Private Power, Online Information Flows and EU Law: Mind the Gap

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The phenomenon of the Internet is widely believed to have been a revolution in society akin to that of Gutenberg’s printing press 600 years ago. One aspect of this revolution initially was perceived to be the ungovernable, indomitable nature of the Internet, especially as compared to the control that could be exerted over previous communications technology, such as television, print media and the telephone, due to the decentralised nature of the ‘network of networks’.

However, after more than 20 years of the Internet being widely available as a public medium, poles of power have emerged, both public (based around the nation-state) and private (based around for-profit corporations), which also interact with each other to produce a corporatised private-public pole of power over the Internet. It is the private aspects of this public-private nexus which is the topic of this book. This private power has manifested in concentrations of power which do not promote and facilitate an optimally free flow of information online for users, compromising their autonomy.

A framework of laws and regulation already exist with the explicit aim, or implicit effect, of governing such concentrations of private power. It is those of the European Union (EU) that are considered here, in particular antitrust/competition law, sector-specific regulation, data protection and human rights. However, it is competition which is the most prominent: absent any ex ante regulation, mono- and oligopolies are prima facie governed by competition law (as a ‘legal regime of last resort’); also, EU competition law has strong enforcement measures available for when breaches are detected. Indeed, in only one of this book’s case studies is ex ante regulation present, namely telecoms markets, with its presence a legacy of the privatisation and liberalisation of this sector from the 1980s rather than a response to the new challenges posed by the Internet. Given the Internet is used as a communications medium extending beyond a mere economic marketplace, EU data protection law and fundamental rights, in particular privacy and free expression, are also relevant to the book’s discussion.

Each chapter of the ‘substantive’ part of this book forms a case study which provides an example of where existing law and regulation in the EU, namely

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1 ‘Antitrust’ is the US term, whereas ‘competition’ is used in most other jurisdictions, including the United Kingdom (UK) and European Union. In this book, ‘competition’ will be the primary term used, except when referring to the American system, in which case ‘antitrust’ will be used.
Introduction

competition, sector-specific regulation, data protection and fundamental rights, leave a ‘gap’ where Internet users’ interests, encapsulated in the idea of ‘autonomy’ explained below, are not protected and instead left exposed to the negative effects of concentrations of private economic power affecting online information flows.

These gaps exist due, in part, to current overarching trends guiding the regulation of economic power, namely neoliberalism. Accordingly, only the situation of market failures can invite ex ante rules. This is also buoyed by the lobbying of regulators and legislators by those in possession of economic power to achieve outcomes which favour their businesses. Given this systemic, and extra-legal, nature of the reasons as to why the gaps exist, some ‘quick fixes’ from outside the system are proposed at the end of each case study, namely the potential for applying regulation and/or applying ‘self-help’ solutions, which are mainly technical measures using peer-to-peer design. These extra-systemic solutions are, admittedly, not a complete or perfect solution to the problems of private economic power online, but they do give a glimpse of alternatives which could be deployed on a grander scale to effect positive change for users.

I. This Book’s Approach

This book explores how information flows on the Internet are controlled by for-profit corporations at various important ‘choke-points’ and critiques the EU’s existing legal and regulatory framework for being unable to ensure that these flows occur in an ‘optimal’ way. In practice the corporate ‘gatekeepers’ of these online information flows at the choke-points are private, for-profit undertakings which have a monopolistic or oligopolistic character. The main argument of this book is that existing EU law and regulation does not adequately address concentrations of private economic power adversely affecting online information flows to the detriment of Internet users’ autonomy due to their neoliberal basis.

A ‘law in context’ approach is taken to the subject of corporate dominance over Internet data flows. More specifically, a critical political economy approach is taken to the study of the EU legal and regulatory frameworks governing concentrations of private power online. This is preferred over a traditional ‘black letter’ doctrinal approach to the law due to the issues of power, freedom, autonomy and control which are explored in relation to online information flows.

