

# *Assessing the economic viability of data intermediation services as defined in the DGA*

Working paper

Melanie Verstraete  
Techno-economics group IDLab  
University of Ghent  
Zwijnaarde, Belgium  
[melanie.verstraete@ugent.be](mailto:melanie.verstraete@ugent.be)

Prof. Dr. Sofie Verbrugge  
Techno-economics group IDLab  
University of Ghent  
Zwijnaarde, Belgium  
[Sofie.Verbrugge@ugent.be](mailto:Sofie.Verbrugge@ugent.be)

Prof. Dr. Didier Colle  
Techno-economics group IDLab  
University of Ghent  
Zwijnaarde, Belgium  
[Didier.Colle@ugent.be](mailto:Didier.Colle@ugent.be)

Michiel Fierens (*Author*)  
Center for IT & IP Law (CiTiP)  
Catholic University of Leuven  
Leuven, Belgium  
[michiel.fierens@kuleuven.be](mailto:michiel.fierens@kuleuven.be)

**Abstract**— With the Data Governance Act (hereinafter DGA), the EU is introducing data intermediation service providers (DISP) to increase trust and promote data sharing through so-called neutral middlemen. This article focuses on the potential consequences of falling under the scope of the DGA and consequently the stringent obligations contained in this regulation. Specifically, the unbundling and neutrality obligations could have a major impact on established and new data intermediation business models in that regard. It is problematic that the DGA leaves room for gray areas regarding its scope and consequently its obligations for DISPs. Indeed, different interpretations may have different consequences in practice regarding the viability of a business models of a company. This may even cause friction in the market by potentially making conditions more favorable for one company than another in certain cases.

**Keywords**— *Data Governance Act; data intermediation services; business models; unbundling*

## I. INTRODUCTION

The new EU data strategy and the resulting legal framework (in particular the Data Governance Act (DGA)) creates new processes and structures to facilitate data sharing by companies, individuals, and the public sector. While data sharing and invasive data collection (and accompanying business models of companies outperform competitors) were discouraged in the past given the General Data Protection Regulation, the EU now wants to emphasize the importance of data sharing through the establishment of the DGA. The EU bases this belief on mainly two assumptions. First, the EU assumes that trust is missing in the current internal data market and that therefore companies are not willing to share data securely and freely. Secondly, the EU assumes that this trust justifies a need for regulated neutral, intermediary players in the economic market. To this end, the DGA promotes new

market players with neutral, specifically imposed business models, namely the data intermediation service provider (DISP). However, this type of introduction has legal and economic implications. Even though several companies already offer services that might be similar to the data intermediation services (DISs) as defined within the DGA, it is not entirely clear to what extent they could fall within the scope of the DGA and consequently what obligations apply to those DISPs.

Whereas the DGA offers opportunities for the creation of new business models via the introduction of DISPs, somewhat paradoxically the various strict obligations for those DISPs in the DGA could also limit the creation of innovative business models regarding data intermediation[1,2]. Consequently, this article questions the scope of DISPs in the DGA and its strict obligations as well as the economic viability of introducing such a new business model through the lens of interdisciplinary research. Here, the definition of a DISP and its associated obligations are assessed from a legal perspective and compared from an economic perspective with existing business models of three interviewed companies offering services that could qualify as data intermediation services. Subsequently, the scope of margin for companies to set up new data intermediation services (new business models) considering the legal obligations formulated in the DGA is explained in more detail. Ultimately, this allows us to preliminary map the wider impact of the DGA on companies in the digital market.

## II. IMPACT OF REGULATIONS ON DATA-RELATED BUSINESS MODELS

Policies, governance frameworks, and regulations provide the barriers of the playing field for companies within a market or ecosystem. As mentioned by [3], policies and regulations can have a major impact on the barriers of entry for businesses

in a certain market. In the case of GDPR, for instance, the regulation provides challenges concerning personal data processing and data security. As argued by [4], legislators should carefully consider the carrot (e.g. relaxation of responsibilities) vs. stick (e.g. heavy penalties) approach to support private sector efforts and foster new business models when posing regulations.

