Study on data in platform-to-business relations

Final Report

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November – 2017

Internal Market, Industry, Entrepreneurship and SMEs

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Luxembourg: Publications Office of the European Union, 2018

ISBN number 978-92-79-74129-6
doi:number 10.2873/602765

Printed in Belgium

Table of Contents

List of Figures

List of Tables

ABSTRACT

This study provides factual evidence on potential issues related to access and (re-)use of data in platform-to-business relations. Based on interviews with online platforms and businesses, a survey of businesses, and a literature review, the study identifies the different categories of data generated through online platforms and assesses a) the extent of access and (re-)use possibilities granted by platforms at present, b) the value placed by businesses on such access and (re-)use and c) the impact of a potential change in platform practices regarding data access and (re-)use.

The study finds that business users generally do not have access to some data which they value highly for marketing purposes, in particular customer email addresses, information on platform user profiles, and user behaviour data. Enhanced access to data could have a significant impact on businesses' turnover though this is conditional on business knowledge of and experience with data analysis.

Finally, the study examines two sets of policy options: 1) Requiring greater transparency on data access and use policies towards business users, and 2) Mandating access to certain categories of data. While the first option does not raise any particular legal concern, and has the advantage of addressing businesses' lack of awareness as regards data and its possible uses, the second option must be designed in conformity with the requirements of the GDPR. Furthermore, this option would in parallel have to address the lack of awareness of business users as regards data in order to be fully effective in its potential impacts.

EXECUTIVE SUMMARY

1. Objective and scope of the study

Previous European Commission research has identified practices of potential concern in platform-to-business (P2B) relationships. This study provides factual evidence on potential issues related to access and (re-)use of data in P2B relations.

In line with the above, the study's objectives are threefold:

- Provide an overview of the current practices of data access and (re-)use between business users and platforms, in particular:
  - Which categories of data are provided to and generated by the use of platforms by business users and consumers,
  - Which types of data and analysis do platforms produce on the basis of information shared with them by businesses and consumers;
  - Which categories of data do business users have access to, which not, and how they can (re-)use these data;
- Identify the impact of such practices, and the implications of greater access and (re-)use for online platforms and business users;
- Support the development of policy options to improve access to and (re-)use of data for business users.

The study focuses on online platforms which act as gateways between business users and consumers, across five categories:

- E-commerce platforms/online marketplaces;
- Hospitality platforms, (i.e. online travel agencies, meta-search engines, restaurant booking platforms);
- User review platforms;
- App stores;
- Social media.

The study also analyses advertising-related activities across all five platform categories.

2. Methodology

The study presents information gathered through:

- Phone and face-to-face interviews with online platforms and businesses;
- A survey of business users of online platforms;
- A literature review of academic and institutional sources.

Interviews were conducted in 9 EU Member States (Czech Republic, Denmark, Germany, Finland, France, Italy, the Netherlands, Spain, Poland). The survey was open to respondents in all 28 Member States.

Some methodological limitations should be kept in mind when interpreting the results of the data collection exercise, in particular the limited representativeness of the business survey sample, with business users of hospitality platforms representing almost 69% of respondents. In addition, three quarters of responses to the survey are concentrated in four Member States (i.e. Germany, Denmark, France and the Netherlands). Most survey respondents are small and medium sized enterprises (SMEs), and generate an important share of their turnover through online platforms. It should also be noted that platform survey results have been analysed qualitatively. Finally, quantitative information on impacts has been difficult to gather due to lack of knowledge of interview respondents.

3. Results and findings

State of the art: data in platform-to-business relations

The academic and institutional literature reviewed for this study outlines the potential for online platforms – and the data they generate/process – as a resource for EU economic growth. For businesses, the data generated through online platforms fosters innovation, allows to better understand market trends, and to adapt their products to consumers' needs.

Because online platforms are the central point where data is gathered, they can act as gatekeepers between consumers and businesses trying to sell their goods and services online. Previous European Commission research has found that there is a lack of information on online platforms' policies regarding data access and (re-)use, and that some platforms may retain certain data that could be of crucial important for their business users.

Categories of data generated by online platform users

The study has identified six categories of data generated by online platform users (customers and businesses):

- **Business identification details**, i.e. information on the business itself (company's address, VAT number, country of operation).
- **User identification details**, i.e. information on customers/potential customers' identity and profile (name, age, gender), contact details (email and delivery/home address), geographical provenance (IP address).
- **Data on individual transactions between businesses and customers**, i.e. the information generated through a specific transaction on the platform (good/service provided, price, payment method, communications between the business and the customer, reviews and ratings of the transaction, items viewed before/after the transaction and provenance on the Internet).
- **Business performance, i.e. information on all transactions taking place through the platform** (number of products/service offered, prices and price changes, number of transactions through the platform, total value of sales, user traffic).
- **User behaviour**, i.e. data on customers/potential customers behaviour on the platform (clicks, browsing history, other products or services purchased on the platform, provenance on the Internet, conversion rate).
- **Analyses of market trends/developments**, i.e. aggregated data and analysis of data collected by the platform and made available to business users.

The distinction between these data categories is essential as the impact of access and (re-)use for businesses and platforms varies across categories. Online platforms add value to these data in two ways:

- Centralised collection of data on businesses, users, transactions and markets through the development of user communities on the platform and hosting of transactions;
- Aggregation of data and analysis to develop insights on business performance, user behaviour, and market trends which would not otherwise be available.

Ultimately, however, the economic value of data to businesses in P2B relationship depends on the use that businesses make of the information.

Value of data for businesses

The data category that business users of online platforms consider most valuable is user identification details, with 67% of survey respondents ranking this as most interesting for them. Within this category, **customer contact details**, and in particular **email addresses**, were reported as most important, as this data allows businesses to communicate directly with their customers, facilitates promotional activities and enhances knowledge about the market.

User behaviour data is the second most valuable data category for business users, with 31% of businesses in the survey ranking this data as most interesting. Number of clicks, search and browsing history, time spent on each page, number of visits and conversion rates were specifically mentioned by businesses, as this allows them to target communication, advertising and marketing activities.

Businesses also mentioned the usefulness of **data on potential customers**, i.e. users who visited the business page on the platform but did not complete any transaction, to better reach them in the future.

It should be noted that the value business users place on each data category depends on their knowledge and experience with data analysis. App store (and e-commerce platform to a lesser extent) users tend to be able to process more complex data (e.g. user behaviour data) and to be more comfortable with data analysis, which correlates with a higher valuation. Finally, the size of the business counts, with small businesses in the interview showing little knowledge as regards data and its possible use, and emphasising instead the usefulness of data analysis (as opposed to raw data) provided by some platforms.

Access to, and (re-)use of, data in P2B relationships

In terms of data access, user identification (including customer identity, contact details, credit card information (where the payment is not intermediated by the platform) are most often granted access to by online platforms, with the exception of e-mail addresses. User behaviour data on the other hand is less available to businesses than the other data categories. Furthermore, platforms rarely grant access to information on potential customers (i.e. users who have not transacted with a specific business).

A significant proportion of business respondents to the survey (41%) report a desire to access more data than the platform makes available. This is particularly the case as regards **email address, customer profile information, and user behaviour data**, which correspond to the data businesses value most. There is therefore a gap between the data business users value most and the data that is made available to them.

Online platforms justify their data sharing policies with customer privacy and compliance with data protection law reasons, lack of skills and lack of demand from businesses, commercial considerations, and technical and interoperability issues.

The level of access to data varies depending on the size of the platform, with large platforms usually granting access to more and better-quality data. Another factor influencing the level of access to data is the alignment between platform and business interests, which ultimately depends on the **platform's business model**. Platforms taking a percentage commission on each transaction (e.g. OTAs, some e-commerce platforms) tend to grant better access to marketing data, including analyses for free, and to invest in marketing tools for business (e.g. banners, widgets, tips). Platforms with business models based on advertising or click-throughs have more interest in generating as much traffic as possible, and therefore grant more systematic access to user behaviour data as opposed to marketing data.

Data is usually made available through dashboards, which business users can log into, with more or less detailed information depending on the platform, and on whether the business has subscribed to a "premium" type of account against payment. Business users either have access to standard reports produced by the platform, or can copy the data from these dashboards. It is less common that platforms allow downloading data as CSV files, and/or to access the data through Application Programming Interfaces.

Finally, but very importantly, the study has found that business awareness of the different data made available to them is fairly low, and even lower as regards the different data (re-)use possibilities.

Assessment of impacts

The current costs for accessing data are low for most business users, with 42% of business users reporting either zero, very low or fairly low costs for data access, compared with 20% who indicated that costs were fairly high or high.

Taking into account the average cost of business management and data analytics software, subscription fees to platform premium accounts, and costs reported by business users in the survey, the study estimates the average direct cost of access to data at around EUR 4,076 per year. This represents 0.2% of annual turnover for businesses with turnover of less than EUR 2 million.

At the same time, the quantitative indications received during the study illustrate that the potential impacts of enhanced access to specific categories of data could be high, with businesses reporting an estimated **potential increase in turnover of 13.75%** if they were granted sufficient access to the data they need. Taking into account these indirect ("opportunity") costs means that lack of access to data held by online platforms ranges from EUR 280,000 for businesses with 2 EUR million turnover, to EUR 137.5 million for businesses with EUR 1 billion in turnover.

Put differently, on a sectoral basis, enhanced access to data could increase turnover by:

- About EUR 2 billion in the app store sector;
- About EUR 73 billion in the e-commerce sector; and
- About EUR 55 billion in the hospitality sector.

Assessment of policy options

The following set of policy options has been examined:

- Requiring transparency on data access and use policies towards business users;
- Mandating access to (certain categories of) data, designed in conformity with the requirements of the General Data Protection Regulation (GDPR).

4. Conclusion and recommendations

Overall, the online platforms consulted in this study consider that they share sufficient information with business users and that there is not a high demand for enhanced access and (re-)use.

At the same time, a lack of access to some data categories has been reported by businesses. This is particularly the case as regards email addresses, customer profile information, and user behaviour data, which belong to the data categories business user value most. Enhanced access to this data could have significant impact on

businesses' turnover, provided businesses have sufficient knowledge and experience in data analysis.

Taking into account the above:

- Measures aiming at increasing transparency with respect to data access and use policies towards business users could have an important impact. These measures could also include incentives for platforms to educate their business users about different data use possibilities, as is already done by larger platforms (e.g. platforms that provide extensive analyses of market trends and developments, or tips for business users to improve their performance on the basis of data analysis);
- Mandating access to certain categories of data could focus on the data categories business users report a lack of access to, i.e. email address, information on user behaviour, and information on user profile.

The second option must be designed in conformity with the requirements of the GDPR. Furthermore, this option would in parallel have to address the lack of awareness of business users as regards data in order to be fully effective in its potential impacts.

1 Objectives and scope of the study

This section outlines the objectives and scope of the study, as well as detailing the methodology used and its limitations.

1.1 Objective

Previous European Commission research, including a public consultation on the regulatory environment for platforms[1] and a study on business-to-business (B2B) relations in the online platform environment[2], has identified practices of potential concern in platform-to-business (P2B) relationships. Some of the issues raised in this research concern the lack of access and (re-)use of some data by business users, and online platforms' lack of transparency as regards terms and practices for data access and (re-)use.

This study provides factual evidence on **potential issues related to access, use and re-use of data in P2B relations.** In line with the above, the study's objectives are threefold:

- Provide an overview of the current practices of data access and (re-)use between business users and platforms, in particular:
  - Which categories of data are provided to and generated by the use of platforms by business users and consumers,
  - Which types of data and analysis do platforms produce on the basis of information shared with them by businesses and consumers user;
  - Which categories of data do business users have access to, which not, and how they can (re-)use these data;
- Identify the impact of such practices, and the implications of greater access and (re-)use for online platforms and business users;
- Support the development of policy options to improve access to and (re-)use of data for business users.

The scope of this study is limited to platform practices around data access and (re-)use.

The study focuses on online platforms which act as gateways between business users and consumers. Businesses use them to reach consumers, either to sell products or services, or to advertise.[3]

1.2 Scope

The study covers five categories of online platforms[4]:

- **E-commerce platforms/online marketplaces** (eBay, Amazon, Cdiscount, Otto, Zalando);
- **Hospitality platforms**, i.e. online travel agencies (OTA) platforms (Lastminute, Expedia, Booking.com), including meta-search engines (Trivago, Momondo, Skyscanner) and restaurant booking platforms (OpenTable, TheFork);
- **User review platforms** (e.g. TripAdvisor, Yelp, TrustPilot);
- **App stores** (e.g. Apple App Store, Google Play Store, Amazon App Store);

1 European Commission (2016). Public consultation on the regulatory environment for platforms, online intermediaries and the collaborative economy. Available at: https://ec.europa.eu/digital-single-market/en/news/full-report-results-public-consultation-regulatory-environment-platforms-online-intermediaries
2 Ecorys (2017). Business-to-business relations in the online platform environment.
3 For a definition of online platforms, please refer to section 2.1.
4 For a definition of each platform category, please refer to section 2.1.

- **Online social media** (e.g. Facebook, Twitter, Instagram, Snapchat, YouTube, Pinterest).

The study analyses advertising-related activities across all five platform categories.

Interviews were conducted in nine countries: Czech Republic, Denmark, Germany, Finland, France, Italy, the Netherlands, Spain, Poland.

In order to maximise responses and enable all relevant stakeholders to provide input, an online survey was conducted alongside the interviews in all 28 Member States.

1.3 Methodology

1.3.1 Overview of methodological tools

The study presents information gathered in interviews with online platforms and businesses, an online survey, and a literature review of data in P2B relations:

- **Interviews with online platforms and businesses** across the five platform categories gathered qualitative information on platform practices regarding access to and (re-) use of data (see Annex 5). Interviews were conducted over a period of two months between 11th August and 10th October 2017. The majority of interviews were conducted over the phone. Some interviews with online platforms took place face-to-face or during round tables organised with the support of a European platform association (see Textbox 1).
- A **survey of business users of online platforms** complements these interviews by collecting precise information on the different categories of data provided by platform users, the extent to which business users have access to this data, and the impact of platform practices on businesses. The survey was launched on 28th August and closed on 20th October.
- A **survey of online platforms** was also launched over the same period. Responses to this survey were analysed alongside the platform interviews (see Textbox 1). Both survey questionnaires are available in Annex 2.
- Finally, a **literature review** of academic and institutional sources provides state-of-the-art information concerning data in the P2B environment.

Textbox 1: Online platform consultation for this study

In total, 10 interviews with platforms were conducted: three with hospitality platforms (Booking.com, Expedia, Skyscanner), two with e-commerce platforms (Amazon, eBay), two with user review platforms (TripAdvisor, Yelp), one with an app store (Apple), and one with the Google covering its social media and advertising offers.

In addition to the 10 platforms interviewed, replies to the online survey of four additional platforms were taken into account.[5] Whereas the platforms interviewed were rather large international platforms, the survey respondents were smaller platforms operating at national level (see Table 1).

Table 1: List of participating platforms

No.	Platform	Country	Type	Status
1	Booking.com	Cross-border	Hospitality	Interview/survey
2	eBay	Cross-border	E-commerce	Interview

[5] In total, the platform survey gathered seven from responses five different platforms, among which two were not used because fell outside the scope of this study. The platform Booking.com participated to both the interview and the survey.

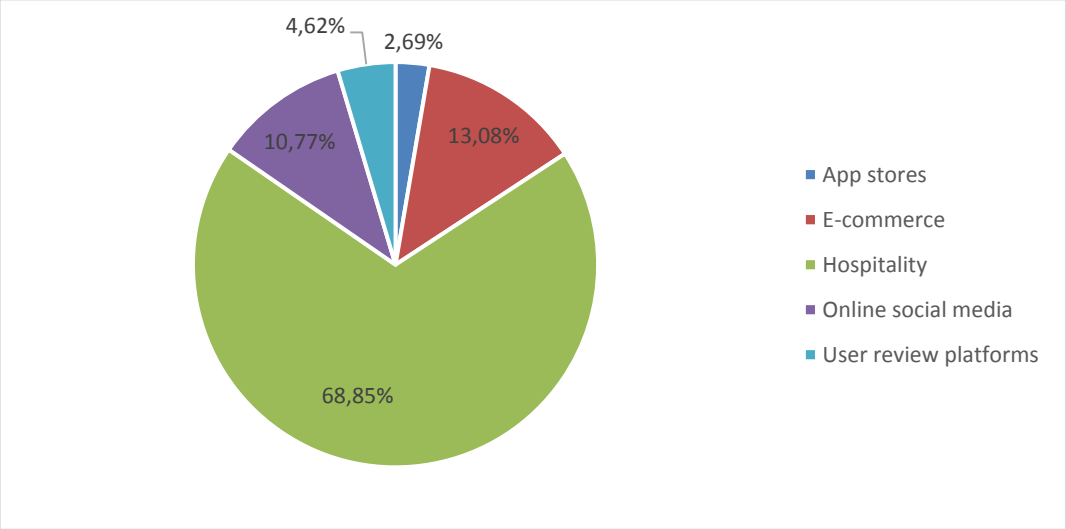
3	TripAdvisor	Cross-border	User review	Interview
4	Apple	Cross-border	App store	Interview
5	Amazon	Cross-border	E-commerce	Interview
6	Expedia	Cross-border	Hospitality	Focus group
8	Skyscanner	Cross-border	Hospitality	Focus group
9	Google	Cross-border	Online social media	Interview
10	Yelp	Cross-border	User review	Interview
11	Anonymous	Non-specified	Online advertising	Survey
12	Anonymous	Sweden	E-commerce	Survey
13	Anonymous	Czech Republic	Online advertising	Survey
14	Okazii.ro	Romania	E-commerce	Survey

1.3.2 Limitations

Given the short timeframe and limited resources that were available for this study, and despite all mitigating measures put in place by the research team, it is important to keep in mind the following limitations when interpreting the results of the data collection exercise.

First, the survey results are based on a sample with limited representativeness. In particular, business users of hospitality platforms represent almost 69% of respondents, as Figure 1 shows.

Figure 1: Distribution of business user respondents per type of platform that is most important for their business



Source: VVA, Business user survey, 260 respondents.

The limited representativeness of results is compensated to some extent through interviews with e-commerce and app store business users. User review platforms were covered in interviews with business users of hospitality platforms. Online social media were covered horizontally across all interviews.

While the online survey was open to respondents in all 28 EU Member States, actual responses were concentrated in a few Member States, with the highest number of respondents in Germany (22.7%), Denmark (22.7%), France (15%) and the Netherlands (14.6%), as Table 2 shows. This geographic concentration is unlikely to affect the results, given that platforms operating across borders tend to apply similar

terms of use across countries, and therefore similar provisions regarding data access and (re-)use possibilities.[6] This was confirmed in the platform interviews.

Table 2: Distribution of business survey respondents per country

Country	Count	Percentage
Belgium	4	1.5%
Denmark	59	22.7%
Finland	3	1.2%
France	39	15.0%
Germany	72	27.7%
Hungary	1	0.4%
Latvia	6	2.3%
Lithuania	1	0.4%
Netherlands	38	14.6%
Other	4	1.5%
Poland	23	8.8%
Portugal	1	0.4%
Romania	1	0.4%
Slovenia	3	1.2%
United Kingdom	5	1.9%
Grand Total	260	100.0%

Source: VVA, Business user survey, 260 respondents.

Most survey respondents were small and medium sized enterprises (SMEs) with less than 250 employees (90.1%) and less than EUR 2 million turnover (51.8%), as Table 3 and Table 4 show.

Table 3: Distribution of survey respondents per number of employees

How many employees does your company have?	Count	Percentage
Less than 10	38	31.4%
Between 10 and 250	71	58.7%
Between 250 and 5,000	7	5.8%
More than 5,000	5	4.1%
Grand Total	121[7]	100.0%

Source: VVA, Business user survey, 260 respondents.

Table 4: Distribution of survey respondents per annual turnover

What is the annual turnover of your company?	Count	Percentage
Less than EUR 2 million	57	51.8%

[6] International platforms' terms and condition related to data access and (re-)use rarely vary depending on the country where the business operates. For instance, see: Facebook Advertising terms and condition related to data use (12. Data Use Restrictions): https://www.facebook.com/policies/ads/prohibited_content. Rakuten's terms and condition related to data use (10. Ownership and Use of Transaction Information): https://rmsportal.rakuten.com/SellerTerms.htm
This result was further confirmed by other platforms in interviews.

[7] The difference between the grand total (121) and the number of survey respondents (260) is due to the fact that some survey answers were incomplete. In the report, each question is analysed against the number of respondents to this specific question, not the total number of survey respondents.

