

An Introduction to Data Ethics

The foundation, application and role of data ethics in the financial services



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Introduction

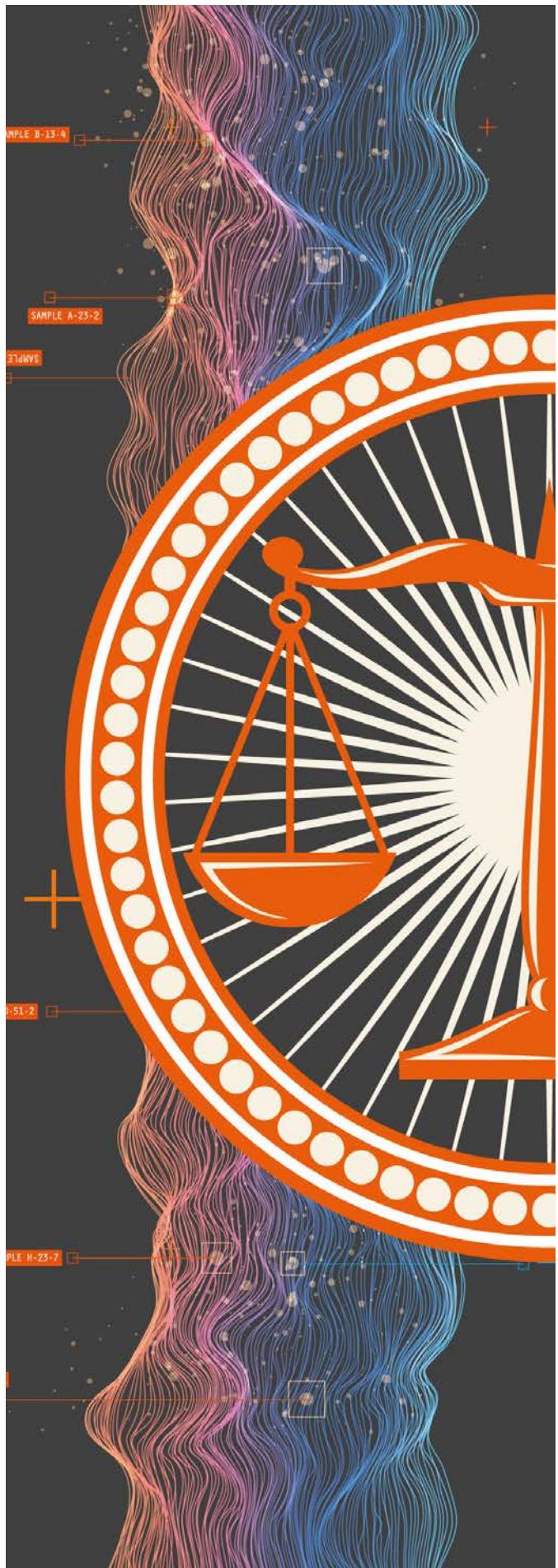
The UK Government defines data ethics or a data ethics framework as a “set of principles to guide the design of appropriate data use in the public sector. It is aimed at [...] data practitioners (for example, statisticians, analysts and data scientists), policy makers, operational staff and people helping to produce data informed insight”.¹

While definitions and opinions vary, put simply, we believe data ethics is a moral code of conduct laid out by each company that it will live, breathe and operate by when it comes to the use of data. No two data ethic frameworks are the same and a framework cannot be copied as it is unique to the history, culture and future plans of an individual company, created by the individuals that run it.

In this whitepaper, we focus on the fundamentals, applications and role of data ethics specific to the financial services (FS) sector and the financial institutions (FIs) that make up the ecosystem. We will cover:

- **What we mean by data ethics and what it should mean to FIs**
 - **Why are we talking about data ethics and why it is so important**
 - **Where to begin – the 101 of data ethics**
 - **Data ethic values in practice**
 - **Making data ethics about more than just a checklist within your organisation**
 - **The future of data ethics for FIs**
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We hope you find this deep dive into data ethics insightful and practical. The subject has a huge role to play in the future of innovation for FIs and for the complex network of sectors they work with, and we are all well aware **business decisions are only as strong as the data and the ethical conduct behind them.**

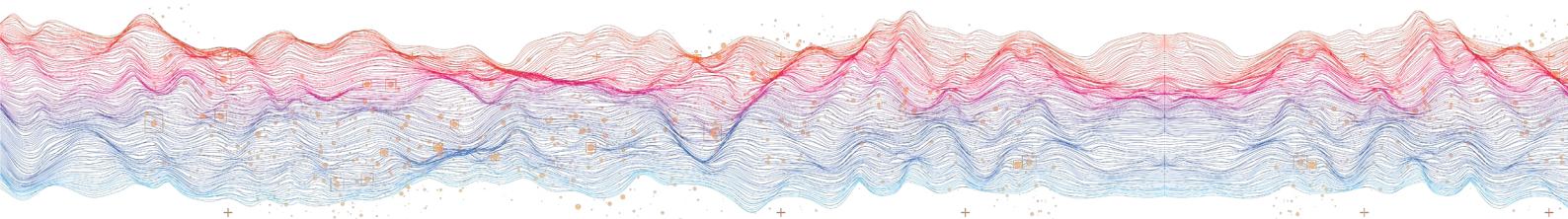


Chapter One

What do we mean by data ethics?

