## Behind the scenes at the Museum of Selfies

1. Museums are no longer just places to see art – they're venues to take selfies posted with #museum. So why not call out the elephant in the room? That's the philosophy behind <u>the</u> Museum of Selfies, a pop-up exhibition which opens next month in Los Angeles. The exhibition traces the history of self-portraits from the prehistoric era to 2006, the year Paris Hilton claims to have "invented" the selfie. There are self-portraits in 21st-century art, mirror selfies by Jacqueline Kennedy in the 1960s, food selfies from Instagram, iconic skyscraper selfies. Naturally, there is an entire section devoted to "the art of the narcissist".

2. The California game designers Tommy Honton and Tair Mamedov came up with the idea last year after learning that more people take selfies with Leonardo da Vinci's Mona Lisa in the Louvre in Paris than photograph the artwork itself.

3. The 8,000 sq ft museum, which is set in a former department store, will be divided into two sections. The first is a timeline of the selfie from the first cave painting to Facebook and cellphone cameras. "The internet revolutionized the selfie, said Honton. "You can take a selfie with a Polaroid, but unless you can share it, or upload it quickly, what effect will it have?" he asks. "Selfies are universal – it's culturally represented."

4. The second part of the exhibition is a series of contemporary artists who have made artwork inspired by selfie culture, though their names are currently under wraps. More than just a theme park, though, the show aims to be educational. Did you know the first self-portrait photograph was taken in 1839 by the American lamp manufacturer Robert Cornelius? He had to stand still for 15 minutes to capture the daguerreotype image. The term "selfie" was Oxford Dictionaries' word of the year in 2013, but it was first used in 2002 in an online forum in Australia. Today, more than 2m selfies are uploaded daily.

5. But while you might think a space like this is just another digitally driven exhibition, the museum has installations where people can make their own selfies. There are photo-op setups and a gym-like setting where guests can walk into a mirror showing six-pack abs or a "crazy pretzel" yoga pose. "It's all sculpture. We wanted things to be physical, tactile and real," said Honton.

6. But should we be worried by selfie culture? "We all have egos. Selfies aren't bad unless they're at the sake of your mental health, sanity or your life," said Honton. That concern taps into an eerie section of the museum, which is devoted to death selfies. More than 300 people have died from selfie-related accidents, including drowning from taking selfies in water, falling on to railway tracks or tumbling off the tops of buildings. "Why do people do this? Is it worth dying for a photo?" asks Honton. "We try and look at the psychology. We hope people will ask 'why am I taking this photo?' and 'why do people do as they do?'"

7. The most-liked photos on Instagram are not selfies – Beyoncé's twin pregnancy announcement last February garnered 11.2m likes, Selena Gomez's kidney transplant in September got 10.5m likes, and the Portuguese soccer player Cristiano Ronaldo's announcement of his fourth child's birth is currently the most-liked photo on Instagram, with 11.29m likes.

8. The museum hopes to have its viewers question why we take and post photos in the first place. "Selfies are easy to document a trip, a moment, something to brag about," said Honton. "It makes it easier to rely on a photo as a memory, but does a selfie make it more personal, or is it just to hoard them? People use it as a replacement for experiencing the real thing."

By Nadja Sayej, The Guardian, February 2018

## The Guardian

# Britons less trusting of social media than other major nations

Majority in UK favour stronger regulation of tech companies such as Facebook and Twitter

Alex Hern, Fri 3 May 2019 06.00 BST

Britons trust social media platforms less than any other major nation and favour stronger regulation of Silicon Valley's technology companies, according to a survey of 23 countries.

More than four in five Britons distrust platforms such as Facebook and Twitter, with other developed nations such as France, Germany and the US not far behind. The attitudes contrast sharply with those in middle-income countries such as Brazil, India and Mexico, where trust is far higher.

The findings are part of the YouGov-Cambridge Globalism Project, a wide-ranging poll of more than 25,000 people on a range of topics including populism, globalism and technology.

Respondents were asked how much they trusted information from various sources, including national broadsheet newspapers, social media and online-only news websites. Britons were the least trusting of all of those media: just 12% trusted information from social media, compared with 83% who had little or no trust in platforms such as Facebook and Twitter.

In all, 23% of Americans said they trusted information gained from social media, as did 20% of Germans, and 28% of Canadians. In developing nations, however, the trust was much higher: a majority of Indians (52%), Saudis (52%) and Thais (52%) trusted information from social media – as did 51% of Poles.

