

# ONE

## Why Digital Responsibilities?

### Why focus on digital responsibilities?

Responsibility is a slippery concept that is difficult to pin down and yet an understanding of responsibilities, how they are allocated and who actions them is fundamental to a functioning society. As societies become increasingly digitalised, understanding how responsibilities are shaped and re-shaped through digital technology is vital if the benefits of digital technologies are to be realised. Digital technology redistributes responsibilities at speed and scale by enabling new and different modes of collaborative working, wealth generation and resource management.

Think of messaging apps such as Signal and WhatsApp and how they enable social and work collaborations over time and space. Think of e-payment platforms and how they enable new forms of marketisation and income generation. These technologies are not used in isolation but are combined in formal and informal configurations to harness new ways of engaging and relating for political, social, business and administrative purposes.

Just as such configurations shape and re-shape how we relate to each other, forming new collaborations and co-operations in the process, so too are the responsibilities that flow through these relationships. If such changes to responsibilities are not realised and established, then the effectiveness of responsible actions is limited. Our work sets out a framework that helps surface responsibilities in digitally mediated spaces and scaffolds

conversations about how responsibilities might be realised, established and actioned.

The work originated from a digital responsibility fellowship supported by the UK's Research Institute for Sociotechnical Cyber Security (RISCS). Lizzie Coles-Kemp was the RISCS digital responsibility fellow and theme lead between 2020 and 2023. The fellowship's focus was to set out digital responsibility as a research area, elicit the relevance of digital responsibilities to effective information protection strategies and consult with academics and practitioners on the state of the art in understandings of digital responsibilities. The three case studies included in this book were funded as part of this RISCS fellowship. Lizzie then joined forces with Mark Burdon on the UK's Discribe Hub+ project. Mark was a challenge fellow on this project that was funded by the Economic and Social Research Council. Together they developed the RISCS work on digital responsibility and combined it with Discribe's work on legal and regulatory aspects of digital security by design.

We present that work as our new digital responsibilities framework in [Chapter 2](#). We then explore the framework's capabilities through the three case studies. We conclude by setting out a manifesto for 'doing' digital responsibility in pluralistic, multi-scalar, digital contexts. Issues of power, marketisation, technocratic control and human agency are never far from the surface in our work, as outlined in the book.

### **The book's rationale**

The book outlines a process of enabling collaboration and constructing consensus among the multiple and continuous parties involved in the realisation, establishment and actioning of digital responsibilities. Through a series of case studies, it highlights the dynamic nature of digital responsibility formation that involves multiple parties, with differing requirements and different capabilities. The framework thus recognises that the process of digital responsibility formation is conducted in a

genuinely pluralistic environment that features groups and individuals with diverse needs, resources and values.

Our focus on the pluralistic nature of digital responsibilities is novel and important because it allows policy makers to better understand the challenges of governance in environments that are disrupted by digital technologies and infrastructures. The digital environment is pluralistic because it straddles separate sites of responsibility realisation and construction (such as the market, the state and the individual) and across different realms of technology engagement relevant to the establishment of digital responsibilities. In turn, these different sites and realms are governed through multiple plural perspectives – legal, regulatory, infrastructural, computational, etc. – to the extent that not one policy perspective is sufficient to understand the true complexity of digital responsibility formation.

The book is highly relevant to both policy and academic communities. It will allow policy makers to better understand the processes of realising, establishing and actioning responsibility for the digital realm. Governance strategies and policy development need to enable collaboration across separate groups to ensure a genuine consensus about the need and actioning of responsibilities in digital environments. The book outlines to policy makers, and indeed digital technology developers, how to think about policy implementation as an issue of responsibility. It provides a new conceptual understanding of responsibility in the digital realm and provides practical examples of policy fragmentation through three case studies developed by up-and-coming digital researchers from across the social sciences. These works highlight the challenges of actioning responsibility across different digital policies.

The work, by its nature, is multi-disciplinary and will be relevant to different academic disciplines: cybersecurity; policy sciences; law and regulation; digital media and infrastructure. On top of the case studies, the book also brings together several different responsibility concepts (including digital responsibility, legal responsibility, responsible research and

innovation) to provide a robust and holistic frame to both better understand and effectively enact digital responsibility from a policy-making perspective.

