has made the latest move in the battle to curb the 'addictive and deceptive techniques' used by social media companies, video-streaming sites, and online games.

A US Senator has made the latest move in the battle to curb the 'addictive and deceptive techniques' used by social media companies, video-streaming sites, and online games. Senator Josh Hawley accuses Big Tech of 'embracing a business model of addiction.' "Their 'innovation' isn't designed to create better products, but to capture attention by using psychological tricks that make it impossible to look away". He has proposed a new law called the Social Media Addiction Reduction Technology (SMART) Act.

The draft act or 'bill' would put limits on features like Snapchat 'streaks', autoplay video, and infinite scroll. These features, says the bill, 'exploit brain physiology and human psychology' and are designed 'to capture as much of their users' attention as possible.' Particular focus is on the Snapchat streak, which displays the number of consecutive days that a user has shared photos on the app with other individual users. Fail to send a photo to one of your friends within 24 hours, and the streak is lost. For anyone questioning their addictive power, note the form on Snapchat's website allowing users



Senator Josh Hawley introduces a bill to tackle social media addiction

to dispute and recover lost streaks. While some internet companies have been lining up to criticise Senator Hawley, the problem can't be ignored. In 2018 the World Health Organisation formally classified gaming addiction as a diagnosable mental health condition, and internet addiction clinics have started to pop-up both in the UK and around the world.

Tech sector insiders have also been remarkably open about the process behind these 'addictive techniques'. Netflix CEO Reed Hastings has famously and repeatedly said that his company isn't

competing with other businesses, "we're competing with sleep". "God only knows what it's doing to our children's brains", mused Facebook co-founder Sean Parker. Senator Hawley is not alone in wanting to tackle this problem. In the UK, the Information Commissioner's Age Appropriate Design Code will restrict the use of 'nudge techniques based upon the exploitation of human psychological bias'. The UK's Chief Medical Officer, Sally Davies, has also called for an end to the 'addictive capabilities' of all services used by children.

In South Korea, where as many as half of all 10-18-year-olds are estimated to be addicted to online games, the Youth Protection Revision Act – commonly known as the Sundown or Cinderella Law – has banned under 16s from gaming between midnight and 6am since 2011.

All of these efforts have one thing in common: a recognition that internet companies need to accept more responsibility for children's welfare, and to start demonstrating that responsibility in the way they strategically design their services. ♦

SPECIAL INVESTIGATION

Profiling

Uncovering the bias in data portraits

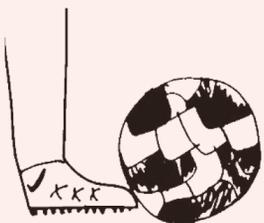


These pictures were made by two different groups from the same data set. But they have inferred very different things.

For most of us data is a difficult word - add the terms Data Bank, Algorithm, Algorithmic Bias, and Profiling and there is a tendency to zone out. So if a workshop can make all of these things clear, and make some of its participants just say "Wow Wow Wow" then it must be worth checking out.

WHAT WAS THE WORKSHOP?

So, if you are going to join in you have to give 10 pieces of information - each on its own post-it note. Anything you like - are you a vegan, how many steps did you walk today, what did you last search for online, who is your best friend on Snap, favourite football team, where do you live? It might feel a bit intrusive, but this is exactly what happens every time you tick the terms and conditions to enter an online service. Online information is called and stored as Data. Add the 'post-its' to the wall under nine different categories - interests, food, social life etc. This puts everyone's data to-



“

I AM ANGRY THAT PEOPLE I DON'T KNOW ARE LOOKING AND FINDING OUT THINGS THAT ONLY I SHOULD KNOW OR MY FRIENDS”

gether in a big group. This is a Data Bank. Taking one piece of information from each category and working in groups, each group uses the data to imagine the person it describes. Imagining what kind of person the data describes means that the groups have to infer what the data is telling them. Infer? Infer = what you assume from what you already know. If the post it says they are interested in ballet, do you infer that they are a girl? If they live in Mayfair (the most expensive area in London) do you infer that they are rich? If they have an Arsenal shirt do you infer that they are unbearably sad because their team did not go to the European Championships?

WHAT WAS 'INFERRED'?

Assumptions (inferences) were made about body shape and size based on number of steps walked, about sexuality based on their favourite band, about age based on their interests. One group assumed that an interest in the theatre meant it must

be an adult. Even hair colour was inferred - "I think he might be ginger because he's from Scotland".

Having drawn one person, the groups swapped their 9 pieces of data with the nearest group and each group made another portrait with the new data set. So, each person created data, added it to the data bank, from which groups took a data set - and used it to infer what it said about the person that they drew. Then they swapped data sets, which means that the same data set was used twice. That's when the WOW comes in. The pictures above were made by two different groups from the same data set, but they have inferred very different things.

"I'm scared that they think they know something about me that's not true. they might get it wrong"

PROFILING

In the digital world gathering information and putting it together to describe someone is called profiling, sometimes referred to as personalisation - and it can be fantastic. It is how Spotify knows what you might like to hear next. They infer what your music

taste is from what you have already played. But as the pictures show it has some risks because profiling can just be a fancy form of guessing - and if they guess wrong it might have more serious consequences than offering you a song you hate.

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I'M A BIT SURPRISED BY HOW MUCH PEOPLE CAN FIND OUT ABOUT YOU AND A BIT NERVOUS AS WELL ABOUT WHAT THEY CAN FIND OUT THAT MIGHT LEAD TO SOMETHING BIGGER"

DID THE WORKSHOP WORK?