The focus of this book is on Internet markets whose subject matter concerns online information flows. While the Internet is transnational by its very nature,
the EU is the book’s principal jurisdictional locus since it is one of the two most advanced competition and regulatory regimes in the world, as well as having a highly complex and developed Internet infrastructure, the majority of which is privately-owned (as opposed to being the property of the state). The analysis is comparative in part, drawing as well from the experience of the United States of America (US) where relevant, given its position as having the other most advanced competition and regulation regime globally. In addition, many of the Internet corporations managing online information flows considered here are transnational entities, which operate in both the EU and the US. This also triggers a (partially) comparative analysis since what happens to such a corporation in one jurisdiction in terms of competition investigations and regulatory action can have spillover effects in the other jurisdictions in which that corporation operates.4

Internet corporations involved in the management and facilitation of online information flows, by providing either physical or virtual infrastructure through which this information flows between Internet users, are considered. These corporations can be termed ‘gatekeepers of information’ since through their infrastructure they channel information to users, and they also have the power to switch on or off these flows, as well as manipulate the flows in other ways: thus, they exert control over the information flows.5 Online information flows have become increasingly important to social and economic aspects of life, given that the data they contain may be the ‘new currency’ of the information economy, or a business input as important as capital and labour.6 The rise of ‘Big Data’ (ie the collection and analysis of large volumes of information), and the associated hype around it,7 reinforces the importance of data in the information economy, and the crucial role of the entities which control that information and data.8 Indeed, the transition to the ‘Internet of Things’, whereby a plethora of objects such as clothes and accessories, coffee machines, and energy meters are becoming Internet-enabled, is likely to cement data gathering and analysing as key functions of the economy but the problems that are generated by control of information are also likely to be amplified as a result of this development.9 Moreover, the proliferation of devices connected to the Internet culminating in the Internet of Things and the amount of activities in the lives of those in (over)developed Western societies which take place involving the Internet in some way or other cause the distinction between

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online and offline to blur.\textsuperscript{10} In an increasingly ambient intelligent environment, more of what used to be ‘offline’ is now also ‘online’, which makes this book and the issues it interrogates all the more timely.

Such corporations operating in markets in which data and information gathering is of paramount importance challenge conventional EU competition and regulation analysis, due to facts such as: the nature of their products and services being highly complex and technical; users in some cases paying no monetary sum (although often paying with their privacy)\textsuperscript{11} to access the services or products which make up examples of two- or multi-sided markets;\textsuperscript{12} and the rise of ‘prosumer’ peer production to (part-)produce informational products and services.\textsuperscript{13} These factors place obstacles in the way of traditional applications of competition law, as well as competition’s paternalistic attitudes towards passive consumers and failure to see or deal with the ‘non-economic’ aspects of issues it encounters.

This book looks at available law and regulation to address the control of online information flows by concentrations of private economic power. Absent specific regulation, competition law is the main legal player, operating as a residual regime to address accumulations of economic power principally through its sanctions for abuse of dominance. There are other legal and regulatory regimes which intersect with parts of the Internet and its information flows but they too leave gaps where Internet corporations are concerned. In any event, these laws also are not designed primarily to tackle corporate dominance resulting from concentrations of private economic power, and for this reason also cannot be relied upon to deal with this issue.

Yet certain other legal regimes, which promote the autonomy of users and are applicable to the scenarios at hand, are considered to determine the extent to which they can solve problems of corporate control of online information flows in the interests of users. EU data protection laws and fundamental/constitutional rights to free expression and privacy are highly pertinent to the governance of online information flows. Furthermore, the objectives of these areas of law converge with the idea of user autonomy, which is central to the argument of this book. Data protection law has the objective of protecting individuals’ privacy, which itself protects individuals’ autonomy.\textsuperscript{14} In Europe, the right to free


expression is conceptualised as centring on the individual, and being based on
the ideas of autonomy and human dignity.15

There are various related areas which are outside this book’s scope. First, the
discussion concentrates on exercises of private economic power, and thus excludes
state-only control of online information flows, such as for the purposes of
preventing crime (e.g., child pornography, terrorism, fraud), addressing copyright
infringement and restricting ‘adult’ material. While the nation-state and private
economic power do cooperate with each other for mutual benefit, pure state
conduct is excluded from consideration, as well as its ‘outsourcing’ to private
providers.