It's been nearly three years since the term 'techlash' was coined²: a term used to describe a growing global concern about the pervasive use of technology and data. With the rise of artificial intelligence (AI) and new emerging technologies, it's never been as critical as it is now for banks and insurers to build and maintain their social contract of trust with customers. This is where data ethics comes into play, asking questions and guiding practical actions about the use of data and understanding where it could be "misunderstood, mismanaged, or misused."³

As we've said, there is no single agreed definition of data ethics. In fact, there are 315 million search results for 'data ethics definition' on Google currently (April 2021). Among these results are a myriad of definitions ranging from overly simplified sentences to philosophical essays, with frameworks, models, thought leadership, and case studies which are either too vanilla to address the specific organisational nuances or overly theoretical to be of any practical value.



Data ethics is more than just AI ethics; it is about how value judgments around the use of information across the data lifecycle interplay with the moral spectrum of a business. The reality is that each business' moral spectrum will differ from that of another business. Think of it this way, your personal moral code of conduct and values are different to your each of your friends', family's, and colleagues'; some aspects may be widely different and others similar, but still with your own personal preferences. The same applies to each and every business.

However, ethics doesn't always provide the right answers to moral problems. Morals - as concepts - get under our skin, and they often relate to emotional issues, such as politics and personal beliefs. Data ethics is no different.

For data ethics to be useful in practice to an organisation, it has to be more than just 'what not to do'; it can't just be a compliance tick box exercise of what is perceived to be bad. And it's not a binary list of yes or no, right or wrong questions. Data ethics is about exploring the nuanced grey areas which don't readily conform to a list of rules or regulations, whilst understanding what values the organisations lives by when using data. It is about shifting the conversation from what you could do with data, to what you should do with data. It is also more than just what you are doing with data, it's also about who is doing it and the how and when. Much of the data ethics conversation focuses on what data is being collected and how it is used, and by whom, but data ethics also needs to raise broader moral questions, such as who gets to make those decisions in the first place.

What does data ethics mean - or should mean - to banks and insurance providers?

Data and digital innovation are being heralded as a driver for economic growth and social value⁴, as well as a post-pandemic recovery bolster⁵. With many FIs exploring how they can be a more responsive real-time organisation, data ethics can be the tool and guard rails needed to accelerate the opportunity of data in a considered way that aligns with organisation values.

FIs receive and manage huge volumes of data every day. Such data is used to support customers, shape products, service development, and manage risk, and data ethics has a pivotal role to play in each of these areas. Compliance activities, for example, have a shared set of data ethics principles around what, where, who, how and why aligning data to an organisation's values will be a fundamental table stake to any FI who wants to use data as a force multiplier. If data is poorly assessed, this could see a legitimate and innocent customer declined for loans or criminal activities left undetected, and vulnerable human trafficking victims ignored. This is where the question as to who manages what type of data becomes vitally important.

Chapter Two

Why are we talking data ethics?

Digital trust was once viewed as a standalone issue for the cyber security world, with cyber professionals considered the guardians and protectors of an organisation's digital risk. Financial organisations today, however, are recognising the power that comes from having a proactive, considered, and strong digital risk position in building trust with their customers and differentiating their organisation as a trusted one. As the boundaries of data-enabled innovation are pushed, trust - both from the organisation trusting the data it has and uses, and its customers trusting how their data is used - will be a fundamental component for an aspiring data-driven organisation.

The opportunity of data and analytics in FS is not a new concept. From the Woolford brothers compiling and selling their list of creditworthy customers in 1899⁶ to the introduction of the Market Price Display System in the 1970s (which gave brokers access to real-time prices to support data-driven decision making⁷), the advent of data warehouses in the 1980s⁸, the proliferation and sophistication of business intelligence tools in the 90s, and the introduction in 2004 of Basel II to wed data-driven analytical frameworks with banking regulation.

Data has always been some part of a business' operating model, but it's the explosion of available data, real-time feeds and visual analytics that has changed the FS sector beyond recognition.

The data economy, enabled by emerging technologies and fuelled by digital transformation, has turned all strategic assumptions on their head. And whatever your data analogy of choice is, oil or water, there's no getting away from the limitless possibilities and opportunities that data offers in the race for increased market share. But the future of data success lies in the hands of those with a firm understanding of data ethics and ensuring it runs through the life blood of their business.