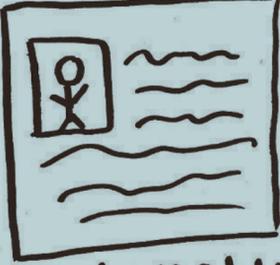
It certainly did - everybody, including the teachers who were watching, learned not to be frightened of words that describe the everyday uses of technology. But what happened went a bit beyond that. Two things bothered the Commissioners: because they had seen their own assumptions they realised how vulnerable everyone is to being misunderstood, or the inferences being biased. "I'm quite sad companies are presuming how I feel!" "I'm a bit surprised by how much people can find out about you and a bit nervous as well about what they can find out that might lead to something bigger". "I'm scared that they think they know something about

me that's not true. They might get it wrong".

But perhaps even stronger was the feeling that it was all very intrusive. The Commissioners had no idea the sorts of information that they were agreeing to give away and just how much inference was going on. Virtually all of them had some concerns about that: "It's like looking into their lives", "They might not want you to know that", "It's invading people's privacy", "I'm annoyed that they are looking into my private stuff", "I'm angry that people I don't know are looking and finding out things that only I should know or my friends", "I'm quite shocked that just by signing up on a profile can enable them to see these things. Companies shouldn't do that. Other companies are bribing other companies to do stuff", "I'm telling the companies to stay away from my data". It seems that uncovering the bias in Data Portraits uncovered quite a lot more. ♦



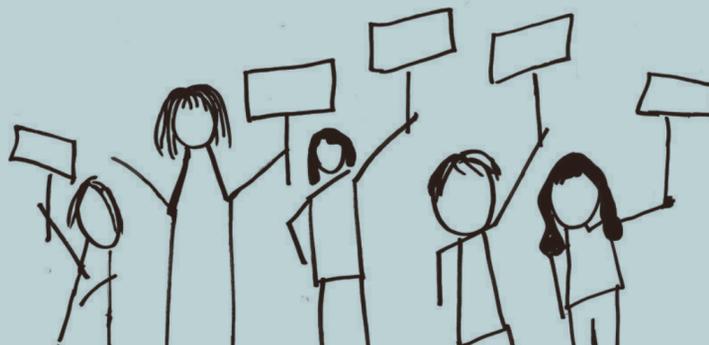
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A NEW PUBLICATION FROM 5RIGHTS FOUNDATION - AUTUMN 2019

**Privacy, Security and Freedom
for the 21st Century Child**

What is the perfect balance of these three much disputed needs? Who should be responsible for maintaining this balance? Do children and young people need a different balance from adults? These questions will be tackled by world leading thinkers across many disciplines, including 5Rights Youth Leaders



THE BIG READ



Young people, the heart of 5Rights

From the very beginning, 5Rights has been influenced by children and young people. It was a large group of Year 9 pupils who identified the issues, anxieties and objections that they had with the digital world, that led to the creation of the 5 Rights; the right to Remove; the right to Know; the right to Safety and Support; the right to Informed and Conscious Use and the right to Digital Literacy.

From that time on, young people's views have been central to what we say to government, international institutions, engineers, and researchers, and to our priorities as an organisation. The work we have done with children and young people has taken many forms, a few of which are outlined below,

and we are always learning from them. But in spite of the huge range of geography, voices, ages and attitudes – the following priorities always shine through. Digital technology is central to their lives and they want it to remain so. They want more 'meaningful' control of devices and services, because they struggle to manage their time online. Family and social conflict is made much worse because of digital devices. What they are taught at school in e-safety focuses on adult fears, not their own experiences and knowledge gaps. They think digital services should not be so greedy and should offer fairer terms for young people; including taking less of their data and putting less pressure on them to fit-in and be popular. They wish that adults would take more

notice of their design ideas to make things better for them. Without exception - once they have explored the digital world a bit – they want to know more.

Over many years we have watched young people grapple with the complex issues of the internet with a level of creativity, kindness and cleverness that has been simply amazing, and many have gone on to meet ministers, policy makers, leaders of public institutions and tech companies. Wherever they go they are admired for their deep understanding and demands for positive change.

The Data Literacy Commission, which produced the work in this issue of the Digital Times is no exception. The Commission, delivered by design agency We Are Snook,

took place across four locations in London from February to July 2019. Each group participated in five workshops that explored issues of data literacy and children's online experience, loosely arranged around the 5 Rights. Participants also went on a number of visits, including to Sky Studios, BBC Blue Room, a joint workshop at Lift and a meeting in the House of Lords. The visits offered multiple opportunities to voice their opinions about how parliament should deal with technology. Participants also had the opportunity to make a film, experience the latest voice and VR technologies and were offered a chance to voice their opinions about how parliament should deal with technology.

Workshop activities were based on a de-

liberative system where information is introduced and participants bring their own experiences to how the information is interpreted and understood. Each exercise involved debate, discussion, creation, opinion and design. This focus on fostering thoughtful deliberation, rather than top-down 'education', was designed from the outset so that we could all - young commissioners, 5Rights team members, and other experts in the room - learn and imagine new solutions together. Many of the participants said that the workshops had made them more confident in expressing their opinions on all subjects; others expressed the desire to continue to work with 5Rights as advisors and spokespeople. Highlights can be found in the pages of this newspaper, but what was

most striking was the increasing number of ideas for design and redesign of services, showing how issues of privacy, bullying, catfishing and sharing could be approached differently. It was wonderful to see so many undeniably brilliant ideas, and we hope to see some of them adopted by businesses.

We want to thank Lucy and David who led the workshops, and Sandra Peon, Ugur Bulbul, Charlene Theophile, Aaliyah Glasgow, Thomas Savage, James Fornara and Izzy Alsina-Reynolds for helping make it happen.