Secondly, the discussion here centres on whether current EU law and regula-
tion, and their application, are capable of addressing the problems caused by the
control of online information flows by private economic power, and thus ensure
that users’ autonomy is preserved and protected. Accordingly, possible concep-
tual reforms to this law and regulation to promote user autonomy are not con-
sidered in great detail. The omission of such discussion is due in part to concerns
of space and to the fact that such conceptual reform is also likely to be a longer-
term project in terms of time. Instead, a more pragmatic approach is taken to the
problems that exist now with these large concentrations of private power online
manifesting in commodified information gatekeepers, and how they may be
resolved in the short term by existing law, regulation and extra-legal methods.
Nevertheless, the reform of existing law and regulation in ways which would pro-
mote user autonomy online, and perhaps autonomy for citizens in other areas
of life as well, may be a much larger project, part of a broader and more pro-
found societal change which embraces more radical, heterodox, schools of eco-
nomic theory, such as participatory economics (and participation beyond just the
economic sphere).16

Thirdly, of current EU law and regulation, consumer protection law is largely
excluded from consideration. Consumer protection law may theoretically promote
individuals’ autonomy through its concern for the weaker parties (i.e., individu-
als) in the marketplace. However, in practice redressing this balance has gener-
ally involved greater transparency obligations on companies to provide more and
accurate information about the products and services they are selling. While more
information may be provided about, e.g., non-net neutral conduct from Internet
Service Providers, what happens to users’ data once it is collected or the exis-
tence of restrictions that mobile device providers put on their devices and access to
content, this does not go far enough to advance user autonomy. The Unfair Terms
in Consumer Contracts Directive (93/13/EEC) does concern the substantive

15 E Barendt, Freedom of Speech, 2nd edn (Oxford, Oxford University Press, 2005); V Zeno-
Zencovich, La Liberta d’espressione Media, mercato, potere nella societa dell’informazione (Bologna,
Il Mulino, 2004).
16 See M Albert and R Hahnel, The Political Economy of Participatory Economics (Princeton,
Introduction

‘fairness’ of terms in standard form consumer contracts, which are frequently used for digital products and services, and in theory an expansive interpretation of what constitutes ‘unfairness’ in such contracts may involve invalidating terms which impinge upon user autonomy as defined below. Yet in practice, consumer law has been tardy in its consideration of digital matters compared to other areas of EU law.\(^{17}\) There is scant Court of Justice of the European Union (CJEU) jurisprudence on unfairness in digital consumer contracts, even though several types of terms commonly used in such contracts would likely fail the current ‘unfairness’ test, let alone an expanded version of it.\(^{18}\) Furthermore, many ‘consumer protection’ issues regarding privacy are already subsumed by the data protection regime in the EU, in contrast to the US which, lacking a similar comprehensive data protection law, has experienced a more activist Federal Trade Commission protect consumer privacy via its authority to police unfair and deceptive trade practices.\(^{19}\) Thus, consumer protection is not one of the areas of law considered in detail within this book’s substantive chapters, but its consideration ought to be incorporated into future reform.

