Ethical Data Stewardship Charter for Suffolk County Council

The purpose of the charter is to demonstrate our organisational-wide commitment to a set of clear principles governing the use of data and associated technologies, at the same time to outline the processes which are to be followed for ethical risk assessment and decision making.

Value of data

Our response to Covid-19 in 2020/21 has underlined the value of data for front-line delivery and improving public services. But even prior to the pandemic, Suffolk County Council (SCC) has been firmly set on a course that has championed the fair and lawful use, re-use and sharing of data across Suffolk and beyond. The setting up of the Suffolk Office of Data and Analytics (SODA) in 2018 and the signing of the Suffolk Information Sharing Charter[1] are important steps. So too are the strong foundations put in place since the introduction of the General Data Protection Regulation (GDPR)/Data Protection Act (DPA) ranging from clearer privacy notices, to impact assessments and mandatory staff training. This ethical data stewardship supports this work (see Annex for dependencies with existing SCC policies) but at the same time fills an important gap.

Trust

Gaining trust from the people we serve – and whose data we are stewards of – is paramount. To date the most important way of gaining trust has been by firm adherence to Data Protection and information laws, which have been significantly strengthened in recent years, in addition to following the myriad of statutory frameworks and directives that are relevant to local authorities.

But as both data science and data technology have advanced there is a growing realisation that simply 'being a public body' and following the laws around privacy and security is no longer enough to build up public trust. Using the term 'trusted' can seem rather hollow unless a council can demonstrate what being trusted looks like in a fast-moving data driven world. Increasingly, we will need

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[1] Charter signed by 11 partner organisations including Suffolk County Council, district councils, the Suffolk Constabulary and two NHS Clinical Commissioning Groups in 2018.

to answer questions like "should we be using data in this way?" and "where is the balance between public good and potential harm?"

There is public concern that the rapid growth in advanced data processing (i.e. big data, artificial intelligence, machine learning, robotics, Internet of Things etc.) is occurring faster than our ability to understand how far the commercial benefits – such as cost reduction, automation and new revenue making opportunities – outweigh the harms such as unfair discrimination and erosion of individual rights.

Although SCC is a non-profit making public body, it is not immune to these technological advances and dilemmas. Machine learning (a branch of artificial intelligence) is already here– often working in the background and generally unheralded, in areas such as cyber security on our IT network (automated scanning technology using algorithms to look for and destroy computer viruses and malware which can work far faster and more accurately than humans). In the future there will almost certainly be greater use of algorithms in more high profile and contentious areas such as education and social care.

We must not focus entirely on the ethics concerning cutting-edge technology. There are many ethical issues in councils which relate to how we match and link existing datasets on analytical platforms, and how we present ever more complex information to the public on planning, prioritisation or funding. Good ethical data stewardship means thinking through these issues in advance.

SCC's multi-layered response to the Covid-19 pandemic – testing, tracing, epidemiological surveillance, supporting vulnerable people, planning new services - has relied totally on the collection and analysis of the right data. For much of the UK-wide effort the public has been onside, as it has accepted that public health needs outweigh any possible negative impacts to privacy and personal rights. But there are also examples in the UK during the pandemic where public bodies have used data – or presented it in a certain way – which has the potential to undermine trust.[2]

The aim of this charter, with a clear commitment to eight ethical data principles, and a long-term roadmap for dealing with difficult operational questions, is to ensure that that Suffolk residents reap the potentially massive rewards from data science while avoiding potential harms.

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[2] For example, the intended use – and subsequent abandonment - of algorithms in England and Scotland in summer 2020 for exam grades, or in terms of data presentation, the confusing definition of Covid-19 deaths varying across the UK (until it was standardised and greater effort made to explain death statistics).