Between EUR-2-50 million	44	40.0%
Between EUR 50 million-1 billion	5	4.5%
More than EUR 1 billion	4	3.6%
Grand Total	110[8]	100.0%

Source: VVA, Business user survey, 260 respondents.

Online platforms generate an important share of the survey respondents' turnover, with 42.4% of them attributing between 10 and 50% of their turnover to online platforms, and 12.7% more than 50%, as Table 5 shows.

Table 5: Distribution of survey respondents per percentage of turnover that can be attributed to online platforms

What percentage of your turnover can be attributed to online platforms?	Count	Percentage
Less than 1%	14	11.9%
Between 1-10%	39	33.1%
Between 10-50%	50	42.4%
More than 50%	15	12.7%
Grand Total	118[9]	100.0%

Source: VVA, Business user survey, 260 respondents.

The study also launched a survey for online platforms to enable platforms that could not be (or did not want to be) interviewed to feed into the research. In total, seven replies were collected from five different platforms, among which two were not used because they fell outside the scope of this study and one reply complemented an interview. The results of this survey are integrated with the discussion of platform interviews, as explained in section 1.3.1 above.

Table 6: Platform survey respondents

No.	Name	Country	Type
1	Booking.com	Cross-border	Hospitality
2	Anonymous	Non-specified	Online advertising
3	Anonymous	Sweden	E-commerce
4	Anonymous	Czech Republic	Online advertising
5	Anonymous	Czech Republic	Real estate
6	Anonymous	Czech Republic	Comparison tool
7	Okazii.ro	Romania	E-commerce

Source: VVA, Platform survey, 7 responses.

Finally, it was difficult to gather **quantitative information on impacts** due to lack of knowledge of interview respondents. The estimates for potential impacts are therefore based on the input of a small number of respondents and should be seen as illustrative (see section 6.1.2).

[8] The difference between the grand total (110) and the number of survey respondents (260) is due to the fact that some survey answers were incomplete. In the report, each question is analysed against the number of respondents to this specific question, not the total number of survey respondents.
[9] The difference between the grand total (118) and the number of survey respondents (260) is due to the fact that some survey answers were incomplete. In the report, each question is analysed against the number of respondents to this specific question, not the total number of survey respondents.

2 State of the art: data in platform-to-business relations

This section presents insights from the literature on the role of online platforms and data in the EU economy, as well as the main challenges concerning data in P2B relations.

2.1 Online platforms: definitions, business models, and role in the EU economy

The European Commission defines online platforms as "'two-sided' or 'multi-sided' markets where users are brought together by a platform operator in order to facilitate an interaction".[10] This interaction can be of a different nature, i.e. exchange of information, or a commercial transaction. Martens (2016) outlines: "In its most generic form, a "platform" is a marketplace where two or more distinct types of users (for instance buyers and sellers) can meet to exchange goods, services information, etc."[11]

In its 2016 Communication on online platforms[12], the European Commission enumerates the following characteristics to define online platforms:

- **The "ability to create and shape new markets**, challenge traditional ones, organise new forms of participation or conduct business based on collecting, processing, and editing large amounts of data";
- The operation within "**multi-sided markets"** with different degrees of control over direct interactions between different groups of users;
- The benefit from **"network effects"**, where the value of the service increases with the number of users of this service;
- The reliance on **information and communication technologies** to reach their users;
- Their important role in **digital value creation**, notably by capturing significant value (including through **data accumulation**), which "facilitates new business ventures" and creates "new strategic dependencies".

According to the same Communication, there are five types of online platforms:

- **Online marketplaces/e-commerce platforms** are online platforms on which direct transactions between sellers and buyers of goods and/or services can take place. Examples of these platforms include eBay, Amazon, Allegro, Leboncoin, Cdiscount, or Zalando.
- **App stores** intermediate between users and providers of digital services/content through applications. Usually, these platforms combine operating systems (e.g. Apple iOS, Google Android) with the transaction platform where customers can download/purchase the app (e.g. Apple App store, Google Play store).
- **Social media** is described as services which enable users to connect, share, communicate and express themselves online or through a mobile app. Examples include Facebook, LinkedIn, Twitter, YouTube, Flickr.
- **Online advertising platforms** are composed of Ad networks and Ad exchanges. Ad networks aggregate online advertising space, allocate them to advertisers, and provide advertisers with tools for delivering personalised ads and for tracking consumer behaviour. Ad exchanges are online marketplaces that facilitate direct transactions between publishers and advertisers. Examples

10 Commission Staff working document on Online platforms accompanying the Communication on Online platforms and the Digital Single Market, COM(2016) 288.
11 Martens, B. (2016). An Economic Policy Perspective on Online platforms, p. 10.
12 Communication on Online platforms and the Digital Single Market, COM(2016) 288.

of such platforms include, as well as the two biggest players in the market, are Google Ads, and Facebook Ads.

- **Search engines** are services helping internet users find the relevant answers to their search requests. Search engines facilitate direct interaction between Internet users seeking information, website operators seeking audience for their content, and online advertisers targeting potential customers. Examples are Google, Bing, Yahoo.

In addition to these five categories, **hospitality platforms** include online travel agencies (OTAs), such as Lastminute or Expedia, which are online marketplaces allowing customers to search and book hotels. Meta-search engines, such as Skyscanner, Trivago and Momondo, are search tools using other search engines' data to produce their own results. Hospitality platforms also include restaurant booking platforms, such as OpenTable or TheFork, which intermediate bookings between restaurants and their customers.

User review platforms or review aggregators are systems that collect reviews and ratings of products and services and make them publicly available on the Internet. Examples include TripAdvisor, Yelp, or TrustPilot.

The **process of value creation** of online platforms is different than in traditional business models, where value is generated by the supplier of a product or a service. Indeed, with online platforms, a large part of the value derived by users is created by other users, which is called **"network effects"**. According to Martens (2016), a network effect is the effect that one user of a good or service has on the value of that product to other people. In the platform environment, online platforms notably trigger positive indirect network effects, in the sense that users of one group benefit from an increased presence of number of users from a different group (e.g. sellers on an online marketplace benefit from a higher number of users).[13]

The other important way online platforms create value, according to Martens (2016), is through **reducing transaction costs** between businesses and consumers, as the platform brings them together in a single place, and therefore facilitates interactions.[14]

For businesses, online platforms are a way to **facilitate participation in the market**, as they allow them to offer access to a wider market than they would otherwise reach through their own websites. As the European Commission (2016) points out, this notably occurs across borders, with SMEs operating online increasing their cross-border sales in the EU four times faster than those without an online presence in the period 2010-2014.[15] Businesses can also take advantage of logistic chains to dispatch their products and therefore decrease delivery costs.

Furthermore, by analysing sales and looking at customer reviews, online platforms can help businesses **better understand a market** and **adapt their products to consumers' needs**. For instance, the European Commission (2016) underlines that social networks can be an important tool for companies to promote themselves and establish direct contact with customers[16], with 29% of SMEs using social media claiming that their situation has improved over the period 2010-2013.[17]

Finally, online platforms provide businesses with a number of **productivity-enhancing tools**, i.e. low-cost ways of processing payments, simple accounting software for small companies, and platforms that help businesses run events.

13 Martens (2016), op. cit., p. 3.
14 Ibid.
15 Commission Staff working document on Online platforms, COM(2016) 288, op. cit., p. 13.
16 Ibid.
17 European Commission (2013). Use of social media by European SMEs. Available at: https://publications.europa.eu/en/publication-detail/-/publication/ba2bcc7a-f31e-4ed4-a792-e63e75ffa553/language-en

Online platforms can **transform this value into revenues** through several ways. One common practice is to charge commission on the transactions they intermediate, notably in the hospitality[18] and e-commerce[19] sectors. Other ways to generate revenues are through advertising (e.g. search engines, app stores)[20] or through the sale of data about their user community.

As noted by Martens (2016), the platform environment is highly competitive.[21] The pace of technological developments and the exponential growth rates of some online platforms have allowed them to build-up a substantial degree of **market power**, which they continuously strive to defend and extend by a variety of strategies, i.e. buying competitors.

The Commission Communication on online platforms (2016)[22] also outlines that online platforms constitute an important, sometimes the sole, **entry point to certain markets** and data. As noted by the Ecorys study on Business-to-business relations in the online platform environment (2017), online platform operators tend to place themselves in a gatekeeper position in such markets, and make themselves indispensable for its users.[23]

2.2 Importance of data in the EU economy

The European Commission Communication on Building a European data economy (2017)[24] outlines the importance of data as **"resource for economic growth, job creation and societal progress"** in Europe. The value of the data economy was estimated at EUR 272 billion in 2015, or 1.87% of the EU GDP, and is estimated to grow by EUR 643 billion by 2020.[25]

As outlined by the Staff working document on online platforms (2016)[26], the digital world is producing personal and non-personal data at an "ever-increasing rate". What differentiates data from other input factors is that data is "virtually non-finite", and can be re-used again in multiple ways for achieving different results, without losing its value.

The diversity of this data presents opportunities for players to innovate considerably, which makes it important that market players have access to large and diverse data sets. On the other hand, because the amount of data collected and processed is quasi-unlimited, as opposed to the limited cognitive capacity of human users, concerns may arise as regards "loss of individual autonomy", "lack of transparency and accountability", and the possibility that the data might be used against users' interests.[27]

As Martens (2016) points out, data has particular properties that distinguish it from ordinary goods and services:

- It can be used by several parties at the same time (**non-rival**);
- It is hard to give exclusive property rights to data (**non-excludable**).[28]

According to the author, such characteristics make it difficult to protect personal data or to assign exclusive ownership rights to personal data. In the EU, the **General Data**

18 Ecorys (2017), op. cit., p. 38.
19 Commission Staff working document on Online platforms, COM(2016) 288, op. cit., p. 16.
20 Ecorys (2017), op. cit., p. 23.
21 Martens (2016), op. cit., p. 11.
22 Communication on Online platforms and the Digital Single Market, COM(2016) 288.
23 Ecorys (2017), op. cit., p. 12.
24 Communication on Building a European data economy, COM(2017) 9.
25 According to the European Data Market Study.
26 Commission Staff working document on Online platforms, COM(2016) 288, op. cit.
27 Martens (2016), op. cit., p. 4.
28 Ibid.

Protection Regulation[29] (GDPR) seeks to set rules to protect the rights and interests of individuals, and, at the same time, to reduce administrative burdens on business and promotes innovation.

The discussion regarding data in the digital economy, including online platforms, in large part revolves around the question of its importance for competitiveness and the health of the market economy. Two distinct and largely opposing positions have developed. On one side, there are those that downplay the importance of data for business competitiveness, and are generally against regulating access to it. On the other side, there are those pointing out that data provides an important competitive advantage to a company. Thus, regulation is needed to mitigate tendencies towards monopolisation.

In order for data to provide a competitive advantage, it has to be inimitable, rare, valuable, and non-substitutable, according to Lambrecht and Tucker (2015)[30]. However, all of these pre-conditions do not necessarily hold:

- **Inimitability**. For data to be inimitable, no other firm should easily be able to replicate the advantage. However, this tends to not hold due to several reasons. First, data is non-rivalrous. That is, its consumption does not decrease its availability to others. Second, data has near-zero marginal cost of production and distribution. These characteristics have led to a market in consumer data, where it is bought and sold.
- **Rareness**. For data to be rare, few businesses must possess it. However, it tends not to hold for several reasons. First, the tools for gathering data are commonplace. Second, consumers leave traces of their data, needs and preferences on the web.
- **Value**. By itself, data is not sufficient to create profit-enhancing opportunities. For one, compatibility and integration is a problem, making it difficult for businesses to save costs or create value for customers. Second, some forms of data, such as video, are not easily analysed. Finally, it is difficult to establish causality within large pools of data, making correlation-based inferences of limited value to businesses.
- **Non-substitutability**. Data does not present a crucial competitive advantage for a business. Rather, what determines success online is ability to understand and meet customer needs.

Due to these aspects, access to data is not likely to lead to uncompetitive and highly distorted markets. There exists a healthy data market, with a mix of big players that collect large volumes and variety of data, as well as small players that focus on niche markets. Most of the data is actively traded and accessible to anyone willing to pay for it. Consequently, there are often many substitutable sources to acquire data. Having a large in-house dataset does not necessarily confer an entrenched advantage. The value of data is often limited by regulatory, commercial and practical barriers to interoperability. The size and unstructured nature of big datasets make it difficult to establish causal relationships, while mere correlations limit the usefulness of data and may lead to wrong conclusions. The history of the digital economy has so far shown that substitutes exist[31].

Consequently, proponents of this position caution against regulatory interventions concerning data access, such as requiring opt-in consent for collection of data from consumers, providing greater transparency as to the value of collected user data, prohibiting or limiting the collection of used data, divestiture of product lines, and

29 Regulation (EU) 2016/679.
30 Lambrecht, A. & Tucker, C. E. (2015) Can Big Data Protect a Firm from Competition. Available at: http://ec.europa.eu/information_society/newsroom/image/document/2016-6/computer_and_communications_industry_association_-_can_big_data_protect_a_firm_from_competition_13846.pdf.
31 Ibid.

forced sharing of data. According to Tucker and Welford (2015), the proposed remedies are likely to **degrade user experience and service quality**.[32] Requiring affirmative used consent would detract from user experience, restricting data collection would impede service improvement, divestiture of data would prevent personalized offers, etc. They might present **administrative challenges**. Requiring greater transparency would necessitate determining what information must be shared, when it should be shared, how prominently it must be disclosed, and to whom, under what conditions, who will enforce these obligations, etc. Furthermore, remedies might **reduce competition**. Requiring greater transparency as to an incumbent's income or costs related to data may reduce competition. Whenever competitors know the actual prices charged by other firms, tacit collusion may be more likely. Finally, regulation might **lessen incentives**. Another problem with firms requiring sharing their data is that this might lessen the incentives for rivals to develop their own sources of data, thereby reducing innovation.

Overall, for the proponents of this view, the pace of entry in the online world shows that data does not create durable barriers to entry or present any other significant competitive threat. Thus, there is no problem in need of a remedy, and, furthermore, the remedies under consideration might harm the industry and users[33].

The alternative position is less optimistic about the relationships between data access and competitiveness. Stucke and Grunes (2016)[34] point out that data is significant for competition for online businesses at least in several respects. Businesses are increasingly adopting **business models** that rely on personal data as a key input. As the volume, velocity, variety, and value of data increase, companies are undertaking **data-driven strategies** to obtain and sustain a competitive advantage, by offering products and services that are not otherwise publicly available, since the value of data may come from its variety. The idea that data has no significant competitive advantage is a myth. The battle over data is spreading to **acquisitions**. Big data-related mergers doubled between 2008 and 2013 from 55 to 134, for example[35]. As data-driven mergers increase, the parties are likely to raise as **defence** data-driven efficiencies. Tech firms, to maintain their dominance, will have strong **incentives to limit** their competitors **access to data**, by preventing others from sharing the data, and opposing data-portability policies that threaten their advantage.

Given the above, according to these authors, public **regulation has a significant role to play**. Currently, however, the tools that competition authorities use are insufficient. They do not have sophisticated tools to assess merger effects on non-price competition, including the impact on quality of free goods in two-sided markets and degradation of privacy protection. Also, market forces are not solving privacy issues. Consumers complain about their lack of control over their private data, for example. The harm from anticompetitive, data-driven strategies can be significant. The harm includes the loss of innovation, consumer choice, privacy individual autonomy and freedom, and the trust in a market economy.

According to Graef et al (2015), user data (individual or business) is of considerable value especially for **online platforms**, because they create value by bringing advertisers and users together[36]. This multi-sided nature of the business model increases the importance of data because without a critical mass on one side (user data), it is unable to attract a critical mass on the other side (advertisers), which makes the platforms profitable. Once one platform achieves a critical mass, it may be

[32] Tucker, D. & Welford, H. (2014) Big mistakes regarding big data. Available at: https://www.americanbar.org/content/dam/aba/publishing/antitrust_source/dec14_tucker_12_16f.authcheckdam.pdf
[33] Tucker, D. & Welford, H. (2014), op. cit.
[34] Stucke, M. & Grunes, A. P. (2016) Debunking the Myths Over Big Data and Antitrust. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2612562
[35] Stucke, M. & Grunes, A. P. (2016), op. cit, p.3.
[36] Graef, I., Wahyunintyas, S., Y. & Valcke, P. (2015) Assessing data access issues in online platforms. *Telecommunications Policy*, 39(5).

hard for competing platforms to gain a foothold on the market. Due to direct network effects, it could be difficult to attract users. Therefore, multi-sided platform markets have properties of "winner-take-most", or "few-winners-take-all" markets. Data might be used to keep advertisers on board, to enable the provision of services to users that are of the quality and relevance they expect, and to maintain the platform's strong position in the market. Hence, user data is becoming a crucial tool to compete. Because of the dependence on their user base, online platforms have an interest in keeping their systems closed. In this context, the concentration of user data may lead to entry barriers, giving rise to access problems for competitors and new entrants that need user data as input for providing competing or complementary services.

As outlined by the Commission staff working document on online platforms (2016), online platforms are well placed to take advantage of data due to significant economies of scope and scale associated with data collection and analysis. Economies of scope are also outlined by Martens (2016), who explains that larger and more varied datasets yield more insights than smaller and separated ones, which enables platforms to **better match users** on different sides of the platform market.[37]

As the Commission staff working document on online platforms (2016) explains, platforms facilitate and collect data about billions of users and interactions (e.g. Facebook has nearly 1.6 billion active monthly users, which is more than 50% of all Internet users) and are among the most visited websites in the world (all top 10 global websites by Alexa monthly online traffic operate online platforms). Large online platforms invest in data resources, e.g. Amazon has 28 data centres across the world, Google and Microsoft have data centres running more than 1 million servers. Notably:

- Online and e-commerce marketplaces rely on considerable amounts of personal and non-personal data in order to ensure personalisation of offers, setting prices or maintaining inventories;
- App stores simplify distribution issues of app developers by facilitating user acquisition, payment, invoicing, after-sales services;
- Social media process a large amount of user data, which includes information on their profile and behaviour;
- Online advertising platforms use information about their audience to better target their ads. Data collection occurs through cookies in users' browsers to record the types of pages that users visit and associate users with certain interests and demographics, as a basis for targeted advertising.

As outlined by the Staff working document (2016), online platforms have more information than each of the sides using the platform, since it is the **central point** where the information is gathered. Platforms can use this information to better connect the two sides of the market (via ranking and recommendations), to attract new participants to the platform, or to sell the gathered data to advertisers. Data can also be used to understand market trends and dynamics.

With regard to consumers, online platforms are able to determine where a customer comes from, and useful information on its purchasing habits (e.g. types of payment). Aggregated data to improve search results, but also disaggregated data at individual level, for instance, can be used by businesses to provide more targeted advertising.[38]

Data is therefore a key factor of business growth. Results from a Eurobarometer survey[39] conducted in 2016 show that almost two third (64%) of the companies using online marketplaces agree that the information about the behaviour and preferences

[37] Martens (2016), op. cit., p. 5.
[38] Eggers, W., Hamill, R. & Ali, A. (2013). Data as the new currency: Government's role in facilitating the exchange, Deloite Review, 2013 (13), 19-29.
[39] Flash Eurobarometer 439 (2016). *The use of online marketplaces and search engines by SMEs.* Available at: http://ec.europa.eu/information_society/newsroom/image/document/2016-24/fl_439_en_16137.pdf

of their customers they receive through online marketplaces is useful for the development or improvement of their products or services. However, recent research on key issues in P2B relations has found that data access and transfer between businesses and online platforms is subject to restrictions.

2.3 Key issues regarding data in platform-to-business relations

There is a consensus that online platforms have considerably expanded in terms of size and scope, reaching new economic sectors.[40,41] An example is Amazon, which started as a book selling business, and has expanded into an online marketplace, cloud computing provider, restaurant delivery service and – more recently – online grocery shop (with the acquisition of Whole Foods). Similar developments can be noticed with Google, or Apple. As underlined above, these exponential growth rates have allowed them to build a dominant position, which may lead to detrimental practices for consumers and businesses.[42,43]

A Consultation on online platforms (2016)[44] highlighted a number of concerns from stakeholders about unfair trading practices from online platforms. Among the key issues regarding data was the problem of **data access**.

