

netCommons
Network Infrastructure as Commons

Alternative Internet's Political Economy Survey Analysis and Interpretation of Data

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Executive summary

Deliverable D5.4 builds on Deliverable 5.2 (Boucas et al. [Mar. 2017](#)) (design of the survey on Internet attitudes) and D5.3 (Boucas et al. [Jun. 2017](#)) (implementation of the survey). It contains a summary and detailed interpretation the survey data obtained.

The Alternative Internet Survey used the open-source online platform *limesurvey*¹ to design the survey and collect data. The survey closed on 22nd January 2018 when we hit our target of 1000 completed questionnaires. The aim has been to target sufficiently competent and frequent Internet users, notably Information Technologies (IT) professionals, academics, University technicians and administrative staff, and students, explained in D5.2. Respondents were selected using a purposive sampling method (Bryman 2016). More specifically, they were recruited through targeted email lists primarily in the main project partner countries but also beyond, as detailed in D5.3. Although not representative of the Internet user population, this public of Internet users is likely to be more appropriate for the topics the survey addresses and potentially better at tackling the complex and sometimes technical questions that are involved. With hindsight, this group of users have given us rich material in the open questions, something that can help possibly help the CN agenda.

To re-iterate information from D5.2, the design of the online survey questionnaire has been based on the inclusion of different categories of questions, separated in five Sections labeled from A to E. After a short explanation of the aims of the questionnaire and the provision of the relevant consent form (in Section A), Section B, drawing on other similar surveys, includes a set of questions about the Internet usage and the digital skills of the respondent. Subsequently, Section C, which can be seen as the core section of the questionnaire, addresses various concerns that the respondent might have as an Internet user, relating to areas such as:

- a) privacy and data control,
- b) digital labor and advertising/consumer culture,
- c) monopolies of information provision,
- d) Internet governance and electronic democracy,
- e) opinions around Community Networks.

Section D explicitly asks respondents to consider community networks as an alternative and also seeks to elicit their views as to the potential of such networks. Finally, Section E includes demographics of the respondents, as well as certain attitudes that they might have towards life and society, which might be indicative of the likelihood to support community initiatives.

The analysis presented here focuses on the rich material provided in the open questions regarding, in particular, the five themes listed above. The responses to the open questions express the perceptions, attitudes and sense-making of the chosen public of Internet users with regard to the existing Internet but also, and more significantly, with regard to potential alternatives where concerns and problems are identified, exploring in particular the potential future of Community Networks (CNs), their purpose and sustainability. These are some of the core themes of the netCommons project. The analysis presented is qualitative and interpretive and is expected to be useful for CNs but also national and European policy-makers and regulators. At a more specific level, D5.4 complements D2.1 (Fuchs et al. [June 2016](#)) and D2.2 (Fuchs et al. [Jan. 2017](#)) on sustainability, and informs the rest of the work in WP5 on alternative Internet's social analysis. It also serves as input to WP4, specifically as a contribution to the forthcoming ethical and policy guidelines for CNs.

Regarding **privacy and data control**, respondents express strong concerns about the monopolistic power of a handful of commercial companies that rely on harvesting personal data using extensive tracking and profiling practices, and the use of data for commercial but also political benefit. There was frustration about the lack of alternatives and the inability to use a service unless one surrenders personal data. In response to these concerns, respondents indicate what steps they have taken, including the use of anonymization and encryption tools, which overall they find cumbersome and not necessarily effective.

¹<http://limesurvey.org>

Equally, regarding **monopolies of information provision**, the responses to the questions on Facebook and Google reveal strong concerns about their ad-driven business model which relies on personal data, their increasing market power and intrusiveness, the potentially severe adverse effects for citizenship, democracy and the public sphere, but at the same time, even if a few responses mention alternatives to these dominant platforms, there are doubts about whether one can stop using them totally.

Regarding **Internet governance and electronic democracy**, the open question on subscriptions to news content reveals contradictions, the most notable one being that between the funding of (quality and credible) journalism and content generally on the one hand and the potential for exclusion and implications for democracy on the other. In terms of alternatives, respondents suggest market structure and organizational models (e.g., new news ventures and non-profit news provision, including community media; and various funding methods, such as state subsidies and public service media, micro-payments, donations, crowd-funding etc.), as well as behavioral interventions (e.g., regulation for free and independent press).

Lastly, the survey reveals strong support for **alternatives** (Section D), even though understandings for alternatives varied from increasing market competition, non-commercial arrangements, decentralization of infrastructure and power, less surveillance and less expropriation of work. Overall, respondents perceive alternatives as favorable to choice, allowing personal involvement and experimentation, which in turn link to sustainability. Turning to CNs in particular, respondents acknowledge challenges (e.g., scale, resources, community spirit, motives, opposition from established market players); yet, they see CNs as offering various advantages, such as affordable Internet connection, closing the digital divide, enhancing social cohesion, strengthening community ties and associate them with democratic participation and involvement in the running of the network, promotion of digital rights and gaining of technical expertise. The need for greater awareness and more information about CNs was emphasized.

Turning to the term “community”, some respondents explain the term is neither progressive nor benign by default. Some warn that community initiatives can end up reinforcing local power structures, rather than empowering more citizens; and question whether such initiatives can address privacy issues.

Finally, some respondents equate CNs merely with Internet connectivity and are unsure whether CNs can provide alternatives to existing powerful services and platforms. Additionally, some caution that local content can reinforce closure and exclusion, others see the local focus as an advantage, and yet regard global and local services as complementary.

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List of Acronyms

AI	Artificial Intelligence
CN	Community Network
DoA	Description of Action
FB	Facebook
ICT	Information and Communication Technologies
ISP	Internet Service Provider
IT	Information Technologies
PGP	Pretty Good Privacy

1 Introduction

This Deliverable concludes the work in WP5 on the political economy perspective on Alternative Internets. It analyses the results of the online Alternative Internet survey carried out in Task 5.4 and reported in D5.3 (Boucas et al. Jun. 2017) to examine the concerns about Internet usage that can be identified among sufficiently competent and regular Internet users. Such concerns provide useful input both to CNs and to other stakeholders of the global communication system such as policy-makers and regulators, who play significant roles in the telecommunications and Internet landscape and, consequently, need to take informed steps as to the regulation of the Internet and the ways in which community networks can be part of this landscape. In addition, the survey results provide input as to the attitudes of those Internet users regarding the possibility of using community networks.

The timeframe of the survey was extended from the original intention of having it running for one month to actually running it for seven months in order to attract the 1000 respondents that were the original target of the Description of Action (DoA). Part of the difficulty of attracting the intended number was that the survey was relatively long (48 questions in total, of which 10 were open, requiring roughly 20 minutes to complete), while there was not any explicit incentive or remuneration provided to the respondents. The survey run from June 2017 until 22 January 2018.

Interestingly, to obtain the 1000 complete questionnaires, which was our original target, 1244 non-complete ones were recorded, a clear indication that many people didn't find enough motivation to complete the task. For the purposes of the analysis, we draw only on the completed questionnaires.

In terms of structure, Sec. 1.1 re-iterates the rationale of the sampling process that we followed. Sec. 1.2 provides an explanation of the choices and method of analysis that we undertook, the main point being that our emphasis is on the analysis of qualitative data from the survey. Sec. 1.2.1 explains where to find and how to use the quantitative analysis.

Chapter 2 is the main body of the deliverable and it reports, in separate sections, the key findings of the survey analysis as drawn with the detailed analysis of the 10 open answer questions. Sec. 2.1 briefly presents the results on the frequency of Internet use for various activities, the type of Internet provision as well as the skills of the respondents when it comes to Internet use. Sec. 2.2 address concerns of the users related to privacy. Sec. 2.3 turns to concerns about digital labor, advertising and digital culture. Sec. 2.4 is about concerns related to the monopoly character of the Internet. Sec. 2.5 is on concerns about Internet governance and electronic democracy. Sec. 2.6 analyzes the attitudes of the respondents vis-à-vis community networks. Sec. 2.7 gives a brief demographic information about the respondents.

Chapter 3 is a summary of the main points drawn from the data analysis and interpretation. The deliverable ends with Chapter 4 which contains the key findings and logical links that tie this work to other parts of the netCommons project.

1.1 Sampling

A common problem in online surveys is that not all people in a population have Internet access, use the Internet or have the ability to fill in an online questionnaire. In other words, there is no clear sampling frame of the population. Statistically relevant sampling is possible, but it is often costly and beyond the budget of a research project. Online surveys are also based on self-selected sampling, whereby the respondents take part on their own accord. Additional issues include the fact that Internet users are a group which is non-representative of

the population in terms of education (they tend to be more educated), age (they tend to be younger), socio-economic level (they tend to be better-off), and ethnicity (they tend to belong to white ethnic backgrounds) (Bryman 2016). In short, taking into account these limitations, an online survey can hardly be representative of the entire population.