Just two sources of information were trusted by a majority of Britons: national TV news channels (61%) and local news organisations (54%). Only the US was more mistrusting of information sources in general. According to the polling, local news organisations are the sole news sources that are trusted by a majority of Americans (58%).

The deep mistrust of social media in the UK and other rich nations comes after a difficult spell for the sector in which companies have been accused of eroding privacy, harming children and undercutting democracy.

The Cambridge Analytica scandal highlighted big tech's ability and willingness to harvest data and subvert democracy, while the Christchurch shooting is the latest example of terrorism encouraged by online radicalisation.

YouTube has continually been found showing inappropriate content to children, and all the social networks have been implicated in nation-state information warfare, beginning with Russian trolls uncovered on Twitter after the US election.

Episodes such as these explain why Britain is leading calls for increased levels of regulation of social media and technology companies. More than 60% of Britons think those businesses should be regulated more than they are now, compared with just 6% who think there is too much regulation and 15% who think there is the right amount.

The calls for stronger regulation come as the UK government is consulting on legislation intended to make Britain "the safest place in the world to go online". The Online Harms white paper proposes imposing a new duty of care on companies that host user-generated content online, and landing them with strong penalties, potentially levied personally on individual executives, if they fail to live up to that duty.

Appetite for regulation appears broadly correlated with beliefs about the extent of the power and influence technology companies have. Two-thirds of Britons polled said influence was too high, again the highest proportion in the world. At the other end of the scale, Japan was again the most comfortable with technology companies, with just 26% expressing concern about that power, compared with 29% who felt it was just right and 19% who felt the sector should have more power.

Germany, for example, has some of the world's strictest regulations for technology companies, which came into effect in the past few years.

As an EU member, the country is covered by GDPR, a pan-continental data protection law that allows the authorities to impose steep fines for violations. It also has strong domestic regulations, passed in June 2017, requiring social networks to remove "obviously illegal" posts within 24 hours after they have been told about them, or face fines of up to  $\notin$ 50m.

The YouGov survey also suggests that despite widespread use of social media across the world, people generally do not see the platforms as a tool for keeping up with news and current events.

## EU seeks temporary deal over refugees and migrants rescued at sea

### Commissioner calls for end to ad-hoc solutions after latest delay in letting ships dock

### Jennifer Rankin, Tue 15 Jan 2019, The Guardian

The European Union is attempting to agree on a temporary deal on the handling of migrants and refugees rescued at sea, after a push for wide-ranging reforms before the European elections failed to win support.

Diplomats are studying plans from the European commission for a temporary mechanism to manage rescue boats, after a series of incidents in which vessels were unable to dock in any Mediterranean port.

The latest case concerned 49 people who were at sea for almost three weeks onboard two German NGO ships, SeaWatch 3 and Sea Eye. They were allowed to disembark in Malta after a deal was struck to disperse them among eight EU member states.

Speaking in the European parliament on Tuesday, the European commissioner for migration, Dimitris Avramopoulos, said the incident was shameful and called for an end to "unorganised ad-hoc solutions".

A spokeswoman said: "The commission stands ready to work with member states in order to set up temporary arrangements that can ensure solidarity with the most exposed EU countries, which can serve as a bridge until the new Dublin regulation becomes applicable."The Dublin regulation is a draft EU asylum law that has stalled over proposed quotas to distribute asylum seekers around the bloc. EU legislators – ministers and MEPs – have given up hope of a breakthrough before European elections in May.

The latest idea for a temporary fix would not include quotas, nor prejudge decisions on the Dublin regulation, according to one EU source. Elements could include EU funds to return refused asylum claimants to their home countries. The plan has backing from around 10 member states, including France, Germany, Spain, Portugal and the Netherlands, but has run into opposition from Hungary, which argues that the policy would encourage more people to attempt the sea crossing.

The commission said it was not searching for unanimity but for a "critical mass of countries" to get the plan off the ground.Avramopoulos held separate meetings with Italy's far-right deputy prime minister, Matteo Salvini, and prime minister, Giuseppe Conte, in Rome on Monday to discuss the plans. The commissioner described the meeting as constructive; the Italian government has yet to comment.

Since Salvini closed Italian ports to NGO rescue boats last summer, EU countries have been scrambling to come up with ad-hoc arrangements whenever a vessel is stranded. The delays are seen as adding to the distress of those onboard and damaging to the EU's credibility.