- The terms and conditions and/or platform practices might limit the businesses' access to data relating to or generated as a consequence of transactions carried out on platforms. More than 4 out of 10 surveyed companies said they usually do not get the data they need about their customers from online marketplaces[45].
- Businesses might also be prevented from procuring the required data from third parties.
- Limitations to **data portability** might limit switching to another, potentially equivalent, platform. For example, following the termination of contract with a platform, a business user might not be able to take data related to its product or service, reviews, or information on customers with it to a competing platform. Almost 5 in 10 businesses using online marketplaces said they cannot easily transfer key commercial data from one online marketplace to another[46].
- There might also be a lack of **verifiability of data**. For example, businesses in advertising complained about the impossibility to verify the quality of the ad-serving service provided.
- There might be contractual **limitations on use of own data**. For example, in app stores, contractual clauses limit the ability of business users to apply data for product or service development outside the platform on which it was first generated.
- Finally, there might be technical measures preventing direct **customer contact**. For example, online travel agencies (OTAs) and some e-commerce marketplaces impose proprietary communications channels which only allow direct, anonymous contact between businesses and their clients.

An Ecorys study on B2B relations in the online platform environment (2017) identified potential negative trading practices at different stages of the commercial relationship, notably in 1) Setting the terms and conditions, 2) Search and ranking, 3) Access to the platform, 4) Platform competing with business users or limiting options, **5) Data access and portability**, and 6) Problem solving.

[40] Communication on Online platforms and the Digital Single Market, COM(2016) 288.
[41] Martens (2016), op cit.
[42] Ecorys (2017), op. cit.
[43] Martens (2016), op. cit.
[44] Flash Eurobarometer 439 (2016), op. cit.
[45] Ibid.
[46] Ibid.

As regards data access and use, the Ecorys study (2017) highlighted the following issues:

- First, in the pre-contractual period, business may **lack of information on platform policy** regarding the data made available to the business user or the extent to which this data may be used by the business user.
- During the performance of the contract, there may be **issues in accessing data or using it outside the platform.** Problems identified include retaining customer contact data, identity of clients, characteristics of users, business payment data, ratings and reviews of services. Such practices impede the business users' ability to measure their performance, develop new business strategies and business models, better respond to market trends, improve products or develop new products. They also undermine trust between businesses and customers.
- Another issue is the **restrictive application of provisions on data access/sharing and use**. Platform refusal to share data with business users, or share only limited information, is often based on privacy or data protection considerations, even where businesses only request access to aggregate and/or non-personal or anonymised data.
- After the contractual relationship is terminated, platforms may restrict businesses from taking data on their customers and transmitting it to another platform or third party. This can put the business at a disadvantage as it requires it to build up its online presence again.

Martens (2016) points out that restrictions in data access can be problematic, notably as they block business innovation.[47]

To address some of the above concerns, in its 2018 Work Programme[48], the European Commission renewed its ambition to address fairness in platform-to-business relations and committed to present a proposal on the topic.

[47] Martens (2016), op. cit.
[48] Commission Work Programme 2018. Available at: https://ec.europa.eu/info/publications/2018-commission-work-programme-key-documents_en

3 Categories of data generated by online platform users

This section presents the different categories of data that are provided to, or generated by the use of, platforms by business users and consumers.

3.1 Typology of data categories

The study team identified six categories of data which were validated in interviews with platforms and businesses as both conceptually distinct (with respect to data access and use) and a comprehensive reflection of P2B interactions.

The data categories are:

- **Business identification details.** This category includes information on the business itself, i.e. company's address, VAT number, country of operation, etc. This information is taken at the time of registration and allows platforms to identify their business users before transactions can take place.
- **User identification details.** This category includes information on customers/potential customers' identity and profile (name, age, gender, nationality), contact details (phone, email and delivery/home address) and geographical provenance (IP address). [49] This information allows businesses to identify their customers/potential customers (e.g. to deliver the product in the case of an e-commerce company, contact the customer in case of an issue, contact customers after completion of the transaction to send marketing or promotional offers).
- **Data on individual transactions between businesses and customers.** This category covers the information generated through a specific transaction on the platform. It includes data on the good/service provided, price, the customer's payment details and method, all communications between businesses and customers before and after the transaction, potential reviews and ratings of the transaction. It also includes the information that has led to the transaction itself, i.e. items viewed before and after the purchase, the browsing or search terms that have led to the purchase, the domain name/IP address of the referring website[50], etc. Such information helps businesses to keep a record of specific transactions and understand the success of their marketing activities on the platform and beyond.
- **Business performance.** This category includes broad information on all transactions taking place through the platform, i.e. number of products and/or services offered and purchased, price and price changes, number of transactions on the platform, total value of sales, user traffic data, etc. This information provides businesses an overview of their own performance on the platform (in other words the supply side).
- **User behaviour.** This category includes data on customer/potential customer behaviour, such as click behaviour, browsing history and provenance on the Internet (referring website' domain name/IP address), other products or services purchased, conversion rate, etc. Such information provides an overview of customer reaction to the goods and services that are being supplied on the platform.
- **Analyses of market trends/developments.** This category covers any aggregated data and analysis of data in the aforementioned categories. The platform may collect and use this information to produce analyses on market trends and developments which can help businesses understand demand on the platform for the goods/services provided by the business, and understand

[49] **IP address** refers to the address that identifies a device on the Internet. It notably allows to identify the geographical provenance of the user.
[50] A **domain name** is the name that identifies a website. When users access a website, the domain name is translated to an IP address, which defines the server where the website is located. It notably allows to identify the provenance of the user on the Internet, in this context which website has referred the user to the platform.

the competition so as to better target customer needs and elaborate new business strategies.

Some of the above data originate with the customer, others originate with the business itself. These categories include data of personal character, which means that the information relates to an identified/identifiable person (e.g. name, location, or information related to specific to the identity of that person), or non-personal character, i.e. related to the transaction. While certain data categories mostly include data of personal character (e.g. user identification details), some comprise a mix of personal and non-personal data (e.g. data on individual transactions can include personal information such as customers' payment details and method, but also non-personal information related to the transaction).

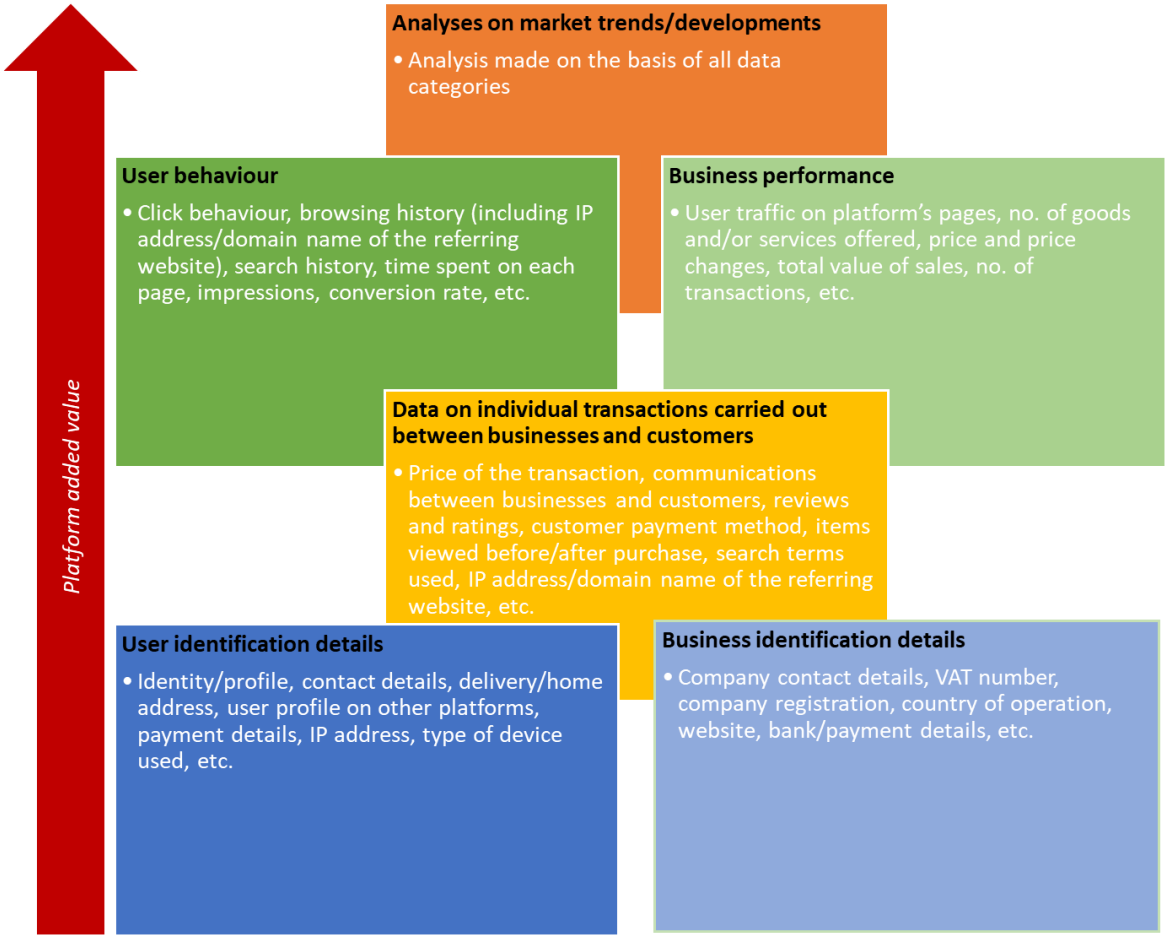
The platform adds to the value of data in two ways:

- Centralised collection of data on businesses, users, transactions and markets through the development of user communities on the platform and hosting of transactions;
- Aggregation of data and analysis to develop insights on business performance, user behaviour, and market trends which would not otherwise be available.

The distinction between these data categories is essential for the study and any potential policy intervention as the impact of access and (re-)use for businesses and platforms varies across the categories. Ultimately, the economic value of data to businesses in P2B relationships depends on the use that businesses make of the information.

Figure 2 provides a visual overview of the six data categories. As noted, the platform's own added value increases as the platform centralises the collection and aggregation of data.

Figure 2: Overview of the six main categories of business/user data defining P2B relations



Source: VVA.

3.2 Categories of data generated by business users

Table 7 provides an overview of the different types of data generated by businesses and users (i.e. customer and potential customers) through online platforms.

Table 7 : Categories of business/user data collected by online platforms

		User identification details	Business identification details	Data on individual transactions	Business performance	User behaviour	Analyses on market trends/developments
E-commerce		• IP address • Type of device • Identity • Contact details • Delivery/home address • Payment details	• Company contact details • VAT number/company registration • Country of operation • Business website • Bank/payment details	• Price • Payment details/method • Communication • Customer review • Business review • Items viewed before purchase • Items viewed after purchased • Referring website IP address/domain name • Search terms used	• User traffic • Number of products/services offered • Prices and price changes • Total value of sales • Number of transactions • Other: travel purposes	• Click behaviour • Browsing history • Referring website IP address/domain name • Search history • Time spent on each page • Search ranks • Impressions • Booking patterns	Dashboard providing aggregated/trend data on business performance, transactions and user behaviour.
Hospitality	**OTAs**	• IP address • Type of device • Identity • Contact details • Delivery/home address • User profile on other platforms • Payment details • Other: guest reviews, type of guest (business or leisure), loyalty programmes, booking history (for registered users)	• Price • Payment details/method • Communication • Customer review • Business review • Items viewed before purchase • Items viewed after purchased • Search terms used • Number of nights booked • Travel purpose • Booking window • Cancellations	• Company contact details • VAT number/company registration • Country of operation • Business website • Bank/payment details • Referring website IP address/domain name • Other: sales data, availability, reservation systems • Product/service information (number of rooms, facilities, prices, photos)	• User traffic • Number of products/services offered • Prices and price changes • Total value of sales • Number of transactions • Other: cancellation rates, booking window, customer demography, travel purpose, all sales within the group of companies of which the platform is part	• Click behaviour • Browsing history • Referring website IP address/domain name • Search history • Time spent on each page • Conversion rate • GPS and location patterns	Dashboard providing aggregated/trend data on business performance, transactions and user behaviour.

	User identification details	Business identification details	Data on individual transactions	Business performance	User behaviour	Analyses on market trends/developments
Meta-search engines[51]	Platforms do not collect this data.	• Reviews and ratings • Device used	• Name • Email address	• User traffic	• Conversion rate	Dashboard providing aggregated/trend data on business performance and user behaviour.
Restaurant booking	• IP address • Type of device • Identity • Contact details • User profile on other platforms • Payment details • Other: guest reviews/ratings, behaviour and preferences, GPS and location patterns,	• Price • Payment details/method • Communication • Customer review • Business review • Items viewed before purchase • Items viewed after purchased • Search terms used • Number of tables booked	• Company contact details • VAT number/company registration • Country of operation • Business website • Bank/payment details • Product/service information (menus, opening hours, facilities, prices) • Referring website IP address/domain name	• User traffic • Number of products/services offered • Prices and price changes • Total value of sales • Number of transactions	• Click behaviour • Browsing history • Referring website IP address/domain name • Search history • Time spent on each page • Conversion rate	Dashboard providing aggregated/trend data on business performance.
Review aggregators	• IP address • Type of device • Identity • Contact details • User profile on other platforms • Payment details	• Company contact details • Country of operation • Business website • Product/service information (products/services, facilities, prices)	• Price • Payment details/method • Communication • Customer review • Business review • Items viewed before purchase • Items viewed after purchase • Referring website IP address/domain name • Search terms used	• User traffic • Number of products/services offered • Prices and price changes • Total value of sales • Number of transactions • Number of reviews • Level of satisfaction	• Click behaviour • Browsing history • Referring website IP address/domain name • Search history • Time spent on each page	Dashboard providing aggregated/trend data on business performance.
App stores	• IP address	• Company contact	• Price	• User traffic	• Click behaviour	Dashboard providing

51 Results for meta-search engines are based only on interviews.

	User identification details	Business identification details	Data on individual transactions	Business performance	User behaviour	Analyses on market trends/developments
	• Type of device • Type of device • Identity • Contact details • User profile on other platforms • Payment details	details • VAT number/company registration • Country of operation • Business website • Bank/payment details	• Payment details/method • Communication • Customer review • Business review • Items viewed before purchase • Items viewed after purchase • Referring website IP address/domain name • Search terms used • Country of operation • Details of the transaction[52]	• Number of products/services offered • Prices and price changes • Total value of sales • Number of transactions	• Browsing history • Referring website IP address/domain name • Search history • Time spent on each page • Domain name of the page users come from • Impressions	aggregated/trend data on business performance and user behaviour.
Online social media	• IP address • Identity • Contact details • Delivery/home address • User profile on other platforms	• Company contact details • VAT number/company registration • Country of operation • Business website • Bank/payment details • Product/service information (products/services, prices)	• Price • Payment details/method • Customer review • Business review • Items viewed before purchase • Items viewed after purchase • Referring website IP address/domain name	• User traffic • Number of products/services offered • Number of transactions • Other: from the website, new followers, availability of products and updates	• Click behaviour • Browsing history • Referring website IP address/domain name • Search history • Time spent on each page • Conversion rate • Keyword requested by the user	Dashboard providing aggregated/trend data on customers.

Source: VVA based on interviews/survey answers.

52 No information on the use that users make of the app after download.

The data that companies provide on their products and services differs according to the type of business. For instance, businesses that sell products provide information about their brand and product codes, while businesses that offer services (such as hotels) provide photos and information about their facilities and staff. In the hospitality sector, the booking process requires specific data about the availability of rooms/tables (reservations and cancellations), also because prices change dynamically according to availability.

4 Value of data for businesses

This section explains the importance of each data category for businesses. In particular, which data is the most valuable to them, and whether this varies according to the sector, size of the company, or level of knowledge as regards data.

When asked to rank the six categories of data they would be most interested in/with the highest priority in the survey, 67% of businesses rank **user identification details** as most interesting for them. **User behaviour** data follows with 31% of respondents to the question, and data from individual transactions/analysis of market trends and developments with respectively 24% and 22% of respondents, as Table 8 shows.

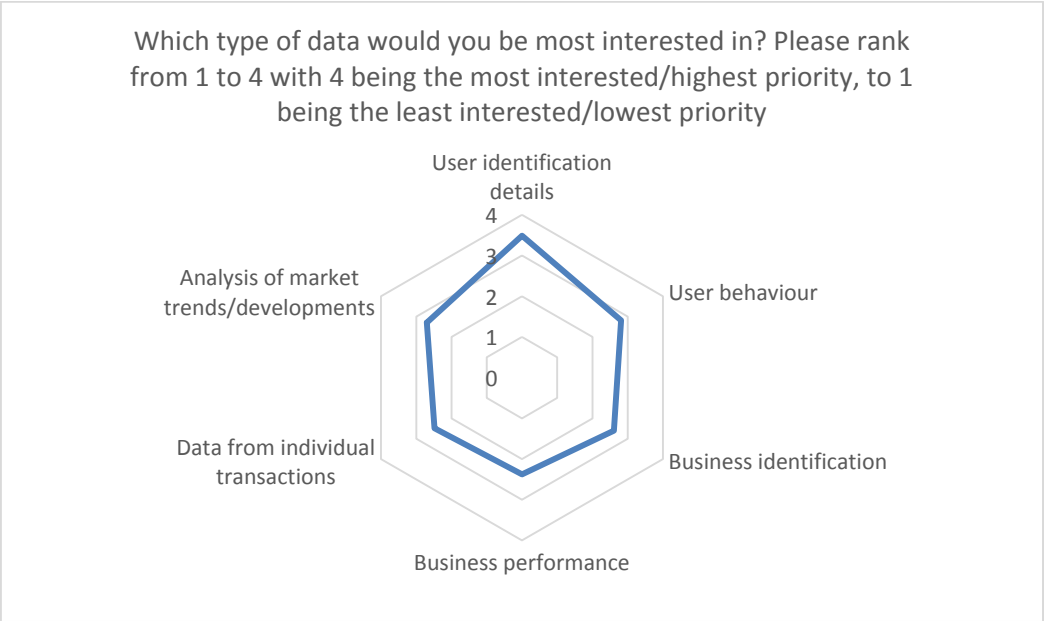
Table 8: Which type of data would you be most interested in? Please rank from 1 to 4 with 4 being the most interested/highest priority, to 1 being the least interested/lowest priority

Rank	User identification details	User behaviour	Business identification	Business performance	Data from individual transactions	Analysis of market trends/developments
1	10%	13%	12%	22%	26%	13%
2	4%	17%	17%	15%	11%	20%
3	9%	28%	26%	20%	19%	27%
4	67%	31%	18%	16%	24%	22%

Source: VVA, Business user survey, 89 respondents to the question.

The above rankings have been averaged to form an "index" that represents the value that businesses operating on online platforms place on the different categories of data. User identification details clearly stand out as most valuable to businesses, as Figure 3 shows.

Figure 3: Most valuable categories of data for businesses



Source: VVA, Business user survey, 89 respondents to the question.

When asked which type of data is the most important for them within the user identification details category, business users in the survey first evoke **customer contact details** (77.4% of respondents to the question) among which the most prominent is the **email address** (30.2%). In the interviews, businesses explained that this data is crucial, first to contact customers in the course of the transaction, and second

as it facilitates promotional activities and enhances knowledge about customer preferences (for instance, by sending satisfaction questionnaires).

A much lower percentage of businesses in the survey mention the **provenance of the customer**, i.e. URL or IP address, as an important data type within the user identification category (5.7% of respondents to the question). This data allows businesses to better target customers in their advertising activities, as it allows to identify referral websites to direct their campaigns to. In the interviews, this data was mentioned specifically by business users who already have a certain level of knowledge of the different possible uses of the data (i.e. more data savvy businesses).

Similar to provenance of the customer, **credit card information** is stated by 5.7% of businesses in the survey as one of the most important user identification details. In the interviews, this information was mentioned by hospitality and app store business users, for instance in case of payment failure.

Within the user behaviour category, business users primarily mention **number of clicks** (34.9% of respondents to the question), **search and browsing history** (27.9%), **time spent on each** page (11.6%). In the interviews, businesses also cited the **number of visits** on the page and **conversion rates**. According to them, this information is important to target communication to each customer, and therefore increase their engagement with the product or service offered.