Fourthly, this book contains illustrative examples of the gaps left by the current legal and regulatory system in terms of addressing the adverse effects on online information flows for Internet users resulting from concentrations of private economic power. It does not attempt to cover all such examples. Indeed, for instance, the domain names and root server system overseen by the Internet Corporation for Assigned Names and Numbers (ICANN) is outside the scope, even though ICANN may fall into the definition of an online private gatekeeper, or at least a ‘public-private gatekeeper’.\(^{20}\) The reason for this is multifaceted: ICANN and the system it oversees can be seen as sui generis in various respects.\(^{21}\) Despite its global reach and the ‘public’ nature of some of the power it wields, in terms of legal structure ICANN is currently a private, not-for-profit organisation incorporated under Californian law. The extent to which the law of other jurisdictions, for instance European law, applies to ICANN in any way is far from a settled point.\(^{22}\)


\(^{22}\) International or European human rights law would seem not to apply to ICANN: M Zalnieriute and T Schneider, ICANN’s Procedures and Policies in the Light of Human Rights, Fundamental Freedoms and Democratic Values, report prepared for the Council of Europe DGI (2014) 12. However, EU data protection law may apply to the WHOIS database operated by ICANN, particularly the parts of the database compiled and managed by the European Regional Internet Registry RIPE NCC which is headquartered in Amsterdam. See also Article 29 Data Protection Working Party, Opinion 2/2003 on the Application of the Data Protection Principles to the WHOIS Directories, WP 76 10972/03.
Furthermore, even in the US, ICANN has claimed that antitrust law does not apply to its activities, so even in its 'home' jurisdiction it is unclear what aspects of the legal system govern its activities.\(^\text{23}\) Another absence is a full consideration of monopolistic social networks such as Facebook, which could also be termed a gatekeeper of information online\(^\text{24}\)—or at least a manipulator of that information (and its psychological effect on users), as its controversial 'Emotional Contagion' experiment demonstrates.\(^\text{25}\) Facebook and other social networks have been excluded, though, for considerations of space and a wish to avoid repetition, given that the application of relevant law would be largely similar to that detailed in the case study on online search in chapter 3.

II. Intended Contribution

This critical perspective on competition law, sector specific regulation, fundamental rights and data protection regarding the Internet differs from what is standard, and believes another world beyond that envisaged by neoclassical economics and its assumptions, as well as its implementations via neoliberalism, is indeed possible.\(^\text{26}\) In legal scholarship and especially scholarship on competition law, the dominant paradigm of neoclassical economics is usually implicitly accepted as being true or good, and the analysis thus follows. This book professes an explicitly normative consideration of the issues, in contrast to ‘orthodox’ or ‘conservative’ approaches, which in practice also adopt normative perspectives, even if they often purport (explicitly or implicitly) to be neutral. The explicit normative position taken here is that users’ autonomy is promoted above the interests of the centralised state and centralised capital. To what extent this objective could be achieved by a more ‘behavioural’ approach to EU law and regulation currently being discussed in the literature\(^\text{27}\) is unclear, and beyond the scope of this book looking at whether the current rules in this area promote user autonomy, although insights from behavioural studies of users may prove helpful for guiding future reform.

In each of this book’s case studies, where it is seen that the existing law and regulation is unable to uphold users’ autonomy adequately, technical solutions are


\(^{26}\) Following and attempting to further the initiation of a theory which ‘would actually be of interest to those who are trying to help bring about a world in which people are free to govern their own affairs’. D Graeber, Fragments of an Anarchist Anthropology (Chicago, IL, Prickly Paradigm Press, 2004) 9.

instead proposed. This is not done on a technologically deterministic basis (that a ‘code’ is a better regulator of human conduct than law, markets, norms, etc) but on the basis that these particular technical solutions, often designed explicitly with ideas of privacy, expression and decentralised commons organisation in mind, better uphold the normative value of user autonomy and so form pragmatic alternatives to the offerings of the poles of private economic power identified. As mentioned earlier, these solutions are not total, complete or perfect but do represent an important alternative to the commercial offerings and open up possibilities of paradigm change in the Internet ecosystem.

Optimal free information flows from an Internet-user-centric perspective will be defined, with a particular focus on facilitating users’ capacity for autonomous conduct online. Although competition law, and regulation for that matter, are more familiar with ‘consumers’ (and occasionally ‘citizens’), for various reasons which will be explained later, Internet users cannot be fully equated with the ‘consumer’ of competition law: for them the Internet is more than just an economic marketplace. Why these free flows are valuable for individuals and society, and thus desirable goals, will be explained.