PART A: What does ethical data stewardship look like in Suffolk?
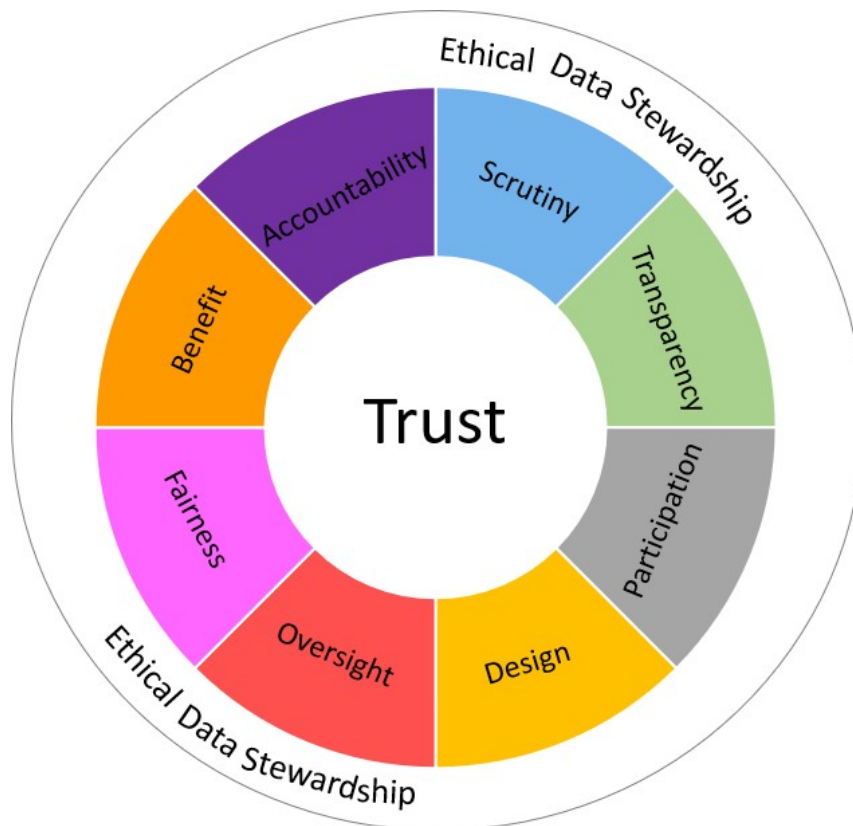
Eight principles

Chart Source: SODA (Suffolk Office of Data & Analytics) 2020

1) Accountability

Data Protection law already places great emphasis on identifying the legal entities – such as local authorities – that are responsible for personal data (known as the 'controller' or 'processor'). At executive level there is also the Senior Information Responsible Owner (SIRO) who makes risk-based decisions in consultation with the Board and expert advisors such as the Data Protection Officer and Information Security Manager. The council's Register of Datasets should also make clear which senior officers in a council are responsible for key datasets.[3] The Suffolk Office for Data & Analytics (SODA) has an information sharing assurance gateway process for all new projects involving SODA partners. But it is becoming more common for new services to utilise multiple datasets which criss-cross IT tools and networks in more than one organisation. In such cases it can be more difficult to know who is accountable for the way in which

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[3] Such registers are also known as 'Information Asset Registers'.

the analytical tool is designed and used, and who acts upon any advice relating to ethics, as well as privacy and security.

SCC gives an undertaking to strengthen its existing safeguards relating to how new data services are commissioned and to be clearer on who is the 'service owner' or 'data steward' - not just owners of individual datasets - at all stages: commissioning, operations and de-commissioning including the deletion or re-use of data.

2) Scrutiny

There are existing robust processes relating to processing of personal data. This includes the creation and review of data protection impact assessments, information sharing agreements and advice from the Data Protection Officer. Individual project boards and corporate-wide information governance structures are also able to direct work relating to information security/privacy. But the wider ethical dimension can be missed. What about the uses of non-personal data? Should council data be used for commercial purposes? The processing of data may be lawful but who decides whether it is 'fair' in the broadest sense of the word?

SCC gives an undertaking that it will use amended governance structures (with the new Data Ethics Advisory Panel outlined in Annex A) and expert advice so that all ethical dimensions are covered as well as privacy and security.