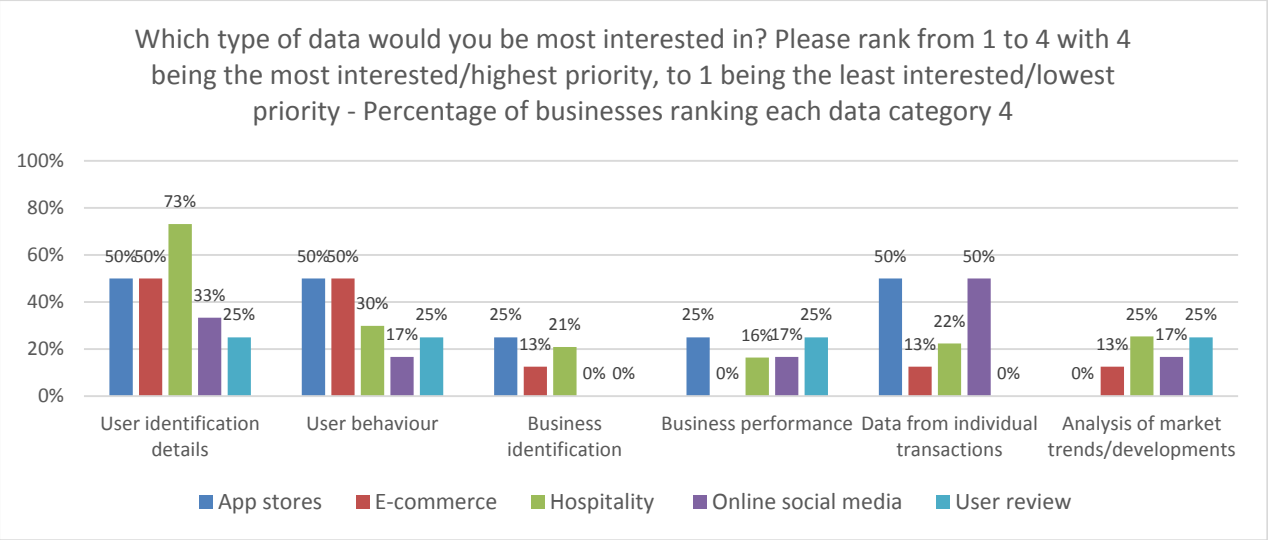
In the interviews, businesses also mentioned the usefulness of **data on potential customers**, i.e. users who visited the business' page on the platform but did not complete any transaction. This data can include information on user profile (e.g. age, gender, nationality) or behaviour (e.g. other items bought on the platform, reason for not completing the transaction) at individual or aggregated level, and allows businesses to reach them in their future advertising/promotional campaigns.

When breaking down the survey results by the type of platform that is mostly used by businesses, it becomes apparent that:

- **User identification details data are mostly valued by hospitality platform users**, with 73% of them ranking this data category as the one they are most interested in/with highest priority, as opposed to half (app-store users)/less than 33% (online social media users) and 25% (review platform users). Interviews with hospitality platform business users confirm that contact details are crucial information for businesses in the sector to contact the guest in advance/during/after the stay.
- **User behaviour data are particularly valued by app stores and e-commerce platform users**, with half of them ranking this data category as the one they are most interested in/with highest priority, as opposed to less than 30% for the rest of business users. Although the small number of respondents to this question should be taken into consideration, input from interviews confirms that businesses in these sectors tend to have more experience and knowledge in data analysis, and therefore value it more.

Figure 4 below shows differences in the value that businesses attribute to the different data categories by type of platform mostly used.

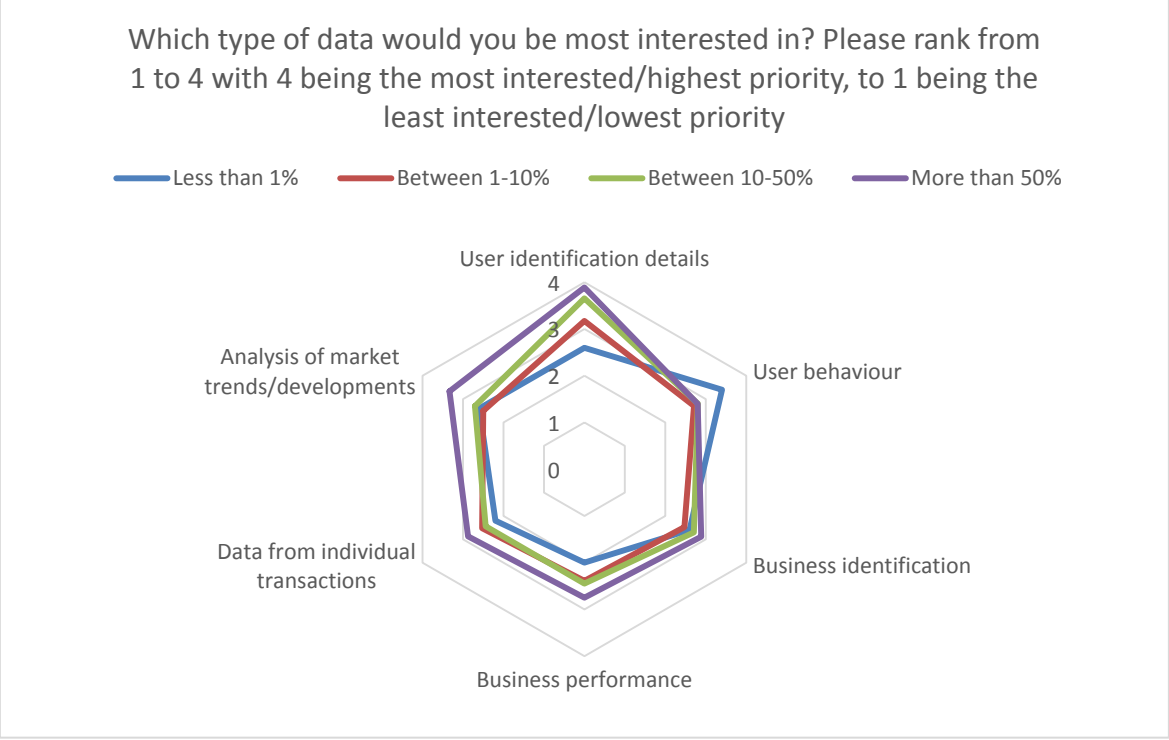
Figure 4: Percentage of businesses ranking each data category as most interesting/highest priority – by type of platform mostly used



Source: VVA, Business user survey, 89 respondents to the question.

Knowledge of and experience with data analysis is an important factor explaining the value that business users place on each data category. This is even more the case, the greater the share of turnover generated from online platforms. As shown in Figure 5, in general, businesses with more than 50% of turnover attributed to platforms tend to rank each data category higher than the rest of survey respondents.

Figure 5: Most valuable categories of data for businesses – by percentage of turnover attributed to platforms



Source: VVA, Business user survey, 89 respondents to the question.[53]

In particular, businesses with more than half of their turnover attributed to platforms value more analysis of market trends and developments than other businesses, as this information is crucial for them to maintain and develop their activity online.

[53] Please note: The importance of user behaviour data for businesses with less than 1% turnover attributed to platforms needs to be interpreted with care as it is based on only five answers.

Knowledge of and experience in data analysis varies depending on the type of platform used. The interviews have found that app store users tended to be more knowledgeable about data and its possible use, and often processed more complex data (e.g. user behaviour data). This observation can also be made to a lesser extent as regards e-commerce platform business users.

Finally, the size of the business is also an important factor, with small businesses interviewed emphasising the usefulness of **data analysis** (as opposed to raw data) provided by the platforms since they do not have the resources to perform such analyses in-house.

5 Access to, and (re-)use of, data in P2B relationships

This section enumerates which categories of data business users have access to and which they do not, as well as how they can (re-)use these data. This section also explains the main procedures developed by platforms for granting businesses access to this data, or allowing them to (re-use) it.

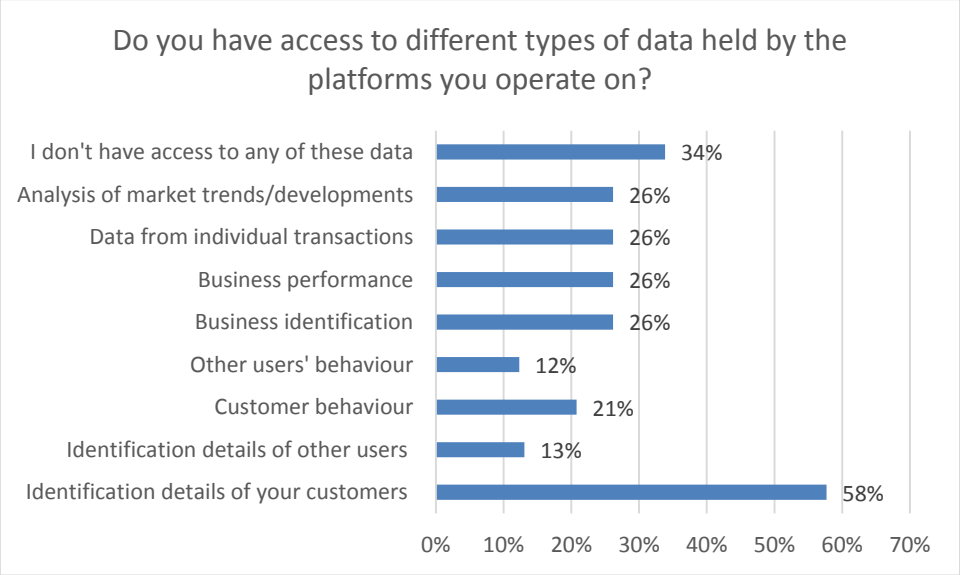
5.1 Access to data

5.1.1 Categories of data that business users have access to

The Ecorys study (2017) highlights that platforms systematically grant businesses access to the data that is necessary to conduct the transaction.[54]

This finding is confirmed by the survey and interviews, which have found that the data category that is the most available to business users is **user identification details**. This includes customers' identity, contact details (e.g. phone number, delivery/home address), and credit card information in case the payment is not intermediated by the platform. 58% of businesses in the survey report to have access to this category of data, as Figure 6 shows.

Figure 6: Business access to data on online platforms



Source: VVA, Business user survey, 130 respondents to the question.

This information is essential for the business to conduct the transaction, e.g. to deliver products for e-commerce businesses, or to contact the customer prior to/during the stay for hospitality businesses. Importantly however, **platforms tend not to share the email address of the customer**.[55] Instead, they intermediate communication between business and customer using alias email addresses (i.e. where businesses can receive and send emails from/to their customers without seeing their real email address, only a series of numbers). Some platforms, e.g. eBay, host a messaging system through which businesses and customers can communicate.

In the interviews, business users reported that platforms used to share customer email addresses with them (e.g. Booking.com, or the French web shop platform Galleries Lafayette) and that some platforms still do (e.g. the OTA Hotel.dk[56] in Denmark, or e-commerce platforms Taloon.com[57] or Neutrauta.fi[58] in Finland). In return, the platforms

54 Ecorys (2017), op. cit., p. 45.
55 eBay's terms and conditions allows the disclosure of its members' email addresses after a transaction, but there is no information about whether this is done in practice. See: Available at: http://pages.ebay.co.uk/help/account/protecting-privacy.html
56 Available at: http://hotel.dk/
57 Available at: http://www.taloon.com/

justify their decision not to grant businesses access to customer email addresses with privacy and commercial considerations (see also section 5.4).

Data on transactions carried out through the platform and information on the business itself (e.g. **business identification details** and **business performance data**) follow, with 26% of the businesses in the survey reporting to have access to this data. This includes information on the transaction itself (product sold/offered, price, payment method, communications between the customer and the business, reviews and ratings), information on the business, and aggregated information on all transactions (e.g. total value of the transactions on the platforms, price and price changes, etc.). While the first two are inherent to the transaction itself, business performance data is the result of the platform's aggregation.

It is common that platforms provide their business users with **analyses on market trends and developments** based on aggregated data on all (or a sub-set of) transactions intermediated by the platform. Depending on the platform, these analyses can include user statistics (e.g. age range, gender, socio-professional category), preferences and behaviour (e.g. number of impressions, conversion rates), or comparisons with other businesses. 26% of businesses in the survey have reported to have access to this information.

Information on **user behaviour** has been found to be less available than the other data categories, with 21% of businesses reporting access to this data. This information relates to the user's interactions with the platform, i.e. the number of items viewed, number of clicks on the product/service page, number of users who visited the page and conducted the transaction (e.g. conversion rates).

The majority of larger platforms have **"dashboards"** which business users can log into and access different types of data. Usually, these dashboards comprise data on the transactions, and aggregated data on business performance. Depending on the platform, dashboards also include information on customer profile (e.g. gender, age, nationality), user behaviour (e.g. click behaviour, conversion rate), and more or less detailed analyses of market trends and developments. In addition, some platforms provide their business users tips on how to improve their performance on the platform, i.e. how to maximise the number of transactions on the platform. The nature and quantity of information available on these dashboards on the incentives created by the business model of the platform, as developed later in this section.

The provision of the more basic data is usually free of charge, but platforms may charge for access to additional and more complex data, requiring business users to subscribe to a **"premium" type of account** (e.g. TripAdvisor and TripAdvisor Premium[59], Google and Google Analytics 360[60]). In some other cases, analyses of market trends and developments are offered to businesses against payment, on a separate dashboard than the one available for them to review their performance.

Finally, businesses report that **platforms rarely grant access to information on other users**, i.e. potential customers who visited but did not transact on the platform. Only 13% of business users state to have access to identification details of other users than their own customers and 12% to information on their behaviour on the platform.

The level of access to data depends first on the **size of the platform**. In general, large platforms grant access to more and better-quality data, as reported by businesses during the interviews. For instance, large e-commerce platforms provide more complex user behaviour data on their dashboard, with information on traffic, number of clicks, browsing and search history, time spent on the item's page. Also, large platforms offer more systematic analyses on market trends and developments, e.g. Expedia or Booking.com in the hospitality sector, or Amazon in the e-commerce sector.

58 Available at: https://www.netrauta.fi/
59 Available at: https://www.tripadvisor.com/TripAdvisorInsights/n2763/introducing-tripadvisor-premium-restaurants
60 Available at: https://www.tripadvisor.com/TripAdvisorInsights/n2763/introducing-tripadvisor-premium-restaurants

The level of access to data granted to business users also depends on the **alignment between platform and business interests**. Where the platform takes a percentage commission on each transaction that it hosts and facilitates (e.g. OTAs or some e-commerce platforms), the platform's interest lies in maximising the number of such transactions. Where the business model is primarily based on advertising or click-throughs (e.g. TripAdvisor, Google, Facebook), it is in the interest of the platform to generate as much user traffic as possible. Similarly, app stores (e.g. Apple) whose business model is based on advertising/number of paid transactions have an interest in providing app developers with tools to make high quality apps to increase user traffic and attract potential buyers.[61] At the same time, the main revenue source for Apple remains in the area of device sales (e.g. iPhones) and the app store (including the number, quality, popularity of the apps that are offered through the store) is one way for the company to elicit interest among users in their devices.

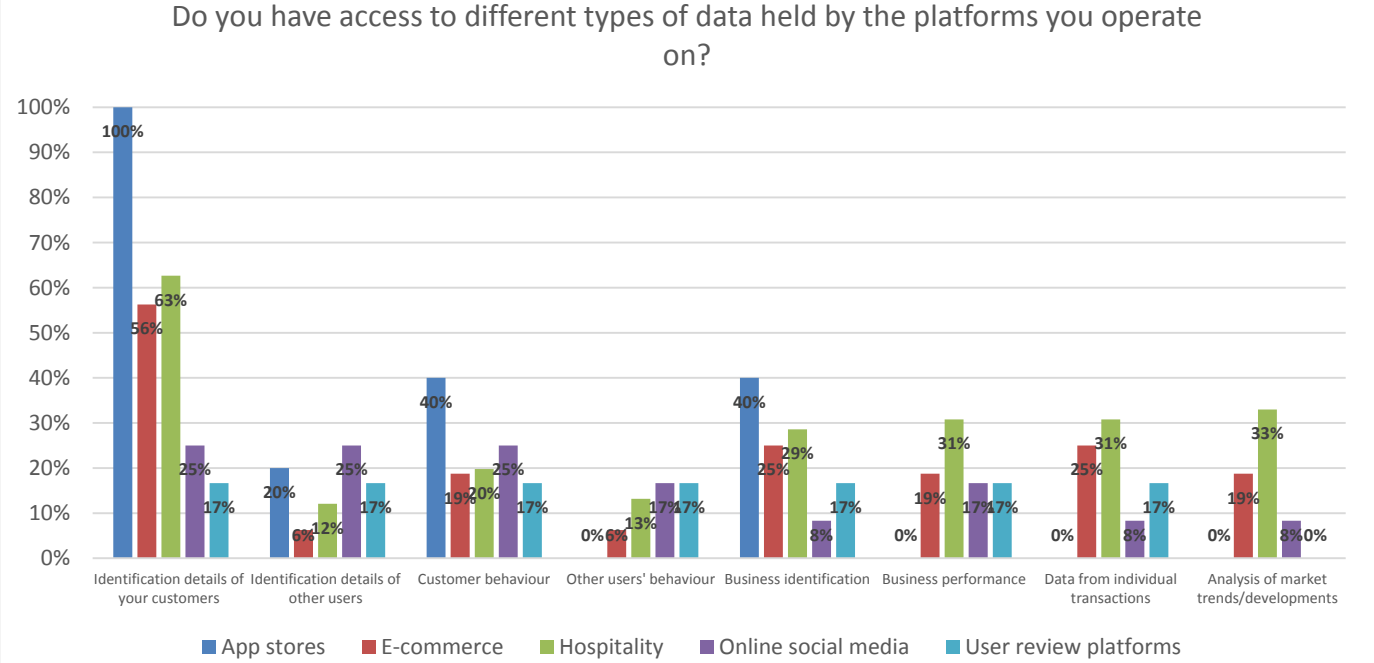
This implies that the extent to which, and in particular which category, data is made available by platforms to businesses is influenced by **whether enhanced access to this data will help businesses to increase the number of transactions/traffic.** Platforms taking a commission on transactions tend to grant better access to marketing data, including analyses, for free, and/or to invest in marketing tools for businesses (e.g. provide them with banners, widgets, or marketing tips). App stores, on the contrary, are reported by business users not to give access to useful marketing data, for instance data resulting from the experience of the user on the app store ("app store optimisation"). One business user in the hospitality sector noted that the price of premium accounts could decrease if the business popularity was high, which suggests that the platforms' willingness to invest in granting businesses access to data depends on the number of customers and potential customers this will attract on the platform.[62]

This reasoning can partly explain the rationale behind platforms not disclosing customer email addresses to their business users. In the interviews, platforms explained that sharing this information could allow businesses to bypass them and conduct the transaction directly with their customers, which goes against platforms' interests. It is interesting to note that some platforms still share this information when their interest in facilitating the success of their business users is higher than their interest in taking a transaction fee (e.g. in the case of the OTA Hotel.dk, which is run by hotels/hotel associations themselves). Another interesting point is that platforms often justify their decision not to grant businesses access to customer email addresses with privacy reasons, whereas in this case commercial consideration seem to be prevalent. This suggests that, in some instances, privacy reasons may be invoked by platforms to cover underlying commercial considerations.

There are some differences in the categories of data business users have access to depending on the **type of platform they most use**. These variations can be explained by the difference in platforms' business models, as noted above. As Figure 7 shows, app store users in the survey tend to have better access to data on user behaviour (40% as opposed to less than 25% for other businesses). Although the limited size of the sample should be taken into account, this observation has also been made in the interviews, with app store businesses reporting to have access to extensive data from this category (e.g. click behaviour, browsing history, time spent on the page, number of impressions) – with the exclusion of data on app store optimisation, as reported above. This is also the case to a lesser extent for online social media users, with one quarter reporting to have access to at least some user behaviour data. For e-commerce and hospitality business users, the data category that is the most available remains user identification data, followed by transaction and business data, for all platform categories.

61 In addition, in the case of Apple, the majority of revenues are generated by sales of devices/equipment, and not through the App store. Hence Apple's primary interest in terms of revenue lies in providing an attractive user environment – not maximising revenue via app sales.
62 The business gave the example of Michelin star restaurants that were given access to user review platforms' premium account for free.

Figure 7: Business access to data on online platforms – by most used type of platform



Source: VVA, Business user survey, 130 respondents to the question.

Looking at these results, it seems that platforms grant access to a wide range of data categories. However, the businesses interviewed report not to have systematic access to the data they need, as section 5.3 will show.