"From a political perspective, with every crisis that occurs in the Mediterranean the political leverage of the EU is diminishing rapidly," said Hanne Beirens, an associate director at the Migration Policy Institute in Brussels.

She said the EU's growing resistance to people coming from Syria had prompted other governments to question whether they should help. "We saw third countries that have been traditionally hosting a lot of refugees, in the Middle East or Kenya, becoming really resistant [and asking]: 'OK, why should we continue to do this and should we not get more financial help?'

Numbers of people crossing the Mediterranean has fallen sharply since the peak of the crisis, although Spain has seen a surge in arrivals. Beirens said these relatively low numbers could reduce the incentive to reach an agreement, but that a coalition of "the usual suspects" could strike a deal. France, Germany, Spain, Portugal, the Netherlands, Luxembourg, Malta and Ireland have typically been among the countries volunteering to take in refugees.

"I expect that de facto there will be some kind of operational agreement because [officials] cannot spend days on the phone each time," she said. "The question is how long it takes those ad-hoc arrangements to become more long-lasting."

## How common is sexual harassment?

1. For social scientists the apparent epidemic of propositioning, pinching, groping and flashing that is gripping America brings a rare opportunity to observe a new norm, around how men behave towards women, being created in real time. First though, they must figure out the extent of the problem. The most extreme example – rape – is hard enough to count. Government statistics produced by the Centres for Disease Control and Protection suggest that one in five women and one in 60 men have been a victim of rape or an attempted rape in their lifetime. On the other end of the scale, sexual harassment – a charge that rarely carries criminal punishment – is far more common, and harder still to count.

2. It is also a fairly new phenomenon, in the sense that there was no phrase that described it until the late-1970s. That coincided with women's growing importance in the labour force as their share of jobs rose from 33% to 42% over the preceding two decades. A formal legal definition arrived in 1980 when the Equal Employment Opportunity Commission (EEOC), a federal agency, stated that unwelcome sexual advances which affected an individual's work were grounds for a complaint.

3. The law was slow to take hold. Just 16 cases of sexual harassment were received between 1980 and 1985. But after a Supreme Court ruling in 1986 decided that sexual harassment was covered by the 1964 Civil Rights Act, and held companies liable for the harassment of employees even if they were not themselves aware of it, the number of EEOC harassment cases shot up. In the intervening 30 years there have been 400,000 complaints against companies. Even before the Harvey Weinstein story broke the dam, the number of cases had risen by 5% since 2014.

6. Yet since the majority of sexual harassment goes unreported, its true prevalence can only be guessed. A 2016 report by the EEOC provided a range of 25%-85% for the share of women who have faced sexual harassment at some point in their working lives. Victims tend to be young, junior and working in male-dominated industries. They are overwhelmingly women: just 17% of EEOC sexual harassment cases are brought by men. Once their relative workplace status and occupations are accounted for, non-white women are no more at risk of harassment than whites.

7. Training staff to prevent sexual harassment, which companies often do to lower their risk of being sued, has been ineffective. The most important single thing is for organisations to have a credible threat of sanction for the perpetrators. That also means protecting staff who speak out. Lilia Cortina, a professor of women's studies at the University of Michigan, finds that this is rarely done well. To that end the EEOC has begun emphasising the role of what it calls "bystander intervention"—a technique shown to be effective in sexual assaults on university campuses.

8. The creation of new norms around acceptable behaviour is likely to prove more effective. And there is already evidence that attitudes to harassment are changing. YouGov, a pollster, asked Americans on behalf of *The Economist* about their views on acceptable physical contact between the sexes (see chart). Younger men are likely to be more respectful than older men in their behaviour towards women, and they are also more likely to agree with women about what is acceptable. On this subject at least, younger Americans are more conservative than their elders.



## Huge reduction in meat-eating 'essential' to avoid climate breakdown

Major study also finds huge changes to farming are needed to avoid destroying Earth's ability to feed its population.

Damien Carrington The Guardian 10 October 2018

Huge reductions in meat-eating are essential to avoid dangerous climate change, according to the most comprehensive analysis yet of the food system's impact on the environment. In western countries, beef consumption needs to fall by 90% and be replaced by five times more beans and pulses.

The research also finds that enormous changes to farming are needed to avoid destroying the planet's ability to feed the 10 billion people expected to be on the planet in a few decades. Food production already causes great damage to the environment, via greenhouse gases from livestock, <u>deforestation</u> and <u>water shortages</u> from farming, and <u>vast ocean dead zones</u> from agricultural pollution. But without action, its impact will get far worse as the world population rises by 2.3 billion people by 2050 and global income triples, enabling more people to eat meat-rich western diets.