Then, the focus will move to considering the ways in which users’ autonomy over free flows of information is threatened by private economic power, which acts as gatekeeper and controls certain important choke-points for information flows. The case studies each concern a particular choke-point, encompassing: the network infrastructure providing Internet access to users; search engines organising web content; mobile Internet ecosystems (devices and application platforms); and cloud providers.

The discussion then examines how far the current EU legal and regulatory system addresses the interference with the free flow of online information by these axes of private economic power, for the benefit of Internet users. Competition law and pertinent sector-specific regulation concerning concentrations of economic power, namely that for telecommunications, will be considered primarily as the parts of the system which are designed to address the problems that economic power can cause, since the corporations under consideration may be considered to be abusing their positions of power in contravention of the rules. Data protection and fundamental rights, especially free expression and privacy, are also considered as subsidiary parts of the legal and regulatory system which might provide some remedy to the interference with free information flows, although these legal regimes have their deficiencies, particularly given that their aims are not primarily to address these concentrations of private power.

The case studies exist along a continuum or spectrum of regulatory intervention, with Internet provision (chapter 3) and Internet search (chapter 4) evidencing the most intervention from EU authorities, with the forthcoming net neutrality regulation and the ongoing competition investigation into Google, respectively. Chapter 6 on cloud computing represents the other end of this scale, with the least legal and regulatory intervention, and is the most prospective case of the four. However, all of the case studies establish that the current legal and regulatory
system in the EU does not address fully the negative impact that concentrations of private economic power have over the free flow of information online and thus Internet users’ autonomy. Why that is the case, that is to say why these ‘gaps’ in current law and regulation exist, is discussed and explained, with the neoliberal influence over EU competition law and economic regulation considered in particular as a factor accounting for these gaps.

With the Internet now increasingly the subject of law enforcement and regulatory interventions by governments, including competition investigations, as well as the growing concentration of private for-profit power—while dialectically the Internet holds the potential for more liberated activity by individual users than previous communications media—this book aims to contribute to the academic and policy discussion in various ways.

First, the book aims to demonstrate the limits of the current legal and regulatory approach in the EU to addressing private economic power in a gatekeeping function over online information flows. The discussion and analysis is based upon Buch-Hansen and Wigger’s critical political economy approach to EU competition policy, which was originally directed at merger control, and expands upon it by applying it to how the current system in the EU addresses concentrations of private economic power in Internet markets.

The discussion in the following chapters will show that the Internet is capable of being captured by for-profit corporations with the associated accumulation of market power and concentration in online markets, and that this is harmful for not just the ‘welfare’ of ‘consumers’ but also for users and their autonomy. Except in the case of Internet Services Providers, there is no ex ante regulation which applies to concentrations of for-profit corporate power exercised online, and it is competition law, in its sanctioning of abuses of dominance, which operates residually to address these accumulations of power.

While competition law can solve some of the problems created by this concentration of private for-profit corporate power through its sanctioning of abuses of dominance, it is not a panacea for all issues involving such an accumulation of private economic power on the Internet, and the approach to thinking of competition law as the only or one of the only permissible checks on this private economic power is misguided. Indeed, it can be seen that an accumulation of market power to form a dominant position in an Internet market can have consequences which are prejudicial to Internet users, but are not adequately captured by competition law. Due to EU competition law’s current ‘More Economic’ approach, its inability to take account of the changed identity of the consumer into user and its difficulties in incorporating ‘non-economic’ values into its analysis, competition law cannot adequately respond to all of the issues created by such accumulations of private power. Furthermore, in situations where there is no dominant position in

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a given market, the profit-seeking characteristic of online corporations entails that all players (or all major players) in a given market may compete with each other on price and other features, but may all still be acting in a similar way which is prejudicial to users’ interests. Thus users lack a ‘real choice’ of alternatives.