Having said that, representativeness was not the purpose of the survey from the very beginning. We were interested in drawing a group of respondents who are reasonably skillful and regular (in terms of variety of uses and frequency of engagement) Internet users. In view of this, we have adopted a method of purposive sampling and sought to locate user communities and groups of Internet users. In selecting relevant user communities, we have replicated practices followed by other researchers. For instance, the Internet Society in their Internet Governance Survey explain that:

“The topics covered by the survey, the means of recruiting participants, and the nature of the questions mean that it attracted individuals who have a higher interest in Internet governance than the general Internet user community. Thus, while the results are not representative of a broad population, we nonetheless believe they are a useful window into the range of stakeholders’ needs and expectations.” (Internet Society 2015).

Following this logic, we have selected user groups deemed to have sufficient knowledge, competence and interest in the topics that are relevant for our purposes. Moreover, individuals falling in these categories can be assumed to know English well enough to fully understand the questions and to give rich, meaningful, and non ambiguous answers, so that the survey answers can be collected in different countries without the need of translation, an effort clearly beyond our resources. These groups would be expected to give us rich and insightful material in the open questions of the survey, which would also provide useful input to advocacy for CNs. The topics include: surveillance, data protection, privacy, advertising and consumer culture, market structure and choice in Internet access, and Internet governance and electronic democracy.

In addition, the chosen groups are relatively easy to access and recruit¹. The groups includes: academics/university researchers, university administrators, IT professionals in products and services, and students, while also some clerical workers have filled in the questionnaire. The reason behind the choices is that academics and IT professionals are assumed to be heavy information technology users and have relevant knowledge and interest. Moreover, there is evidence that students (younger Internet users more generally) are heavier users, that is they spend more time online compared to other age groups. In the UK, for instance, according to the latest Ofcom data, younger Internet users have a higher volume of Internet use than all Internet users (in 2015, 31.2 hours for 16-24 years old and 26.8 hours for 25-34, compared to the total average weekly hours spent online at 21.6 hours among all adult population (Ofcom 2016), p. 32). This evidence is supported by the latest Eurostat report on Internet usage which shows that 96% of individuals aged 16-24 were regular Internet users, compared to 57% in the 55-74 age group (Eurostat 2018).

The survey has targeted predominantly UK respondents, but also respondents from the other countries where the project partners are based (i.e., France, Greece, Italy, Spain, and Switzerland). Beyond these, we have also used international mailing lists and we have put no limitation as to the ethnicity/nationality of the respondent. As a result, we have managed to attract a diverse pool of respondents².

1.2 Methodology of Analysis and Results Accessibility

As was also discussed during the review meeting of the first reporting period in Brussel in Sept. 2017, the survey structure is not meant for a general analysis, and the population sample reached is not representative

¹Indeed, it turned out that reaching these groups is easy, using mailing lists, asking colleagues and activists to spread the request, etc.; however, it turned out that after the initial contact it is still difficult to collect complete and representative answers

²The full histogram of respondents origin is available on the web site, namely at <https://www.netcommons.eu/?q=survey-question/401>; respondents come from 30 different countries with 20+ countries having more than 10 respondents.

of any general population (and by consequence the results can not be generalized), so that the analysis of quantitative questions does not yield scientifically sound results. We focus instead on the qualitative data collected. Following these considerations, but also aware that we have collected a wealth of data that can be in any case useful and interesting, we have proceeded in the analysis of our data separating the quantitative part from the more interesting and challenging (to interpret) qualitative (open answer questions) part, as explained in Sec. 1.2.1 and Sec. 1.2.2.

1.2.1 Quantitative Data Analysis

We have presented all the graphs generated by the quantitative data collected in a specific section of the net-Commons project website³. In the website we have provided short descriptions of the data obtained, and bar plots of all the data, for free and open use if anyone want to use them.

This on-line repository is an integral part of this Deliverable, hence a sort of appendix to this document. The goal of the repository is to provide the reader of all the background information that can be useful to understand the interpretation of the quantitative answers. Finally, we have also carried out a very interesting regression analysis and generated the Pearson correlation index highlighting the pairwise correlation of the answers between every question in the survey where this is meaningful both from a semantic perspective and from a stochastic one. Semantic perspective means that only questions whose meaning belongs to the same ontology domain, as for instance all the questions of the group QB1a that ask users how often they go on-line for different purposes, are examined. Stochastic perspective means that both questions must be amenable of quantification of the answers, so that a scale from “low” to “high” can be correctly defined and mapped to a number, which is then used to compute the correlation. Note that in general the classical interpretation of “positive” and “negative” correlation may not be true in this case, as the quantification of the answers is arbitrary, thus the semantics of the correlation must be analyzed and defined for every point of the correlation matrix.

In the remaining part of this deliverable we only mention briefly the overall picture of responses (quantitative data) obtained per question when this is useful for the interpretation of the rich mass of open answer questions.

1.2.2 Qualitative Data Analysis

We have obtained a wealth of useful data on a number of open questions, which means that most people that complete the survey were really interested in it, and did not fill it “quick&dirty” just to finish. More specifically on the seven open questions we obtained:

QC1B (privacy violations experienced): 637 comments

QC3B (encryption or anonymization service used): 262 comments

QC3C (other steps taken in response to privacy concerns): 198 comments

QC11B (attitudes about Facebook being the social network site most people use): 731 comments

QC12B (attitudes about Google being the search engine most people use): 760 comments

QC18B (concerns regarding online newspapers charging subscription fees for access): 755 comments

QD2B (opinions about using a CN instead of, or in addition to, one’s current Internet provision): 863 comments

for a total of 4206 answers. The above list is a good indication of the volume of qualitative data that this deliverable analyses in detail.

There are, generally, two ways in which open answer questionnaires can be analyzed. One would be to carry out a content analysis (predominantly a quantitative analysis method) and the second to carry out a qualitative

³The direct URL to access this section of the website is <https://www.netcommons.eu/?q=survey>, otherwise the collection of graphs is accessible as a specific section linked by this deliverable page <https://www.netcommons.eu/?q=content/alternative-internets-political-economy>.

analysis. Since the sample has not been intended to be representative and we have in some sense marginalized the quantitative questions, we decided that it would not make much sense to pursue the former, i.e., provide an enumeration of the ideas and comments made and count how many respondents communicated a certain point or idea. Rather, drawing on the interpretive method (Elliot et al. 2013), we thought that:

- a) Each idea expressed was of importance regardless of the number of respondents expressing it;
- b) We had to include all ideas encountered so as to do justice to our data;
- c) We had to identify the meaning-making on the part of the respondents and present the data accordingly;
- d) We had to make sense of the data by presenting it in a coherent whole so as to identify the broader themes (concerns of the respondents) and the links between them.

In short, we decided in favor of a “narrative” presentation of the data as opposed to a static enumeration of it. As Elliot and Timulak explain, the emphasis is on understanding phenomena.

In the analysis presented here, our focus has been on the perceptions, attitudes and sense-making of this public of Internet users with regard to the existing Internet but also, and more importantly, in relation to potential alternatives wherever concerns and problems are identified, exploring in particular the potential future of CNs, their *raison d’être*, their future, and their sustainability. How our respondents make sense of reality and how they conceptualize alternatives, if any, links to research on imaginaries which is experiencing a resurgence recently (Mansell 2012). To paraphrase (Kennedy 2018), how people experience, feel, conceptualize, and negotiate their current Internet use, and how they think about change, are just as important as what they know about the Internet and the business models of associated providers. For us and the netCommons project in general, what is of the utmost importance is how our chosen Internet public thinks of, imagines, and articulates change and alternatives (e.g., Is there an alternative? What does it look like? Which actors and factors can enable it?), all in turn intimately linked to their perceptions about the prevailing politico-economic context of the existing Internet. To quote (Dencik 2018):

“In looking at imagination and imaginaries, we are invited to consider how we make sense of society, instituting and instituted by social practices in their emergence, formation and reproduction. As such, a concern with the politics of imagination is as much a concern with the way in which social institutions and practices are legitimized and continued as it is a concern with the possibilities for the articulation and doing of alternative formations.”

In view of the above, we carried out a thematic analysis, which is a general method for analysis of qualitative data. Following (Bryman 2016), we identified the themes emerging out of the qualitative data by reading through the transcripts of open questions/comments, identifying basic keywords/codes, and combining such codes to build more composite codes or categories that were related to our research interests (pp.584-589).

More specifically, the way we proceeded for each open question was as follows:

- Step 1: We read quickly through the transcript to obtain an overall awareness of the content and the themes for the particular open question.
- Step 2: We went back and read through the entire transcript and conducted an initial coding (categorization) based on the main keywords encountered in each comment. In many cases a single comment contained more than one initial themes/keywords, some times as many as five. We wrote all the codes/keywords at the side of the transcript and made a separate list of them. As we read on, we retained an awareness of the codes/keywords already encountered and ensured that the same code was used for the same or similar keywords.
- Step 3: After having finished reading all the comments (for each open question) we went back to the list of codes we had taken down. We searched for common elements in the codes and then started combining codes together to generate higher level groups of codes and more general themes.
- Step 4: We went back to the transcript of the specific open question and moved around the passages conveying the codes of the same group so as to have the information in the transcript organized in a more coherent

way as far as the themes were concerned.