This trajectory would smash critical environmental limits beyond which humanity will struggle to live, the new research indicates. "It is pretty shocking," said Marco Springmann at the University of Oxford, who led the research team. "We are really risking the sustainability of the whole system. "Feeding a world population of 10 billion is possible, but only if we change the way we eat and the way we produce food".

The new study follows the publication of a landmark UN report on Monday in which the world's leading scientists warned there are just a dozen years in which to keep global warming under 1.5C, beyond which even half a degree will significantly worsen the risks of drought, floods and extreme heat. The report said eating less meat and dairy was important but said current trends were in the opposite direction.

The new research, <u>published in the journal Nature</u>, is the most thorough to date and combined data from every country to assess the impact of food production on the global environment. It then looked at what could be done to stop the looming food crisis. Springmann added thatt dietary and technological change [on farms] are the two essential things, and hopefully they can be complemented by reduction in food loss and waste." About a third of food produced today never reaches the table.

The researchers found a global shift to a "flexitarian" diet was needed to keep climate change even under 2C, let alone 1.5C. This flexitarian diet means the average world citizen needs to eat 75% less beef, 90% less pork and half the number of eggs, while tripling consumption of beans and pulses and quadrupling nuts and seeds. This would halve emissions from livestock and better management of manure would enable further cuts.

In rich nations, the dietary changes required are ever more stark. UK and US citizens need to cut beef by 90% and milk by 60% while increasing beans and pulses between four and six times. However, the millions of people in poor nations who are undernourished need

to eat a little more meat and dairy.

Reducing meat consumption might be achieved by a mix of education, <u>taxes</u>, <u>subsidies for</u> <u>plant-based foods</u> and changes to school and workplace menus, the scientists said.

To halt deforestation, water shortages and pollution from overuse of fertiliser, profound changes in farming practices are needed. These include increasing crop yields in poorer nations, more universal water storage and far more careful use of fertilisers.

All the diet and farming options are already being implemented in somewhere in the world, said Springmann. In the Netherlands and Israel, fertilisers and water are being better used, while big cuts in meat consumption are being seen among young people in some cities.

But a global change is needed, he said: "I think we can do it, but we really need much more proactive governments to provide the right framework. People can make a personal difference by changing their diet, but also by knocking on the doors of their politicians and saying we need better environmental regulations – that is also very important. Do not let politicians off the hook."

Nature crisis: Humans 'threaten 1m species with extinction' By Matt McGrath 6 May 2019 BBC News (abridged version)

On land, in the seas, in the sky, the devastating impact of humans on nature is laid bare in a compelling UN report. One million animal and plant species are now threatened with extinction. Nature everywhere is declining at a speed never previously seen and our need for ever more food and energy are the main drivers. These trends can be halted, the study says, but it will take "transformative change" in every aspect of how humans interact with nature. From the bees that pollinate our crops, to the forests that hold back flood waters, the report reveals how humans are ravaging the very ecosystems that support their societies. The brief, 40-page "summary for policymakers", published today at a meeting in Paris, is perhaps the most powerful indictment of how humans have treated their only home. It says that while the Earth has always suffered from the actions of humans through history, over the past 50 years, these scratches have become deep scars.

The world's population has doubled since 1970, the global economy has grown four-fold, while international trade has increased 10 times over. To feed, clothe and give energy to this burgeoning world, forests have been cleared at astonishing rates, especially in tropical areas. Between 1980 and 2000, 100 million hectares of tropical forest were lost, mainly from cattle ranching in South America and palm oil plantations in South East Asia. Faring worse than forests are wetlands, with only 13% of those present in 1700 still in existence in the year 2000. Our cities have expanded rapidly, with urban areas doubling since 1992.

"Species are going extinct at a faster rate than we've seen for millions of years" - Laura Foster reports. All this human activity is killing species in greater numbers than ever before. According to the global assessment, an average of around 25% of animals and plants are now threatened. Global trends in insect populations are not known but rapid declines in some locations have also been well documented. All this suggests around a million species now face extinction within decades, a rate of destruction tens to hundreds of times higher than the average over the past 10 million years.

The assessment also finds that soils are being degraded as never before. This has reduced the productivity of 23% of the land surface of the Earth. Our insatiable appetites are producing a mountain of waste. Plastic pollution has increased ten-fold since 1980. Every year we dump 300-400 million tonnes of heavy metals, solvents, toxic sludge and other wastes into the waters of the world.