The strict rules applicable to entities qualifying as DISPs under the DGA, including structural requirements, potentially have a huge impact on how DISPs organize their business model. In particular, DISPs (both structurally and in terms of cross-use of data [5 Article 12(a)]) must separate their data intermediation services from the rest of their business. In addition to these structural requirements, it is forbidden to tie preferential commercial terms (including pricing) for the provision of DISP to the provision of other services [5 Article 12(b)]. Finally, DISPs must also provide fair, transparent and non-discriminatory access to their service and take appropriate measures to ensure interoperability. Even the reasonable continuity of the provision of its data intermediation services, normally a requirement for public authorities, must be guaranteed [5 Article 12(f, i and h)]. Although the intent of the legal obligations of this kind of separation are clear (namely not to misuse the data that DISPs manage as a kind of fiduciary in facilitating data exchanges between data holders and data users), different interpretations of this legal concept may cause confusion. Such obligations may even have significant distorting effects on the activities of DISPs, which cannot be fully identified at this stage. This research will provide preliminary insights by answering the following research question:

*RQ: How does the DGA impact the companies providing these data intermediation services within the EU data market?*

The impact can be evaluated both on a company and from a market perspective. For the first perspective, looking at the individual business model, impact from unbundling and neutrality requirements may indicate the viability of a business model or not for a company providing a DIS. The latter related to the positioning of a DISP business model within a larger data market or ecosystem takes into account competition and market power [3]. For instance, competition from non-regulated (not under scope of DGA) types of data sharing and brokering [6]. The market perspective is not included in the scope of this paper, as only a preliminary analysis of the problem is conducted here. However, understanding the industry structure and competitive forces are important for profitability in the long run [3] and will be included in further ongoing research as a next step.

### III. METHODOLOGY

A short legal analysis of the DGA under IV. provides insights in the gray areas and risks associated with the DGA's scope as well as the legal definition of the DGA. The main source of analysis is the text of the DGA and the preparatory work as set out in the DGA proposal. Where necessary, reference is made to other primary or secondary legislation, court decisions and legal doctrine to clarify and supplement the insights from the primary sources.

Further, through an ongoing series of semi-structured interviews, we further validate the proposed data intermediation business model and its impact and try to map

the services from three different organizations.<sup>1</sup> The three interviewed organizations are anonymously represented and cited accordingly in the following section 'V. Potential Impact of DGA on analyzed service as organization X, Y & Z. The different services offered by the interviewed organizations were examined as well as how they offer data intermediation service. Each of their offered services will be compared to the legal definition within the DGA. Additional questions concerning the business model, offerings, and understanding of DISPs and the DGA were asked and serve as input for both this and future research.

The DGA further mentions that other data-related services (e.g. cloud storage, analytics, data sharing software) can also be part of a DIS if those services directly concern the provision of data intermediation services (and thus do not need to be unbundled as together they form a single service) [5 Rec. 28]. In order to answer the question of whether a particular data-related service directly relates to a DIS, it is interesting to identify from a business perspective which services are closely related to intermediation and which are not. Applying the business model logic from [7], this article will therefore also assess whether certain services directly relate to the provision of the services potentially qualifying as DISs of the interviewed organization or not. This means if they have the ability to impact the way in which the organization brings value towards its customer segments. Emphasis will be put on customer segments since intermediaries can be classified as multi-sided platforms (MSPs) [8] connecting their different customer segments. The value offering of MSPs depends greatly on their ability to introduce network effects<sup>2</sup>. Here due to the nature of these business models connecting supply and demand of data, cross-side network effects<sup>3</sup> appear most crucial in generating value. Depending on the evaluation, consequences of the obligations and restrictions in the DGA will be discussed.

### IV. DATA INTERMEDIATION SERVICE PROVIDER

The DGA defines a DIS as "a service that aims to establish a commercial relationship for the purpose of data sharing between an undetermined number of data subjects and data holders on the one hand and data users on the other through technical, legal or other means including for the purpose of exercising the rights of data subjects in relation to personal data" [5 Article 2 (11)]. However, this definition lends itself to multiple interpretations concerning the scope and applicability of the DGA. As of this writing, neither the European Commission nor any enforcement organizations are offering any clarifying advice.