Step 5: We revisited the general themes of the particular question and sought to identify links and connections between them. In the process we took decisions to combine them to produce even higher level themes and/or subsume certain themes into others.

Step 6: We organized the transcript according to the final set of themes and made links between the low level ideas within each higher order theme, eliminating repetitions, compiling similar points and providing references to all the respondents making the same or similar point/keyword.

Step 7: We provided a narrative flow of all the themes and provided a concluding section summarizing the themes of the particular open question.

As mentioned, we followed the above process for each individual open question separately.

1.2.3 Open Data

Making the wealth of data collected in this survey public is not only our duty as participants in the Open Data Pilot, but also extremely important for other researchers to build on our work and possibly comment, validate, or question our analysis. After the anonymization of the data, we have published the data set on the zenodo platform together with the tools we used for the quantitative manipulation; they are accessible through the following permanent keys:

- DOI: 10.5281/zenodo.1294040
- URL: <https://zenodo.org/record/1294040>

2 Results of the Online Questionnaire

Throughout this chapter we explicitly report (verbatim quotes) and comment on qualitative answers, while we refer, when needed, the quantitative results directly to the [web repository](#) we created on netCommons website (see Sec. 1.2.1 for further details). To ease further analysis and re-use of our Open Data, we often explicitly identify the (anonymized) respondent, e.g., (QC1B r259) means that the quoted answer is number 259 to question QC1B, so that it can be easily retrieved from the file `complete-results-survey357528.csv` on the [zenodo repository](#).

2.1 Introductory and Preliminary Sections

Before we move to the analysis of the qualitative open questions, in this part we discuss briefly the first two Sections of the survey containing introductory questions.

Section A of the questionnaire offered a short explanation of the aims of the questionnaire based on the netCommons project DoA, and included the consent form that all respondents had to accept before they could proceed with answering the questions.

Section B of the questionnaire was about Internet usage and digital skills. Internet usage comprises a number of different dimensions, namely: frequency of Internet usage for particular activities, type of provision of Internet service, as well as an evaluation of the availability and quality of the signal that the user is likely to have when on the move. The relevant results to questions QB1, QB2, QB3, QB5 and QB6 can be found in [Section B of the web repository](#).

The results verify that the group of respondents selected are indeed frequent Internet users. For instance, all respondents go online for private purposes to check their email at least once daily; almost 80% use an instant messaging application at least once daily; nearly 60% participate in social networks at least once daily; more than 50% watch or upload videos on YouTube or other video platforms at least once daily; over 30% buy or sell goods or services online at least once a week.

The results also verify that the above services are received predominantly at home through commercial providers: nearly 60% of respondents access the Internet through a commercial fixed provider, 25% through a cable tv operator, and just under 30% through a mobile operator, and roughly 15% access the Internet through other means, such as a community or municipal network. The figures suggest that some respondents have more than one ways to access the Internet.

To measure digital skills, we use a Likert-type format which provides a good overview of the skills of the user. The results of the questions on digital skills (QB8) are in [Section B of the web repository](#). The responses to this group of questions confirm that, based on their self-assessment, the respondents are competent Internet users. Over 90% feel confident to: download, open and save files; upload files; install applications on mobile devices; connect to Wi-Fi networks; know how to backup data; know which information to share online. Over 80% feel confident that they know how to adjust privacy settings and to use cloud services. Finally, around 60% feel confident that they know how to backup data, design a website and create new content using existing images, audio or video.

The above statistical information proof our claim that the sample is not representative of the global population, but the respondents are Internet users who, based on their experience of predominantly commercial provision, their frequency and diversity of engagement, and the level of skills, are expected to have gained adequate exposure to Internet characteristics and pitfalls to provide informed answers to the survey questions, including the open ones.

2.2 Privacy concerns

Question QC1A (N=1000) asks whether the user has experienced privacy violations. Seven options were provided. The results are as follows:

- Email account (e.g. spam or hacking) 67.4%
- Social media platforms 34.3%
- Online shopping 23.9%
- Online banking 8.5%
- Search engine 24.7%
- Mobile phone use 24.4%
- I have not experienced any of the above 22.4%

Question QC1B asks respondents to provide an example/more details of the privacy violation they have experienced.

The violations experienced most concerned unsolicited commercial email, text messages and phone calls; viruses, spyware and malware delivery attempts; and increasingly sophisticated phishing scams. One response is matter of fact showing awareness even if not necessarily approving: *“I consider spam the price of doing business. If I want free services, then I have to expect spam/ paid for messages/ use of my data to sell to me, especially on social media”* (QC1B r259).

Strong negative feelings are expressed with regard to the **data mining practices** of social media and other platforms, and the extensive tracking and profiling associated with this. For instance, advertisements and search results are too much customized from the profile commercial companies have for a given Internet user, *“even if I don’t remember to have authorized this”* says one respondent (QC1B r68). Targeted ads, respondents explain, are based on information drawn from web search, social networks and online activity in general, including personal communication such as emails and instant messaging. They refer to cross-referencing across diverse services by the same provider (e.g., Google/Alphabet using information from its Gmail services to provide targeted ads not just to the Gmail platform but also on its Google search engine). Clearly, the greater the market concentration (the more services a company provides), the greater the user data it collects and by extension the greater the risks to privacy. In the words of one respondent:

“I am also becoming much more concerned about the volume of personal data /profile information that Google have about me. I have signed up to many Google services for convenience (Google Play Music, Google Drive, Gmail, Google Fit etc.), but I wish I could see all of my data in aggregate and opt-in or out for retention of all of those data sets. I’m concerned about how much they know about me, but I’m sucked into the vortex now! Wonder if it’s too late.” QC1B r1199.

Equally, referring to privacy violations and expressing concerns about the **monopolization of the Internet** by a handful of big companies, another respondent (QC1B r1238) explains: *“Google and Facebook are the two main monopolies which are not social media companies, they are the Establishment and the advertising companies”*.

Similar concerns about tracking and profiling apply to cases where users have opted for convenience to use their, say, Facebook login details to be able to access other services online. The potential for cross-linkages and for Facebook in this case to access data from a much larger pool of websites and services is obviously significantly greater.

Importantly, respondents also note **cross-referencing** (sharing of personal data) across services provided by different companies, such as between Google, Facebook, Amazon, and Ebay among others. Many respondents feel uneasy about the intrusiveness of data gathering and analytics (QC1B r211). Here are some illustrative strong-worded statements: *“I assume that some of my private information [is] captured by the websites I visit without my consent”* (QC1B r360, typos corrected). Others write about the *“general quasi-legal spying on my activity by search, social media, and email providers”* (QC1B r325); *“mass surveillance, unauthorized*

access” (QC1B, r1373); “Social media snoops on everything I do” (QC1B r592); “. . . in my internet surfing experience I feel watched” (QC1B, r901); “Google encroachment is the ultimate privacy invasion!!” (QC1B, r665). In addition, a few respondents express specific concerns about location tracking and location metadata (e.g., QC1B r891, r1233, r1423, r1539).

Some strong worded statements are made to explain the effects of **commercialization and the quantity and intrusiveness of advertisements** on the Internet. “I perceive advertisement as a privacy violation, it diverts and distorts my attention and leads me into trails of thought that I would not otherwise have. My thoughts become hijacked” (QC1B r202); “so called ”relevant” advertising i.e. continuous harassment through search engines” (QC1B r238); “Targeted marketing, even without explicit-well informed consent” (QC1B r239); “targeted advertising”, “invasive advertising” (QC1B r325); “intrusive ad pop-ups” (QC1B r494). “Each time I receive tailored ads I feel uncomfortable” (QC1B r534).

Two important issues were raised in relation to data mining, tracking and profiling. First, **frustration about the lack of alternatives**, the inability to use a service unless one surrendered her/his data to the commercial provider. What looks as user control and options at first sight turns out to be false: “Most websites cannot be accessed without consenting to cookies” (QC1B r723); “I cannot use an app without giving access to my camera, contacts or photos” (QC1B r1310). There were also comments about the Terms of Services and, again, the lack of options a user is presented with: “to not be excluded from (virtual) social life and other communities/ services [I have no option but to agree] to terms of service which I don’t like at all and are violating my privacy in various ways” (QC1B r97). Often, there is a feeling of resignation: “No one checks long consent agreements because of lack of time and ‘giving up’” (QC1B r23); and criticism about the “constant changes” in the TOS by the social media platforms (QC1B r416, in this case Facebook).

The second important issue raised in the responses is the **lack of awareness of the full extent of tracking** as well as the **use and sharing of the data**. According to (QC1B r863), the use of personal data “should not happen . . . without your own permission or at least [it should be] fully and legally clarified”.

It is interesting to note how these concerns about extensive tracking and use of data were confirmed with a scandal which exploded at the time of writing this deliverable: the revelations in March 2018 that the data mining company Cambridge Analytica allegedly had access to Facebook’s 50 million (later estimated at 90 million) users and by inferring the political preferences of US voters it was sending them personalized messages in an attempt to influence the 2016 Presidential election. The timing of this scandal and the discussion that ensued in formal policy circles and the media demonstrate the topicality and significance of the survey.