Different disciplines have differing conceptual understandings and applications of responsibility. As such, it is not possible for the book to cover all dimensions of responsibility, particularly in relation to philosophical perspectives. Issues that are well trodden in the broad philosophical literature, such as moral responsibility or collective responsibility, have therefore not been explicitly covered in the book. They do, of course, feature in the areas of legal and digital responsibility but are done so implicitly, rather than explicitly.

We would like the book to equip policy makers worldwide, and UK policy makers particularly, to have policy discussions about fundamental areas of digital policy including digital identity, service and technology resilience, fraud and scam prevention, and personal data protection.

## The book's coverage

The book has three parts: (I) digital responsibility framework overview, (II) three case studies of policy challenges in digitally fragmented environments that surface responsibility issues and (III) a thematic conclusion that brings together the key findings of (I) and (II) to better understand the role of digital responsibilities in policy making.

In [Part I, Chapter 2](#) lays out the main canons of literature in which our work is grounded. [Chapter 2](#) explores academic understandings of responsibility across three frames: digital technology, law and the individual. We build on the extant literature to provide a new way of understanding the complex enmeshing of responsibility formation in digital environments. The process of realising, establishing and actioning responsibility for the digital realm needs to enable collaboration across separate groups to ensure a genuine consensus about the need and actioning of responsibilities.

The chapter concludes by introducing our digital responsibility framework and setting out the high-level and operational process points involved in digital responsibility formation:

- *Realising* entails the realisation and construction of responsibility needs across the different parties involved in digital service delivery and policy development.
- *Establishing* regards the formulation and establishment of digital responsibility requirements, particularly through law or regulation.
- *Actioning* entails how established responsibilities are actioned or non-actioned by parties involved in digital policy implementation.

The digital responsibility framework represents a new way of conceptualising the development and actioning of responsibilities in the digital environment. It outlines the importance of understanding the relations between:

- Realising, establishing and actioning digital responsibilities in a policy context.
- The sites, realms and environments in which digital responsibilities are formed.
- The norms, requirements and values that underpin digital responsibility policy-based formation.
- Enabling collaboration and constructing consensus throughout the processes of digital responsibility formation to better understand and inform policy making.

We contend that aligning these relationships increases the likelihood of successful responsibility adoption which enables the better implementation of policy requirements for digital environments.

**Part II** of the book provides case studies of digital policy challenges, especially across fragmented regulatory spaces.

The case studies highlight the relationships between realising, establishing and actioning responsibility and the necessary associations between different parties in responsibility generation. These relationships become more important in areas of fragmented regulatory spaces or governance.

The case studies are three individual works that each highlight a digital policy challenge in the following policy areas:

- Development of UK online safety legislation and the fractious process of legislative debate ('Digital Safety') – Mark Burdon and Lizzie Coles-Kemp.
- Lack of much needed digital services for refugees and asylum seekers in the UK ('Digital Migration') – Evan Easton-Calabria.
- Provision of online targeted material to recognise and encourage Kurdish participation in the UK census ('Digital Census') – Iida Käyhkö.

Each case study depicts a snapshot in time. They each show the messiness, complexities and contradictions that challenge the implementation of any framework or policy. The case studies underline the situatedness of responsibility formation and how responsibilities are constructed through relationships and interactions.

As part of the writing process, we handed our draft writing to illustrator Chris Day. While academic writing often flattens or simplifies such complexities in a bid to communicate an argument, we have incorporated illustrations within the case study chapters to draw out some of these complexities. We go on to use illustrations in [Chapters 6](#) and [7](#) to show how contextual complexities might interact with the framework that we set out. In this way, we hope to ground a concept as abstract as digital responsibility in the day-to-day spaces that stand to benefit from a more holistic approach to realising, establishing and actioning responsibilities in digitally mediated spaces and places.