The definition can be further divided into two different types of elements. On the one hand, there are elements that refer to the nature of the DISP: 'services [...] by technical, legal or other means' and, on the other hand, there are elements that refer to the function of the DISP: 'the purpose of establishing commercial relationships between an unspecified number of data holders/affiliates and data users'. These functional elements refer to the relationship between data holders and data users.

---

<sup>1</sup> The organizations that were analyzed are part of or related to the Flemish data ecosystem.

<sup>2</sup> A network effect is an increase or decrease of the value offered as a result of an increase in customers in a customer segment.

<sup>3</sup> A value increase for customer segment when the number of customers in another segment increases.

### A. Service

Services are defined under European legislation as acts normally performed for remuneration, including activities of an industrial or commercial nature, by craftsmen and the liberal professions [9]. The DGA does not provide for a different interpretation. Jurisprudence has broadly interpreted the concepts of economic activity and provision of services in the context of the internal market [10]. The specific situation of DISs should be examined on a case-by-case basis, bearing in mind that the element of public funding or the absence of pursuit of profit is not always a decisive factor [1].

### B. Aim to establish a commercial relationship

The main purpose of this element of the definition seems to be to make a clear distinction between data intermediaries and government agencies that make data available for reuse in the sense of Chapter 2 from the DGA and data altruism in the sense of Chapter 4 from the DGA, who make data available in the general interest (*vis-à-vis* through commercial relationships). Yet several ambiguities remain around this element of the definition. For example, what does it mean for DISPs to "aim to" establish a commercial relationship? Are there guidelines to assess the establishment of a commercial relationship? And to what does the term 'commercial' refer?

Strangely, the DGA does not explicitly refer to existing legal terms such as a "business" or an "economic activity"[11]. While these terms emphasize the capacity of the service provider, establishing a commercial relationship primarily involves looking at the relationship between entities (here data holders and data users) who call for the provision of the service. In this respect, "commercial" refers to the nature of the relationship between those two parties and not their actual capacity. The term "commercial" is often used in EU law to refer to "commercial and professional activities" of companies and thus seems to implicitly base it on the commercial capacity of the entities in question[12]. However, this is strange as the DGA seems to emphasize only the nature of the relationship between data holders and data users (who can both be commercial and non-commercial actors)[1].

Next, the term 'aim to' seems to refer to the actual purpose and design of the DISP's business models, namely making conscious business decisions aimed at establishing commercial relationships between data holders and data users and thus enabling further use of data. Consequently, what matters is not the nature of the services but their actual function, namely whether they are intended to establish such kinds of relationships [13]. The recitals in the DGA additionally refer several times to the 'aim to establish' without further clarification and such circular reasoning is not very illuminating. In that respect, we can ask whether objective criteria can substantiate the 'aim to' criterion in addition to the subjective interpretation of a business model [7].

### C. For the purpose of data sharing

Despite the fact that the term "data sharing" has no uniform definition throughout existing policies and laws, the DGA contains its own definition of the term. Data sharing is "the provision of data by a data subject or a data holder to a data user for the purposes of the joint or individual use of such data, based on voluntary agreements or Union or national law, directly or through an intermediary, for example under open or commercial licences subject to a fee or free of charge". The broadest possible term ("data sharing") was chosen to encompass all possible ways in which further use of data can be enabled. This shows that the way in which commercial

relationships may arise and how further use of data is facilitated (technical, legal or otherwise) is not important [2]. After all, the focus is on the function of the DIS, not on how it is provided.

Additionally, DISs are always enabling further use of the data for data holders and/or data users. However, the DISP itself does not pursue any additional data usage. In particular, the prohibition on cross-use of data in the DGA is intended to prevent additional use of such data for its own purposes. The DISP should not benefit from economies of scope by offering additional services related to the data entrusted to them. As visible in the impact assessment, this contrasts with the current large platforms in the market characterized by 'vertical integration' of data-related activities [14]. Through these features, the EU wants to bring confidence to the figure of the DISP.