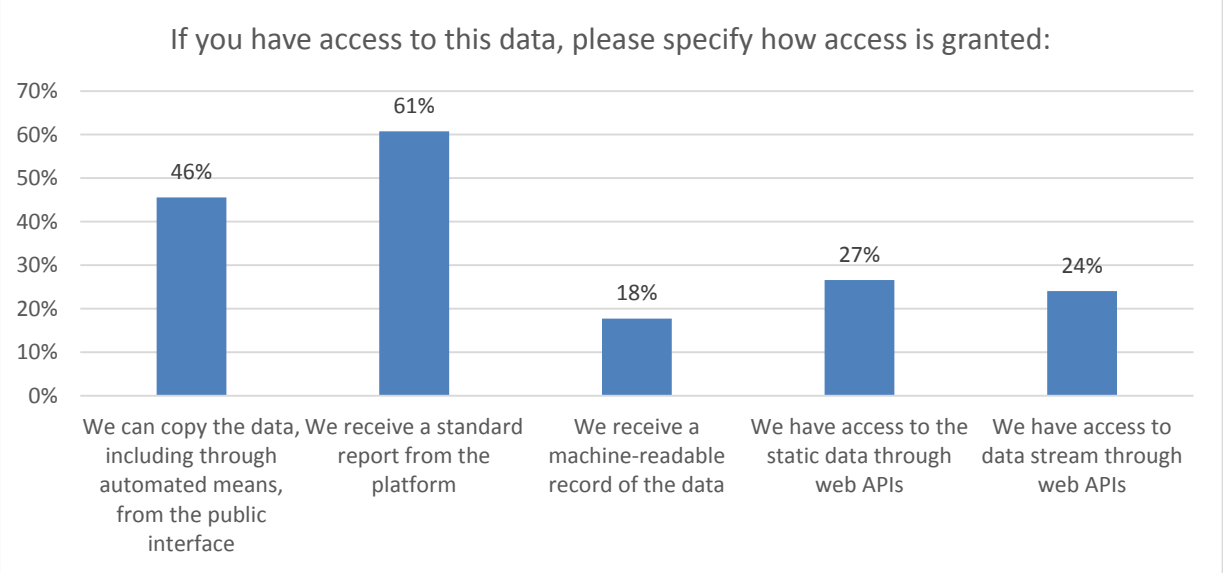
Finally, it is important to note that about a third (34%) of survey respondents stated not to have access to any data, which contradicts what platforms report in the interviews. This discrepancy could potentially be explained by a **lack of awareness** among business users of the different data access and (re-)use possibilities (see also section 5.4). In this context, it should be noted that 45% of the smallest business respondents to the survey did not know how data was made available to them by the platform and this figure decreased with business size. Similarly, 57% of businesses with less than 1% of turnover attributed to platforms were in the same situation, against between 26% and 30% for other businesses. This result suggests that smaller businesses, or businesses that are less dependent to online platforms to generate turnover, are less aware of the data possibilities offered by the platforms on which they operate.

5.1.2 Procedures for granting access to data

All of the 10 large platforms interviewed for this study have dashboards where business users can get an overview of the transactions conducted and other statistics. As Figure 8 shows, 61% of business users indicated that they access data through standard reports produced by the platform, and 46% copy the data from the platform's dashboard.

Some platforms also allow to download data as CSV files, and/or to access the data (either static or via a dynamic data stream) through Application Programming Interfaces (APIs). This is the case for big international platforms such as Google and Apple. However, most business users reported a lower level of access through these methods in the survey (respectively, 18%, 27% and 24%).

Figure 8: Platforms' processes for granting access to data



Source: VVA, Business user survey, 79 respondents to the question.

Table 9 shows that businesses receiving access to analyses of market trends and developments mostly used the dashboard, by copying the data from the interface (45%) or through reports (38%). The same observation can be made with as regards business performance data, with 88% of businesses reporting access to this data category through the interface or through reports. APIs are mostly used for individual transaction data (41% of businesses reporting access to this data category through this mean) and user behaviour data (23%).

Table 9: Platforms' processes for granting access to each data category

	We can copy the data, including through automated means, from the public interface	We receive a standard report from the platform	We receive a machine-readable record of the data	We have access to the static data through web APIs	We have access to data stream through web APIs	Grand Total
Analysis of market trends/developments	45%	38%	3%	10%	3%	100%
Business identification	10%	30%	30%	20%	10%	100%
Business performance	23%	65%	0%	12%	0%	100%
Data from individual transactions	18%	23%	0%	18%	41%	100%
User behaviour	15%	31%	15%	15%	23%	100%
User identification details	26%	21%	21%	18%	13%	100%

Source: VVA, Business user survey, 79 respondents to the question.

The platforms interviewed for this study ask users to consent to sharing data with businesses either in their terms and conditions or when the user signs up to the platform or creates a profile. In some platforms' terms and conditions (e.g. TripAdvisor), business users are explicitly identified as data recipients.

5.2 (Re-) use of data generated on online platforms by businesses

5.2.1 Different possibilities of (re-)use

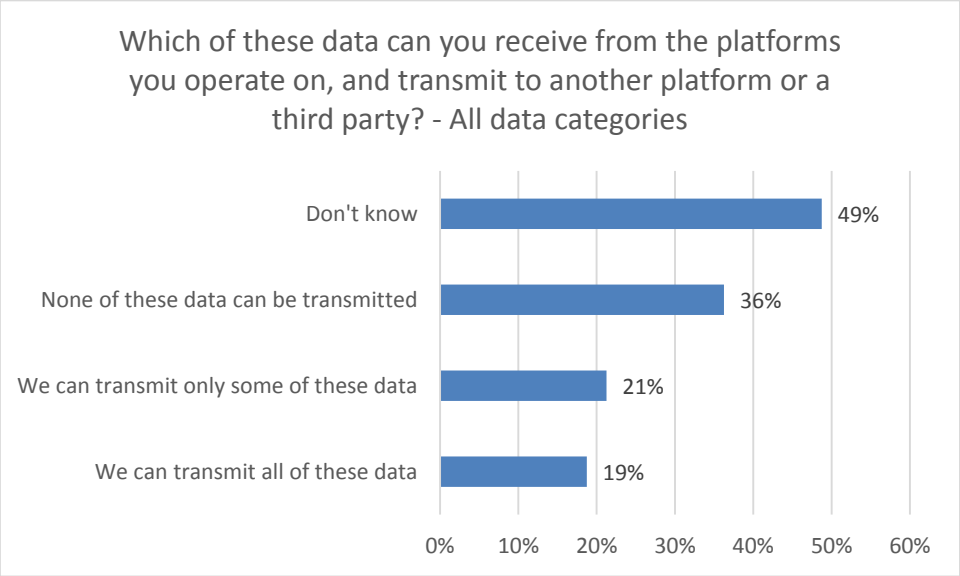
Interviews with platforms and business users confirm that the great majority of businesses multi-home, i.e. operate on several online platforms at the same time. These platforms can be within the same category, but it is also common that businesses use different platforms simultaneously (e.g. in the hospitality sector: OTAs and user review platforms). The survey results confirm this observation, with only 13.5% of business users operating on only one type of platform.

There are different ways for businesses to (re-)use data:

- Receive the data from one platform and transmit it to another platform. This is relevant for reviews and ratings, as most online platforms allow customers to leave feedback on their transactions and/or general experience with the business. One possible use for business users is to take these reviews and ratings with them to the other platforms they operate on, or bring them to user review platforms. This is also relevant in the case one platform closes or changes its data access or data (re-)use policy, so business users do not lose the information that has been gathered;
- Receive the data and transmit to a third party (i.e. not a platform) e.g. for analysis;
- Receive the data and conduct their own analysis of these data.

Both survey results and interviews with business users report a low level of awareness about the different possibilities of (re-)using data made available by platforms. 49% of the business users surveyed indicated not knowing whether data could be transmitted to another platform or third party, as Figure 9 shows. In addition, more than one third (36%) of respondents indicate that no data can be transmitted to another platform or third party.

Figure 9: Businesses' data (re-)use possibilities on online platforms



Source: VVA, Business user survey, 80 respondents to the question.

5.2.2 Procedures to allow (re-)use

Although none of the platforms interviewed for this study indicated that there are any contractual restrictions on data use and re-use, it has been found that some platforms' terms and conditions prevent the re-use of data, notably the transmission to another

platform, which can partly explain the low level of data (re-)use by business users reported in the survey.[63]

Platforms also claimed that user generated content on the platforms (e.g. reviews and ratings) are owned by the user and not by the platform or the business and that, for this reason, they should not be ported to third parties by the business without the consent of the user who generated the content.

Most platforms allow business users to download the data they grant access to and to upload it to third-party platforms for management purposes (e.g. property management systems in the hospitality sector), or data analysis (e.g. data analytics platforms). As regards transmitting data to other platforms, the most common example given by platforms and business users is the widgets/badges that some user review platforms give to business users, and which they can display online (including on other platforms) or offline.

It should be noted that, while there are usually no contractual restrictions on data use by the platforms, the format in which businesses receive this data can prevent certain types of uses. For instance, e-commerce businesses in the interviews noted that some platforms provide sales data in PDF format, which prevents businesses from easily compiling and analysing the information together with data from other online and offline sales channels.

5.3 Business user satisfaction with data access and (re-)use possibilities

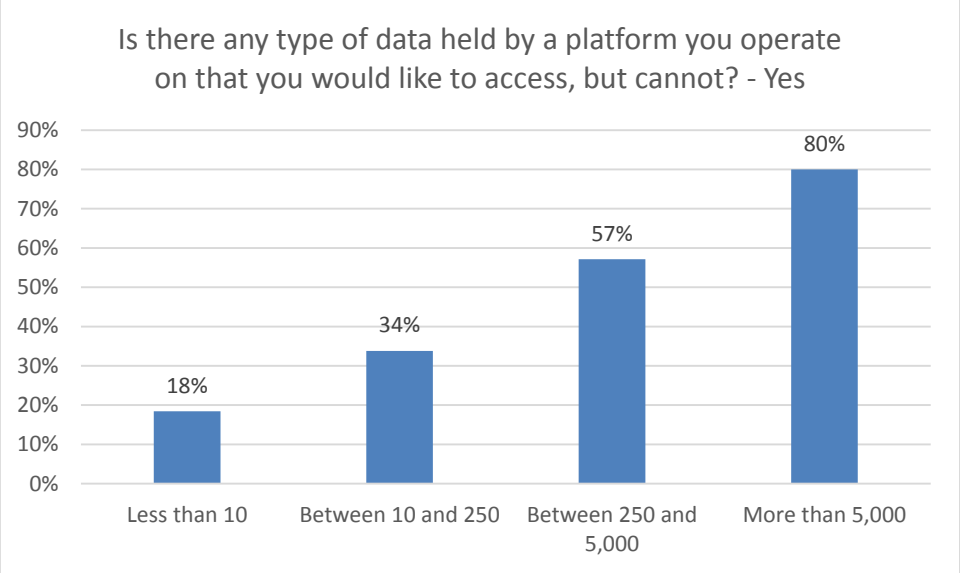
Overall, the online platforms consulted in this study consider that they share sufficient information with business users and that there is not a high demand for enhanced access and (re-)use. This has been confirmed to some extent by interviews with business users, who indicated that they are overall satisfied with the access to the data from the platforms they operate on and that, in many cases, they do not use the data that is made available to them.

At the same time, a significant proportion of business respondents to the survey (41%) report a desire to access more data than the platform makes available. One of the platforms responding to the survey indicated that demand for access to data has been increasing, which could also be explained by an increase in business awareness as regards the impact of data on their business.

The survey results also show that **demand for enhanced access to data increases with the size of the business.** One third of businesses of between 10 and 250 employees indicated a desire for more access to data, against 18% for businesses of less than 10 employees, as Figure 10 shows. This figure is much higher for larger businesses (more than 250 employees), but the small number of respondents among this category means the results have to be interpreted with care.

63 For instance, Rakuten's terms and conditions outline that: "Rakuten.com shall own all Transaction Information. Shop Owner may only use Transaction Information to further a transaction related to this Agreement, in accordance with the terms of this Agreement, Rakuten.com's Marketplace Privacy Policy and all applicable Law. Shop Owner will not (i) disclose or convey any Transaction Information to any third party (except as necessary for Shop Owner to perform its obligations under the Agreement); (ii) use any Transaction Information to conduct customer surveys or for any marketing or promotional purposes; (iii) contact a Customer that has ordered a Product that has not yet been delivered." Available at: https://rmsportal.rakuten.com/SellerTerms.htm. Another example is Facebook: "12. Data Use Restrictions (…) 2. Don't use Facebook advertising data for any purpose (including retargeting, commingling data across multiple advertisers' campaigns, or allowing piggybacking or redirecting with tags),
except on an aggregate and anonymous basis (unless authorized by Facebook) and only to assess the performance and effectiveness of your Facebook advertising campaigns. 3. Don't use Facebook advertising data, including the targeting criteria for your ad, to build, append to, edit, influence, or augment user profiles, including profiles associated." Available at: https://www.facebook.com/policies/ads/

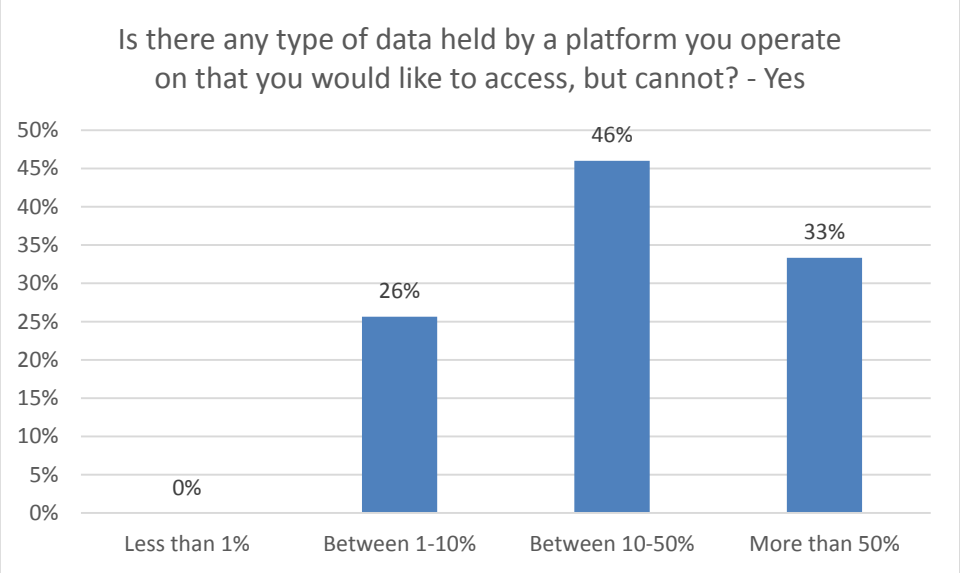
Figure 10: Business demand for greater access to data – by company size



Source: VVA, Business user survey, 89 respondents to the question.

Demand for enhanced access to data is highest for businesses with between 10-50% of turnover attributed to online platforms, and logically lower for business with less than 1% turnover attributed to online platforms. Here again, the small number of respondents of this category should be considered.

Figure 11: Business demand for enhanced access to data – by percentage of turnover attributed to online platforms



Source: VVA, Business user survey, 89 respondents to the question.[64]

In terms of access, the business users interviewed report a desire for enhanced access to customers' **email address**, as most platforms across all sectors do not share this information with business users (although the extent to which this information is available depends on the incentives behind the respective business models, as explained in section 5.1.2). 21% of respondent to the question on whether there is data that they would like to access answered specifically email address.[65] The reason for the interest in email addresses is the desire to communicate directly with customers, either to ask for

[64] The importance of user behaviour data for businesses with less than 1% turnover attributed to platforms needs to be interpreted with care as it is based on only seven answers.
[65] Please note that all of these businesses are in the hospitality sector. However, interviews with business users of other platform categories confirmed that the request for email addresses could be found across all sectors.

further information on the booking, or to send them promotional offers. On the other hand, most businesses in the hospitality sector also admitted that they can ask for this information in person (e.g. when the guest arrives at the venue).

Another common data request in the interviews relates to the **customer profile** (e.g. details on their customers' age, gender, city of residence). Most platforms, except social networks (e.g. Facebook) and advertising platforms (e.g. Google Ads) do not provide this data, or they do so only against payment in premium versions (e.g. TheFork). According to businesses, this information would allow them to better know their customers and to better target them with marketing and promotional offers. This also applies to potential customers, i.e. platform users who did not conduct the transaction. This would help business users to understand the reasons why the transaction did not take place, and better target their future marketing/advertising activities.

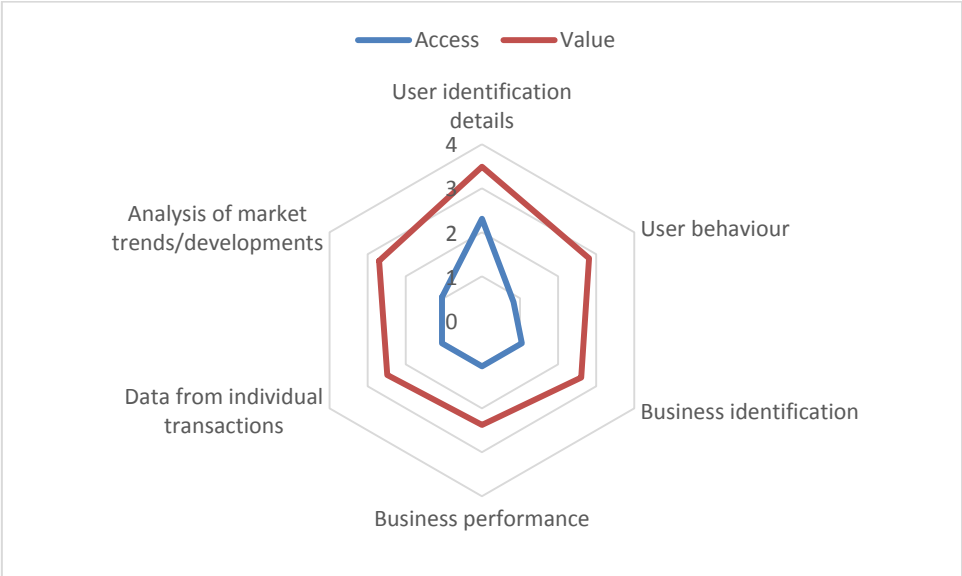
With regard to behaviour data, business users in the survey specifically mention **numbers of clicks, search information, numbers of impressions and conversion rates.** 15% of all survey respondents say they are interested in accessing such information. Notably, app developers complained about a lack of data on the interaction of customers/potential customers with the app page on the app store, as outlined in section 5.1.1. Like for user profile data, businesses noted that user behaviour information would be useful not only for their customers but also for their potential customers, to understand the reasons for customer churn.

These requests for enhanced access to email address, profile and behaviour information are consistent with the perceived value of these data for business users as shown in the survey, with 67% of businesses ranking user identification details as the most interesting data, followed by 31% for user behaviour.

When comparing the level of access to data with the value business user place in this data as outlined in the survey (Figure 12), it can be noted that:

- The data category that is most valuable for businesses (i.e. user identification details) is also the one they report having most access to. Exception should be drawn for email address, which is one of the data categories for which business users report lack of access;
- The gap between value and access is highest for **user behaviour** and **analysis of markets trends and developments**. This is also consistent with the demand expressed by business users in interviews for platforms to produce, and make available, an analysis of data collected by the platform. As mentioned above, in some cases the platform makes such analyses available to the business for free and in others against payment.

Figure 12: Business access to and value of data held by platforms



Source: VVA, Business user survey.

In terms of **(re-)use of data**, compared with the data access results above, demand is low, with only 13% of survey respondents indicating a desire to receive and transmit more data than they are able to today.

In the interviews, business users indicated not being fully aware of the different possibilities to (re-)use data, and not understanding the purpose. Among e-commerce, hospitality and app developers, third parties (e.g. data analytics software) offer more developed analysis tools than what is available on online platforms, although this is often against payment.

Finally, businesses in the interviews mentioned some concerns. One potential concern mentioned by one business user in the hospitality sector related to user reviews and ratings, as they are linked to the platform and may be lost in case of the platform shutting down.[66]

Another concern that was mentioned by one business interviewee related to the case of big international platforms whose services compete with those of the business users on the same platform. This is the case for e.g.:

- Amazon which hosts businesses selling products via Amazon marketplace, but it also sells merchandise directly as an e-commerce retailer;
- Apple which hosts apps that sell content such as music, but it also has its own iTunes catalogue.

Despite the fact that, overall, business user satisfaction as regards access and (re-)use possibilities is high, there is an existing demand for enhanced access to some data. Also, the lack of awareness of businesses as regards the different possibilities of data use should be taken into consideration, as it can considerably influence demand for such data.