Above all we are grateful to the awesome young people who participated - what you have said will make us think very hard about how to work with politicians and tech companies to make a better digital world.

2015

DELIBERATIVE JURIES

Where young people lead the thinking

In 2015, 5Rights commissioned academics from the University of Leeds and University of Nottingham to deliver 'Youth Juries' across three cities: London, Leeds and Nottingham. Deliberative juries are traditionally used to help those without the knowledge of their rights. They are given information and context, but bring their own experiences to the process to form a collective vision. As one juror remarked, "older people don't realise how vulnerable young people are". The youth jurors' recommendations were compiled into a report, 'The Internet On Our Own Terms', and presented to policymakers in parliament.

“

A LOT OF OLDER PEOPLE TRY TO THINK ABOUT WHAT IT WOULD BE LIKE AS A YOUNG PERSON ON THE INTERNET, BUT THEY DON'T REALISE HOW VULNERABLE YOUNG PEOPLE ARE... IT'S IMPORTANT THAT YOUNG PEOPLE GET THIS CHANCE TO SPEAK FOR OURSELVES”

2016

YOUNG SCOT

Young people reshaping Scotland for the better

5Rights' brilliant partner Young Scot have led the way in digital policy engagement with young people. Supported by the Scottish Government, the Youth Leadership Group's work has been hugely productive and successful. They have hosted conferences, submitted evidence to government consultations, and briefed cabinet ministers, police, NHS and beyond; they have also been invited to meet with product developers, senior civil servants and company leaders. They have published two reports: Our Digital Rights and their Youth Leadership Group Report. As a result of their extraordinary work, the 5Rights framework is the Scottish government's official policy.

“

I CAN'T WAIT TO SEE WHERE THE REST OF OUR INVESTIGATION AND EVIDENCE-GATHERING TAKES US. IT'S AN AMAZING EXPERIENCE GETTING TO BE PART OF SOMETHING SO IMPORTANT... I LOOK FORWARD TO THE FUTURE OF DIGITAL RIGHTS FOR YOUNG PEOPLE”
—Young Scot 5Rights leader

2017

THE ZONE APP

Co-created app that manages your media use

One of our jurors from the Youth Juries had suggested a personal setting that automatically turned off intrusive apps and online services at certain times of day (e.g. night) and in particular places (e.g. school). Her point was that while you know what's good for you, it's hard to have the discipline to keep making this choice. She wanted to make it just once and have it stick. Design agency Fjord at Accenture stepped up to the challenge, and worked with Rosie Higgins and young people to produce first a prototype, then a Minimum Viable Product of the Zone App. The App never went into production but Apple and Android have since introduced some of the features that the young co-designers wanted into their devices – not as child-centred nor as comprehensive as our designers, but we are very proud that our young people can outsmart even Apple and Google's best designers.

2018

BT HOT HOUSE

Co-designing information campaigns around commercialisation

"When [parents] call for dinner it's hard to put it down. I just ask for a minute but sometimes it's more like 5, 10, 15, sometimes an hour". The young participant who noted this concern about addictive, unsaveable games, started something bigger than he imagined... a 'hot house' to co-design solutions to make technology child- and youth-friendly. 12 students came to BT's Hot House and met senior BT staff from engineering, marketing, design, research and user experience departments. Without exception the BT staff found it exacting, shocking and inspiring, and realised the multitude of ways that they had not understood how technology impacts on children and young people. Together they created three designs to help children understand the commercial drivers of technology; a campaign, an avatar that used pop ups to inform, and a game. Unanimously, the avatar was chosen as the winner.

SNAP VISIT

Meeting a tech leader and suggesting product improvements

It started with a 'Speed Dating' session that allowed Young Leaders to understand various professional roles as they questioned engineers, directors and the CEO of Snap. This was followed by '5Rights Question Time' chaired by Callum (14) where they asked challenging questions about how Snap delivered on children's rights, why some design features were socially and emotionally difficult for young people, and made practical suggestions for Snap's future evolution. The Youth Leaders, several of whom were Snap fans, were excited to meet Evan and came away with a very positive view of the team. They were hopeful too that their concerns and suggestions had been heard.

"I AM SO GRATEFUL THAT WE HAD THIS OPPORTUNITY TO ENGAGE WITH SUCH THOUGHTFUL YOUNG PEOPLE ABOUT THE WAY THAT TECHNOLOGY IMPACTS THEIR LIVES"
—Evan Spiegel, CEO and co-founder

ARTS

Demystifying the Age Appropriate Design Code

Book by 5Rights · Illustrations by Nick Hilditch

Demystifying the Age Appropriate Design Code

Why is the Code important?

- The rights of children are routinely ignored in the digital world
- In many cases illegally (e.g. TikTok's Federal Trade Commission fine)
- In almost every case morally (e.g. Facebook's evidence to Parliament on their Service if they are dealing with a minor or a child under 13)

Companies are actively creating ways to track behaviour

resulting in thousands of individual data points – that reveal a child's...

smoking habits, sexual activity, location, mood, interests, friendship groups, break-ups, heartbeats, search, likes and posts, financial status, vulnerabilities and when they are most likely to respond.

As it stands children are offered no specific data protections

Most online service providers **do not** even try to establish the age of their users. Those that do ask users to **self-declare** their age. But when they do tick the box or self-declare – nothing happens. **they are simply treated as if they were adults.**

Even underage children are treated as adult

Have you had a "workplace accident"? **CALL NOW!** Buy a lost box now! **TRY THIS diet plan** READ ME! READ ME! READ ME! **Some kids lie about their age... but virtually 100% of companies fail to check their age...** Meanwhile millions of kids tell the truth – but it makes no difference they still get an adult service.