### D. Undetermined number

While the intent of this fourth element is again clear (focus on the function of the DIS and not on the specific type), the question arises whether data sharing can be considered closed by determining the number of participants in the determination from only one side, whether they are the data subjects/data holders or data users. The DGA proposal spoke of "services whose purpose is to intermediate between an unlimited number of data holders and data consumers"[5 Rec. 22]. The distinction between data holders and data subjects, who can both operate on the same side, namely as providers of data, and data users on the other side, was only established later in the final version of the DGA and possibly explains the new terminology in the DGA of "on the one hand... and on the other hand..." (causing the confusion). Consequently, we assume that both sides must contain any number of participants as this later terminological addition has nothing to do with whether an undetermined number of participants on either side is sufficient [1].

### E. Through technical, legal or other means

As pointed out several times above, what matters is the function that DISPs seek to perform, not exactly how it is done. For this reason, the broadest possible interpretation was opted for here as well. In this way, DISPs are not limited to a particular means of providing their services and the DGA remains applicable during the further development of DISs and technological evolution. However, without any *de minimis* thresholds or further restrictions, a potentially large gray zone regarding the actual function of DISPs is at hand. According to a broad interpretation of the definition, lawyers may for example also establish commercial relationships [2]. However, this cannot be the DGA's intention. While the interpretation regarding how a DIS can be provided is broad, the actual function of a DISP seems to us to be rather restrictive, especially given how the interviewed organizations under V. are currently positioning themselves in the market [5 Rec. 22].

## V. POTENTIAL IMPACT OF DGA ON INTERVIEWED ORGANIZATIONS

Depending on a maximum, broad or a minimum, limited interpretation of the definition and legal considerations, the interviewed organizations may or may not fall within the scope of the DGA. When examining the different services offered by the interviewed organizations and how they implement their DIS, they mostly point to three types of services, namely (1) by merely passing data from holder/subject to user directly by enabling a marketplace or matchmaking service, (2) orchestrating an ecosystem and enabling exchange through

other DISs or (3) by setting up a customer sharing and data processing environment. In this respect, it is peculiar that the DGA nowhere takes into account the existence of multiple DISs that jointly enable relationships between data holders and data users (e.g. ecosystem orchestrator and multiple other DISs within that ecosystem). Nonetheless, all three types of services seem to indicate a rather minimalist interpretation of the function of a DISP, namely connecting different parties and facilitating data exchange within some kind of dedicated environment.

Organization X provides a matchmaking service to enable the sharing of data between data holders seeking a job and data users seeking to recruit them. Additionally, organization X provides services on top of their DIS such as HR assessments and coaching for data holders to attract more job seekers. At first glance, according to the legal considerations in the DGA, these HR assessments do not directly relate to establishing commercial relationships for the purposes of data sharing, since mere matchmaking between data holders and data users can still take place even without these additional services (minimalist interpretation of a DISP's function) [5 Rec. 33, 15]. As a result, those services should be unbundled and be provided through a separate legal person than the DIS. In addition, data processed as part of coaching/assessments may not be directly combined with data collected from matchmaking or marketplace interactions. However, the combination of such services may just provide organization X with a competitive advantage since the organization could then provide a more valuable offering towards their potential customers as current market players are trying to differentiate themselves in this way. In the long run, organization X aims to expand their matchmaking service towards an HR marketplace including coaches and assessment providers. To attract those additional segments, they need to establish a customer base of jobseekers and recruiters first. The value offering for coaches and assessment providers is larger if there are more potential job seekers, thus customers, present. On the other hand, additional coaching and assessments might attract more job seekers. To overcome this chicken-and-egg problem, organization X offers those services itself to enable those cross-side network effects in a later stage.

Organization Y then seems to facilitate matchmaking done by organization X through providing services like identity service, authentication, authorization and storage [16, 17, 18, 5 Rec. 28]. As a result, the business model of organization X is mainly focused on matchmaking and is not designed to accommodate a full technical facilitation of data intermediation. If the majority of matchmaking services such as organization X in the future rely on other organizations such as Y to provide identity, authentication, authorization, and storage services, this may also be an indication, for example, that organizations similar to organization X do not specifically consider these services directly related to a DIS and thus essential to providing the DIS (here the matchmaking). Hence, these services then do not fall under the scope of the DGA and must be legally provided separately from the DIS.