5.4 Obstacles in data access and (re-)use

As noted, the platforms interviewed for this research reported that they are willing to and that they already do make data available to business users, with the sole exception of personal user details, where seven platforms cited **customer privacy** and compliance

66 This applies to the particular case of the Netherlands, with the recent acquisition of the restaurant booking platform IENS.nl by TripAdvisor. Available at: https://www.tripadvisor.co.uk/ShowTopic-g188590-i60-k9852035-IENS_guide_becomes_a_full_trip_advisor_company-Amsterdam_North_Holland_Province.html.

with data protection laws as the main reason for not granting access to these data. As explained above, privacy reasons may also be invoked by platforms to shield underlying commercial reasons, for instance in the case of customer email addresses.

Most platforms have indicated that they would be willing to revise their data access and (re-) use policy if there was a demand from business users and if there was legal certainty in relation to data protection rules.

A **lack of skills** among business users to deal with raw data and a **lack of demand** for further access and (re-use) were mentioned as additional obstacles by six platforms. This is confirmed by business users in the interviews, who indicated that they rarely ask for access to more data than provided by the platforms, and that they do not have sufficient resources to analyse raw data.

Three platforms also admitted that **commercial considerations** inform their reluctance to share email addresses with business users. Indeed, platforms in the hospitality and e-commerce sector indicated that their transaction fee based business model is predicated on transactions taking place on the platform, not outside of it. Allowing businesses access to customer email addresses before the payment has occurred would create an incentive for businesses to ask the customer to cancel the transaction on the platform and to contract directly with them, thus avoiding the booking fee.

In the case of reviews and ratings, platforms also indicated commercial reasons for not allowing businesses to port these data to competing platforms. Indeed, the platforms claim that their investment in the platform and its functionalities (e.g. translation of reviews, quality checks, etc.) means that the review is specific to each platform. A general requirement to allow portability would, according to the platforms, impede competitiveness and undermine their business model.

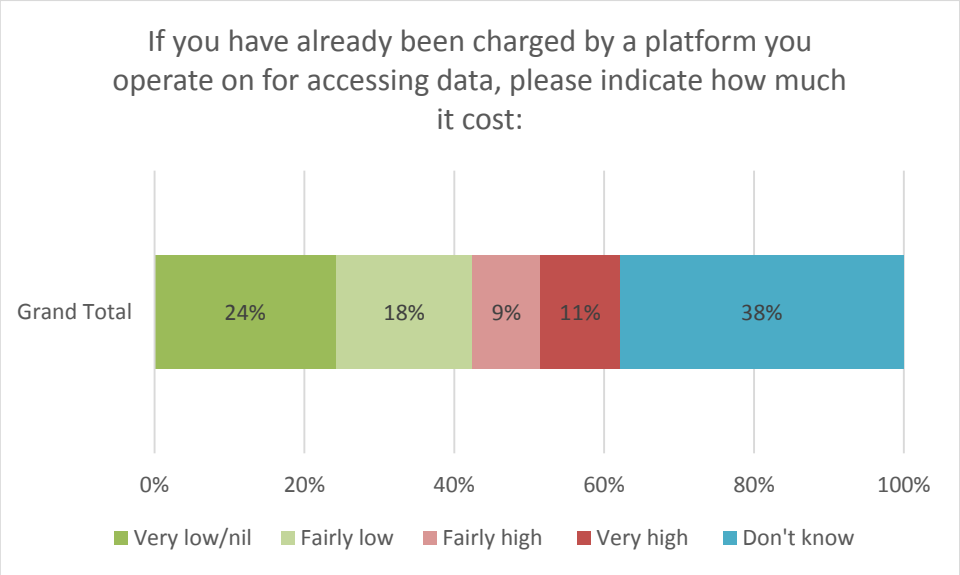
Finally, **technical and interoperability issues** between platforms means that ratings, review systems and other data generated on the platform are specific to that environment which makes portability very difficult. This point was specifically mentioned by app store platforms, which have different operating systems with different infrastructures, but also by user review platforms and one OTA. When questioned about the need to improve interoperability between platforms, the platform interviewees noted that the environment in which they operate is very competitive and fast moving with different functionalities and services emerging all the time. According to the platforms, the resulting user choice and innovation would be jeopardised by a requirement for full interoperability to enable data portability between platforms.

6 Assessment of impacts

6.1 Impact of current platform practices in terms of data access and re-use on businesses

The current costs for accessing data are low for most business users, with **42% of business users responding to the survey reporting either zero, very low or fairly low costs for data access**, compared with 20% who indicated that costs were fairly high or high.

Figure 13: Costs of accessing data for businesses operating on platforms



Source: VVA, Business user survey, 66 respondents to the question.

These costs can include subscriptions to premium accounts on some platforms, or business management/analytics software.

Most business users in the interviews have indicated to use business management/analytics software. These include notably:

- **Property management systems** (e.g. Base7Booking, Cloudbeds) for hospitality platform business users. These software allow business users to manage bookings, number of rooms available and prices on the platforms. Most of these platforms also centralise reviews. Not of all them offer data analytics tools, but offer to link with data analytics engines, such as Google Analytics (e.g. Base7booking).
- **Sales management software** (e.g amoCRM, Freshsales) for e-commerce platform business users. These software help business users to manage their sales and marketing activities, by allowing them to review their sales, performance. Similarly, as property management systems, these platforms offer or link with data analytics tools (e.g. Leadfeeder) to analyse marketing data.
- **App analytics software** (e.g. AppsFlyer, Appsee) for app store business users. These software offer in-app analytics tools that complement the data available on app stores (i.e. pre-transaction data). Apple, Google and Amazon offer their own in-app analytics tools, which are separate from the data app store tools, either for free (Google Analytics and Amazon Analytics versions) or against payment (e.g. Apple Analytics, Google Analytics and Amazon Analytics premium versions).

Subscription fees to this software vary depending on the size of the business. Table 10 below summarises estimated prices for these additional software, which form businesses' main costs for accessing and receiving/transmitting data on platforms.

Table 10: Subscription fees for business management/analytics software[67]

Name	Price/month (EUR)	Price/year (EUR)
Property management		705
Base7Booking	67	804
Cloudbeds[68]	100	1200
Cubilis	17	204
WebRezPro	51	612
Sales management		249
amoCRM	13/user	156
Freshsales	10/user	120
Leadfeeder	50	600
Pipedrive	10/user	120
App analytics		336
Google Analytics	free	free
Apple Analytics	84	1008
AppsFlyer	0.03/app install	N/A
Appsee	free	free

Source: VVA based on software's websites.

Another type of cost incurred to business users are the subscription fees for premium accounts of the platforms they operate on. Among the nine platforms interviewed, seven offer premium versions (e.g. TripAdvisor, Apple, Amazon, Skyscanner, Google, Yelp, Trustpilot). As above, subscription fees vary depending on the size of the business, or traffic on the platform.

Table 11: Subscription fees for platform premium accounts

Name	Type	Price/year (EUR)
Google Analytics 360 Suite	All	100,000[69]
Apple Analytics	App store	1,000[70]
Amazon Analytics	E-commerce	0.10/hour
Skyscanner for Business	Hospitality	Variable
TripAdvisor Premium/Business Advantage	User review	Variable
TrustPilot Lite	User review	4,000

Source: VVA based on platforms' websites.

When asked for the estimated annual costs for accessing data from the platforms they operate on, the 17 business users responding to the question indicated an average of **EUR 9,300 per year**. Due to the restricted size of the sample, it is difficult to identify trends by size or percentage of turnover attributed to platforms. It is worth noting that respondents to this question are mostly hospitality platform users (11 out of 17).

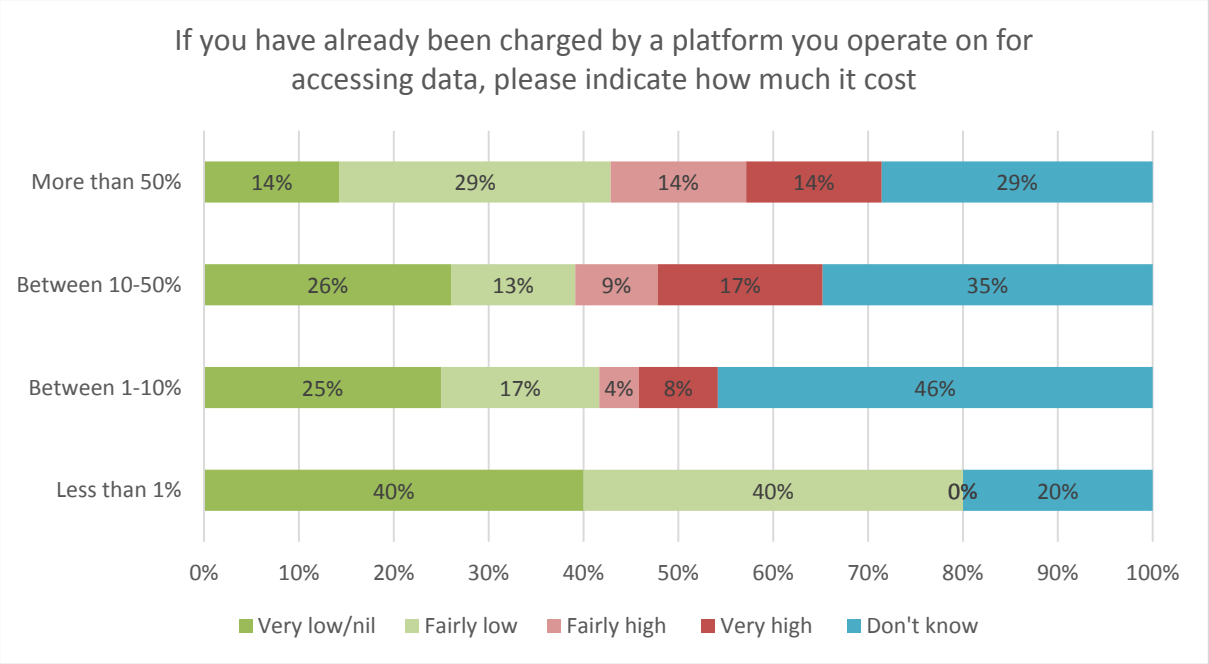
This number is higher than the ones retrieved on most platform and analytics software websites. This may be explained by the fact that platforms and software managers tend to make available only the starting price for their services on their websites, which is likely to increase depending on the business, or the number of services subscribed.

Without taking into account Google Analytics premium price, which considerably increases the average, the average cost of access to online platform data for businesses is estimated at **EUR 4,076 per year**, which represents **0.2% of annual turnover** for businesses with turnover of less than EUR 2 million.

67 Based on the four best ranked software on the website Capterra.com (available at: www.capterra.com) and the four first suggested app analytics software on the website BusinessofApps (available at: http://www.businessofapps.com/guide/app-analytics/). Estimates per year are based on the starting price per month. Prices in dollar converted in euros as of 26/10/2017.
68 Starting price per month estimated for a hotel of 10 rooms in Belgium. See: https://www.cloudbeds.com/pricing/
69 Source: http://www.blastam.com/google-analytics-360-standard-comparison
70 Source: https://aws.amazon.com/kinesis/analytics/pricing/?nc1=h_ls

These costs tend to increase with businesses' dependency on platforms for generating turnover. 28% of survey respondents with more than half of turnover attributed to platforms indicated fairly high or high costs of accessing data, as opposed to 12% of business users with between 1-10% turnover attributed to platforms, and none with less than 1%.

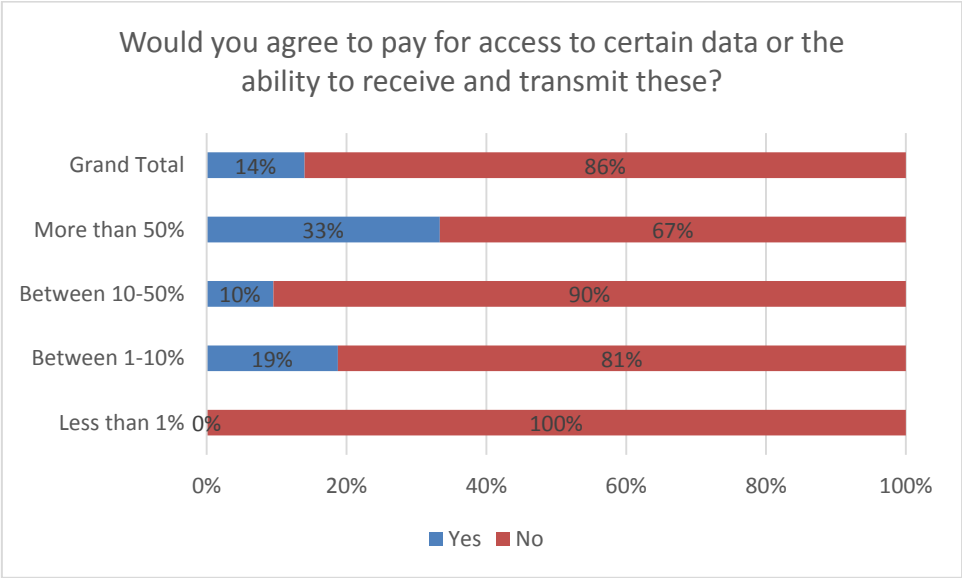
Figure 14: Businesses' costs for accessing data - Per turnover attributed to platforms



Source: VVA, Business user survey, 66 respondents to the question.

This is confirmed by survey results, which show that the willingness to pay for accessing or the ability to receive/transmit data increases with the turnover attributed to platforms. One third of business users with half of turnover attributed to platforms are willing to pay for accessing or receiving/transmitting data, as opposed to none of the businesses with less than 1% turnover attributed to platforms.

Figure 15: Businesses' willingness to pay for accessing/receiving and transmitting data



Source: VVA, Business user survey, 100 respondents to the question.

6.2 Potential impact of enhanced data access and re-use possibilities

Finally, the potential for data to increase business turnover in online markets is well recognised, even by the platforms themselves. For instance, in the presentation of its analytics product Google Analytics, Google states that "Businesses that integrated multiple customer and marketing data sources saw 2.6 times sales growth over three years compared to peers."[71]

Very few businesses were able to quantify potential impacts of enhanced access to data. When asked during interviews, business users mentioned figures ranging from 2-3% increase in turnover to 30%, as Table 12 shows. The difficulty for businesses to estimate the impact of enhanced data access is an additional indicator of their current lack of knowledge as regards data use possibilities, which has also been emphasised by interviews with platforms and businesses.

Table 12: Potential impacts of enhanced access to data by businesses

Type of platform most used	Increase in turnover	Most valuable data category	Reasoning
Hospitality	2-3%	Email address and behavioural data (e.g. click behaviour or browsing history)	Solving other issues, such as narrow parity rates, could increase the turnover by 20%.
E-commerce	10-15%	Contact details of customers and potential customers	Would allow to send customers the catalogue of their products directly.
E-commerce	15-20%	Customer data (e.g. age range, nationality, buying practices)	Would allow to better target customers, i.e. through targeted newsletters.
E-commerce	30%	Complete access to behavioural data, in particular conversion rates	Provided the business has sufficient data analytics skills in-house.
E-commerce	10%	Name, address, phone number and email address.	n/a
E-commerce	Below 5%	n/a	Online platforms are secondary to their business. 70% of the sales take place through their web shop.
App store	10%	User identification details (e.g. address, level of income).	Would allow to better target potential customers.

Source: VVA Interviews.

Taking the simple average of these figures, enhanced access to data could **increase turnover of businesses using online platforms by 13.75%.** Another way of looking at this figure is that it represents the opportunity cost of insufficient access to data, which, added to the direct costs for accessing data calculated in section 6.1.1, raises the total costs for business related to data access issues, to:

- About EUR 280,000 for business with EUR 2 million turnover;
- About EUR 6.9 million for businesses with EUR 50 million turnover;
- About EUR 137.5 million for businesses with EUR 1 billion turnover.

When linked to the current turnover of the app store, e-commerce and hospitality sectors in Europe, **enhanced access to data could increase turnover by:**

- About **EUR 2 billion** in the app store sector, which would raise the total turnover generated by businesses in the sector up to EUR 16.2 billion;
- About **EUR 73 billion** in the e-commerce sector, which would raise the total sector turnover up to EUR 603 billion;
- About **EUR 55 billion** in the hospitality sector, which would raise the total sector turnover up to EUR 455 billion.

71 Available at: https://www.google.com/analytics/360-suite/#?modal_active=none

Table 13 summarises this information.

Table 13: Potential impacts in turnover of enhanced access to data for businesses

Sector	Turnover	Potential turnover	Increase due to greater data access
App store	EUR 14.2 billion[72] (2014)	EUR 16.2 billion	+ EUR 2 billion
E-commerce	EUR 530 billion[73] (2016)	EUR 603 billion	+ EUR 73 billion
Hospitality	EUR 400 billion[74] (2016)	EUR 455 billion	+ EUR 55 billion

Source: VVA.

One recurring remark is that impacts vary depending on whether businesses have knowledge and capacity to use the data. In the hospitality and e-commerce sectors, most business users interviewed have noted that enhancing access to data could be useful provided they had the time, resources and necessary knowledge to make use of this data. The app developers interviewed were more knowledgeable and willing to analyse data, but reported to prefer using third-party data analytics software compiling the data generated through the use of the app, which is most valuable to them, with the one available through the app store.

In the interviews, business users mentioned significant potential impacts of greater access to data for:

- **Email address**, to facilitate promotional activities and widen the reach of advertising campaigns;
- **User profile** (e.g. information on their customers and potential customers' gender, age, city) to improve their offer and better target their advertising campaigns;
- **User behaviour data** (e.g. number of clicks, search and browsing history, customer engagement on the item's page on the platform) to better picture clients' needs and target advertising.

These data could be therefore prioritised in the framing of the policy options.

72 Source: Vision Mobile. Available at: https://ec.europa.eu/research/innovation-union/pdf/active-healthy-ageing/vision_mobile.pdf
73 Source: E-commerce Europe. Available at : https://www.ecommerce-europe.eu/press-item/european-ecommerce-report-2017-released-ecommerce-continues-prosper-europe-markets-grow-different-speeds/
74 Source: HOTREC Annual Report 2016-2017. Available at: http://www.hotrec.eu/publications-positions-8629/annual-reports.aspx

7 Assessment of policy options

This section aims at supporting the European Commission in the development of policy options to improve the access to and the (re-)use of data for business users.

7.1 Proposed policy options

At the present stage, there is no policy instrument regulating the access to and (re-)use of data for businesses. No limited set of policy options have been defined by the European Commission yet, other than the baseline option in which EU action would continue to be limited to possible ex-post enforcement of the existing competition and consumer protection frameworks in targeted cases.

Beyond this baseline scenario, a series of potential substantive (content) measures could aim to support access of businesses to data originating from them or pertaining to them. Two potential measures have been proposed:

- Requiring transparency on data access and use policies towards business users.
- Mandating access to (certain categories of) data, designed in conformity with the requirements of the GDPR.

Beyond these content dimensions, there is also a scoping element with two dimensions:

- Types of platforms to be covered, either:
  - all platforms, possibly with an exemption for micro-enterprises;
  - or all platforms over a certain threshold, possibly defined in terms of turnover, number of users, sector or data types.
- Geographic scope, either:
  - Focusing only on platforms established in the EU, e.g. based on the logic of the e-commerce Directive.
  - Targeting all platforms that do business with business users located or domiciled in the EU, following the logic of EU consumer protection rules or data protection law.

Finally, the last dimension is the choice of instrument with which to execute some of these measures; these include notably:

- Non-regulatory intervention via guidelines or best practices;
- Self-regulation;
- Co-regulation;
- Legislation, via a Directive;
- Legislation, via a Regulation.

7.2 Legal impact assessment for the platform-to-business ecosystem

7.2.1 With respect to the content options

As a common element for the potential content options, they are all predicated on the consideration that online platforms face and lead to specific challenges in the internal market which are significant enough to warrant additional policy intervention compared to other similar service providers. Generally, the activities of online platforms are likely to be governed by the rules for information society service providers as defined in the eCommerce Directive 2000/31/EC. The eCommerce Directive already contains obligations in terms of information requirements, consumer protection, liability and out-of-court dispute settlement. These would continue to apply to the online platforms as before, and any further policy action (whether legislative or not) would therefore need to be necessary and proportionate on the basis of the evidence indicating that online platforms indeed face and lead to challenges which differ from those of information society service providers in general.

The legal basis for the potential content options could be found in the TFEU's provisions on ensuring the functioning of the internal market, provided that collected information provides sufficient indication that there is indeed market fragmentation (in the sense that platforms or their business users are treated unequally across the Member States) or that there is otherwise a deficiency in the functioning of the internal market that creates notably risks to the protection of consumers in the market.