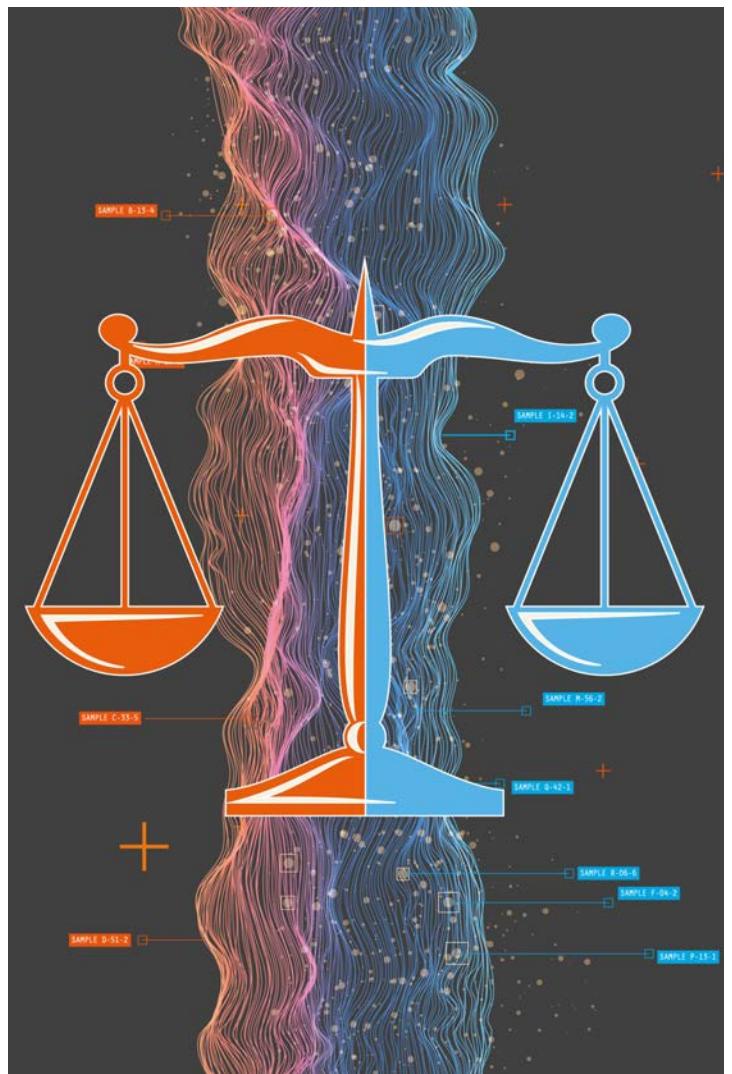


The necessity of debating and exploring data ethics couldn't be more relevant than it is right now for FS organisations. The UK Government's Centre of Data Ethics and Innovation highlighted the "inherent tensions that face banks when utilising data and algorithms" in its recent work⁹ exploring public attitudes on the use of data and algorithm in FS. It found that people generally have a negative perception of algorithmic decision-making in loan decisions, and punish a bank by moving twice as much money away from the institution when informed the financial organisation 'uses information which could act as a proxy for other characteristics (gender, ethnicity or social media usage) in their algorithms compared to a neutral description' (The Behavioural Insight Team, Oct 2019).¹⁰

One of the challenges FS organisations find themselves faced with when trying to talk seriously about data and data ethics is moving beyond hype and conversation littered with buzzwords such as 'strategic asset', 'data-driven organisation' or 'data transformation'. Often, it feels like something is missing from the conversation: the role of data trust. With the pace of change, innovation, and opportunity introducing new classes of risk, data trust has a key role to play within the FS industry.

Trust in data is not just about knowing what you are doing with data at any given moment, but rather understanding what is happening with it and how it's being respected across the entirety of the lifecycle.

Data ethics is more than just the ethical use of data, it is the new parameter for competitive advantage, with an organisations' morals, ways of working, governance frameworks, and employee behaviour being called into question. Data ethics will inform the future of a business, and how it evolves alongside innovative technologies, calling into question its general practices and whether it's a financial provider that consumers will want to be associated with.