Organization X and Y can thus be seen as complementary service providers offering DIS towards the customers of organization X. The fact that organization Y aims to be a connecting agent providing interoperability between different data points through identity services (when providing services to customers other than organization X), introduces doubt as to how to classify organization Y. In the broad interpretation of DIS functioning, this could also be classified as establishing commercial relationships between holders and users for the purpose of data sharing. However, we may wonder how to

distinguish between the services offered by organization Y and purely technical tools to share data [5 Rec. 28] or additional specific tools to facilitate the exchange of data [5 Rec. 32] that do not qualify as a DIS. In this case, we believe organization Y should not be considered a DISP (thus favoring a minimalist interpretation of a DISP's function, which only relates to the matchmaking function of organization X here). Indeed, qualifying such facilitators of DISPs as DISPs, could drastically widen the scope of the DGA, which would not enhance legal certainty. This does not fit within the broader objective of the European Union, which just encourages interoperability and modularity (rather than seeing everything as a single DIS).

A look at our last interviewed organization Z's business model confirms the reasoning from the previous paragraph concerning complementary technological support. While organization Z offers a complete data collaboration platform, on which the secure data sharing is effectively hosted, it likewise offers the software separately with governance measures to be determined by the customers themselves. Such software thus allows customers themselves to initiate the creation of relationships between data holders and data users for the purposes of data sharing. In that respect, again considering a minimalist interpretation of the function of a DIS, the provision of a complete platform qualifies as a DIS, while the provision of specific software to customers to set up a DIS themselves falls outside the scope of the DGA. Indeed, this second type of service is mainly aimed at providing technical support to a customer who is mainly focused on the matchmaking and data sharing aspect (on the provision of a DIS). This results in two different customer segments with their own value proposition for organization Z. Consequently, both activities (provision of a platform and of software) must be unbundled at the level of organization Z. In addition, as the customer of the software itself qualifies as a DISP, any other data-related activities of that customer, separate from the provision of its DIS, must consequently also be unbundled.

## VI. CONCLUSION AND CALLS FOR FURTHER RESEARCH

This paper provides first insights from an ongoing research project concerning the impact of the DGA on organizations looking to provide DISs in the data market. Through this interview series, we have analyzed which organizations and respective business models potentially fall within the scope of the DGA and which do not. Additional interviews will be organized to gain deeper insights building on these first conclusions. In this way, we strive to provide a better understanding of the definition and scope of a DISP. Besides, in addition to the current preliminary analysis at company level, the concrete impact of the DGA on the market dynamics will be studied as indicated in section III to better understand the long-term impact of the DGA.

From the legal analysis, it is clear that whether a service falls under the scope of the DGA or not depends on several factors. We believe that the business model of the DISP ("aim to establish") plays a fundamental role in this analysis. However, it would be useful in the future to clarify some more objective yardsticks in addition to this subjective criterion, for instance in case law. Likewise, how to interpret the function of a DIS (ranging from minimum to maximum) remains a major ambiguity. In our view, the function of a DIS should be interpreted restrictively, given how the organizations interviewed are currently positioning themselves in the market with their business model. The possible ways and means in which such a function can be provided can then be interpreted

broadly. This also fits in the broader objective of the European Union, which encourages interoperability as well as trying to get some grip on data-related services delivered on top of an existing service such as algorithms on platforms (e.g. by imposing certain restrictions on them).<sup>4</sup>

It is also worth noting that the DGA does nowhere take into account the existence of multiple DISs that jointly enable relationships between data holders and data users (e.g., ecosystem orchestrator and multiple other DISs within that ecosystem). The possibility of the existence of multiple DISs within a single data space or ecosystem and its possible consequences require further investigation.