3) Transparency

The advent of access to information legislation has meant that far more information is routinely put into the public domain. But a key issue with emerging data science and technologies is that there are many aspects which are unclear and untested even to those who have commissioned them. For example, if a vendor sells a software product with predictive analytics it can be rather like a 'black box' with very little known about the exact algorithm or logic used, the origin of the data used to create and train the algorithm in the first place (i.e. data which may be from a very different cohort in another part of the world), and whether the vendor intends to use the data inputted by the customer for its own ends. Some of these details are often hidden behind so-called 'confidentiality clauses' inserted by the vendor to protect its intellectual property and commercial advantages. But how does this weigh up against the need to protect the interests of our residents and service users?

The sheer complexity of the tools in advanced data services means that the logic and methodologies used are not always easily explainable to commissioners and the public alike.

SCC gives an undertaking that no data processing services are commissioned without maximum transparency from developers (internal or external suppliers) about the design of data services including any algorithms. Furthermore, the logic and methodologies used for a data service must be easily explainable to elected members

and the public on demand (and ideally proactively published in high profile and/or potentially contentious situations).

4) Participation

Although the law has a narrow definition of 'consent' for personal data processing, it could be argued that a council discharges most of its work using the far wider meaning of 'consent': its elected members weigh up social and political acceptability, make decisions on behalf of their constituents and the council staff carry these out. But 'consent' is not easily actionable with complex data systems which have been developed rapidly - or perceived by some to have crept up on us - in recent years. To date, the governance structures around IT do contain various specialists (in security, privacy, procurement and technical architecture), but ethical decisions need meaningful participation from a far wider pool of people.

SCC gives an undertaking to modify its governance structures (see below in Part B) so that ethical considerations can be weighed up by a) internal ethics specialists, b) external data specialists (e.g., from academic organisations) and c) members of the public.

5) Design

'Privacy by design' is already a key concept in data protection law: the need to risk assess and build new services with the right controls at the outset (rather than trying to retro-fit measures at a later date, after a data breach or other privacy issue is flagged up). GDPR/DPA has updated the law to provide some safeguards in many areas which overlap with data ethics and human rights, such as use of biometric data, profiling and automated decision making. In parallel, it is also important for technical information risk assessments to be undertaken on significant new IT services. But how can you ensure that broader ethical issues are adequately assessed at the outset, such as unfair bias in datasets, algorithmic patterns that may lead to discrimination or social exclusion?

SCC has an undertaking to develop a model ethical impact assessment methodology which can be applied to scenarios where data services are being developed. This will cover use of algorithms, predictive analytics, artificial intelligence (including branches such as machine learning), robotics, Internet of Things (e.g., in social care) but also any context where the use of data is novel and untested.

6) Oversight

A key concern with advanced data analytics is the extent to which machines can acquire a high degree of autonomy, learn to make own their decisions and reduce human involvement. In many areas of council work – such as in social care and education - the human analysis of knowledge/information and case-by-case decision-making will always be central to what we do. But where do the

exact boundaries lie? Predictive analytics products already allow scores, traffic light risk ratings and other codes to be applied to residents using a wide variety of data in some UK councils (not currently SCC). This can provide a great aid to those professionals who need to prioritise resources, flag up people potentially at higher risk and automate certain routine tasks (which leaves more time to focus on tasks where humans make a difference). But should such scoring mechanisms ever lead directly to potentially life-changing decisions for individuals such as getting a home, school place, grant or social care support?

SCC will take a precautionary stance: human oversight at all stages in data processing and for final key decisions to be made by humans. Furthermore, to have a mechanism in place which will allow for a service user to appeal where they believe the use of automated data systems has led to harm or discrimination.

7) Fairness

Fairness and respect should be hard-wired into every service the council delivers face-to-face or remotely. But the advent of advanced data processing raises lots of ethical challenges. If the existing raw data used to power the newer automated systems is based on outdated preconceptions (or even prejudices) about people of different genders, ages, ethnic or social groups then that will be set into the logic/algorithms and perpetuate the issue. And if you look afresh at data how can you safeguard against unconscious bias given that those who design software tend to come from a relatively narrow group in society? Some of the data filtering and classification processes have the potential to create convenient 'bubbles' which downplay human diversity in all its forms.

SCC will provide adequate attention to how data is compiled, linked, and analysed to ensure that there is no actual or perceived bias. By adhering to the other principles of accountability, scrutiny, transparency, participation and oversight we will ensure that we respect human diversity in all its forms.