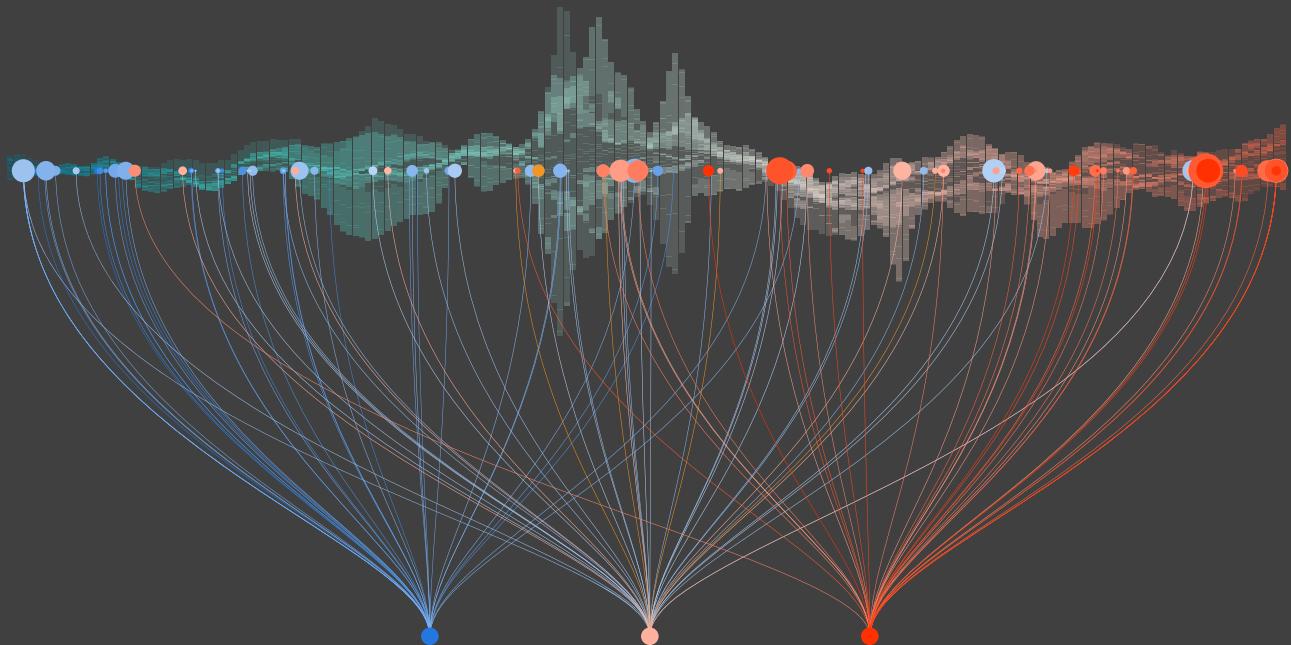


Chapter Three

Where to begin

Ethics isn't just something you should buy out of the box. We don't believe in a standalone vanilla set of data ethics to plug in and go; nor do we believe you can borrow a meaningful set of data ethics from another organisation and hope for the best. For data ethics to best support your organisation it has to be an extension of your organisation's overall values and principles - what 'the right thing' means for you.

We recognise that frameworks can have a role to play in scaling up data ethics across organisations, by providing defined approaches to decision making and concrete guidance for known scenarios, helping employees as they learn about data ethics as a practice. However, we have concerns that off-the-shelf or generic frameworks may lead to an over-simplified or narrow view of ethics which doesn't empower employees for unforeseen scenarios and doesn't take account of the unique considerations of the organisation.



If an organisation uses a generic data ethics framework, it can end up defining the process of data ethics through a series of generic tick boxes, as opposed to truly exploring what its specific data ethics rules should be for them as a unique organisation. This approach can make an organisation think it is 'doing' data ethics, whereas in fact it is simply jotting down high level statements for a set of prescribed boxes that may not truly fit the business' culture.

Despite the many frameworks on offer, the discipline of data ethics has yet to provide much concrete help in identifying ethical courses of action in difficult grey-area situations. Such situations include the kind that Harvard Business ethicist, Joseph Badaracco¹¹, has described as "not issues of right versus wrong", but "conflicts of right versus right, and, second, navigating those situations where the right course is clear, but real-world competitive and institutional pressures lead even well-intentioned managers astray".

In this context for a financial institution, a prime example of 'right versus right' would be the decision to exploit data to combat fraud, which is now seen as entirely normal, but it genuinely is a decision (we could choose not to do this) that leads to other key decision points. First, we have to balance the 'right' of saving customers' money by reducing the financial loss to fraud through use of their data against the 'right' of minimising the collection and use of personal data and respecting individual consent in such use of their data. But this isn't simply a yes or no binary question: we then find ourselves asking how much data or which data types to exploit, or which technologies are appropriate (do we, for example, automate decision making?) - where the overarching decision remains right versus right.

From reviewing many of the open source data ethics frameworks, we rarely see the first point being '**what are your data ethics principles?**'. Instead, these frameworks often launch into generic, vanilla discussion prompts which feel nice and gentle, and go through the motions, but don't actually get to the heart of data ethics.

The very beginning of a data ethics discussion must start with '**what are our core values as an organisation?**'. We fully recognise that organisation values can too often be seen as a set of platitudes that never make it past a glossy poster on an office reception, but if an organisation's values truly reflect its culture, they can be an incredibly powerful starting block.