A different treatment of platforms is not inconceivable; it should be recalled that the eCommerce Directive also distinguishes different types of information society service providers in relation to its liability rules (on mere conduit, hosting and caching), thus implicitly recognising that rules in information society services can be varied depending on the specificities of the provider.

As regards the content of the policy options themselves, i.e. supporting access of businesses to data originating from them or pertaining to them, it seems that transparency measure on data access and use policies towards business users as such does not seem to raise additional legal questions. Mandatory access to certain categories of data would need to be in full conformity with the GDPR. Moreover, when mandating such access care must be taken to protect stakeholders' business interests, and take their intellectual property rights and trade secrets into consideration, e.g. under Directive (EU) 2016/943 of the European Parliament and of the Council of 8 June 2016 on the protection of undisclosed know-how and business information (trade secrets).

7.2.2 With respect to the scoping options

As noted above, there is a scoping element with two dimensions:

a. Types of platforms to be covered

Neither option – electing to cover either all platforms, possibly with an exemption for micro-enterprises; or all platforms over a certain threshold, possibly defined in terms of turnover, number of users, sector or data types – would pose specific legal challenges, although effectiveness must be considered when applying a threshold: the number of business users might not be a credible or measurable metric, since even a small amount of business users might suffer a significant detriment, and for services such a search engines the number of users (indexed properties) can be arbitrarily high.

b. Geographic scope

For this option, applying the rules to only platforms established in the EU would improve consistency of EU law, as it would be aligned on the logic of the eCommerce Directive. Targeting all platforms that do business with business users located or domiciled in the

EU would indubitably be more effective and be capable of addressing regulatory evasion. The underlying logic for the latter would be in line with EU competition and consumer protection laws.

7.2.3 With respect to the choice of instrument

Finally, the last dimension is the choice of instrument with which to execute some of these measures. All the instruments are prima facie legally viable (with the reservation that binding legal effects can of course only be obtained through legislative instruments, not via non-regulatory intervention or self-or co-regulation), and the choice of the right instrument is largely dictated by the question to what extent the desired effects are likely to be achieved by a less binding instrument.

8 Conclusions and recommendations

The study has found that overall, the level of access to data granted by platforms is already high, with most businesses not using all the data that is made available to them.

However, business users reported lack of access to the following type of data:

- Email address;
- Information on user behaviour and user profile (both customers and potential customers).

The data businesses reported to lack access to belongs to the data categories that are the most valuable for businesses. Indeed, email address is crucial to conduct the transaction and facilitate promotional activities. On the other hand, data on user behaviour and profile allows businesses to enhance customer knowledge and to run targeted advertising and marketing campaigns.

Knowledge and experience as regards data and its possible uses is an important factor determining the value of data for business users, and the degree of satisfaction as regards the level of access granted by platforms. App store users have been found to be more knowledgeable about the different data use possibilities, as well as larger businesses in general. Businesses who are experienced about data tend to use third-party data analytics software to process this data, rather than the tools offered by online platforms themselves.

Currently, impacts for businesses are low (between 0.75% or 0.2% turnover). However, businesses indicate a **potential for high impacts** of better access to data if knowledge as regards different data use possibilities was enhanced.

Taking into account the above, measures aiming at increasing **transparency** on data access and use policies towards business users could have an important impact. These measures could also include incentives for platforms to educate their business users about different data use possibilities, as it is already done by larger platforms (e.g. platforms that provide with extensive analyses of market trends and developments, or with tips for business users to improve their performance on the basis of the data available).

Mandating access to certain categories of data could focus on the data categories business users report to lack access to, i.e. email address, information on user behaviour, and information on user profile. This second option must be designed in conformity with the requirements of the GDPR. Furthermore, this option would in parallel have to address the lack of awareness of business users as regards data in order to be fully effective in its potential impacts.

9 Annexes

9.1 List of sources

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9.2 Survey questionnaires for business users and online platforms

9.2.1 Survey questionnaires for business users

Data access and portability for businesses on platforms - BUSINESSES

Presentation

ID: 3

This study is led by VVA on behalf of the European Commission (Directorate General for Industry, Entrepreneurship and SMEs). Its aim is to assess data access, (re-)use and portability (i.e. receive and transfer data) for businesses operating on online platforms.

This questionnaire seeks to understand:

- **Which categories of data are generated by business users and customers through platforms;**
- **Which categories of data business users have access to, which they do not, and how they (re-)use these data;**
- **What are the impacts of these practices on business users and platforms, and what would be the impacts of greater access and portability.**

Some key definitions of terms used throughout the questionnaire:

- **"Platform" refers to an online platform where buyers and sellers of products or services meet;**
- **"Business users" or "businesses" refer to businesses offering goods or services or seeking to buy advertisement space on platforms;**
- **"Customers" or "users" refer to the parties purchasing the goods or services or targeted by the advertisement on platforms.**

Thank you for your participation.

This questionnaire is intended for internal use of VVA and the European Commission. All answers will remain confidential and will not be shared with third parties without your explicit consent.

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Platform information

ID: 4

1) What is the name of your company?*

ID: 5

2) Which online platforms does your company use? (Multiple answers possible)*

- ☐ E-commerce platforms/online marketplaces (e.g. eBay, Amazon, Cdiscount, Otto, Zalando)
- ☐ Hospitality platforms, i.e. online travel agency (OTA) platforms (e.g. Lastminute, Expedia, Booking.com), including meta-search engines (e.g. Trivago, Momondo, Skyscanner) and restaurant booking platforms (e.g. OpenTable)
- ☐ User review platforms (e.g. TripAdvisor, Yelp, TrustPilot)
- ☐ App stores (e.g. Apple App Store, Google Play Store, Amazon App Store)
- ☐ Online social media (e.g.Facebook, Twitter, Instagram, Snapchat, YouTube, Pinterest)

Validation: Max. answers = 1 *(if answered)*
ID: 234

3) Which type of platform is the most important for your business? (Only one answer possible). *Please note that the remainder of this questionnaire will relate only to the most important platform for your business. If desired, you are invited to complete this questionnaire again in respect of the other types of platforms you use.* *

- ☐ E-commerce platforms/online marketplaces (e.g. eBay, Amazon, Cdiscount, Otto, Zalando)
- ☐ Hospitality platforms, i.e. online travel agency (OTA) platforms (e.g. Lastminute, Expedia, Booking.com), including meta-search engines (e.g. Trivago, Momondo, Skyscanner) and restaurant booking platforms (e.g. OpenTable)

- [ ] User review platforms (e.g. TripAdvisor, Yelp, TrustPilot)
- [ ] App stores (e.g. Apple App Store, Google Play Store, Amazon App Store)
- [ ] Online social media (e.g.Facebook, Twitter, Instagram, Snapchat, YouTube, Pinterest)

Categories of data collected via your platform

ID: 6

4) Business identification - Which types of data do you provide to the platforms you operate on?

- [ ] Company contact details
- [ ] VAT number/company registration
- [ ] Country of operation
- [ ] Business website
- [ ] Bank/payment details
- [ ] Other - Please specify (Required): *
- [ ] None of the above

ID: 140

5) Business performance - To the best of your knowledge, which types of data do the platforms you operate on hold on your business?

- [ ] User traffic on pages on your platform that advertise the business' products/services
- [ ] Number of products/services offered by the business via your platform
- [ ] Prices and price changes offered by the business via your platform
- [ ] Total value of sales per time period
- [ ] Number of transactions
- [ ] Other - Please specify (Required): *
- [ ] None of the above

ID: 7

6) User identification - To the best of your knowledge, which types of data are provided to the platforms you operate on by users who may be interested in purchasing the goods and services you offer via these platforms?

- [ ] IP address
- [ ] Type and other identification of the device(s) used to access the platform
- [ ] Identity (login details, ID, name, gender, age)
- [ ] Contact details (email, telephone)
- [ ] Delivery/Home address
- [ ] User profile on other platforms (e.g. social media profiles)
- [ ] Payment details
- [ ] Other - Please specify (Required): *
- [ ] None of the above

ID: 141

7) User behaviour - To the best of your knowledge, which types of data do the platforms you operate on hold on users who may be interested in purchasing the goods and services you offer via these platforms?

- ☐ Click behaviour
- ☐ Browsing history
- ☐ Search history
- ☐ Time spent on each page
- ☐ Other - Please specify (Required): *
- ☐ None of the above

ID: 8

8) Data on individual transactions carried out between businesses and customers - Assuming a transaction takes place between your business and a customer via a platform you operate on. To the best of your knowledge, which types of data does the platform collect as result of such a transaction?

- ☐ Price of the transaction
- ☐ Payment details/payment method
- ☐ Pre- and post- sales communications between the business and the customer
- ☐ Customer review/rating of the transaction
- ☐ Business review/rating of the transaction
- ☐ Items viewed by the customer before purchase
- ☐ Items viewed by the customer after purchase
- ☐ Search terms used to arrive on the item's page (if applicable)
- ☐ Other - Please specify (Required): *
- ☐ None of the above

ID: 160

9) Analyses on market trends/developments - To the best of your knowledge, does any platform you operate on analyse this data to generate insights on market trends and developments?

- ☐ Yes
- ☐ No
- ☐ Please specify:

Platform use of data and access for businesses operating on the platform

ID: 167

10) Do you have access to different types of data held by the platforms you operate on?

- ☐ Identification details of your customers - Please specify:
(for instance, IP address, device(s) used to access the platform, identity, contact details, delivery/home address, payment details, user profile on other platforms (e.g. social media) etc.):
- ☐ Identification details of other users (i.e. potential customers)
(for instance, IP address, device(s) used to access the platform, identity, contact details, delivery/home address, payment details, user profile on other platforms (e.g. social media) etc.):
- ☐ Customer behaviour - Please specify:
(for instance, click behaviour, browsing history, search history, time spent on each page, etc.):
- ☐ Other users' behaviour (i.e. potential customers) - Please specify:
(for instance, click behaviour, browsing history, search history, time spent on each page, etc.):
- ☐ Business identification - Please specify:
(for instance, company contact details, VAT number/company registration, country of operation, business website, bank/payment details, etc.):
- ☐ Business performance - Please specify:
(for instance, user traffic on pages of your platform advertising products/services, number of products/services offered by the business via your platform, price and price changes offered by the business via your platform, total value of sales per time period, number of transactions, etc.):
- ☐ Data from individual transactions carried out between businesses and customers - Please specify:
(for instance, description of the good or service being transacted, price of the transaction, payment details/payment methods, communications between the business and the customer, reviews and ratings of the transaction, items viewed before and after the purchase, search terms used to arrive on the item's page, etc.):
- ☐ Analysis of market trends/developments - Please specify:
(Analysis done by the platform on the basis of all the data provided by customers and businesses.):
- ☐ I don't have access to any of these data.

ID: 143

11) If you have access to this data, please specify how access is granted:

	User identification details	**User behaviour**	**Business identification**	**Business performance**	**Data from individual transactions carried out between businesses and customers**	**Analysis of market trends/developments**
We can copy the data, including through automate	○	○	○	○	○	○

d means, from the public interface						
We receive a standard report from the platform						
We receive a machine-readable record of the data						
We have access to the static data through web APIs						
We have access to data stream through web APIs						

ID: 204

12) If you were granted access to data that qualifies as "personal data" according to the General Data Protection Regulation, on what legal basis did it take place (e.g. consent expressed in the terms and conditions, signing of a contract)? Please explain.

Article 4(1) of the General Data Protection Regulation (Regulation (EU) 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC): *"'Personal data' means any information relating to an identified or identifiable natural person ('data subject'); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person".*

ID: 152

13) If you have already been charged by a platform you operate on for accessing data, please indicate how much it cost:

	User identification details	**User behaviour**	**Business identification**	**Business performance**	**Data from individual transactions carried out between businesses and**	**Analysis of market trends/developments**

					customers	
Very low/nil						
Fairly low						
Fairly high						
Very high						
Don't know						

ID: 138

14) Please indicate the estimated annual costs (in EUR) to your business for accessing data from the platforms you operate on:

ID: 16

15) Which of these data can you receive from the platforms you operate on, and transmit to another platform or a third party?

	User identification details	User behaviour	Business identification	Business performance	Data from individual transactions carried out between businesses and customers	Analysis of market trends/developments
We can transmit all of these data						
We can transmit only some of these data						
None of these data can be transmitted						
Don't know						

ID: 225

16) If you were granted the permission to receive and transmit data that qualifies as "personal data" according to the General Data Protection Regulation, on what legal basis did it take place (e.g. consent expressed in the terms and conditions, signing of a contract)? Please explain.

Article 4(1) of the General Data Protection Regulation (Regulation (EU) 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC): *"'Personal data' means any information relating to an identified or identifiable natural person ('data subject'); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person".*

ID: 173

17) If you have ever attempted to receive data from a platform you operate on, and transmit it to another platform or a third party, please indicate how much it cost:

	Cost of transmitting data
Very low/nil	
Fairly low	
Fairly high	
Very high	
Don't know	

ID: 179

18) Please indicate estimated annual total costs (in EUR) to your business for receiving data from the platforms you operate on, and transmitting it to another platform or a third party:

ID: 180

19) If applicable, please indicate what reason(s) were you given by a platform you operate on for you not being able to access, or receive and transmit data to other platforms or third parties?

Denied access to data due to::

Denied the ability to transmit data due to::

ID: 183

20) Is there any type of data held by a platform you operate on that you would like to access, but cannot? If so, what?

☐ Yes - Please specify:

☐ No

ID: 184

21) Is there any type of data you would like to receive from a platform you operate on and transmit to other platforms or third parties, but cannot?

☐ Yes - Please specify:

☐ No

ID: 191

22) Which type of data would you be most interested in?

	Please rank from 1 to 4, with 1 being most interested/high priority, to 4 being less interested/low priority:
User identification details	
User behaviour	
Business identification	
Business performance	
Data from individual transactions carried out between businesses and customers	
Analysis of market trends/developments	

ID: 226

23) Within each category, which type of data is the most important to you?

User identification details

:

User behaviour

:

Business identification

:

Business performance

:

Data from individual transactions carried out between businesses and customers

:

Analysis of market trends/developments
:

ID: 188

24) Would you agree to pay for access to certain data or the ability to receive and transmit these?

Note: **Provided this is not subject to restrictions according to the General Data Protection Regulation (Regulation (EU) 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC).**

- ☐ Yes - Please explain:
- ☐ No

ID: 123

25) In your view, what measures could industry or policymakers take to facilitate data access and re-use for businesses operating on online platforms?

Additional information

ID: 130

26) How many employees does your company have?

- ☐ Less than 10
- ☐ Between 10 and 250
- ☐ Between 250 and 5,000
- ☐ More than 5,000

ID: 132

27) What is the annual turnover of your company?

- ☐ Less than EUR 2 million
- ☐ Between EUR-2-50 million
- ☐ Between EUR 50-1 billion
- ☐ More than EUR 1 billion

ID: 189

28) What percentage of your turnover can be attributed to online platforms?

- ☐ Less than 1%
- ☐ Between 1-10%
- ☐ Between 10-50%
- ☐ More than 50%

ID: 133

29) Where is your business established as a company?

- [ ] Austria
- [ ] Belgium
- [ ] Bulgaria
- [ ] Cyprus
- [ ] Croatia
- [ ] Czech Republic
- [ ] Denmark
- [ ] Estonia
- [ ] Finland
- [ ] France
- [ ] Germany
- [ ] Greece
- [ ] Hungary
- [ ] Ireland
- [ ] Italy
- [ ] Latvia
- [ ] Lithuania
- [ ] Luxembourg
- [ ] Malta
- [ ] Netherlands
- [ ] Poland
- [ ] Portugal
- [ ] Romania
- [ ] Slovakia
- [ ] Slovenia
- [ ] Spain
- [ ] Sweden
- [ ] United Kingdom
- [ ] Other - Please specify (Required): *

ID: 134

30) In which countries does your business operate?

- [ ] Globally
- [ ] Across the EU
- [ ] Austria
- [ ] Belgium
- [ ] Bulgaria

- ☐ Cyprus
- ☐ Croatia
- ☐ Czech Republic
- ☐ Denmark
- ☐ Estonia
- ☐ Finland
- ☐ France
- ☐ Germany
- ☐ Greece
- ☐ Hungary
- ☐ Ireland
- ☐ Italy
- ☐ Latvia
- ☐ Lithuania
- ☐ Luxembourg
- ☐ Malta
- ☐ Netherlands
- ☐ Poland
- ☐ Portugal
- ☐ Romania
- ☐ Slovakia
- ☐ Slovenia
- ☐ Spain
- ☐ Sweden
- ☐ United Kingdom
- ☐ Non-EU countries

ID: 233

31) If you have any other information to share with us, please indicate it here:

ID: 135

32) We may wish to contact you to clarify some of your answers. If you agree to such a contact, please indicate your phone number and/or email address here:

Thank You!

ID: 1

Thank you for your answers!

If you wish to answer this questionnaire in respect of another type of online platform you use, please feel free to restart it.

9.2.2 Survey questionnaire for online platforms

Data access and portability for businesses on platforms - PLATFORMS

Presentation

ID: 3

This study is led by VVA on behalf of the European Commission (Directorate General for Industry, Entrepreneurship and SMEs). Its aim is to assess data access, (re-)use and portability (i.e. receive and transfer data) for businesses operating on online platforms.

This questionnaire seeks to understand:

- **Which categories of data are generated by business users and customers through platforms;**
- **Which categories of data business users have access to, which they do not, and how they (re-)use these data;**
- **What are the impacts of these practices on business users and platforms, and what would be the impacts of greater access and portability.**

Some key definitions of terms used throughout the questionnaire:

- **"Platform" refers to an online platform where buyers and sellers of products or services meet;**
- **"Business users" or "businesses" refer to businesses offering goods or services or seeking to buy advertisement space on platforms;**
- **"Customers" or "users" refer to the parties purchasing the goods or services or targeted by the advertisement on platforms.**

Thank you for your participation.

This questionnaire is intended for internal use of VVA and the European Commission. All answers will remain confidential and will not be shared with third parties without your explicit consent.

Platform information

ID: 4

1) What is the name of your platform?*

ID: 5

2) What are your activities? (Multiple answers possible)*

- ☐ Intermediating the sale of goods and/or services - other than the categories below (e-commerce platform)
- ☐ Intermediating bookings from customers (online travel agency, meta-search engine, restaurant booking)
- ☐ Aggregating customer reviews (review aggregator)
- ☐ Intermediating the sale of apps (app store)
- ☐ Online social media
- ☐ Publishing/offering online advertising
- ☐ Other - Please specify (Required): *

Validation: Max. answers = 1 *(if answered)*

ID: 169

3) Please indicate which type of activity the remainder of this questionnaire relates to (One answer possible): *Please note that the remainder of this questionnaire will relate only to the selected activity. If desired, you are invited to complete this questionnaire again to cover additional activities.* *

- ☐ Intermediating the sale of goods and/or services - other than the categories below (e-commerce platform)
- ☐ Intermediating bookings from customers (online travel agency, meta-search engine, restaurant booking)

- [ ] Aggregating customer reviews (review aggregator)
- [ ] Intermediating the sale of apps (app store)
- [ ] Online social media
- [ ] Publishing/offering online advertising
- [ ] Other - Please specify (Required): *

Categories of data collected via your platform

ID: 6

4) *Data on businesses operating on your platform* - Business identification - Which types of data do you hold on businesses that are registered to sell goods/services via your platform?

- [ ] Company contact details
- [ ] VAT number/company registration
- [ ] Country of operation
- [ ] Business website
- [ ] Bank/payment details
- [ ] Other - Please specify (Required): *
- [ ] None of the above

ID: 140

5) *Data on businesses operating on your platform* - Business performance - Which types of data do you hold on businesses that are registered to sell goods/services via your platform?

- [ ] User traffic on pages on your platform that advertise the business' products/services
- [ ] Number of products/services offered by the business via your platform
- [ ] Prices and price changes offered by the business via your platform
- [ ] Total value of sales per time period
- [ ] Number of transactions
- [ ] Other - Please specify (Required): *
- [ ] None of the above

ID: 7

6) *User data* - User identification - Which types of data do you hold on users who may be interested in purchasing goods and services via your platform (e.g. collected at registration stage as the user logs on/clicks through the platform)?

