

Chapter 106

Legal Responses to the Commodification of Personal Data in the Era of Big Data: The Paradigm Shift From Data Protection Towards Data Ownership

Emile Douilhet

Bournemouth University, UK

Argyro P. Karanasiou

Bournemouth University, UK

ABSTRACT

Big Data is a relatively recent phenomenon, but has already shown its potential to drastically alter the relationship between businesses, individuals, and governments. Many organisations now control vast amounts of raw data, and those industry players with the resources to mine that data to create new information have a significant advantage in the big data market. The aim of this chapter is to identify the legal grounds for the ownership of big data: who legally owns the petabytes and exabytes of information created daily? Does this belong to the users, the data analysts, or to the data brokers and various intermediaries? The chapter presents a succinct overview of the legal ownership of big data by examining the key players in control of the information at each stage of processing of big data. It then moves on to describe the current legislative framework with regard to data protection and concludes in additional techno-legal solutions offered to complement the law of big data in this respect.

INTRODUCTION

Big Data is a relatively recent phenomenon, but has already shown its potential to drastically alter the relationship between businesses, individuals, and governments. The issues surrounding privacy of the online users (Mayer-Shoenberger, Cukier 2013) and the overall ethical challenges involved (Schroeder, 2014) make big data a topical issue, especially in the aftermath of the Snowden revelations. Many organi-

DOI: 10.4018/978-1-5225-7501-6.ch106

sations now control vast amounts of raw data, and those industry players with the resources to mine that data to create new information have a significant advantage in the big data market. The use of predictive analytics in processing information tracked across different platforms to identify trends in the behaviour of individuals further adds value to big data (Fotopoulou, 2014) and makes it an important asset for any commercial entity. This rapid commodification of personal data has given rise to a new approach with regard to its legal protection in the era of big data: a shift from the traditional privacy protection regime to a wider protection under property law is considered by scholars as an appropriate legal response to the phenomenon of monetisation of personal data, once seen through the lens of big data (Victor, 2013).

The aim of this chapter is to identify the legal grounds for the ownership of big data: who legally owns the petabytes and exabytes of information created daily? Does this belong to the users, the data analysts, or to the data brokers and various infomediaries? The chapter presents a succinct overview of the legal ownership of big data by examining the key players in control of the information at each stage of the processing of big data. It then moves on to describe the current legislative framework with regard to data protection and concludes in additional techno-legal solutions offered to complement the law of big data in this respect, with a particular focus on the European context¹.

BACKGROUND

The transition from the traditional economic model of neoliberal markets in the post-industrial era to “informational capitalism” (Cohen 2016), based on a data-driven economy has challenged conventional legal thinking. Often referred to as the oil of the 21st century, data has become a valuable asset for the key stakeholders offering services in the digital era. At the same time, the law has been struggling to cope with this overbroad scope and definition of “data”, as it does not purely address the user’s privacy, being able to reveal one’s identity but it can also be valorized and thus imply property entitlements for user generated data. The following section explores how data can be legally assessed during various stages of processing: in doing so, it is intended to demonstrate how big data appears to be an area not overly addressed by the current regulative framework, which focusses mostly on data protection and appears to bear little attention to how data can gain monetary value and thus allow for property based claims.

MAIN FOCUS OF THE ARTICLE

Issues, Controversies, Problems: The Four Stages in the Big Data Processing Cycle and Property Law

There are four main stages in the processing cycle of big data from its raw form to its use in predictive analytics:

1. Collection
2. Processing

8 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/legal-responses-to-the-commodification-of-personal-data-in-the-era-of-big-data/217930

Related Content

XML Data Services

Vinayak Borkar, Michael Carey, Nitin Mangtani, Denny McKinney, Rahul Patel and Sachin Thatte (2006). *International Journal of Web Services Research* (pp. 85-95).

www.irma-international.org/article/xml-data-services/3076

Knowledge Representation Technologies Using Semantic Web

Vudattu Kiran Kumar (2019). *Web Services: Concepts, Methodologies, Tools, and Applications* (pp. 1068-1076).

www.irma-international.org/chapter/knowledge-representation-technologies-using-semantic-web/217876

XML Data Binding for C++ Using Metadata

Szabolcs Payrits and Péter Dornbach (2009). *International Journal of Web Services Research* (pp. 18-34).

www.irma-international.org/article/xml-data-binding-using-metadata/34104

The Assurance Point Model for Consistency and Recovery in Service Composition

Susan D. Urban, Le Gao, Rajiv Shrestha, Yang Xiao, Zev Friedman and Jonathan Rodriguez (2012). *Innovations, Standards and Practices of Web Services: Emerging Research Topics* (pp. 250-287).

www.irma-international.org/chapter/assurance-point-model-consistency-recovery/59927

Accessibility Evaluation of Turkish E-Commerce Websites

Yakup Akgül (2022). *App and Website Accessibility Developments and Compliance Strategies* (pp. 169-187).

www.irma-international.org/chapter/accessibility-evaluation-of-turkish-e-commerce-websites/287258