That is why the regulator introduced The Age Appropriate Design Code

The answer is not to protect children from the digital world, but to protect them within it... This code provides practical guidance on how to design data protection safeguards into online services to ensure they are appropriate for use by, and meet the development needs of, children. Elizabeth Denham CBE, UK Information Commissioner

So if children must be offered data protection... HOW?

You can use hard identifiers, such as a passport or photo ID. You can use a verification service, such as Yoti, Medi (the post office), Verify. You can run a capacity test, that indicates the approximate age of the user. You can give all your users the same high level of data protection that the Code requires. **OR You could just let them say they are a kid and you do the rest...**

Online services that comply with the code will...

- 1 give the child high privacy settings
- 2 turn off all the nudges like autoplay, access notifications, endless feeds
- 3 stop sharing or making the child's data accessible to anyone else
- 4 provide tools, like save buttons, opportunities to opt-out
- 5 take the LEAST amount of data for the LEAST amount of time and get rid of it at the FIRST OPPORTUNITY
- 6 disable auto-recommend for material that is detrimental (fyi, self-harm, pro-anorexia)
- 7 TURN OFF GPS – unless they need it
- 8 fill out a form that shows they have thought about a child's need in advance
- 9 make choices about their service that always put the BEST INTERESTS of the child first
- 10 make sure that a child can be treated like a child

To see the full story, go to www.5rightsfoundation.com/resources

Drama

Created by students during the Terms & Conditions workshop

YOUNG PERSON

I've left all this data lying around. Damn I'm screwed

ADULT

Why do you even care 🤖 you haven't done anything wrong, so there is nothing to worry about.

YOUNG PERSON

Who agrees what is right or wrong? If the Nazis were alive, they would be able to tell who was homosexual

ADULT

I hadn't thought of it like that before 😬

YOUNG PERSON

We're screwed 😬

SECOND YOUNG PERSON

🤖 Because I've known all this, I know I leave things behind, I tend to delete things

YOUNG PERSON

I didn't know what was happening. Its mad that they can see what you're doing. It's like looking into people's private lives. That's an invasion of privacy.

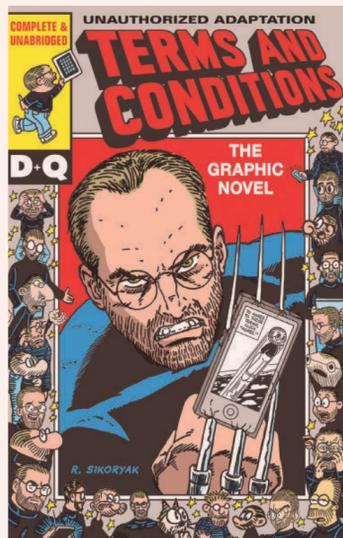
SECOND YOUNG PERSON

They think they know me, but I am worried that it might not be true.

Send a chat

Book review

R. Sikoryak's Terms & Conditions



For his newest project, R. Sikoryak takes the monstrously and infamously dense iTunes Terms and Conditions and turns them into a graphic novel. The iTunes Terms is the contract everyone agrees to – but no one reads. Terms and Conditions creates a fun read – proof, if it were needed, that comics make everything better. But what do the critics say?

WIRED

Terms and Conditions serves as both a digestible guide to the doc and a visual history of comics.

THE INDEPENDENT

"Awesome" and "inspiring" probably aren't the words that leap to mind when you scroll through Apple's iTunes contract – but that's about to change... Artist Robert Sikoryak has been converting the

"unabridged" legal text... into a series of gorgeous comic parodies.

THE HUFFINGTON POST

A remarkable experiment in how we read comics and what we get from them.

THE CREATIVE REVIEW

This creative cartoonist has taken the tediously boring iTunes terms and conditions and turned it into a graphic novel that is actually worth reading.

NEW YORK TIMES

The juxtaposition is hilarious, and we see a Steve Jobs-like character as a stand-in for the heroes of each original work, with the scenes peppered with Apple devices and references alike.

CONSUMERIST

A graphic adaptation of something a lot of people have seen, but almost no one has actually read.

New Documentary

The Great Hack



The Great Hack is a highly charged documentary that exposes the advancing abuse and misuse of every internet user's personal data. The movie confirms that in our technology-driven world, behaviour is being accurately predicted by those who want to change or influence that behaviour for their own profit. The stakes are high. Using recent history – "voter-profiling

company" Cambridge Analytica's influence on Britain's Brexit Movement and on the 2016 election of Donald Trump – filmmakers Karim Amer and Jehane Noujaim sound a call for action. The film contends that data rights are fundamental rights and must be protected. This serious treatment of a complex issue may not engage any but the most mature kids.

OPINION

VOX POPS

There was a strong emphasis on wanting action. Here are some of the views taken on the final day.

What we want from politicians

“

I demand their accountability, where data laws are breached. I demand that tech companies make it more obvious about how they're using any data.”

“

Under the legislation on data rights and privacy, we want you to: ask questions, provide extra security, stop assuming lifestyles, and inform us if our data is being exported”

“

MAKE SOCIAL MEDIA PLATFORMS WARN YOU OF ANY DANGERS. YOU HAVE TO READ TERMS & CONDITIONS TO USE AN APP”

“

I think more laws can be made to make a change, such as enforcing a law making Terms and Conditions no more than 1 page, with everything more easy to read and straight forward to the point, so people know what they're actually signing up for and agreeing to”

“

Make sure social media is more safer and make sure its terms and conditions are visible so everyone can agree to it”

What we want from tech companies

“

MAKE SOCIAL MEDIA LESS ADDICTIVE. RESTRICT UNDERAGE PEOPLE FROM SHARING THEIR DATA. HAVE A SETTING WHERE IT IS SAFE TO KEEP OUR DATA”

“

Notify me if you are using my information and ask me if I'm OK with it!”