Finally, a limited interpretation of the DISPs function appears to be similar to providing a public utility service or owning an essential facility as is the case in the electricity and gas markets. However, can then ask oneself who then still wants to provide DISs, in addition to their own data-related services, given the few incentives that the DGA contains. Especially, since in the case of such multi-sided digital markets and despite low switching costs, other potential barriers to entry could be identified e.g. incumbency advantages [19]. Further research can investigate possible incentives for offering DISs as well as the economic viability of business models in a fully interoperable market of on-top services.

#### ACKNOWLEDGMENT

Supported by SolidLab Vlaanderen (Flemish Government, EWI and RRF project VV023/10)

#### REFERENCES

- [1] Forthcoming. T. Bobev, V. K.Dessers, C. Ducuing, M. Fierens, A. Palumbo, B. Peeters, L. Stähler, (2023) ‘White Paper on the Definition of Data Intermediation Services, CiTiP Working Paper.
- [2] G. Caravano and M. Finck. (2023) Regulating Data Intermediaries: The Impact of the Data Governance Act on the EU’s Data Economy. *Journal of Competition and Regulation in Network Industries*, doi: <http://dx.doi.org/10.2139/ssrn.4422263>. URL <https://ssrn.com/abstract=4422263>
- [3] M. E. Porter (2008). The five competitive forces that shape strategy. *Harvard business review*, 86(1):25–41.
- [4] I. Rubinstein (2012). Big data: The end of privacy or a new beginning?. *International data privacy law* (2013 Forthcoming), NYU School of law, public law research paper, 12-56.
- [5] Regulation (EU) 2022/868 of the European Parliament and of the Council of 30 May 2022 on European data governance and amending Regulation (EU) 2018/1724.
- [6] W. Kerber.(2021) DGA-einige Bemerkungen aus ökonomischer Sicht.
- [7] A. Osterwalder, & Y. Pigneur (2010). *Business model generation: a handbook for visionaries, game changers, and challengers* (1). John Wiley & Sons.
- [8] B. Caillaud, & B. Jullien(2003). Chicken & Egg: Competition among Intermediation Service Providers. *The RAND Journal of Economics*, 34(2), 309–328. <https://doi.org/10.2307/1593720>
- [9] Art. 57 TFEU; Directive 2006/123/EC on services in the internal market.
- [10] Case C-484/14, AG Szpunar, 2016, <https://curia.europa.eu/juris/document/document.jsf?text=pecuniary%2Bremuneration%2Bservices&docid=175130&pageIndex=0&doclang=EN&mode=req&dir=&occ=first&part=1&cid=24672693#ctx1>, par. 37.
- [11] See art. 1 Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises and art. 9 (1) VAT Directive.
- [12] Regulation (EU) No 1215/2012 of the European Parliament and of the Council of 12 December 2012 on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters [2012] (consolidated version) OJ L 351,1, Art. 17(1)(c).
- [13] L. von Dithfurt and G. Lienemann. (2022) The Data Governance Act: Promoting or Restricting Data Intermediaries? . *Journal of Competition and Regulation in Network Industries*, 270–295. URL <https://ssrn.com/abstract=4272920>
- [14] Section 2.1 and 2.3 IMPACT ASSESSMENT REPORT Accompanying the document “Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on European data governance (Data Governance Act)”, COM(2020) 767 final.
- [15] I. Ajunwa, & D. Greene(2019). Platforms at Work: Automated Hiring Platforms and Other New Intermediaries in the Organization of Work. In *Work and Labor in the Digital Age*, 61-91. Emerald Publishing Limited.
- [16] ISO/IEC 24760-1:2019(en) IT Security and Privacy — A framework for identity management — Part 1: Terminology and concepts
- [17] ISO/IEC 15414:2015 Information technology — Open distributed processing — Reference model — Enterprise language, 6.6.4
- [18] ISO/IEC/IEEE 24765:2017(en) Systems and software engineering — Vocabulary
- [19] E. Calvano, & M. Polo (2021). Market power, competition and innovation in digital markets: A survey. *Information Economics and Policy*, 54, 100853.

<sup>4</sup> See in this regard also the Digital Services Act and the Digital Markets Act.

