

# Consumers in the cloud

Citation for published version (APA):

Dolny, T. (2023). *Consumers in the cloud: EU consumer protection in cloud computing contracts*. [Doctoral Thesis, Maastricht University]. Maastricht University. <https://doi.org/10.26481/dis.20231123td>

## Document status and date:

Published: 01/01/2023

## DOI:

[10.26481/dis.20231123td](https://doi.org/10.26481/dis.20231123td)

## Document Version:

Publisher's PDF, also known as Version of record

## Please check the document version of this publication:

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# Consumers in the cloud

## EU consumer protection in cloud computing contracts

Tomasz Dolny

### **Impact paragraph**

*What is this research about?*

When we use online email, stream music or videos or archive pictures on the internet, it is very likely that we are using cloud computing. Those pictures, videos or emails are no longer saved on hard drives of our computers. Instead, they are stored and processed on a group of remotely located computers accessed over the internet, referred to as cloud computing.

From the perspective of a consumer, the offer of cloud computing products on the market is expanding and includes not only music subscription services and video on-demand subscriptions, videoconferencing but also storage application and other software applications. Many more traditional online products for consumers such as e-mail hosting, online game servers or social networks are cloud based.

Although the user experience might be very similar or better compared to the situation when videos, music or pictures were still on our own computers, using cloud computing raises some interesting legal questions. These concern the rights of consumers when they enter into contracts with companies providing cloud computing products. What happens if all my emails are lost? Can somebody access my pictures stored online without authorisation? Can I change my mind after I subscribed to a video streaming service? Can I terminate the contract and move my music somewhere else?

The answers to those questions can be found in EU law which regulates many aspects of contracts between businesses and consumers. This research aims to assess whether EU consumer contract law is appropriate to regulate cloud computing contracts. This research discusses whether EU law regulates cloud computing in a coherent and consistent manner and whether it is likely to achieve a high level of consumer protection, increase consumer trust in cloud computing, and foster the development of an EU single digital market. Some arguments are presented on how existing EU law could be improved in order to better address the challenges of cloud computing technologies.

The thesis addresses all the elements related to a contract between a consumer and a business, starting from the information the consumer should receive upfront, whether consumers can change their mind after concluding the contract, and whether rights and obligations in the contract are unfairly distributed to the detriment of consumers.

*Who are the target groups of this research, and how is this research relevant to them?*

This dissertation is focused on the analysis of provisions in existing EU law and as such is mostly targeted at legal scholars and practitioners. By providing a systematic assessment of a

broad range of issues, it could be useful to consumer protection authorities and national courts where they are called upon to apply EU consumer law in the area of cloud computing.

Since the thesis also presents arguments on how existing EU law could be improved in order to better address the challenges of cloud computing technologies, the research could also be of use for policymakers or legislators when they are considering legislative changes in the future.

Lastly, it is the author's ambition that this research can serve as a guide for market participants. First, it could be of practical everyday use for consumer organisations and consumer advocates when they advance consumer protection in an online environment. Second, this research will hopefully contribute to compliance by businesses and will have an impact on commercial practices employed by cloud providers by helping them provide products in accordance with EU law and remedy any in compliant practices.

*What is the envisaged impact of this research?*

Much has been written about the economic potential of cloud computing. It reduces the costs of operating computer systems and furthers efficiency gains likely to appear from service innovations. Users do not need to invest in their own infrastructure; storage and processing takes place in the cloud rather than at the users' premises or on the user devices. Cloud services can rapidly scale up or down according to demand. Cloud virtualises computation power so that the physical location of users or computer resources are no longer a constraint.

Cloud computing continues to evolve from a market disruptor to the expected approach to IT solutions from business organisations. It is no longer a novelty but the mainstream product which gained solid ground. Therefore, ensuring that the EU legal framework applying to cloud computing is coherent and consistent has gained particular importance.

Cloud computing has obviously the greatest impact on businesses. However, one should not underestimate the impact of cloud computing on consumer products, even if services for consumers are still less developed. The IT needs of consumers are growing and require more and more sophisticated infrastructure for storing and processing. Some applications, games or video services might also require enhanced computing resources. By adopting cloud products, businesses can offer consumers smooth access to products and better user experience even at peaks of consumer demand. It would be hard to imagine modern on-demand consumer video or music streaming services without the scalability of the cloud.

Perhaps cloud computing also has a broader societal relevance going beyond purely economic savings, as it may exemplify a more general trend in society. We are moving away from owning "things" towards models, based on use and access, which depend on needs. Ownership appears as expensive and unnecessary when the same benefits can be achieved through services offered to consumers.

In this sense, cloud computing belongs to the same phenomenon as, for example, the sharing economy. It is about the redistribution, sharing and reuse of excess capacity in goods and services. Similarly, cloud computing is about an access to a pool of computing resources which are shared among multiple users. It improves the allocation of resources by allocating capacity dynamically and by reducing resources that are left idle.

The same way as car-sharing optimises the use of cars by allocating a certain time to users when they need a car and limits the time when the car stays idle and creates costs for the owner, cloud computing allows for efficiency gains in allocating computing resources to customers when they need them and shares these resources between different users in a dynamic manner. This reduces excess capacity in the economy.

This societal trend of moving away from ownership towards sharing or renting goods or buying services creates new business models and new consumer habits. Cloud computing with its illusion of having immediate access to unlimited resources is part of this trend.

As cloud computing becomes a societal trend, an expected IT approach for businesses and a mainstream product for consumers, any problems with this model of product delivery are no longer limited to a narrow group of tech-savvy users. Such issues come to the forefront and can affect large number of users at the same time. Risks in cloud computing or potential market failures can become a significant issue and deserve special attention from a regulatory perspective.

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