“

Make your terms and conditions... short and straight to the point because the way they are represented, they are long and boring and repeat the same thing”

Nudge, ping, share, buzz, like, chat, play, watch...
Give me my attention back!



x-Google Design Ethicist, Tristan Harris, says that “all of our minds can be hijacked. Our choices are not as free as we think they are”. We spend 700,000,000 hours watching YouTube videos that have been recommended to us, via YouTube’s “toxic” algorithm (says the creator of YouTube’s algorithm). 90% of young people hear ‘phantom vibrations’ in their pocket – they think that their phone has buzzed when it hasn’t. We check our phones on average 2,617 times every day, and it takes us 25 and a half minutes to regain our focus once we have been distracted.

We are all being hooked, trained, and ordered to act impulsively with every click, swipe, like, comment, notification, buzz, or ping. Companies use behavioural psychology to understand how we react to things, and what we are likely to do next, so that they can nudge us to do things they will benefit from. When did you last find yourself quickly checking the time on your phone, only



to find yourself also checking the weather, your Instagram and TikTok feeds, having conversations with seven different friends over Snapchat, FB Messenger, WhatsApp, and scrolling through a news or shopping site?

Young people say that while their devices can be entertaining and make them feel safer, they also feel distracted, consumed, annoyed, and tired.

One young person said “I decide when I disconnect”, and they have some smart ideas to stop apps from being so distracting.

“If you reach a specific amount of screen-time, the keyboard will disappear so you can't text and so will the call button in WhatsApp. If in a real emergency you need to call, use the normal call feature on the phone.” “If you go over your screen-time limit, you get a game penalty so that you don't earn as much, or any rewards” “Cut down the screen-time allowance by half each day.” “Game developers: make the controller or the screen stop working for three hours to keep them out so they can do other activities”. ♦

The price of a good reputation



Children have a say on the value of their reputation



of the troublesome issues for young people is the idea that their personal data is kept forever. The understanding that what you do as a child may impact on your adult life did not strike many as very fair.

But when they considered what they might be willing to pay to protect their reputation things got all together more complicated. Some put a large value on their reputation (£10,000 and £50,000), others not so much (£50, £500 and £1,000) and some abstained to put a sum.

But perhaps the most surprising was from the person who wrote “I don't believe it should be based on a person's ability to finance. This makes it a class issue.”

I don't believe it should be based on a persons ability to finance. This makes it a class issue.

This has been expressed widely. It is not fair because everyone should have good reputation. Even if you don't have money, you should always know that when you grow up you can have that option - which brings us to the money.

The average 13-year-old gets £11.20 in a week, which (once you take out the people who thought their

reputation was priceless) means that each of the young people felt their reputation was worth months or years of income.

It seems that the value that young people place on their reputation is not matched by the ease with which it is lost. In the case of Paris Brown and her 14 year old tweets, the price was her job. ♦

The case of Paris Brown

Most children post things that they regret, but Paris Brown's story is more dramatic than most.

Imagine you are young, a bit drunk, you go out, something happens and you just decide to go on your phone and write a tweet. It was a bit racist, and it wasn't that nice. 10 years later you are going for a job. It's a good job, and it would give you a lot of money. They search your name up, and find the tweet. You can't get the job, even though are the best person for it. You feel let down by what you did when you were young, drunk, and couldn't imagine the consequences.

That's exactly what happened to Paris Brown, elected the UK's youngest and first Youth Police Commissioner, when her tweets came to light shortly after being appointed. As the backlash started, she dramatically resigned in a tearful press statement apologising for drunken and racist tweets when she was 14 years old.

Should Paris Brown have the right to remove her tweets because she is 14, or should she be held responsible? If you have unacceptable views when you are a child, might you grow up and know better, or is it 'once a racist always a racist'? Furious debates took place in the 5Rights workshops.

“She was only like 16 when it happened, and she was still a child technically, maybe when she is over 18 you can hold her accountable for what she has done, but she was young, she was still going through education.”

“She should think before she acts, because whatever you write on Twitter, could have a massive impact not only on young people, but also adults. It could have a massive influence around the world.”

“There should be a punishment at the time... she did this ages ago, like years before she got the job. Why can't it just be forgotten about? Yes. Because the media got involved.”