Ethics as a concept can be too abstract, but the actions taken off the back of data have very real consequences – **do you understand your data lifecycle as a business and how data is used to inform decisions that affect the business and also your customers?**. It's that clear, traceable link between organisation values and the data driven action that brings data ethics to life, and stops them from being seen as just an ivory tower conversation. The defined ethics must act as a practical tool in helping to identify the correct course of action in difficult grey-area situations – not necessarily the 'issues of right versus wrong', but 'conflicts of right versus right'.

The ethics of right versus right choices are often ignored in the face of the right versus wrong choices. However, in our experience, the right versus data ethics challenges (where decisions entail two desirable, but mutually incompatible options) can be some of the toughest of ethical decisions to make. However, we should fully expect data ethics to give us some answers: there may be several right answers, but the challenge is to choose between them and do what is perceived on balance to be right thing for your organisation.

The reason we are obsessively passionate about starting with values and exploring this divisive grey space from this perspective is because it reveals the strength of an organisation's commitment to its values, and ultimately what its values are in reality, which lays the foundations for trust.



Do you understand your data lifecycle as a business and how data is used to inform decisions that affect the business and also your customers?

Chapter Four

Values in practice

So, what do values in practice actually look like? Here we have provided some example values for an international cooperative and an independent retail bank as a source of inspiration, which breaks down the values and how they would translate into data practice.

International cooperative principle values example

- Voluntary and open membership
- Democratic member control
- Member economic participation
- Autonomy and independence
- Education, training and information
- Cooperation among cooperatives
- Concern for community



Translating international cooperative principle values into data practice

- Never stop talking to and seeking feedback from members about how it is using data to enhance and support its values
- Don't take unnecessary risks that undermine equity
- Data policies, standards and processes need to be understandable and accessible
- Openly share best practice with the wider cooperative community

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Independent retail banks principle values example

- Putting customers first
- Passionate about leaving things better than we found them
- Collaborating across boundaries
- Working as one team
- Personal accountability, being decisive, using judgement and common sense
- Never settle
- Act fairly, ethically and openly



Translating independent retail bank values into data practice

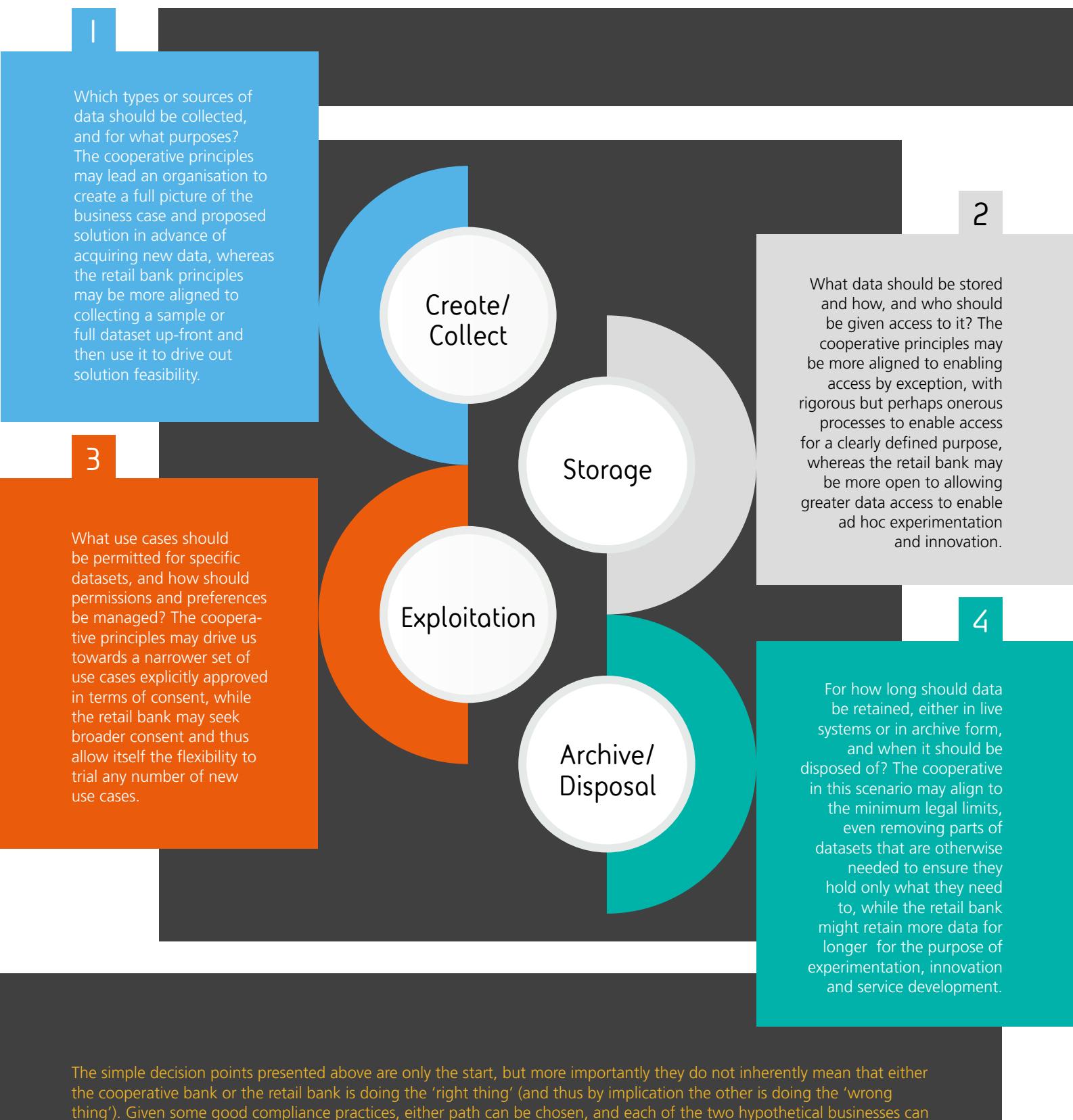
- Clarity between data investments and rate of return / benefits
- Importance of firm foundations – a focus on technical debt and data architecture
- Data sharing and communication across the organisation
- 'Accountable data freedom'
- Foster an innovative data culture that accepts fast failure