Examples of cross-referencing and data sharing concerned banks and financial institutions, too. The comments of (QC1B r984) are worth quoting here as they refer, in addition, to the lack of alternatives:

*“I use cash transactions in preference to credit card as I don’t want to enable my financial institution to construct a profile of my spending habits they can sell to third parties - although really I trust my financial institution which is a “by the people, for the people” type of credit union; I don’t trust the providers of the credit card technical infrastructure though. **I wish there were a more readily accessible internet version of cash transactions but I’m unaware of such a thing at this time** – to the best of my knowledge all online financial transactions leave an identity trail.”* (emphasis added).

Related to the issues of data mining, terms of service, and cross-referencing of data, is also that of **security**. Put simply, to what extent do the services that handle and accumulate data have the necessary technical facilities in place that guarantee that data are properly stored, treated and accessed by third parties? Some implied that [hardware and] software developers are to blame for not producing products and services that are adequately secure, adding that “After Snowden’s revelation it was clear that all US search engines need to be regarded as fully wire tapped” (e.g., QC1B r78); “There are about no secure operating systems available and apps claim too m[any] rights without user control” (QC1B r226). Responses reveal distrust among users over the security of personal data, either by default, negligence or, worse, intentionally. For instance, comments include “The companies either share/sell the email address or otherwise **lose control of m[y] email information** (through a hack or the like)” (QC1B r332, emphasis added).

Examples refer to instances of hacking of email addresses and other online accounts such as social media, online gaming, online shopping, and bank accounts. In a couple of cases, respondents complimented the security features of a social media account, in that the company in question (they didn't specify) alerted them that there was an attempt by someone to access their account but the security system in place stopped that (QC1B r436). A few respondents mention hacking instances of company, not personal, accounts, which typically involve huge amounts of personal data. For example, concerns are voiced that personal details are not stored with sufficient care and that vendors use insecure systems (e.g., QC1B r1421) which can easily lead to data leaks, and that personal data are often used for commercial and financial gains.

“My browsing and dat[a] use records are being shared with compensation to the providers without my permission and with no compensation to me. My records are used for commercial and financial gain for the development of companies, of products and of services the goals and objectives of whom may violate my values - without permission or compensation. My records are saved without my permission. My records are used to profile me without my permission. My records are used to promote goods and services to me without my permission” (QC1B r1315).

Interestingly, and again justifiably as the Facebook/Cambridge Analytica scandal noted above illustrates, respondents are also concerned about **third-party access to user data** held by a company (be it a social media platform, an online e-commerce company, but also banks and financial institutions, such as credit card companies and online payments systems) and the rights that such third parties have. Related to this, concerns are expressed about significant delays in companies disclosing publicly that there was a data breach and users' data had been leaked and used in inappropriate ways. *“One web email company told their users 2 years after the hacking!!!”* (e.g., QC1B r517). In the words of another respondent, *“[a bank] apparently reported it was a third party marketing company that they had used, who had leaked the data”* (QC1B r562).

It is not just commercial for-profit companies, but governments and state institutions/organizations too that were mentioned in examples of privacy violations. For instance, one respondent refers to *“General and far-reaching government surveillance and corporate data sharing/selling without my consent”* (QC1B, r1467). In other words, there is recognition by some that **surveillance can have commercial as well as political motives**. *“[The] Intelligence community like GCHQ via Tempora as mentioned in the Snowden's revelations can monitor my data by looking into these companies' data collection. Data stored in [cloud] servers have backdoor which can be snooped by law enforcement”* (QC1B r1238). There are specific concerns about countries with authoritarian regimes: *“Websites and servers located in a country where human rights, freedom, dignity and privacy are not respected cannot be trusted in no way!”* (QC1B, r159); *“Some hacker(s) enter my account (Facebook), intent [on] learn[ing] my political activities, and then inform me to the officials”*(QC1B r329).

QC2A to QC4 in our survey address privacy concerns, as explained in D5.2 (Boucas et al. Mar. 2017).

Question QC2A asks the respondent to consider the following statement: “Users do not have control over how personal information is collected and used by online companies.” Just over 90% of the respondents strongly agree or agree with the statement with only 7.4% stating that they disagree or strongly disagree. [Detailed, commented results are on the web site, node 432.](#)

Question QC2B asks the respondent to consider the following statement. “Most online businesses handle the personal information they collect about users in a proper and confidential way”. Just over 65% of the respondents strongly disagree or disagree with the statement, 22% strongly agree or agree, while the remaining have selected the “do not know” option. [Detailed, commented results are on the web site, node 415.](#)

Question QC2C asks the respondent to consider the following statement: “Existing laws and organisational practices provide a reasonable level of protection for users' online privacy today.” 76.5% respondents strongly disagree or disagree with the statement, nearly 15% strongly agree or agree, while the rest have selected the “do not know” option. [Detailed, commented results are on the web site, node 423.](#)

Question QC2D asks the respondent: “How do you feel about the fact that search engines and social networking sites like Google, YouTube and Facebook use your personal data for profit-making purposes?” 60%

respondents report that they are very concerned or concerned, a bit over 22% are somewhat concerned, while the rest are not concerned. [Detailed, commented results are on the web site, node 434.](#)

Question QC2E asks the respondent: “How do you feel that data about online activity of the users (e.g. websites or online platforms visited), and the relevant personal communication may be shared between Internet companies and other organisations, such as the police, secret services or insurance companies?” Nearly 63% respondents report that they are very concerned or concerned, almost 17% are somewhat concerned, while just under 20% were not concerned. [Detailed, commented results are on the web site, node 414](#)

Following this measurement of privacy concerns, we also examine the link between concerns and steps taken to address these concerns. To this end, we have inquired about **the steps**, if any, that users have taken to address these concerns and we also asked additional relevant questions (QC3A). Our intention in this is to identify the extent to which there is a link between privacy concerns and changes in attitudes towards Internet use. As explained in D5.2, this question is important from a ‘privacy concern’ perspective, as taking steps indicates a stronger concern than otherwise. The majority of respondents have selected the following answers from the list of options offered them. The list here is ordered from the most common to the least common step selected:

- nearly 64% have changed the default privacy settings. Here it is worth noting the comment in another part of the survey that “Over-riding/altering existing settings is very frustrating” (QC1B r772);
- just over 61% have installed ad-block software;
- just under 45% have paid more attention to the terms of use and privacy policies of online series and Internet Service Providers (ISPs);
- nearly 45% have blocked certain applications on social media (e.g., Facebook birthday calendar);
- just over 30% have reduced the frequency of usage of online services they have concerns about;
- almost 30% have stopped using the online service(s) they have concerns about;
- about 26% have used a service that anonymises or encrypts online data or identity (discussed further below);
- about 20% have taken other steps (see below);
- about 20% have stopped using open WiFi;
- 13.6% have not taken any steps;
- just under 5% have reduced their use of the Internet to the minimum.

The most common services used to anonymize or encrypt online data or identity are (QC3b N=263): Tor (free anonymity software that conceals a user’s identity and online activity), **VPN! (VPN!)** services (a few making the point that the chosen VPN solution is based in Europe as opposed to the USA where the legislative framework is less user-friendly and open to abuse by authorities), alternatives to Google search, GnuPG (Cryptographic software) and other Pretty Good Privacy (PGP) solutions, private browsing, and various encrypted services for email, instance messaging, cloud storage etc. Solutions like these are mentioned by fewer respondents, which might imply that, even though many users have concerns, very few do something about it for various reasons. For instance, one respondent noted that they use various encryption software solutions “*but I find them all very cumbersome and not at all easy to use or efficient*” (QC3b r1618). There is also recognition that national enforcement and investigatory powers laws have become powerful enough to render such solutions meaningless (e.g. QC1B r1238).

Another response relates to uninstalling applications which come by default with the mobile phone, commenting that “*It wasn’t particularly easy to use*” (QC3b r270). It is worth noting that this respondent comes across as tech-savvy as they give a very detailed and knowledgeable answer. In this sense, one can wonder how much harder it might be for an ordinary user to uninstall applications that are on a device by default.

One respondent took legal action. He/she was a victim of fraud and subsequently part of a class action suit against the commercial online company in question (QC1B r801). Finally, others create fake accounts, not provide their real personal information such as their name etc. or give fictitious email addresses.

The final question in the area of privacy concerns is QC4: “Would you consider using alternative platforms instead of Facebook, Twitter, YouTube or Google, if this choice would provide better control of your data and privacy?”

Just over 46% of the respondents already use or would definitely consider using an alternative platform instead of the above mentioned dominant ones. A bit over 10% would ‘probably not’ or ‘definitely not’ consider using an alternative platform. Significantly, a substantial percentage of just over 43% of respondents would probably consider it but it would depend on what their friends would do. In sum, that makes a total of almost 90% of users who either use or would give consideration to the idea of using an alternative platform.