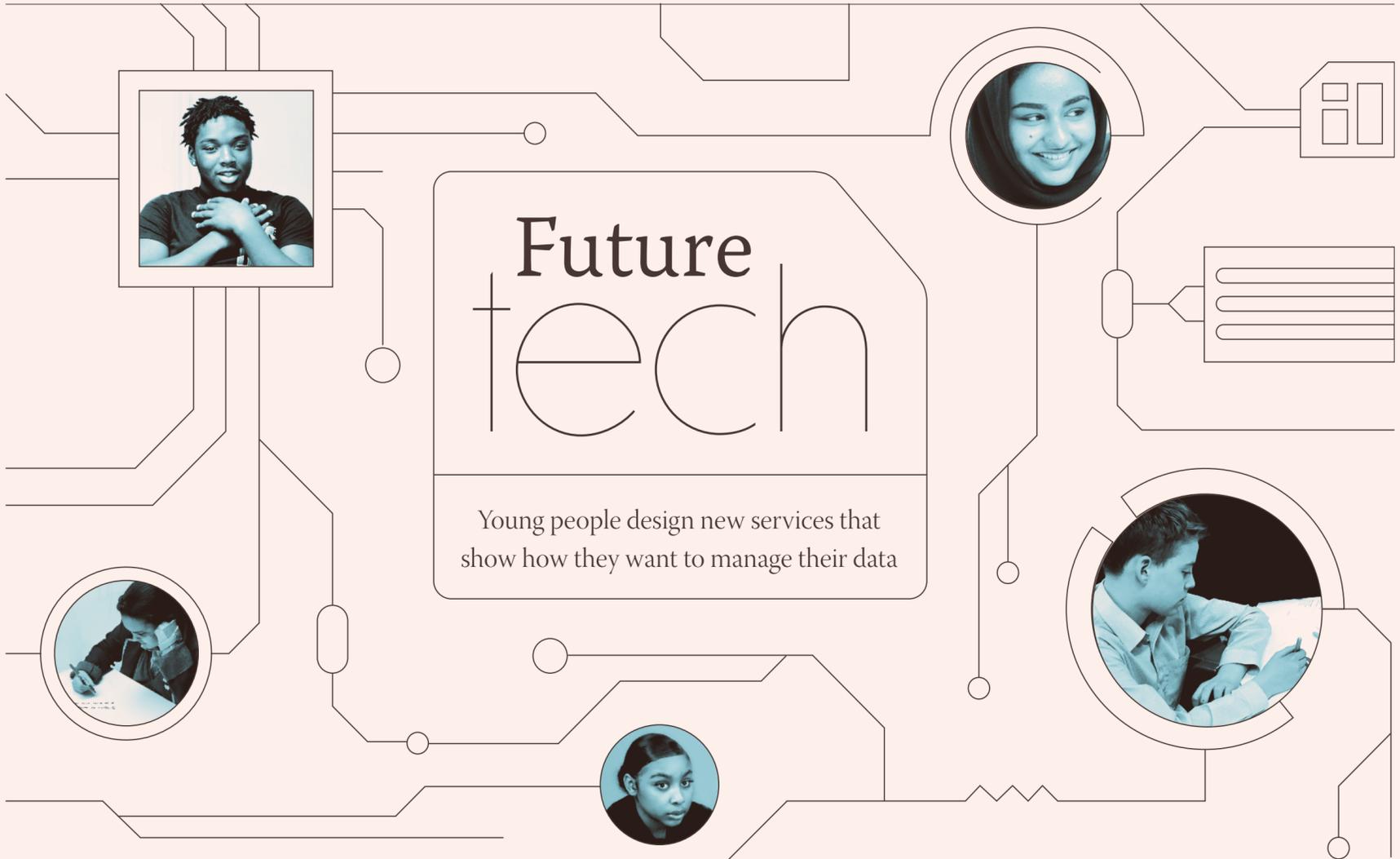
“She has a bad influence on young people - when she said all of this to all people, young people were looking up to her... she was working for the police. Do we want to look up to someone who has been doing something bad?”

Children should have the right to remove what they themselves have posted, but does this mean we have to forgive offensive posts? It turns out that the Data Literacy Commissioners think so – well, most of them. ♦

HOW MANY WEEKS POCKET MONEY YOUR REPUTATION IS WORTH

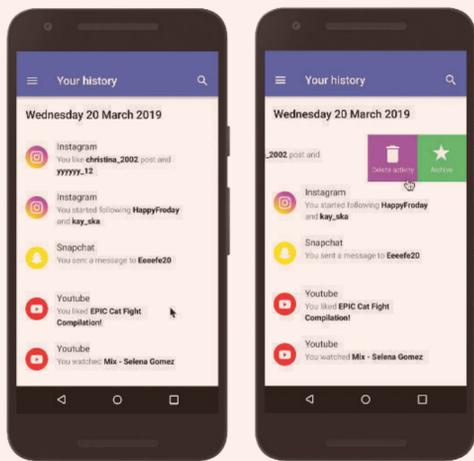


BUSINESS INNOVATION



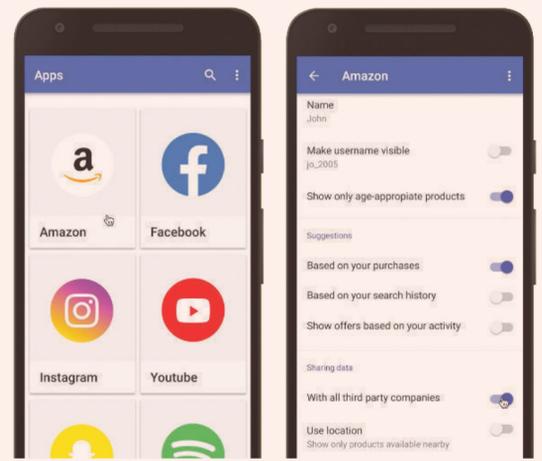
YOUR STORY

This app collates users' internet history, so that they can see they are doing each day, and where they are spending their time.



PERMISSO

This app allows users to quickly access permissions for each app they use in one click. They can choose if they want to share their location, if they want suggestions to be made about their preferences and if their data can be shared with others.



WIPED

Wiped enables users to be in better control of what their friends are posting about them. The app allows users to check what's being posted about them by others, and enables them to delete it permanently if required. This way, a user is fully in charge of their online story.