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Throughout every stage of your business' data lifecycle, there are opportunities to consider how your defined business values can be leveraged, and that your newly defined data ethics practises are present in each data touch point. Here we have broken down the lifecycle into four key stages and provided insight on key data ethics considerations for each stage.



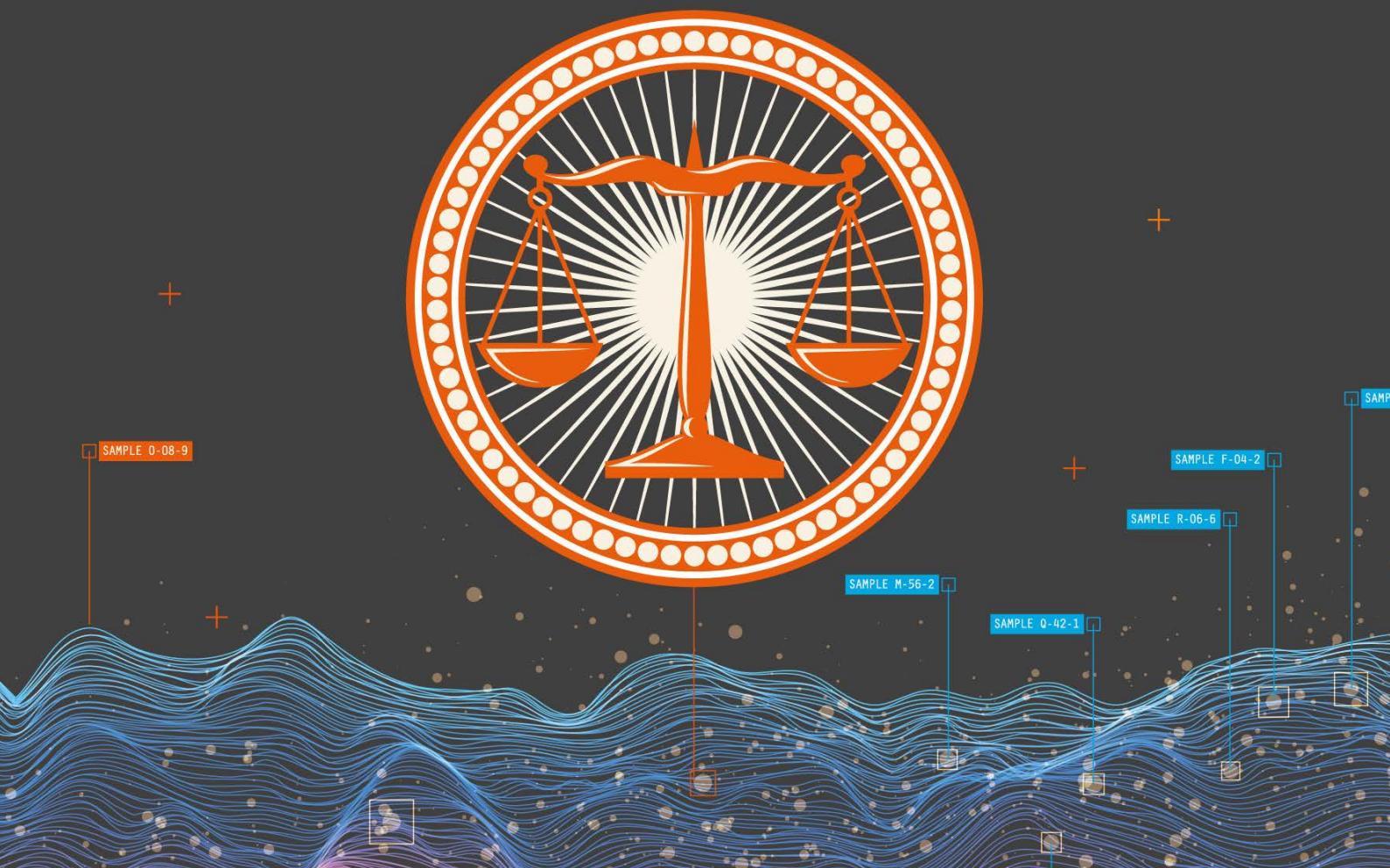
Chapter Five

More than just a checklist

You may choose to separate compliance from ethics in your organisation structure, having separate individuals who will either mark your work or work through an ethical dilemma with you. This allows the relevant personnel to focus on either the policy or legislation