Overall, the survey shows strong concerns about privacy: a handful of commercial companies that rely on harvesting personal data using extensive tracking and profiling practices, the use of personal data for commercial but also political benefit, and finally the lack of alternatives and the inability in many cases to use a service unless one surrenders personal data. In response to these concerns, the respondents indicate the steps they have taken to address them (such as paying more attention to the privacy settings, using ad-block, anonymization and encryption software etc.) but overall they find such steps cumbersome and not necessarily effective.

2.3 Digital labor, advertising, consumer culture

Questions QC5, QC7, QC8 and QC9 are set to provide a measure of advertising and commercialization concerns. Following the logic outlined above in the case of privacy, we included a question (QC9) on consideration of alternatives.

Question QC5 asks: “How do you feel about the fact that providers of websites, search engines, or social media sites can use your personal information to deliver targeted advertisements to you?” [Digital labor]. Nearly 60% of respondents have reported that they are very concerned or concerned, 24% are somewhat concerned, while the remaining around 17% were not concerned. [Detailed, commented results are on the web site, node 426.](#)

Question QC7 asks: “How do you feel about the amount of advertisements on the Internet?” [Advertising]. Almost 80% of respondents have replied that they find the amount of advertisements too much. Only about 10% find that the amount is right and just under 1% think they are not enough. There are, however, just over 11% respondents who have selected they Do not know/No opinion answer. [Detailed, commented results are on the web site, node 436.](#)

Question QC8 asks: “How would you feel about the idea that when you register your new account at an online platform, you have the option to choose whether you want to see advertisements or not?” [Advertising opt-in]. Just over 86% respondents have reported that they agree or strongly agree, just under 5% disagree or strongly disagree, while just below 10% selected Do not know/No opinion (results in [Detailed, commented results are on the web site, node 441.](#)

Question QC9 asks: “Would you consider using alternative platforms instead of Facebook, Twitter, YouTube, or Google, if this choice would mean receiving no advertisements?” A bit over 41% of respondents already use or would definitely consider using an alternative platform instead of the above mentioned dominant ones. Just over 13% would probably not or definitely not consider using an alternative platform. Significantly, a substantial number of just over 45% respondents would probably consider it but it would depend on what their friends would do [Detailed, commented results are on the web site, node 420.](#)

As advertising is linked with privacy concerns about user data, the commercial character of the Internet, as well as the dominant place of monopolies, i.e., themes addressed through open questions in other sections of the survey, there is no open question on advertising *per se*. Still, the answers to the closed questions demonstrate that the vast majority of the respondents consider advertising too much and would prefer to be given more options as to whether to receive ads or not. On the issue of alternative platforms to Facebook, Twitter, YouTube, or Google, a total of nearly 87% of users who either use or would give consideration to the idea of using an alternative platform. Still, this percentage conceals more divided opinions, with over 40% of the respondents

being clear that they would definitely consider alternatives (if they have not already used them) but another 45% would base their decision depending on the practices of their peers.

2.4 Monopolies

This Section comprises questions on monopolies, which seek attitudes towards the dominant presence of an Internet service provider, social networking site, or search engine (questions QC10 to QC13). We also have included one question on consideration of alternatives (question QC13).

Question QC10A asks the respondent: “Let us assume you live in a city where there is only one Internet service provider. How would you feel about that?” Just over 55% of respondents have reported that they are very concerned or concerned, nearly 20% are somewhat concerned, while the remaining respondents are not concerned [Detailed, commented results are on the web site, node 430](#).

Question QC11B asks: “How do you feel about the fact that Facebook is the only social network site that most people use?” Half of the respondents have reported that they are very concerned or concerned, just over 21% are somewhat concerned, while a bit over 20% are not concerned (results in <https://netcommons.eu/?q=survey-question/447> [Detailed, commented results are on the web site, node 447](#)).

Question QC11B (open question) invites the respondent to justify their answer to QC11B.

For many respondents, **Facebook is an indispensable platform, one they can hardly do without**: “*If most people use Facebook, what can I do?*” (QC11B r63) or “*I think that the software quality of Facebook is poor, but it is the only serious alternative to keep in touch with friends*” (QC11B r51). For many users, Facebook (FB) is the platform through which they can keep in touch with friends, find information about organizations and businesses, take part in discussion groups, planning events. As a result, it is difficult to move away. They would lose personal, professional and interest communication channels. “*Those few who have left are entirely absent in my life now. I wouldn’t even know how to contact them*” (QC11B r1539).

Some respondents confess that “*there is little I can do but submit to it*” (QC11B r201), as they “do not see the end of social media” and if another platform became so popular they “*would have to switch towards using that platform*” (QC11B r138). So, there is a well-documented dependence on Facebook, as “*you don’t seem to be able to dropout somehow*” (QC11B r141). If you cancel your account you are cut out of your social circle (QC11B r304). If you put too many restrictions, you miss out on possible contacts (QC11B r1471). So, people are prepared to compromise on the security of their data and privacy in order to use FB (QC11B r702). While others do not even think in terms of privacy and data security, but rather of the opportunities for communication provided (QC11B r712).

A respondent mentions: “*No alternative if Facebook does things which are of concern. And I guess people would still stay with Facebook anyway, even if they do nasty things*” (QC11B r81). Another confirms: “*I have a number of long-distance friends who have indicated they would not be interested in pursuing a personal relationship through other, more open technologies (such as email) outside of FB*” (QC11B r1967).

The creation of a critical mass and the lock-in effect on FB “*creates a kind of inertia with respect to alternatives*” (QC11B r331). Not being on FB is equivalent with exclusion from the professional and social groups and their dynamics (QC11B r353). It becomes almost compulsory to use it and use nothing else (QC11B r431). You need to be visible there (QC11B r473). There is a lot of peer pressure to use the same platform as others use (QC11B r1024). It is difficult to escape from the influence of FB (QC11B r1187).

Despite their concerns, many users feel they cannot pull out of FB (QC11B r801, r807) and that they will accept the terms of service (QC11B r884). You feel social excluded if you do not join or if you leave it (QC11B r901).

Others highlight the **positive effects** of Facebook:

“It is useful that people mostly communicate in one place. It would be tiresome to have to search for which social media service each person had registered with” (QC11B r410).

“I use Facebook to socialise, read shared articles, join groups, get academic papers and write opinions. Using Facebook gives me the opportunity to listen to music and enjoy paintings” (QC11B r411).

Despite shortcomings, FB is seen as good communication and information medium (QC11B r1609, r2087).

Many see it exactly as a communication medium which connects people effectively and is not a threat (QC11B r876). Others stress the fact that everybody can be on it and can have a reasonable degree of freedom of speech (QC11B r1185). And the more enthusiastic ones exclaim: *“I think FB is an amazing social media platform which connects all people around the globe and also spreads love and peace among them”* (QC11B r1590).

Many respondents adopt a **positive stance towards Facebook**, but accompanied by some **reservations**:

“I’m satisfied for what it does for me (1) swiftly keeping in touch with friends and colleagues from abroad; (2) keeping in me updated on what is relevant to my ”friends”/acquaintances (i.e. press articles, new publications, scientific blogs, interactions among people in different groups/circles) and (3) spreading news or organising/coordinating events. I’m probably not fully aware nor too overtly concerned (yet) about the reach of spread of my personal info (esp. my children’s pictures risk of being stored permanently, downloaded or misused beyond my capacity to make them accessible to friends only)” (QC11B r110).

Ambivalent attitudes are seen in statements such as: *“I find it incredibly interesting and fascinating. My concern walks along with my curiosity”* (QC11B r124). Some respondents find that there is potential for misuse by FB, but also some degree of control by the users (QC11B r198).

Many express their dislike vis-à-vis FB, but still consider it necessary for communication (QC11B r345). The dislike can be due to commodification, advertisements, the like policy, the aesthetics (QC11B r345). They know that interactions are monitored for targeted advertising but they still use it as a platform as it enables them to stay in touch with friends worldwide (QC11B r525, r529). Too much personal information collected and the monopoly position of FB are not likable, but it is convenient to have all users on the same platform (QC11B r1059). Many are prepared to sacrifice a certain amount of privacy for convenience, though they do not like this (QC11B r1160). Many understand that this is what their business model is about and try to be selective with the data that they post (QC11B r1469).

The necessity to use FB, for some, comes with a compromise on values, e.g. the anti-proprietary values expressed by certain campaign groups which have to use FB to avoid being irrelevant (QC11B 449).

Many critical respondents have stressed the fact that FB is for many users the **single information source**. It can spread fake news, influence democracy, censor content and manipulate large segments of the population (QC11B r562).

Concerns have been expressed about the fact that most people get information from FB rather than from professional journalists (QC11B r143) and about the **accuracy of information**. *“It is very disturbing the amount of counter-information that is published and not double-checked”* (QC11B r2057).