Certain other legal regimes may be applicable to these situations where users’ autonomy is being eroded by accumulations of private power, namely fundamental rights and EU data protection law. However, their operation alongside competition law still does not address the entirety of the prejudice and harm suffered by Internet users. In the case of fundamental rights, this is mainly due to the fact they operate primarily vis-à-vis state action rather than that of private entities. Data protection, while applicable to private entities, is limited in its application to ‘personal information’, and not always well-enforced in practice. As a result, the operation of these existing laws and regulation leaves ‘gaps’, where the system does not promote autonomy for Internet users vis-à-vis concentrations of private economic power.

The book shows that these ‘gaps’ in the legal and regulatory system exist because the system does not promote autonomy for users, and is still focussed on their character as consumers vis-à-vis corporations (and citizens vis-à-vis the state). A cognisance of user autonomy is necessary in order to address all the harm that users suffer from accumulations of economic power. However, this book is also critical of the law itself in being able to provide such an adequate outcome, especially where new technologies are concerned, given their very quick rate of change and development. Thus, any legal/policy/regulatory solution, aside from potential substantive inadequacies, may also procedurally be too little, too late. In addition, corporate regulatory capture gives rise to scepticism as to the possibility of regulation being mooted in the first place and its successful adoption and implementation. Moreover, the ‘invisible handshake’ and the nation-state’s interest in the surveillance of Internet users, particularly through privately-owned infrastructure, entails that in practice, full public/state control over the Internet is undesirable, let alone unlikely to happen (eg via expropriations) given the neoliberal currents at play in the EU and beyond.

While there is a need for a new approach in addressing the problems caused by concentrations of private economic power acting as online information gatekeepers for Internet users, advocating for new laws and regulation is not an easily-accomplished solution. This is due to the deep penetration of neoliberal ideas in competition law’s ‘More Economic’ approach and ‘light touch’ sector-specific regulation in the EU; the lack of ‘joined up’ coherence throughout the

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legal and regulatory framework to marry ‘social’ and ‘economic’ objectives; and the regulatory capture of institutions and the lobbying which the intended targets of regulation engage in to avoid being regulated in the first place. Thus, the short-term promotion of user autonomy may be better, or at least more immediately accomplished by users taking matters into their own hands and designing non-hierarchical, non-exploitative online tools and infrastructure, possibly operated on a cooperative basis, rather than prioritising requests for more state intervention such as ex ante regulation. Indeed, peer-to-peer commons-based alternatives are suggested in the substantive case studies as pragmatic options for users unwilling to wait for the benevolence of state and for-profit corporate power to protect and promote their autonomous interests.

III. Outline of the Book

The following chapters are structured into one theoretical chapter and four substantive case studies followed by a concluding chapter. These case studies have been chosen as they illustrate the issues at the core of this book, namely the gaps that the current legal and regulatory system in the EU produces when protecting and promoting users’ autonomy vis-à-vis private economic power online. Before exploring how the case studies play out in practice, chapter 2 provides more background on the book’s main argument, that existing EU law and regulation does not adequately address concentrations of private economic power adversely affecting online information flows to the detriment of Internet users’ autonomy due to their neoliberal basis. First, the emergence of neoliberalism and its influence over contemporary Internet-related EU laws will be outlined. The Internet is bound up in a dialectic of corporatist control and individual freedom given the historical context surrounding its origins, and the technological affordances it presents to individual users, a dichotomy which will be examined. Then, the idea of user autonomy will be explained, followed by how it interacts with contemporary EU competition law and regulation. Finally, conceptual alternatives to this existing law and regulation are suggested as better ways of achieving user autonomy in practice.