The report's authors say there are a number of direct drivers of which land use change is the primary one. This essentially means the replacement of grassland with intensive crops, or replacing ancient woodland with a plantation forest, or the clearing of forests to grow crops. Since 1980, more than half of the increase in agriculture has been at the expense of intact forests. It's a similar story at sea. Only 3% of the world's oceans were described as free from human pressure in 2014. Fish are being exploited as never before, with 33% of fish stocks harvested at unsustainable levels in 2015.

Researchers say the loss of nature will have major implications for humans. The authors looked at a number of scenarios for the future, including business-as-usual, but also examining options that were more based on sustainable practices. In almost all cases, the negative trends for nature will continue to 2050 and beyond. The only ones that didn't continue towards ecological disaster involved what the scientists term "transformative change". The study doesn't tell governments what to do, but gives them some pretty strong hints.

One big idea is to steer the world away from the "limited paradigm of economic growth". They suggest moving away from GDP as a key measure of economic wealth and instead

adopting more holistic approaches that would capture quality of life and long-term effects. They argue that our traditional notion of a "good quality of life" has involved increasing consumption on every level. This has to change.

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# The great inaction

## Climate change is a problem of unprecedented scope and intractability. Can it be overcome?

**I** T IS MORE than a quarter of a century since the leaders of the world, gathered in Rio de Janeiro in 1992, committed their countries to avoiding "dangerous anthropogenic interference in the climate system" by signing the UN convention on climate change. The case for living up to their words has only become stronger. The level of carbon dioxide in the atmosphere grows unremittingly. Average global temperatures have risen, too, to about 1°C above those of the pre-industrial era. The science that links the two is incontestable. Recent extreme-weather events, from floods in Hanoi to fires in California, were made more likely by the change that the climate has already undergone. Things

Yet when the parties to the convention on climate change meet again in Katowice, Poland, on December 2nd, it will be against a backdrop not just of rising temperatures but also of rising despair. The problem is obvious; the stakes are huge; solutions are within reach. So why is the response inadequate?

One reason is special interests. A formidable lobby exists to warn of the dangers of climate change. But when it counts—as, say, in Washington state's recent ballot initiative on a carbon tax—its antagonists in the fossil-fuel industry smack a chequebook more forcefully on the other side of the scales. On the right that has bred a culture which flatly rejects the evidence.

But the chief reason is that the world has no history of dealing with such a difficult problem, nor the institutions to do so. The harm done by climate change is not visited on the people, or the generations, that have the best chance of acting against it. Those who suffer most harm are and will be predominantly poor and in poor countries. The people called on to pay the costs of reducing that harm are and will be mostly much better off. The *gilets jaunes* angry at increases in French fuel taxes (see Europe section) and the family which in 20 years will be forced from land in Mexico by drought know nothing of each other. But the protester does know that such taxes are not being raised in America or Russia.

The better off are more able to adapt to climate change than the poor, and thus have less cause to avoid change. And making the poor wealthy enough to adapt involves economic growth that is still mostly powered by fossil fuels. Although no one should be asked to forgo that growth, it has consequences.

What might produce a moment of clarity to break this impasse? One possibility is the sheer impact of climate change. Geophysical features of Earth are already being redrawn. The dry edges of the tropics are heading polewards at about 50km a de-

will only get worse-perhaps catastrophically so.

In a sense the world is already equipped for the task at hand. Wind and solar power have, after huge subsidies, joined nuclear reactors and dams as affordable ways of generating gigawatts of electricity without burning fossil fuels. As our Technology Quarterly this week shows, parts of the energy system not easily electrified—some forms of transport, industrial processes like making steel and cement, heating offices and homes—could also be decarbonised with coming technologies. And policymakers have tools to bring about change, including carbon taxes, regulation, subsidies and, if they choose, command and control.

cade. The line of aridity defining the American West has moved roughly 230km east since 1980. The sea ice in the Arctic is a shadow of its former self. Nobody can know whether the world will one day wake up and cut emissions to zero. Even if it does, the main problem—the stock of greenhouse gases already emitted will remain. A crash programme to suck carbon dioxide out of the air would take vast resources and years to make a difference.

Another spur might be innovation. The world would have many fewer firms developing electric cars were it not for Elon Musk and Tesla. But without policies to spread innovation, such as a carbon tax or subsidy and regulation, inventiveness alone is insufficient. The technology that matters is the technology being used. And citizens have resisted climate-change polices.