The issue of **fake news or inappropriate content/information** has been stressed. There is no control over fake news (QC11B r412, r2153) or content that is damaging to political and social process and anti-democratic (QC11B r1395). FB is a *“vehicle of dangerous fake news, especially for young and inexperienced people”* (QC11B r49). Moreover, *“Facebook algorithms result in vulnerable people being shown right-wing, inappropriate or extremist content”* (QC11B r264). It spreads fake news, propaganda and misinformation on a wide scale (QC11B r383, r483) that can have devastating social effects (QC11B r393, r1335). A respondent mentioned that FB has been used to mount campaigns against their family and also hate speech campaigns, e.g. against teachers (QC11B r149). And FB seems to be very hands-off regarding hate speech and far right elements (QC11B r1524).

For others, the problem is that FB spreads too much trivia (QC11B r231), producing a “pile of garbage” and being a form of *“global imperialism”* (QC11B r319). It shapes perceptions about what we read (QC11B r232). FB is narrowing the perspective of the user and reduces their ability to think critically: *“It dumbs people down*

and steals valuable time to do other things ... like reading or thinking” (QC11B r1232). It destroys people’s ability to read, be informed and discuss (QC11B r217).

Respondents are concerned that **Facebook has too much control over what we see online** (QC11B r348, r435). In the absence of net neutrality laws, FB is able to decide which sites we should watch (QC11B r1234). The fact that FB decides what posts you see is troublesome (QC11B r194). There are hidden algorithms that determine news and information flows (QC11B r1687). Algorithms express bias and that has an impact on what is presented to users (QC11B r381, r412). The great majority of users do not know that how the FB algorithm creates bubbles of social themes for commercial and marketing purposes (QC11B r1378). They receive news and information from a narrow range of sources that match their own views (QC11B r1423, r2004). Manipulation of the users towards targeted advertising purposes, is particularly alarming: *“Nobody really has control over the rubbish shown in the Feed and its ordering ... It just decides you are ‘interested’ in something with no regard to whether you like or hate it. So people are shown superficial, polarizing content and/or meaningless rubbish that is viral”* (QC11B r2016). It is collective ideological filtering (QC11B r1714). *“Walled garden”* control access and bury stories that they do not like (QC11B r1297). *“People do not see all of their ‘friends’ posts, but just an algorithmically selected subset—yet most think they see ‘everything’”* (QC11B r1423). Users end up in bubbles together (QC11B r870, r1512) and cannot easily introduce and include “friends” outside of their political preferences or values (QC11B r1084).

As a result, many see FB as concentration of information, lack of pluralism and choice (QC11B r70, r814, r1691). FB suffocates diversity (QC11B r1113) as it does not allow all opinions to be expressed; it thus gives the false impression that what it hosts is representative of the diversity of society, which causes damage to minority views (QC11B r899). Respondents would welcome more diversity and multiplicity (QC11B r1073).

Beyond information provision, FB has a monopoly and **too much control of digital personal and public lives and communications** (QC11B r494, r1153, r1312, r1335). *“It has control on nearly every relationship, on people’s habits and personal data”* (QC11B r67). *“They know more about me than my spouse does, or even me. And have no interest to forget”* (QC11B r82). *“FB kind of knows my whole life”* (QC11B r1179).

The issue of profiling is dominant in the responses (e.g., QC11B r325) but also concerns are expressed that, through profiling, human behavior and relationships become predictable and can be manipulated (QC11B r332). The power of FB lies in this ability to control and shape behavior through the collection of data and the creation of profiles. Even if you do not participate you can be tagged by photos, your email can be obtained from users’ address books and FB will speculate about other connections (QC11B r1327).

“All the users and their use of such platforms and services appear to be ... objects to be classified, interpreted, stored, manipulated and employed in various ways that we are not clearly aware of and have not control over” (QC11B r159).

Monopoly over lots of personal data means that FB **can affect consumer behavior, lifestyles and even political choices** (QC11B r969). The character of FB as manipulative has been expressed by many respondents (790), as personal information provided enables FB to understand human behavior and manipulate it for better marketing and profit (QC11B r1041). FB’s power derives from the fact that it is involved in many spheres of social life (QC11B r232, r1174, r779) and the masses are influenced by it through advertisements and fake news (QC11B r1221). The knowledge gathered by FB generates power to manipulate people towards commercial objectives (QC11B r670) and consumerist desires (QC11B r1232). FB makes assumptions that people who participate are mainly consumer subjects and they are treated as such. There are other spheres of activity, though, that are disregarded, such as political discussions (QC11B r883).

“Facebook can draw connections between people, gather a lot of information shared on their platform, thus creating an almost perfect picture of people, what they like, what they don’t like etc. This is annoying and invading when it’s used to send targeted ads, but it is terrifying when it comes to share it with secret services, or it is used to political purposes . . . Mark Zuckerberg started to show some interest in politics. What if he decides to run for the White House? With the data collected on people, he could easily choose to use specific ads to target people and shape undecided people’s opinion. Where is democracy in this process?” (QC11B r796).

FB owns the user content and it uses it to **manipulate their emotions** (QC11B r375, r1443); it is *“an extremely powerful attack vector to manipulate public opinion”* (QC11B r97). FB can direct public opinion in one direction instead of encouraging dialogue and fair critique of ideas (QC11B r749). FB can influence people politically (QC11B r1017) and strengthen their biases. It exerts too much control and can threaten civic discourse (QC11B r1153, r1483). It can even influence the outcome of elections (QC11B r1253).

FB is seen as having too much **power over how interactions between people are shaped** (QC11B r454). *“FB is a dictatorship with 2 million inhabitants without freedom of speech towards the company”* (QC11B r784). It limits the possible reactions you can demonstrate (QC11B r325). A range of social activities are surrendered to proprietary algorithms (QC11B r1206). FB has features that shape the kinds of interactions that are possible (QC11B r1320): *“FB has boxed us all into segments and categories based on banal inputs such as ‘likes’ and emojis”* (QC11B r1199). The reactions, such as Angry Face, are just superficial self-expression and has no effect (apart for targeted advertising) (QC11B r2016).

Respondents express frustration that FB **causes alienation** (QC11B r976) through **commodification** and **promotion of a limited set of personality characteristics** (QC11B r416). *“Mediating social relations with a capitalist platform leads to alienation”* (QC11B r1373). It has socio-cultural impact (QC11B r2004), e.g. as it contributes to the younger generation’s practices of immediate decision-making, as opposed to deeper thinking, which is necessary to address the political and social problems of nowadays (QC11B r984). It also contributes to *“changing the perception of what labour is in our daily life, transforming us into productive beings without compensation”* (QC11B r1134).

This degree of control for some acquires philosophical and existential dimensions: *“I am concerned about the implications . . . because our social relations, who we think we are and what we believe about each other is then ultimately left to the whims and wishes of those who dominate the market (note, not the market itself!). It is a mechanism of control like no other in history”* (QC11B r202). Some have talked about *“current and future control of large portions of the population of the world”* (QC11B r354). As a respondent put it *“I don’t want FB to hold all my data, tell me what to buy, think or who to connect with”* (QC11B r1018). Another mentioned *“I feel like a lab rat on Facebook”* (QC11B r1318).

Many respondents have expressed worries about FB and privacy (QC11B r1419). Is FB handling user data in a responsible way? This is the key question for many respondents (QC11B r438). The concern is about the amount of data FB collects and how this data might be used or where it might end up (QC11B r438, r949). Some respondents point out that people do not understand or are unaware of how much personal data they share, who has access and how FB uses this data (QC11B r782, r1248, r1346, r1626). Young people, in particular, do not understand the extent to which they enable violation of their privacy (QC11B r939, r1281). People use FB as a private online space where they put private photos and information without knowing what this information can be used for by FB (QC11B r1024).

Facebook provides opportunities and tools to *“track users even when they browse other sites”* (QC11B r54). A respondent express worry that once you create a profile it can never be erased (QC11B r2114). *“FB is playing games with our privacy and there’s nothing we can do about it”* (QC11B r873). Data can be used in ways that cannot be predicted or even imagined (QC11B r557, QC11B r1147).

Respondents have express wide concerns about the fact that FB collects data that are used for **advertising/commercial purposes** (QC11B r801, r1452), without paying the users (QC11B r143) and for making profit (QC11B r159, r1250, r1415, r2153). The fact that FB *“makes unreasonable amounts of money out of*

users' data" is problematic (QC11B r245). The growing amount of data and the fact that it is monetized is concerning (QC11B r548). Respondents are concerned about the "*ethical policy behind economic decisions regarding the use of the data*" (QC11B r122). Respondents pay emphasis not only on the fact that user data is shared, but that this is done for profit-making purposes (QC11B r194, r886).

Respondents express astonishment about the fact that many people are not aware that anything posted on FB is FB property and that they are willing to give up ownership of their data (QC11B r1377). For some, it is impressive that most people do not understand that FB is funded by advertising. This means that targeted data will always be needed and that more personal data on habits and demographics will be sought after (QC11B r232). The fact that users are not aware of the monetization and exploitation of their data is surprising (QC11B r1967). Many respondents are of the view that most people do not understand how much information FB uses for its own profit (QC11B r289, r782) and how the data they provide have an impact on society and consumption habits (QC11B r1338).