8) Benefit

Finally, but not least, advanced data services should all provide clear benefits to the people of Suffolk and as far as possible zero harm. Some data analytics services, if deployed, have obvious benefits, such as being better able to prioritise front-line social care resources or to help highways maintenance teams deal with potholes. But there are ethical decisions around relative benefit and trade-offs: should project A which supports a small minority group have precedence over project B which supports the majority? Should we allow academic studies to test hypotheses using our valuable customer data or does this distract attention away from the front-line and undermine public trust? To what extent do suppliers benefit from the data which the council inputs into their products? Should the council ever gain financially from customer data, even if the revenue is ploughed back directly into services?

Data Protection law and its principles aim to reduce potential harms such as those related to holding inaccurate data, keeping data longer than necessary and allowing non-authorised persons to access the data. But there are also potentially much wider societal harms which occur with legal data processing; for example, a small number of companies accumulate vast amounts of data on people from multiple sources with the ability to re-fashion markets, supply chains and even tastes to suit their own commercial agenda. Public bodies need to avoid being perceived as new 'data barons' by adopting good ethical data stewardship (enshrined in these eight principles).

SCC gives an undertaking that its data services will only be used for clear public benefit with the aim of zero harms to society and the environment. Such benefits will be weighed up using the new governance structures. The council will use its influence, spending power and data science capability to improve the ethical behaviours of key suppliers of data products (e.g., data hosting, software and consultancy).

PART B: Roadmap for change

The council will focus on five key areas - in parallel - to ensure that the eight principles of ethical data stewardship can be met.

1) Monitoring & review

There is clarity around the use of data within the Suffolk Office of Data & Analytics (of which SCC is a member) due its information sharing assurance gateway process and clear governance structures which have been in place since 2018. But it is likely that processing using artificial intelligence will be of interest in other, perhaps less obvious, places in SCC.

A review will be undertaken of where advanced data processing is already in use in the council, its suppliers and commissioned services. This will include looking at the use of algorithms, machine learning, identity matching engines (which use data from multiple sources to confirm the identity of someone), linked data and anything else where there is ethical concern. A report will summarise the 'current state of play' and the general direction of travel for the council and its key suppliers.

There will be a process for monitoring advanced data services. Technical change can be very rapid, and it is important to be able to check where suppliers have added new features, changed algorithms and how they report back to the customer as per contracts.

2) Ethics centre of excellence

Data ethics is a new branch of ethics and corporate knowledge in this area needs to be developed (rather than left to external advisors and regulators). The council will set up a virtual centre of expertise by having person(s) who can provide advice to those preparing for a new data service (which could have an ethical dimension), to the Corporate Leadership Team and to elected members.

The person(s) in those roles will need to survey developments in technology and how organisations are responding elsewhere (in other councils, the NHS, wider public sector) and be able to react to emerging risks and opportunities.

The Ethics Advisor should also build closer links between the council and academic organisations in the East of England and further afield.

Nationally, SCC will work with the Centre for Data Ethics and Innovation, The Local Government Association, the National Analytics Forum and others to ensure that it can influence national policy (as well as adopt best practices as they develop over time).

3) Model ethical impact assessment

To meet the 'ethics by design' principle, the council will develop a model ethical impact assessment methodology. Given that commissioners of new services already complete due diligence (e.g., data protection impact assessments where there is personal data being processed and adherence to rules on procurement), it is important that this is not onerous and focuses only on those projects where there is likely to be a strong ethical dimension because of advanced data processing. The methodology will need to create a set of prompts for doing an impact assessment such as:

- the data technology is very new and relatively untested.
- an intention to use algorithms using customer or staff data.
- linking data in ways which has not happened before.

Although much can be added to the existing Data Protection Impact Assessment (DPIA) approach, there are some key differences, and the aim is not to simply duplicate effort. Whereas in a DPIA a 'red' traffic light rating indicates there are significant risks around lawfulness, proportionality or security, an ethics advisor will look beyond this. A proposed service may be lawful with appropriate security controls but:

- There are questions around whether data **should** be used in the way proposed because there is a reasonable chance of it being unfair, harmful, discriminatory (or being perceived by Suffolk residents as such and undermine trust).
- There is not currently enough evidence around accountability (e.g., not clear on data service ownership once the service moves from a project to operations), transparency (e.g., no communications plan for service users) or oversight (e.g., not clear how humans will stay in control of

key decision making in the long-term or how suppliers could make incremental changes that go unnoticed).