The four substantive case studies comprise situations in which there are concentrations of private economic power in the EU which perform a gatekeeper function over a certain ‘choke-point’ for online information flows going to and from Internet users. As mentioned above, these case studies are illustrative of what are broader trends in both how Internet markets are set up, and also the gaps left by the application of current law and regulation in the EU. An assessment is made in each chapter of the extent to which these accumulations of private for-profit power online harm user autonomy, and the extent to which pre-existing EU law and regulation can address these issues. In each case, it is found that while current law and regulation go some way to addressing user autonomy concerns, they still
leave some aspects of these concerns unaddressed, so there is a ‘gap’ in the law and regulation where user autonomy is not protected vis-à-vis private power. This is an undesirable state of affairs, yet one which is unlikely to be remedied easily and expeditiously within the current system.

The case studies consist of an examination of Internet provision, search engines, mobile device ecosystems, and cloud computing. These case studies encompass both the physical and virtual infrastructure facilitating Internet users’ communications and other activities online, and each form a point at which a gatekeeping function can be performed with regard to the information that users send and receive over the Internet. They are illustrative of concentrations of online private power whose negative consequences for Internet users are not fully addressed by existing law and regulation in the EU, and demonstrate greater trends in the commodification of the Internet, particularly the contemporary and forward-looking chapters on mobile devices and apps, and the cloud, given these are directions that are being pursued with new devices developed as part of the Internet of Things.

In particular, chapter 3 (‘Dominance and Internet Provision’) looks at issues of dominance in how Internet access services are provided to users. Internet Service Providers (ISPs) offering this access perform a gatekeeping function over online information flows, particularly in the ‘last mile’ to and from users: they are in a position to censor or otherwise manipulate what users send and receive. These ISPs under consideration are mostly private for-profit corporations, although some of the European ones have emerged out of what used to be state-owned telecoms monopolies, which underwent a process of privatisation and market liberalisation from the 1980s. The ex ante sector-specific regulation of these entities is a legacy of that process, accompanied by competition law. However, as is explored in more detail in the body of the chapter, these have been insufficient to address the rise of ‘net neutrality’ as an issue for Internet provision, which is born of corporate dominance and encompasses both competition concerns and digital rights issues. While in both the EU and US net neutrality has been a subject of regulatory activity, it can be seen that this activity, where it exists, is ‘too little, too late’, and so demonstrates the inadequacies of the system in instituting ex ante regulation to address pre-existing legal and regulatory gaps.

Chapter 4 (‘Dominance and Internet Search’) turns attention to search engines, which perform a major gatekeeping function over information available to users on the Web. They also represent an important example of almost total dominance by one single entity in the EU, namely Google. Google’s functioning has been subject to competition investigations for alleged abuses of dominance in both the US and EU, which will be analysed, along with the extent to which the results of these investigations alongside the operation of other relevant areas of law uphold online user autonomy.

Chapter 5 (‘Dominance and Mobile Devices’) charts the transition to Internet-enabled mobile devices, namely tablets and smartphones, providing a more ‘closed’ and controlled Internet experience to users. The position of gatekeeping that device vendors and app store operators possess vis-à-vis users is considered,
which again raises the (by now familiar) issues of competition and users’ digital rights. There have been some competition investigations in this field, which again are examined to determine whether they have resulted in gains for users’ autonomy online.

Finally, chapter 6 (‘Dominance and the Cloud’) is more forward-looking than those which precede it, in examining the migration of various previously offline functions of data storage, software and applications to centralised Internet-enabled cloud providers. Again, cloud providers occupy a gatekeeping position regarding the information users send and receive. The prospective application of competition law and the other relevant areas of law are examined to determine whether these gatekeeping issues can be addressed adequately to protect and promote users’ autonomy.

The final chapter summarises the outcomes of the case studies vis-à-vis how dominance of online information flows by concentrations of private economic power is addressed in the interests of user autonomy by the available legal tools in the EU. It will be seen that the case studies together present a situation in which gaps exist in the application of current EU law and regulation to concentrations of private power. While acknowledging that these gaps arise from more deep-seated currents in society that are likely to be too profound to be addressed in the short term, possible next steps for law and regulation will be discussed.