The inability of users to **control their data** is also a danger to democracy (QC11B r1520). "*The amount and resolution of data, including preferences, social and behavioral, that is visible to Facebook for its users is staggering. The resulting profiles can be abused by companies, criminals, and governments*" (QC11B r118). FB is becoming Orwellian (QC11B r517).

Users are prepared to share all too easily their data and the data of others with institutions and corporations that are beyond the public control. "*Basic pillars of a democratic society are being deserted out of habit, complacency and laziness*" (QC11B r1520).

There is a cavalier attitude in how FB uses personal profiles (QC11B r384). The company would not mind sharing information with government agencies if needed, and this is seen as consequential (QC11B r181). There are also concerns about triangulating information between FB and other records on the Internet, thus identifying and even predicting behavior (QC11B r332). "*Users are at the mercy of FB who decides how they will use the information and who they will share it with*" (QC11B r325).

Users are left with **no choice in terms and conditions**. FB constantly changes privacy settings to undermine user choice (QC11B r416)—privacy settings are changed at short notice (QC11B r769). And there is lack of transparency of FB practices in changing privacy protocols (QC11B r384). FB is proactive in changing terms and conditions to better suit business purposes at the expense of customer data. It obfuscates user privacy controls by making them difficult to understand (QC11B r387, r589).

Many respondents claimed that it is not really known the extent to which FB shares information with government and commercial entities (QC11B r194). Generally speaking, the practices of FB are seen as non-transparent (QC11B r1357, r1486). It does not "*open itself up to ... encounter and evaluate the internal logic and practices of the organization*" (QC11B r1112). The element of opaqueness is an evident concern of the users: "*their filter settings are highly non-transparent ... they have access to a lot of personal data—no one knows how this will be used in the future—it is already open to abuse*" (QC11B r164). FB have a terrible record of transparency of their policies (QC11B r664); they do not make known that they organize and sell data to third parties and they do not publicize which these parties are (QC11B r1185, r1395).

"The level of detail Facebook, Google etc. hold on people is so sophisticated that it's a historic change with frightening potential ... The book 1984 was a warning about what governments tend towards when they have this sort of power ... You could argue that big data and internet surveillance is taking us toward a dystopian reality" (QC11B r877).

The collaboration of FB with state-affiliated agencies make it a "*hegemonic vector for capital and state power*" (QC11B r1095).

Some respondents feel that younger people have different perceptions of privacy and are less concerned (QC11B r1160). Other do not think that it is a big problem if personal information is bought and sold on FB (QC11B r360). But there are also respondents who are not concerned about the collection and sharing of data as such;

rather, they are concerned about the fact that only data on consumer behavior are of interest and this leaves out other data that could be collected and deployed for more useful social and political purposes (QC11B r883).

For many, FB is so big a monopoly that it becomes dangerous (QC11B r854, r1216). Such a company “*will be able to control almost all aspects of our online practices and sometimes even offline practices, too*” (QC11B r1234). Monopolies are detrimental to democracy as they give too much power to the people who control them (QC11B r1210). They are also detrimental to the economy, as they destroy competition (QC11B r366). Companies with such a large market share should not be allowed, as this is negative for competition (QC11B r1066, r1113) and creates privacy concerns (QC11B r188). Monopolies provide illegitimate power (QC11B r512).

Many see it very difficult for another company to challenge the position of FB (QC11B r125). It appears effectively to be a monopoly due to the scale/concentration of users (QC11B r418, r949, r951, r2261). FB and the other four (Amazon, Microsoft, Google, Apple) of the “*big five*” have created a landscape of “*digital feudalism*” (QC11B r1112). It is difficult to see alternatives (QC11B r1217), as FB also influences the ways alternatives are developing (QC11B r1219).

FB has far more power, knowledge and information than any single nation state on Earth (QC11B r545). As a monopoly, it is “*unresponsive to customers and manipulative of government regulations*” (QC11B r209). Concentration of power means that users are weak and vulnerable (QC11B r1016). “*We are not the customers; we are the product*” (QC11B r1921). “*I think because it is so popular, it means its users will forgive it of anything . . . Because people have become so dependent on it, they don’t mind giving up all their data and pretty much their lives in order to make other people rich. Maybe they don’t know that they’ve done it but the fact that Facebook own the rights to all content worries me. I think they can continue to push the limits of what is tolerable in terms of consuming adverts and allowing political parties i.e. the Tories to tap into people’s feeds with ‘promoted’ ads*” (QC11B r644). Alternatives are needed if FB is to take seriously complaints about hate speech and take steps to protect users (QC11B r1174). There are no real competitors who could put pressure for better terms of agreement, e.g., better privacy (QC11B r1236, r2264).

FB is too dominant and the absence of competing platforms (QC11B r923) is a danger for diversity of opinions and for democracy (QC11B r819). “*It is used in my country by almost all young population instead of any other media source for staying informed—a particularly grave effect on institutionalism, democracy, rule of law etc. for countries of the global South*” (QC11B r217). The monopoly character invites also security concerns: “*you have to hack only a single entity to get almost everything about almost everyone*” (QC11B r97, r1345).

Too much monopolistic power should not be controlled by private interests but should be a public service (QC11B r524). Such an essential communication medium should not be corporate (QC11B r841) but the remit of democratic governments (QC11B r1349). “*The funnelling of users to a single platform, and a profit-oriented one to boot, should be of concern to anyone who would like to see true community develop through the use of digital technologies*” (QC11B r214)

There have been respondents, though, who either see it as natural that there will be some monopoly (QC11B r428), or those who believe that it is not a monopoly (QC11B r443). For some, FB is simply part of informational capitalism and needs to generate revenues in some way (QC11B r1123). Many argue that since it is a profit-making corporation it cannot be guaranteed that behaves responsibly (QC11B r397).

The monopoly position enables FB also to influence the whole character of the Internet. The world is as if it is a large shopping mall and we are consumers and not citizens (QC11B r401). Commodification of personal information is the price to pay for user convenience (QC11B r415). The commodification of communication is one of the most concerning aspects of the Internet (QC11B r548). It is unnerving, for many, that “*more than a billion people manage their net of friends and other social contacts by such an aggressive enterprise, which tries to manipulate people*” (QC11B r587). It is also ideological in the sense that “*the experience the platform provides also gears people away from the idea of the web as an open and collaborative network, to one based on few centralized corporate platforms*” (QC11B r664).

FB has trillions of data packages and has too much influence/control of the population (QC11B r266, r1113).

Too much data gives too much power (QC11B r115, r430, r435, r475, r1032, r1070, r2080). The fact that huge amounts of user data are in the hands of a profit-making corporation raises significant concerns (QC11B r994, r1243, r1306, r2044, r2267). The fact that FB holds huge amounts of data makes governments and organizations to want to get access to it, while advertisers want to make sure that they have access to such a big customer base; this gives FB important social and political power (QC11B r1603).

FB, Google, Amazon and the telcos hold about citizens more information than the governments (QC11B r239). FB is like a supranational state (QC11B r634). FB is the largest government on the planet, as it has the most information on the biggest number of people (QC11B r1031). The concentration of data power and consolidation of other resources (money, land, natural resources) can lead to a state of tyranny (QC11B r1316).

“This is a position of considerable power, open to a wide range of potential abuse, in particular in relation to manipulative (political) advertising that targets identified personal weaknesses, and granular surveillance by both governmental and commercial actors. The full implications of this will likely only become evident gradually” (QC11B r589).

For certain respondents, FB is regulated to some extent, though it is about consumer regulation and less government control (QC11B r270). But, for others, FB is seen as a monopoly which abuses its market dominance (QC11B r421); it has power and influence which is not effectively regulated (QC11B r1049, r2004). The national and European laws do not apply or are without sufficient effect (104). Political regulation is insufficient (QC11B r454, r1266, r1286) and the dominance of the platform makes regulation difficult (QC11B r1109). There is no control over data gathering and little control over news curation (QC11B r692). Users do not have the legal right to see who collects their data and who receives it (QC11B r1398). There is no way the millions of users can hold FB to account (QC11B r1111) and FB can circumvent national laws (QC11B r545). Respondents tend to think that trying to legislate for privacy, e.g., against targeted advertisements, will be difficult (QC11B r296).

As there is little understanding and regulation regarding what FB do with user data (QC11B r388), there is an expressed need for clarification of the rights around user data, judicially and socially (QC11B r292). For many, the huge amount of personal information on the users is too much (QC11B r207, r418) and this should not be allowed (QC11B r407, r2140). More generally, *“FB is so global that their policies should be formulated at the UN level, but they are probably done by some teenager in the FB office”* (QC11B r508).

Certain respondents suggest that FB could lead the way and establish an ethical code of conduct, but it is very doubtful as they do not have the interest in doing so (QC11B r1219). The company has responsibilities to consider security, privacy and hacking concerns and should take steps accordingly (QC11B r2069). But, currently, they do not assume responsibility for the level of influence they have as a business and as a central societal entity (QC11B r2149, r2227). Others argue that if FB wants to be the primary communication network it should behave in an acceptable manner (QC11B r1004).