decisions of what is and isn't allowed, or, alternatively, the ethical decisions of how to balance right against right.

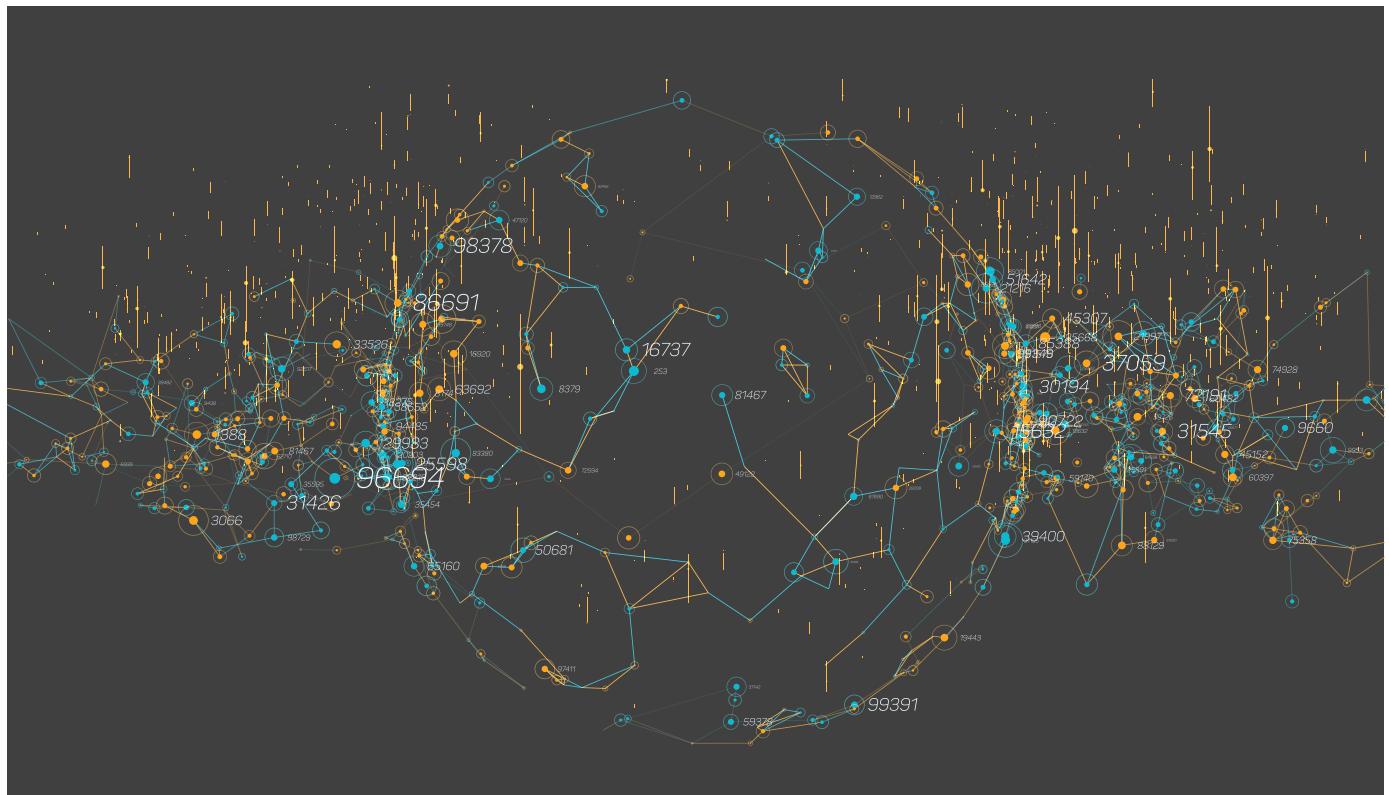
For data ethics and the values you define to be taken seriously they need to be more than just a list of what you mustn't do or a compliance check list. It's about having clarity over your organisational culture and how that relates to what your organisation does with data. Working with data is a broad and nuanced specialism and it's not about simple 'right' and 'wrong'. It's about judgement calls between 'right' and 'right' and developing strong cultural awareness that leads your employees to an appropriate course of actions for novel scenarios that a check-list approach simply can't anticipate.