In [Chapter 3](#), Mark Burdon and Lizzie Coles-Kemp examine the complex and fractious Parliamentary debates involving the development of the Online Safety Act 2023 ('OSA'). The Online Safety Bill 2021 was considered a landmark piece of prospective legislation in its attempt at establishing a new legislative framework for tackling harmful content online. To make the UK a safe digital space, the Bill sought to establish a new 'duty of care' upon online service providers towards their users, obligating them to take positive action to mitigate potentially harmful content. The proposed imposition of this wide-ranging reform was contentious and led to significant debate about the expected responsibilities of different parties. [Chapter 3](#) highlights the digital policy challenge of tackling online harms as a prism to (a) identify how digital responsibility manifests within the different dimensions of private sector digital design, delivery and use and (b) examine the fractious policy debates to identify the responsibility contentions behind the debates. The chapter finds that a responsibility consensus across key parties was not fully realised which meant that legal responsibility was established through the implementation of the OSA which commanded responsible action discharged through technological means rather than it being a consensus driven exercise. The Parliamentary debates thus demonstrate distinct types of responsibility action at play, which were mostly negative, particularly from the private sector parties, in trying to avoid responsibility for online harms and safety.

In [Chapter 4](#), Evan Easton-Calabria examines the roles of various levels of governance, from supra-national (the United Nations) to national (the UK Government) and local (London authorities, civil society organisations) regarding the provision of digital services for UK-based refugees or asylum seekers. The chapter explores several elements of digital responsibility by humanitarian and civil society organisations towards refugees. By the very definition, a refugee is no longer under the responsibility of their home country, but instead has a host state, the UNHCR as a 'surrogate state',

or a resettlement country which legally ‘takes responsibility’ for them. In this light, responsibility in the refugee context is one inherently related to the breakdown of the state–citizen compact or in fact relates to the lack of fulfilment of a (new) state–citizen relationship. The chapter findings highlight refugee-serving organisations in the third sector as important actors filling gaps in state-led refugee assistance, and ones which either explicitly or de facto take responsibility for several aspects of digitally assisting refugees. In doing so, the case study also touches on the intersections between digital responsibility and humanitarian and civic responsibilities. The contexts explored illustrate that just as responsibility occurs in physical contexts, so does it manifest in digitally mediated contexts. In this case, the absorbed actions of civil society organisations provide digital services to refugees with fewer resources to take on such a task, especially during COVID-19 lockdowns.

In [Chapter 5](#), İida Käyhkö examines digital responsibility practices among London’s Kurdish community regarding the 2021 census. The chapter examines the creation of accessible and secure digital services for marginalised communities, particularly those who have a fraught relationship with the state. Käyhkö provides a window into the existing actions of responsibility among London’s growing Kurdish diaspora, and what these can tell policy makers about the concerns and challenges encountered in digital interactions with the state. Further, it looks at how digital services are engaged within a particular cultural setting, and why specific cultural environments must be considered in discussions on digital responsibility. The chapter finds that digital responsibility is shaped by specific cultural settings, and that practices of outreach and support may already exist in informal and semi-formal networks, unnoticed or unaided by local councils or central government. Actions taken by community organisers created a sense of trust and excitement around the 2021 census



and created secure and accessible environments for community members to complete the census. The shouldering of digital responsibility is therefore not merely a question of providing expertise or assisters to marginalised communities, but rather of engaging with existing community networks from a perspective of civic responsibility.

Part III of the book synthesises the previous chapters to outline future digital policy implications. A ‘lessons learned’ approach is taken by applying our framework to case study findings to better understand digital responsibility issues.

In [Chapter 6](#), we shed light on the lessons that can be learned when the framework is applied to the case study findings. Five lessons learned are put forward:

- Actions tell a lot about responsibility but not everything. Actions must be understood in the context of realising and establishing responsibility.
- Digital responsibilities are distributed across infrastructures, technologies and governance requirements.
- Responsibility lacunas – an absence of responsibility in certain circumstances – are features rather than bugs of digital responsibility formation and should be seen and supported as spaces for positive digital responsibility formation.
- Using forcing functions, such as legislation or security controls, does not guarantee the outcome of expected digital responsibility actions.
- Resource allocation and revenue generation effect digital responsibility formation at all levels.