- There may also be issues around the balance of benefits and trade-offs: external organisations benefiting (perhaps financially) from the data inputted versus benefits to service users.
- Finally, the role of the Ethics Advisor is to assess how far the proposal is precedent setting (technology used, type of algorithm etc.) and requires a wider pool of people to decide on the direction of travel (rather than 'sleep-walking' into a position with long-term harms that would be difficult to reverse).
- All of the above can be built into the existing DPIA process so that ethics does not create a completely parallel process.

4) Communications & training

It is difficult to follow the 'participation' and 'transparency' principles unless there is communication about what is happening with advanced data processing in the council and to show the evidence used to make decisions. Improvements will be made in the following areas:

- Greater awareness for commissioners of services and products using advanced data technologies, and the questions they need to ask of suppliers and developers in projects.
- Public facing content outlining the steps taken to ensure that the ethical principles are embedded. Answering questions from elected members, academics and the wider public on how data is used (rather than simply reacting to Freedom of Information requests).
- Building on the work of SODA in developing training in data security and data protection, so that analysts, data scientists and other groups will understand where there is a wider ethical dimension and the steps they need to take (e.g., if there is a requirement for an ethical impact assessment).

5) Governance structures

The 'scrutiny', 'participation' and other principles require a governance structure that allows the right people to review, monitor, decide and document actions regarding ethics and advanced data processing.

In the short-term the following process should be followed:

Initially, service owners (stewards) will be urged to seek advice from the Ethics Advisor and where necessary undertake a model ethical impact assessment.[4] This should then be reviewed by the Ethics Advisor (with input from the Data Protection Officer, Information Security Manager and other relevant specialists).

The second governance layer will be a referral to the Chair of the Corporate Information Governance Board (which represents functions in all parts of the

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[4] Initially the DPO could cover the role of Ethics Advisor, as this post holder's work already overlaps with ethics and it would help to build on the work already undertaken on the SCC GDPR compliance road-map.

organisation), who will decide whether this can be dealt with at the next meeting (or out of committee depending on the deadline of the proposed data service). If the CIGB is satisfied there are still significant issues beyond its remit then it will refer to the SIRO.[5] Ultimately, the Cabinet could be used for particularly important or contentious decisions subject to the existing constitutional safeguards.

In the medium term, an Ethics Panel should be set up (initially on an advisory basis) under the auspices of the SCC Audit Committee. This should include independent member(s) (e.g., academics) and the SCC Ethics Advisor. Its deliberations will form a part of the annual Information Governance element of the Annual Governance Statement (see proposed Terms of Reference in Annex B).

Longer term, this could be expanded to include 'Citizens' panels' or similar which will ensure there is sufficiently wide views of opinion on complex decisions impacting the people we serve in Suffolk.

Each year there are dozens of new projects and initiatives which involve the processing of personal and non-personal data. The aim of the above governance is not to stifle debate but ensure that the relatively small number of data projects with an ethical dimension get the scrutiny and decision making they deserve.

Finally, in order that the council can react to significant ethical issues as they arise there should be a mechanism whereby any elected council member can refer directly to the Audit Committee (and its Data Ethics Panel) if they feel any existing or proposed data processing undertaken by the council warrants such scrutiny and decision making.

Annex A:

Existing policies at SCC which link with Ethics Data Stewardship Charter.

Our Information, Our Priorities (2019)

Suffolk Information Sharing Charter (2018)

Data Protection Policy (2018)

Information Security Policy (2018)

Use of Cloud Services Security Policy (2018)

Suffolk County Council Privacy Notice

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[5] SIRO role description can be expanded to read: "Establish an effective Information Governance Framework and ensure compliance with regulatory, statutory and organisational information, security policies, standards *and ethics*."

Approved September 2021

Elected Members' Code of Conduct [Suffolk Local Code of Conduct]