Then there are novel forms of international action. Easier than global agreements are small, like-minded groups: I'll do cement, you do steel and then we can share the fruits. Such a "climate club" approach can shrink the free-rider problem. If big economies are willing to be generous, the number of countries prepared to cut emissions could rise quickly.

Ultimately, though, countries suffering from climate change may resort to unilateral measures to improve their own situation. The Intergovernmental Panel on Climate Change notes that reflecting sunlight back into space before it warms the Earth's surface, perhaps using particles—a form of "solar geoengineering"—is "highly likely" to limit temperature rises. Geoengineering is within the scope of a country like Belgium or Brazil. But its effects are not fully predictable, nor will they be evenly spread; some schemes could harm some places. It is no substitute for mitigation and its planned use by one country could terrify others, spreading instability. Geoengineering is worth studying, but it could leave the world an even more dangerous place.

## UK police use of computer programs to predict crime sparks discrimination warning

#### Human rights group claims the algorithms threaten a 'tech veneer to biased practices'

### Sarah Marsh, Sunday 3 Feb 2019, The Guardian

The rapid growth in the use of computer programs to predict crime hotspots and people who are likely to reoffend risks locking discrimination into the criminal justice system, a report has warned. Amid mounting financial pressure, at least a dozen police forces are using or considering the predictive analytics. Leading police officers have said they want to make sure any data they use has "ethics at its heart".

But a report by the human rights group Liberty raises concern that the programs encourage racial profiling and discrimination, and threaten privacy and freedom of expression. Hannah Couchman, a policy and campaigns officer at Liberty, said that when decisions were made on the basis of arrest data it was "already imbued with discrimination and bias from way people policed in the past" and that was "entrenched by algorithms".

She added: "One of the key risks with that is that it adds a technological veneer to biased policing practices. People think computer programs are neutral but they are just entrenching the pre-existing biases that the police have always shown." Using freedom of information data, the report finds that at least 14 forces in the UK are using algorithm programs for policing, have previously done so or conducted research and trials into them.

The campaign group StopWatch said it had "grave concerns around the effectiveness, fairness and accountability of these programs". Its chief executive, Katrina Ffrench, said: "We cannot be sure that these programs have been developed free of bias and that they will not disproportionately adversely impact on certain communities or demographics. For proper accountability there needs to be full transparency." These programs are often referred to as "black boxes" because the role each piece of data plays in the program's decision-making process is not made public.

"This means the public can't hold the programs to account – or properly challenge the predictions they make about us or our communities. This is exacerbated by the fact that the police are not open and transparent about their use," the Liberty report concludes. The programs used by police work in two main ways. Firstly, predictive mapping looks at police data about past crimes and identify "hotspots" or areas that are likely to experience more crime on a map. <u>Police</u> officers are then directed to patrol these parts of the country.

Secondly, "individual risk assessment" tries to predict the likelihood of a person committing, or even be the victim of, certain crimes.

Durham is among forces using such programs and has a system called Harm Assessment Risk Tool (Hart), says the report. Hart uses machine learning to decide how likely a person is to commit a violent or non-violent offence over the next two years. It gives an individual a risk score of low, medium or high, and is designed to over-estimate the risk. The program bases its prediction on 34 pieces of data, 29 of which relate to someone's past criminal history.

West Midlands police are also leading on a £48m project funded by the Home Office called National Data Analytics Solution (NDAS). The long-term aim of the project is to analyse vast quantities of data from force databases, social services, the NHS and schools to calculate where officers can be most effectively used. An initial trial combined data on crimes, custody, gangs and criminal records to identify 200

offenders "who were getting others into a life on the wrong side of the law".

Supt Iain Donnelly, who is the project manager for NDAS, said: "[The project] seeks to use advanced analytics, otherwise known as data science techniques, to generate new insights from existing data already in the possession of police." He said the datasets being used were crime recording, incident logs, custody records, crime intelligence and conviction history from the police national computer (PNC) system. "We are not using data from non-police agencies," he said.

"With so many predictive analytics programs or algorithms now in use it's even more important than ever to be asking questions about how an individual's risk is calculated, which factors are included and what is the margin of error when using these factors, [and] is someone asking whether the 'risk factors' are as accurate for black or BME people as they are for white people?" said Zubaida Haque, the deputy director at the Runnymede trust.