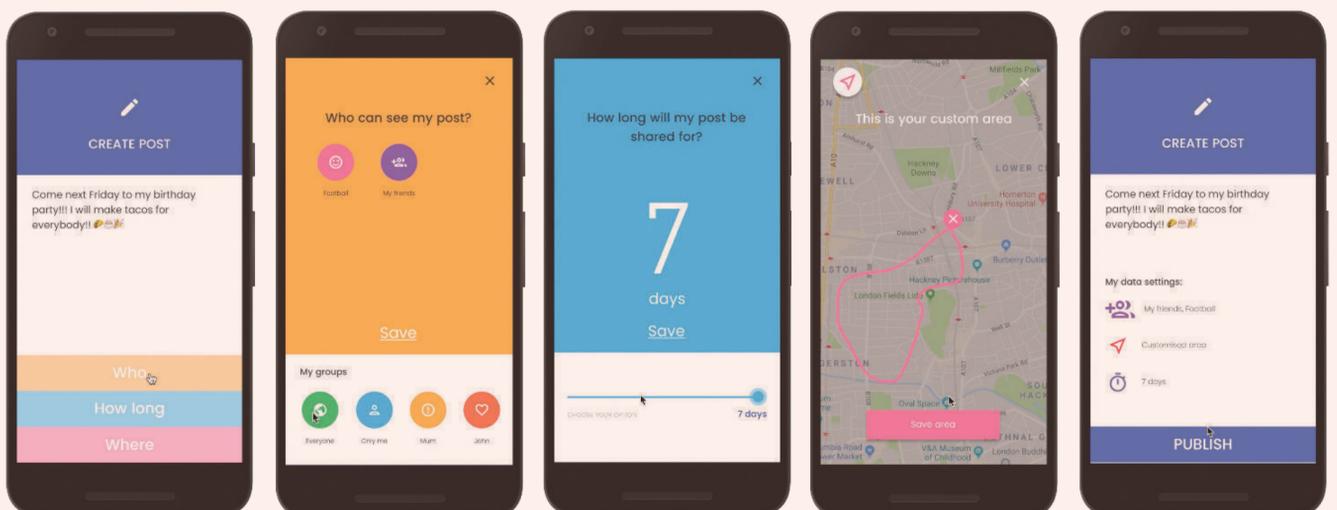
INFOBOOTH

Infobooth is a plugin that lets users clearly see what information is being captured about them when they browse the web. Settings can be changed with just one click.



MY DATA

This app, in the easiest way possible, lets a user decide who gets to see what they post and for how long. The app also enables a restriction on content being shared beyond a particular location.



MARKETS

CHILDREN

61% of children under 13 have a social media account, despite 13 being the minimum joining age for most apps



1/3rd of all internet users in the world are children

71% of 12-15 year olds are allowed to take their phone to bed

90% of students suffer from 'phantom vibration syndrome' (thinking their mobile phone is vibrating in their pocket)

55K children are classed as having a gambling problem in the UK

50% of 14-15 year-olds feel addicted to the internet

SOCIAL MEDIA

48% of UK girls aged 11-18 have experienced harassment or abuse on social media

73% of girls have taken specific action to avoid being criticised on social media

91% of respondents to Girlguiding's survey said that there should be age limits on social media, and 45% said there should be ways to check the age of a young person using social media platforms

The top 15 social media privacy policies require a university-level reading ability

98% uni students 'agreed' to give away their first born child when they accepted (but didn't read) the terms and conditions

PARTICIPATION

82% of young people care about making the world a better place

74% believe that they can make a difference

ONLY 8% of young people campaigned for something they believed in

ONLY 6% ad been involved in a youth advisors group

ONLINE DATA

2,617 times per day the average person touches their phone

25'30s average time to get back to a task after being interrupted

TRACKING

14K times per day weather apps check and update a user's location

17K children have been given location tracking watches by the Chinese government

153/1000 audio clips were recorded from people's phones to Google, without them knowing

two thirds of identity fraud will occur because of parents over-sharing details of their children online

VOICE RECOGNITION

3Billion is the number of voice assistants in use (such as Alexa, Siri)

Amazon patented technology that can analyse your voice to understand how you are feeling, including whether you are sick or depressed

ALGORITHMS

70% of all YouTube videos watched are videos that users haven't actually searched for

700m hours spent watching videos that YouTube's algorithm recommends each day

100m Google's algorithms block 100 million spam messages every day. But to do this, they have to read your emails

FACEBOOK'S LIKES CAN ACCURATELY PREDICT

- Race
- Ethnicity
- Sexuality
- Gender
- Likelihood of parental divorce
- Religion

FROM 70 thumbs up an algorithm can know you better than a friend

FROM 150 thumbs up it can know you better than a family member

TECH COMPANIES

TECH COMPANIES IN TOP TEN MOST VALUABLE BRANDS IN 2019

Apple (Technology)	\$205.5B
Google (Technology)	\$167.7B
Microsoft (Technology)	\$125.3B
Amazon (Technology)	\$97.0B
Facebook [Instagram and WhatsApp] (Technology)	\$88.9B
Coca-Cola (Beverages)	59.2B
Samsung (Technology)	\$53.1B
Disney (Leisure)	\$52.2B
Toyota (Automotive)	\$44.6B
McDonald's (Restaurants)	\$43.8B

MONTHLY ACTIVE USERS

Facebook	2.4 Billion
YouTube	1.9 Billion
WhatsApp	1.5 Billion
Instagram	1 Billion
Twitter	330 Million
Snapchat	301 Million

DAILY ACTIVITY

WhatsApp messages	60 Billion
Snapchat video views	10 Billion
YouTube video views	5 Billion
Facebook shared posts	4.75 Billion
Tweets	140 Million
Instagram Posts	95 Million