Data ethics needs to facilitate conversations, ensure the issue at hand is discussed and understood, and any trade-off made clear. Embrace this complexity and accept that you won't always get it right, so you and your team need to keep thinking and learning. As we know from our everyday lives, ethical problems aren't simple. They are multi-faceted, and frequently there's no single right answer.



Conclusion

The future of data ethics for FIs



Through this whitepaper we have provided steps to consider as you develop your company's values and data practices, but there is a further step to take into consideration: making data ethics part of the everyday business for the whole organisation, not just the data specialists.

Aside from internal marketing efforts, those that have been a part of the process of defining values, defining data practices and how that impacts the data lifecycle must become true champions of data ethics for the business. This can only be done if each individual truly understands how ethical guidelines impact their day to day role, and how they can be leveraged to inform decision, and then, most importantly, have the agreed ethical framework actually put into practice.

One key factor is the appointment of committed data roles, such as ethics officers and auditors, that will be a part of the framework development from start to finish, oversee data ethics in practice, and own the review of processes that form part of the data lifecycle (such as data sharing, data quality, and data analysis). But with the ultimate goal of ensuring all elements work hand in hand to ensure all work truly reflects the defined values.

If unsuccessful, product innovation and company growth may be impacted, customer trust negatively impacted, and in turn customer satisfaction will be tarnished and many may flee to competitors that take data ethics more seriously – all playing a part in the loss of market share, reputation and profitability.

Make data ethics part of the everyday business for the **whole organisation**, not just the data specialists.

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Global Headquarters
BAE Systems
Surrey Research Park
Guildford
Surrey GU2 7RQ
United Kingdom
T: +44 (0) 3301 585268

BAE Systems
8000 Towers Crescent Drive
13th Floor
Vienna, VA 22182
USA
T: +1 720 696 9830

BAE Systems
Level 1
14 Childers St
Canberra, ACT 2601
Australia
T: +61 290539329

BAE Systems
Suite 905 Arjaan Office Tower,
Dubai Media City
Dubai
T: +971 4 (0) 568 6776

BAE Systems
101 Thomson Road
#07 -03 to 07. United Square.
Singapore 307591
T: +65 6951 2371

Appendix

- ¹ [https://www.gov.uk/government/publications/data-ethics-framework#:~:text=The%20Data%20Ethics%20Framework%20is,scientists\)&text=people%20helping%20to%20produce%20data%2Dinformed%20insight](https://www.gov.uk/government/publications/data-ethics-framework#:~:text=The%20Data%20Ethics%20Framework%20is,scientists)&text=people%20helping%20to%20produce%20data%2Dinformed%20insight)
- ² <https://www.ft.com/content/76578fba-fca1-11e8-ac00-57a2a826423e>
- ³ The ODI
<https://theodi.org/article/the-odi-consequential-to-research-the-second-generation-of-ethics-tools>
- ⁴ National Data Strategy, 2020
<https://www.gov.uk/government/publications/uk-national-data-strategy/national-data-strategy>
- ⁵ <https://www.mckinsey.com/~/media/mckinsey/business%20functions/mckinsey%20digital/our%20insights/how%20six%20companies%20are%20using%20technology%20and%20data%20to%20transform%20themselves/the-next-normal-the-recovery-will-be-digital.pdf>
- ⁶ <https://www.equifax.co.uk/resources/what-we-do/credit-experts-since-1899.html>
- ⁷ <https://www.londonstockexchange.com/discover/lseg/our-history>
- ⁸ <https://www.cio.com/article/3290407/history-of-business-intelligence.html?page=2>
- ⁹ <https://www.bi.team/publications/the-perception-of-fairness-of-algorithms-and-proxy-information-in-financial-services/>
- ¹⁰ <https://www.bi.team/wp-content/uploads/2020/05/WEBSITE-BIT-Predictiv-Perceptions-of-fairness-of-algorithmic-decision-making-2.pdf>
- ¹¹ <https://hbr.org/1993/05/whats-the-matter-with-business-ethics>

BAE Systems, Surrey Research Park, Guildford, Surrey, GU2 7RQ, UK

E: learn@baesystems.com | W: baesystems.com/financialservices

 [linkedin.com/company/baesystemsai](https://www.linkedin.com/company/baesystemsai)

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