Finally, in [Chapter 7](#), we conclude the book by contending that digital responsibilities should be considered in five ways which provides policy makers with a better responsibility-based understanding of the consensus building requirements necessary for implementing policy in fragmented digital environments. These five ways are:

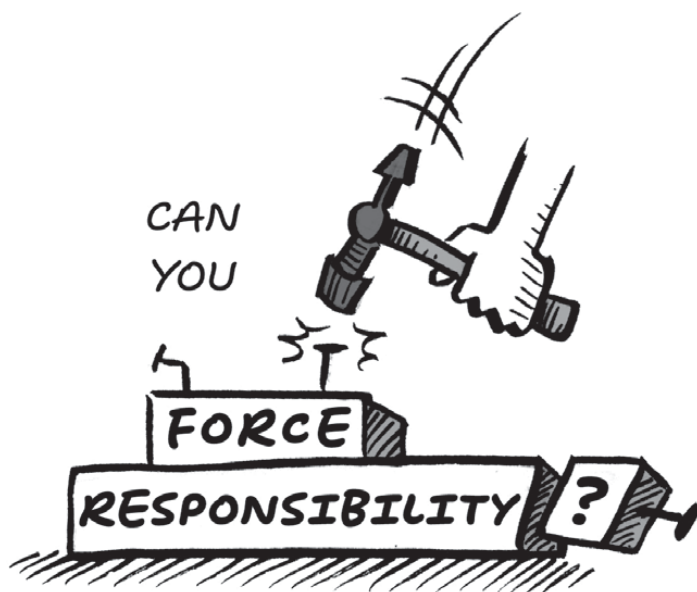
- Understanding the digital is about real relationships.
- Understanding digital impact at scale.
- Understanding that we can't have speed and responsibility.
- Understanding responsibility frameworks differently.
- Understanding that digital responsibility is pluralistic.

Chapter 7 therefore squares the circle and builds on everything that has passed before it. We put forward several different arguments for why digital responsibilities should be understood differently, beginning with the contention that to understand digital responsibility means to truly acknowledge and understand the real relationships involved in digital technology implementation and management.

All the case studies, to a certain extent, demonstrate that individuals can be understood, even by positive intention actors, as something less than an individual – a responsibilised cog of an infrastructural wheel. The Digital Migration and Digital Census case studies demonstrate clearly that even well-intentioned responsibility realisations and establishments require on-the-ground actions that are aimed to meet the needs of the individual. We then contend that it is important to understand the impact and scale of digital technology implementation which helps to explain why individuals become cogs, especially in institutional structures of automation predicated on a hybrid mix of public service delivery and private sector profit.

The impact and scale of digital technology implementation leads to our third understanding. Put simply, responsibility generation, either individualised or through collaborative consensus, cannot be achieved at speed. A conundrum and tension visibly arises in the drive towards automation at scale and the increasing pathways of responsibilisation that cements individuals as cogs of infrastructural implementation. Both the state and private sector technology providers cannot shoehorn responsibility on to individuals, and expect them, at the same time, to be informed and consensual participants

Figure 1.1: The limits of forcing functions



in digital service delivery. We therefore conclude our argument by contending that digital responsibility needs to be understood pluralistically.

When put together, these five understandings shed light on why digital responsibility is different and points to the distinct types of understandings and conversations that are required to better acknowledge the complexity of forming responsibility consensus in digital environments.

### **What we hope you'll get out of the book**

Our book sets out the importance of placing the issue of digital responsibility at the centre of policy making including policies about the digital and policies that rely on the digital for their implementation. Our case studies illustrate the

implications of why it is important to consider responsibilities when implementing policies and the harms that can arise as a result. We propose a framework that is intended not to regulate responsibilities but to act as a prompt that scaffolds conversations about digital responsibilities in environments encompassing digital technologies that continually shape and re-shape the interactions upon which our societies are structured.

By using illustrations, we hope to provide a bridge from theory into practice, thereby providing inspiration for how to make the question of digital responsibility central to the design and implementation of public policy in contemporary, digitally mediated settings.