ALGORITHMS

\$250m Pokemon Go was paid for driving 500 million players to McDonalds

1.8% Facebook's market value increase after it was fined for misusing its users' data

€20m is the maximum fine for breaking data protection

Sources include: ars technica, The Baffler, BBC News, Business Insider, Centre for Humane Technology, 'Computers in Human Behaviour' journal, The Guardian, MIT Technology Review, NBC News, NewScientist, The New Statesman, The New York Times, The Next Web, PNAS, Tech Crunch, The Telegraph, The Times, The Verge, Voicebotai, wbur and reports by The Children's Society, GDPR Associates, Girlguiding, Ipsos MORI, Ofcom, Plan International, and Unicef.



etting young people ready for work is critical for the UK's economy to prosper. That is the message from business, parliamentarians and educators – but it doesn't seem to be getting any better. New innovations are being developed for businesses and society but there is a lack of people with digital skills who can use them. Accenture, a major business service company, says that it may cost the UK as much as £141 billion in future growth. Young people are often called 'digital natives' as if they are born equipped with digital and life skills. Yes, they seem to have fast thumbs that fly across the screen but the skills that are missing are not how many Instas you can post in an hour. The top skills in demand are Machine Learning, Cryptocurrency, Software as a Service and Artificial Intelligence (AI) and there are fortunes to be earned for those who can master them. What's more, all roles (even very traditional jobs like medicine, farming, and teaching) will need employees who have the skills to understand digital systems even if they don't require programming and computer science knowledge – this is called the digital skills gap. Yet many young people don't possess digital literacy skills, making it difficult to see how the new workforce will gain skills and how these young people will find suitable employment.

WHERE TO START? 5Rights Data Literacy programme is an amazing place to start understanding how technology works, and what



Are young people 'work ready'?

it is trying to do. For example, the design element in our workshop where privacy systems are turned into Apps (see the Technology page) is the first step to becoming a User Experience Designer – but there is more to be done.

HACKATHONS IN SCHOOLS. A hackathon is where a group of people with different specialist skills get together to solve a problem. They have been done in some schools – so why not all schools?

The great thing about a hackathon is that you learn the most important thing – you don't have to be good at everything to be in tech, you just have to find out which bit you're good at because product development teams all work together. You might be good at something quite surprising. A product development team might include at least one Product Team Manager, Visual Designer, User Experience Designer, Programme

Developer, Content copywriter, a Researcher and a Marketing Associate. The team may also need experts from the world of work that the technology is for – so in financial innovation (FinTech) you may need an economist, financial services expert or mathematician. For innovations in schools and education settings (EdTech) you may need teachers, subject specialists, the Department of Education, or even a pupil to see if it works.

MIX UP YOUR SUBJECTS. Tech companies like people who are technically proficient, but what they love is people who are creative and critical thinkers. Yes, computer science is a brilliant 21st Century subject to have under your belt – but so are Art, Design, English Language, Computational Thinking, and even Drama. What companies are looking for are people who can work together, share a project with others, see something

through from beginning to end – and most of all solve problems. In the end, engineering - using computers, a pencil or a calculator – is the art of solving a problem, for which you need creative, critical and collaborative thinking

IT'S NEVER TOO SOON. Business leaders have urged parents and teachers to understand that we need to encourage children to start thinking about technology as a skill, not only as entertainment, right from the beginning. Start at nursery and keep on going, through primary and secondary – by the time you are leaving school it may already be a missed opportunity. But it's not just business, the UK is one of the world leaders in 'tech-for-good' – that is technology that is specifically designed to make the world better. Technology can be used to improve the NHS, the Police, and Local Councils. There may be ways in which we can help the elderly or the young, and it might be anyone who has those ideas – all they need is a way to explain how it might work and a product team to build it.

IT'S AN EXCITING TIME. Most important in tackling the skills gap is to remember that technology is not for any one kind of person, it's for us all. It can be used for almost any purpose. It can be built by anyone – in fact there is considerable evidence that the more diverse and experienced a product team is, the more successful it will be in anticipating what users might like. So whoever you are, if you find the right problem, you could be the one to solve it. ♦

5Rights

FOUNDATION

As a charity, we work for systemic change to ensure that the digital world caters for children and young people by design and by default. The enormous potential of technology will only be realised when it is designed with children in mind, which is why we call for companies to anticipate children in the architecture of their services, for policymakers to require that children are supported on- and off- line, and that children are empowered to navigate the digital world creatively, knowledgeably and fearlessly.

OUR PROJECTS INCLUDE:

Campaigning for the introduction of the UK Age Appropriate Design Code: A piece of data protection legislation that will give children and young people higher levels of data protection by default. The Code offers a glimpse of a future in which children's data will only be used when it is in their 'best interests'.

Children's Rights: We are working on behalf of the UN Committee on the Rights of the Child to create a General Comment on the Convention on the Rights of the Child, which will reflect the international consensus on the requirements for a safe childhood, and set out how countries should implement and promote children's rights online.

Creation of a Global Exemplar Child Online Protection Policy: This policy recognises children and young people online, and outlines principles that promote their rights, safety, and wellbeing. Following the adoption of 5Rights' Child Online Protection Policy in Rwanda in June 2019, we have been asked to update the policy for a global audience.

Universal standards for online contracts: Children and young people are treated like adults when they sign up to websites and apps. Working with the IEEE, we will create an age-appropriate standard for businesses to ensure that children's rights and welfare have been considered.

Read more about our work at
www.5rightsfoundation.com



We would like to thank both We Are Snook for its help in planning and coordinating the Workshops of this Commission, and all the young people, teachers, and school leaders who took part.