- [ ] IP address
- [ ] Type and other identification of the device(s) used to access the platform
- [ ] Identity (login details, ID, name, gender, age)
- [ ] Contact details (email, telephone)
- [ ] Delivery/Home address
- [ ] User profile on other platforms (e.g. social media profiles)
- [ ] Payment details

- [ ] Other - Please specify (Required): *
- [ ] None of the above

ID: 141

7) *User data* - User behaviour - Which types of data do you hold on users who may be interested in purchasing goods and services via your platform (e.g. collected at registration stage as the user logs on/clicks through the platform)?

- [ ] Click behaviour
- [ ] Browsing history
- [ ] Search history
- [ ] Time spent on each page
- [ ] Other - Please specify (Required): *
- [ ] None of the above

ID: 8

8) *Data on individual transactions carried out between businesses and customers* - Assuming a transaction takes place between a business and a customer via your platform. Which types of data you - as a platform - collect as result of such a transaction?

- [ ] Price of the transaction
- [ ] Payment details/payment method
- [ ] Pre- and post- sales communications between the business and the customer
- [ ] Customer review/rating of the transaction
- [ ] Business review/rating of the transaction
- [ ] Items viewed by the customer before purchase
- [ ] Items viewed by the customer after purchase
- [ ] Search terms used to arrive on the item's page (if applicable)
- [ ] Other - Please specify (Required): *
- [ ] None of the above

ID: 167

9) Does your platform perform analyses on market trends and developments based on the above data?

- [ ] Yes - Please specify:
- [ ] No

Platform use of data and access for businesses operating on the platform

ID: 14

10) Why do you collect the above data on *users* via your platform? (Multiple answers possible)

- [ ] To comply with legal obligations
- [ ] To reduce burdens on businesses and customers on your platforms
- [ ] To improve your existing service as an intermediary to users and businesses on your platform
- [ ] To develop new products or services for users and businesses on your platform

- [ ] To generate insights on demand and supply for different kinds of products and services on your platform
- [ ] To generate wider market insights that could be of use to businesses operating on your platform
- [ ] To support you in deciding which goods or services to sell directly via your platform
- [ ] To develop/run targeted advertisements
- [ ] To share the data with businesses operating on your platform against remuneration (provided you are entitled to by law)
- [ ] To share data analysis services based on these data with businesses operating on your platform against remuneration (provided you are entitled to by law)
- [ ] To share the data with third parties against remuneration (provided you are entitled to by law)
- [ ] To share the data with third parties e.g. for research or policy development purposes (provided you are entitled to by law)
- [ ] To offer data analysis services based on these data to third parties
- [ ] Other - Please specify (Required): *

ID: 15

11) Why do you collect the above data on *businesses* via your platform? (Multiple answers possible)

- [ ] To comply with legal obligations
- [ ] To reduce burdens on businesses and customers on your platform
- [ ] To improve your existing service as an intermediary to users and businesses on your platform
- [ ] To develop new products or services for customers and businesses on your platform
- [ ] To generate insights on demand and supply for different kinds of products and services on your platform
- [ ] To generate wider market insights that could be of use to businesses operating on our platform
- [ ] To support you in deciding which goods or services to sell directly via your platform
- [ ] To develop/run targeted advertisements
- [ ] To share the data with businesses operating on your platform against remuneration (provided you are entitled to by law)
- [ ] To share data analysis services based on these data with businesses operating on your platform against remuneration (provided you are entitled to by law)
- [ ] To share the data with third parties against remuneration (provided you are entitled to by law)
- [ ] To share the data with third parties e.g. for research or policy development purposes (provided you are entitled to by law)
- [ ] To offer data analysis services based on these data to third parties
- [ ] Other - Please specify (Required): *

ID: 16

12) Which of the data that you collect on your platform do you make available to *businesses* operating on your platform?

- [ ] Identification details of their customers - Please specify:

For instance, IP address, device(s) used to access the platform, identity, contact details, delivery/home address, payment details, user profile on other platforms (e.g. social media) etc.:

☐ Identification details of other users (i.e. potential customers)- Please specify:
For instance, IP address, device(s) used to access the platform, identity, contact details, delivery/home address, payment details, user profile on other platforms (e.g. social media) etc.:

☐ Customer behaviour - Please specify:
For instance, click behaviour, browsing history, search history, time spent on each page, etc.:

☐ Other users' behaviour (i.e. potential customers) - Please specify:
For instance, click behaviour, browsing history, search history, time spent on each page, etc.:

☐ Business identification - Please specify:
For instance, company contact details, VAT number/company registration, country of operation, business website, bank/payment details, etc.:

☐ Business performance - Please specify:
For instance, user traffic on pages of your platform advertising products/services, number of products/services offered by the business via your platform, price and price changes offered by the business via your platform, total value of sales per time period, number of transactions, etc.:

☐ Data from individual transactions carried out between businesses and customers - Please specify:
For instance, description of the good or service being transacted, price of the transaction, payment details/payment methods, communications between the business and the customer, reviews and ratings of the transaction, items viewed before and after the purchase, search terms used to arrive on the item's page, etc.:

☐ Analysis of market trends/developments - Please specify:
Analysis done by the platform on the basis of all the data provided by customers and businesses.:

ID: 143

13) If you share data with businesses operating on your platform, please specify how this is done:

	User identification details	**User behaviour**	**Business identification**	**Business performance**	**Data from individual transactions carried out between businesses and customers**	**Analysis of market trends/developments**
We allow businesses to copy the data, including through automated means, from the public interface	○	○	○	○	○	○
We provide a standard report to businesses	○	○	○	○	○	○

We provide a machine-readable record of the data						
We give access to the static data through web APIs						
We give access to data stream through web APIs						

ID: 149

14) Where possible, could you provide hyperlinks to the APIs/data sources?

ID: 150

15) If you do not share this data with businesses, please indicate the main reason for this:

ID: 45

16) If you grant businesses access to data that qualifies as "personal data" according to the General Data Protection Regulation, on what legal basis does it take place (e.g. consent expressed in the terms and conditions, signing of a contract)? Please explain.

Article 4(1) of the General Data Protection Regulation (Regulation (EU) 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC): "'Personal data' means any information relating to an identified or identifiable natural person ('data subject'); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person".

ID: 92

17) In your experience, approximately what percentage of businesses ask for access to data?

	Identification details of customers	**Identification details of other users (i.e. potential customers)**	**Customer behaviour**	**Other users' behaviour (i.e. potential customers)**	**Business identification**	**Business performance**	**Data from individual transactions carried out between**	**Analysis of market trends/developments**

							businesses and customers	
<1%								
1-10%								
10-50%								
More than 50%								

ID: 151

18) How has the demand for data from businesses evolved over the last 24 months?

- Decreased significantly
- Decreased slightly
- No change
- Increased slightly
- Increased significantly

ID: 152

19) Please indicate estimated costs for implementing your current data access policy for businesses with regard to the following types of data:

	User identification details	User behaviour	Business identification	Business performance	Data from individual transactions carried out between businesses and customers	Analysis of market trends/developments
Very low/nil						
Fairly low						
Fairly high						
Very						

high						
Don't know						

ID: 138

20) Please indicate estimated overall costs (in EUR) for implementing your current data access policy for businesses:

User identification details

:

User behaviour

:

Business identification

:

Business performance

:

Data from individual transactions carried out between businesses and customers

:

Analysis of market trends/developments

:

Action: JavaScript: New JavaScript

ID: 123

21) In your view, what measures could industry or policymakers take to facilitate data access and re-use for businesses operating on online platforms?

Additional information

ID: 130

22) Approximately how many businesses are registered as active users on your platform?

- Fewer than 500
- Between 500 and 10,000
- Between 10,000 and 100,000
- More than 100,000

ID: 132

23) What is the annual turnover of your platform?

- Less than EUR 2 million
- Between EUR-2-50 million
- Between EUR 50-1 billion

- [ ] More than EUR 1 billion

ID: 133

24) Where is your platform established as a company?

- [ ] Austria
- [ ] Belgium
- [ ] Bulgaria
- [ ] Cyprus
- [ ] Croatia
- [ ] Czech Republic
- [ ] Denmark
- [ ] Estonia
- [ ] Finland
- [ ] France
- [ ] Germany
- [ ] Greece
- [ ] Hungary
- [ ] Ireland
- [ ] Italy
- [ ] Latvia
- [ ] Lithuania
- [ ] Luxembourg
- [ ] Malta
- [ ] Netherlands
- [ ] Poland
- [ ] Portugal
- [ ] Romania
- [ ] Slovakia
- [ ] Slovenia
- [ ] Spain
- [ ] Sweden
- [ ] United Kingdom
- [ ] Other - Please specify (Required): _____ *

ID: 134

25) In which countries does your platform operate?

- [ ] Globally
- [ ] Across the EU

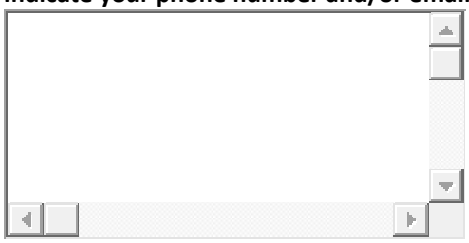
- [ ] Austria
- [ ] Belgium
- [ ] Bulgaria
- [ ] Cyprus
- [ ] Croatia
- [ ] Czech Republic
- [ ] Denmark
- [ ] Estonia
- [ ] Finland
- [ ] France
- [ ] Germany
- [ ] Greece
- [ ] Hungary
- [ ] Ireland
- [ ] Italy
- [ ] Latvia
- [ ] Lithuania
- [ ] Luxembourg
- [ ] Malta
- [ ] Netherlands
- [ ] Poland
- [ ] Portugal
- [ ] Romania
- [ ] Slovakia
- [ ] Slovenia
- [ ] Spain
- [ ] Sweden
- [ ] United Kingdom
- [ ] Non-EU countries

ID: 168

26) If you have any other information to share with us, please indicate it here.

ID: 135

27) We may wish to contact you to clarify some of your answers. If you agree to such a contact, please indicate your phone number and/or email address here:



Thank You!

ID: 1

Thank you for your answers!

If you wish to answer this questionnaire in respect of another type of activity, please feel free to restart it.

9.3 Interview guides for business users and online platforms

9.3.1 Interview guide for business users

Study on data in platform-to-business relations
Interview guide – Business users

Data provision / types of data

1. What share of your business takes place online? What share of your business takes place via a third party online platform? Do you operate on several platforms – please explain.
2. Which categories of data do you provide to the online platforms you operate on (e.g. product information, company contact details)?
3. Are there types of data that are specific to your sector, if so which?

Access and use

4. Do the platforms you operate on grant you access to and/or let you use:
    a. Identification data provided by end users on the platform, and if yes which categories of data (e.g. contact details, payment details, IP address, device(s) used to access the platform, others)? Does it make a difference whether the consumers in question have already carried out a transaction with your business on the platform?
    b. User behaviour data generated by end users of the platform, and if yes which categories of data (e.g. click behaviour, browsing history)? Does it make a difference for your access rights whether the consumers in question have already carried out a transaction with your business on the platform?
    c. Business performance data, be it that of your own business or that of other businesses?
    d. Data on or generated at the occasion of an individual transaction with your business and end consumers via the platform, and if yes which categories of data (e.g. orders, price, payment method, communications between businesses and consumers, reviews and ratings)?
    e. Other categories of data generated by the platform, for example analyses on market trends and developments?
    f. Other categories of data not listed above? Please explain/specify.
5. Have you ever requested access to any of the above data from the online platform?
    a. Has any such request been refused?
    b. If yes, what reason(s) were you given by the platform for not being able to access the requested data?
    c. Did you have to pay for access to any data you requested?
6. If you were granted access to data that qualifies as personal data within the meaning of the General Data Protection Regulation[75], on what legal basis did it take place (e.g. consent expressed in the terms and conditions, signing of a contract)?
7. Overall, how satisfied are you with the access to data that is granted to you by the online platforms on which you operate? Please explain.

Transmission to other platforms

75 Article 4(1) of the General Data Protection Regulation (Regulation (EU) 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC): "'Personal data' means any information relating to an identified or identifiable natural person ('data subject'); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person".

8. Do you have the possibility to transmit any of the above data to another platform?
    a. If yes, have you ever used this possibility?
    b. How long does it take for a platform to respond to your request to transmit or let you transmit data to another platform?
    c. Did you have to pay to transmit data to other platforms?
    d. Is the cost/difficulty something that stops you from transmitting data to another platform?
    e. What reason(s) were you given by the platform if you were not able to transmit data to another platform? (e.g. cost?)
9. Overall, how satisfied are you with the possibilities granted to you by the online platforms on which you operate to transmit data to another platform? Please explain.

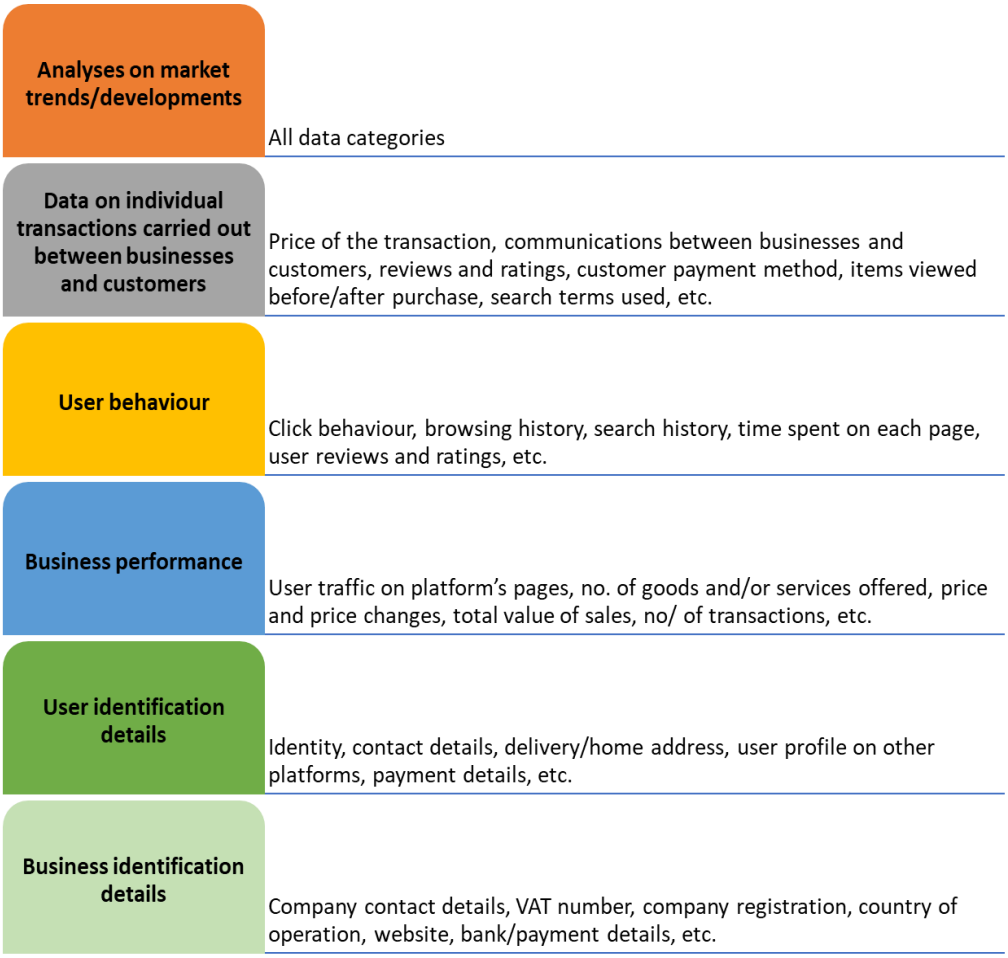
Impacts

10. For which types of data – if any – is or would access from the platform be the most important for your business (notably in terms of innovation, marketing, financial impact, brand building)?
11. What impacts do the current practices of the access/use/transmissibility of data on the platform have for your business (e.g. in terms of business conduct, turnover and valuation of the business, employment, innovation)?
    a. What would be the impacts of greater access to these categories of data and ease of transmission?
12. What in your view are the main issues in terms of data access/use and transmissibility for business users?
13. Is there, in your view, any need for an action at EU or national level – legislative or non-legislative?

9.3.2 Interview guide for online platforms

Study on data in platform-to-business relations
Interview guide – Platforms

1. The following six main types of data have been identified as part of this study. Can you please have a look at the figure and:
    a. Provide comments on the six categories of data (do they cover all / the main types of data in P2B relations; are they distinct types of data; is anything missing?)
    b. Provide examples of different types of data for each of the four broad categories based on the experience of your platform.



2. Are there data that are specific to your sector, and if so, which?
3. How important is data to your business model? What is the role of data in your business model? In your organisation's decision-making processes?
4. Is data important for other activities of your company?
5. Which of these different categories of data do business users have access to/can use?
    a. For each category to which you grant business users access, please specify whether this is the case for all or only types of data within that category (for example, within user identification data, access could be granted to the email and delivery address, but not the IP address).
    b. For user identification and user behaviour data, please distinguish between users that have carried out at least one transaction with the business user requesting access to their data and those who have not yet carried out a transaction with that business user.

c. If you grant business users access to data that qualify as personal data within the meaning of the General Data Protection Regulation[76], on what legal basis did it take place (e.g. consent, contract)? And how?

d. If access is granted to business users, do you charge for access to and/or use of certain data or the ability to transmit these to other platforms?

e. What share of businesses operating on your platform request access to data? How has this evolved over time?

6. Which of these different categories of data can business users transmit to other platforms?

    a. What share of businesses operating on your platform request transmission to other platforms? How has this evolved over time?

7. Are there types of data you block access to? E.g. through blocking bots?

8. What are the main obstacles to sharing data with business users and allowing them to transmit them to other platforms?

    a. What cost (type of cost and magnitude) would it entail to share these data with business users and let them transmit to other platforms?

9. How do you share data? (e.g. allow businesses to copy the data, including through automated means, from the public interface, provide a standard report to businesses, provide a machine-readable record of the data, give access to the static data through web APIs, give access to data streams through web APIs, other)

10. What are the main benefits of sharing data with business users and allowing them to transmit it to other platforms?

11. What impacts would greater data access / use / transmissibility for businesses operating on your platform have on your business (e.g. in terms of economic impact, competitiveness, business model, etc)?

12. Do you regularly discuss data access and use with third party businesses selling on your platforms?

13. How do you think platform practices regarding data access, (re-)use and transmission will evolve in the future? Are you considering granting access to more data in the future, or allowing business users to transmit more data ot other platforms?

14. What in your view are the main issues in terms of data access, use and transmission to other platforms for business users? What – if any - should be the role of the European Commission, or national authorities, in this regard?

76 As defined in Article 4(1) of the General Data Protection Regulation (Regulation (EU) 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC): "'Personal data' means any information relating to an identified or identifiable natural person ('data subject'); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person".

9.4 Detailed results of the surveys for online platforms and business users

Please refer to the Excel file attached.

9.5 List of interviews with business users and online platforms

9.5.1 List of Interviews with business users

No.	Country	Sector
1	FR	App store
2	IT	App store
3	Cross-border	App store
4	FR	App store
5	ES	App store
6	FR	App store
7	FR	E-commerce
8	FI	E-commerce
9	DE	E-commerce
10	FR	E-commerce
11	FI	E-commerce
12	NL	E-commerce
13	DK	Hospitality
14	PL	Hospitality
15	PL	Hospitality
16	IT	Hospitality
17	ES	Hospitality
18	CZ	Hospitality
19	FR	Hospitality
20	FR	Hospitality
21	NL	Hospitality
22	DK	Hospitality

9.5.2 List of Interviews with online platforms

No.	Platform	Country	Sector	Status
1	Booking.com	Cross-border	Hospitality	Done
2	eBay	Cross-border	E-commerce	Done
3	TripAdvisor	Cross-border	User review	Done
4	Apple	Cross-border	App store	Done
5	Amazon	Cross-border	E-commerce	Done
6	Expedia	Cross-border	Hospitality	Done
8	Skyscanner	Cross-border	Hospitality	Done
9	Google	Cross-border	Online social media	Done
10	Yelp	Cross-border	User review	Done

9.5.3 List of participating platforms to the survey

No.	Name	Country	Type
1	Booking.com	Cross-border	Hospitality
2	Anonymous	Non-specified	Online advertising
3	Anonymous	Sweden	E-commerce
4	Anonymous	Czech Republic	Online advertising

5	Anonymous	Czech Republic	Real estate
6	Anonymous	Czech Republic	Comparison tool
7	Okazii.ro	Romania	E-commerce

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Catalogue number
ET-04-17-899-EN-N

Publications Office

doi:10.2873/602765