For certain respondents, there is nothing too problematic with the state of affairs in social media. *“Being part of a social network is a choice, therefore . . . I can still de-register when this may be problematic for me”* (QC11B r68). There are other platforms, as many respondents point out (QC11B r88) and FB is a preference because people could decide to use other networks (QC11B r122). For many, while monopolies are not good, the *“no choice”* is not true and users can make the choice to not engage (QC11B r1050): *“it all depends on people’s intentions whether to stick to it”* (QC11B r213). The users could seek information from other sources and could find alternative ways of communicating, so it is their responsibility and not FB’s (QC11B r1473).

Interestingly, many have accepted the **nature of FB** and caution that one has to be careful about it (QC11B r233); they see it as a free tool or service which has to make money (QC11B r858). For some, it is only natural that a user can choose to use it or not in the understanding that their business model is based on advertising (QC11B r1130), and this would make it acceptable to users as otherwise they would have to pay a subscription to have FB services (QC11B r531). As one put it *“I am using it knowing about its implication for personal data, anonymity, social safety of people/citizens”* (QC11B r1082).

Freedom of choice is argued by many respondents (QC11B r464, r639, r699, r808). FB can be used in many different ways, depending on the decision of the user (e.g., what to share, whom to follow, how frequently to update) (QC11B r1225). The user's responsibility takes the form of being selective as to how you use add-ons, or apps, as they often agree to give access to much more than should be shared (QC11B r338).

Indeed, many users do exercise this freedom and move from FB to different platforms (QC11B r536, r1315). Others decide not to join at all, being wary of its power (QC11B r935, r1377). Others are very selective as to what they post on FB, by avoiding personal posts, for instance (QC11B r880, r937). Or they minimize their use of social media (QC11B r1160). Certain respondents feel that by adjusting privacy settings they can have “*an acceptable mix of advertising*” (QC11B r1130) while some of the respondents use anti-ad detectors to reduce advertising (QC11B r1299).

Interesting is to assess **consideration of alternatives** by the respondents. “*Alternatives do exist, people even know, yet they seem to be unwilling or unable to make a collective change*” (QC11B r1520). Some “*believe that there are more activist steps I can take to try and change or undermine it*” (QC11B r201).

A respondent mentioned that “*At least in my peer group, Facebook is kind of over . . . I see a fragmentation into many very different platforms: Diaspora, Friendica, Whatsapp, Signal, Threema, HipChat, identi.ca to name the most frequent ones*” (QC11B r78) Many also consider using alternative online communities, e.g., in digital health, with better control and protection of data (QC11B r1123). It is necessary to “*convince our networks to migrate to alternative platforms but it takes time to educate*” (QC11B r1238).

Yet, many have decided to not use social media at all:

“Although I was an early adopter of technology and social media, I am no longer so, and have deleted all my social media accounts. I am extremely concerned with the intrusiveness of advertising, and the stealthy gathering of private user data through cookies and tracking. Even more so after the recent election, where the cumulative shaping of the perceptions of mass populations are influencing election outcomes - this is horrific. We are so far away from the original idea and intention of the Internet, and as individuals we have no power in shaping it. It requires transnational regulation, and I am at least grateful that the EU, if no-one else, is increasingly the watchdog here” (QC11B r1313).

For others, the power lies with the human agents generally, rather than the platform: it is the human subject that makes fake news or that chooses the extent to which they use the platform (QC11B r567). Many think that they can stop FB at any point they choose (QC11B r941). Others think that FB is used by a middle aged segment of the population, while the younger generation have many more alternatives (QC11B r542).

In conclusion, FB **limits user choices** with regard to Internet engagement. User data are sold without consent and it is not clear to which entities they are shared with; FB decides on the terms of access of the service; FB algorithms determine the information to be displayed or not; alternative activities or opinions are excluded; opinions and information are often ideological; regulation cannot be imposed effectively; users are manipulated into becoming consumer subjects; the ways of communicating and interacting are shaped by FB mechanisms and practices; the users feel that there is a necessity to be on FB to retain communication rights and opportunities.

“Facebook is a walled garden, one in which you are segregated based on an algorithmic determination of which flowers you like, flowers arranged by a tyrannical caretaker who watches you through the dusty curtains of his potting shed whilst taking notes on your behavior and selling them to the gift shop” (QC11B r566).

Question QC12A asks: “How do you feel about the fact that Google is the only search engine that most people use?” Almost 50% of the respondents have reported that they are very concerned or concerned, just over 26% are somewhat concerned, while just over 20% are not concerned. [Detailed, commented results are on the web site, node 444.](#)

Question QC12B (open question) invites the respondent to justify their answer to QC12A.

A category of users have focused on the quality of the Google resources and have been generally positive. The **quality of results** that Google provides is seen as the determinant of its dominant position and suggests that there are no alternatives (QC12B r68). It is seen as having the best functionalities and providing the more efficient tools (QC12B r108, r480, r740, r806, r915, r1301, r2090, r2114, r2256). *“Google seems to be the best. It is only a route to information, being concerned would be like being concerned if most people used Yellow Pages”* (QC12B r410). It has permeated our culture and has become a synonym of Internet search because its quality is better (QC12B r436). There is no alternative innovation in the field of search engines (QC12B r1304, r1448). It is seen as the best, easiest and most convenient search engine to use (QC12B r492, r2103, r2122), it is reliable and useful (QC12B r510, r533, r536). As a result, they deserve to be in this dominant position (QC12B r751).

A respondent put it bluntly: *“Google finds me what I’m looking for. That’s all I care about”* (QC12B r428). Indeed, many focus on the utility of having an effective search service (QC12B r1292). It works very well, this is why it is universally accepted (QC12B r649, r1169). And if it gives people what they want then it is not a problem that many will use it (QC12B r711), it is understandable (QC12B r1050). The monopoly element can be overseen by some respondents, rather it is how comprehensive the service provided that matters (QC12B r2237, r2253).

“Google is NOT the only search engine used, which suggests that if people are dissatisfied with Google, they can and do look elsewhere. If anything, this index of humanity that Google is almost forming is a hugely positive thing for the spread of information, communication amongst humanity. It is a greatest of levellers, allowing people across the globe to be as informed as each other” (QC12B r545).

If a better alternative comes to the market people will use it (QC12B r773). For many, indeed, Google is great (QC12B r1128). And the fact that it is free is very positive (QC12B r138).

Many respondents are of an ambivalent opinion, identifying both the good service and the price to pay for having it: *“I think Google is an incredible platform, though advertisements and privacy violations are serious problems”* (QC12B r289). Some recognize that Google is good and useful, but are concerned about its pervasiveness, even in common language, and stress the need to find alternatives (QC12B r517, r544). Some are a bit concerned about the use of their personal data but not about the fact that most people use Google (QC12B r918).

Many respondents attribute the efficiency of the Google search engine to the fact that there is always an increasing number of users and this optimizes the results provided by Google (QC12B r1581, r2267), but they understand the trade-off is that user data are exposed to commercialization. There is also a trade-off between what the user is prepared to disclose in their searches and the benefits they can receive (QC12B r769).

Some accept things as they are and see it as the price you have to pay (QC12B r233). Google is a sophisticated product and, since it is free, the trade-off is that the users are its products (QC12B r397, r1291). Indeed, certain respondents accept that since the service is free income will have to be generated in some way (QC12B r1469). They do appreciate that information bubbles are developed, or are concerned about data use, or about the monopoly position, but still use it because they consider Google better than alternative search engines (QC12B r993, r1017, r1082, r1559, r1691). They are concerned about monopoly behavior, privacy and collection of data on a number of services (email, calendar, drive google docs), but it feels like there is no other choice (QC12B r1320). As a respondent mentioned, dominance has led to *“possibly skewing”*, but the services are great so it is a *“quid pro quo”* (QC12B r726).

However, a few respondents have argued that the search algorithm is getting worse, as it uses personalization based on wrong interpretation of users’ habits (QC12B r297). Some users are not sure whether it is the best or good enough (QC12B r478).

A third (and the largest) category of respondents appear more critical and more concerned. They see Google the **information gatekeeper** (QC12B r654, r1330), and *“gateway to the world of user data gathering”* (QC12B

r1313); it controls information access (QC12B r1153, r1234, r1585) and has great power and monopoly over what people see (QC12B r1108, r1216, r1361, r1520) and how they form opinions (QC12B r771, r1159).

Many respondents have expressed their concern that Google **controls the results** of their search (QC12B r44, r814, r910, r2057). It determines what users can read, the amount and quality of information they have access to (QC12B r88, r181, r1093, r808, r886, r916, r1216). They can hide true information and spread false information (QC12B r778, r1597, r1603, r1651) and they promote pages according to their interests (QC12B r790). And the most worrying aspect, is that most users are not aware of this and accept the results they get in their searches as the most accurate or objective (QC12B r1378). Nor they are aware that the search results are presented to them in a way that is not the same for everybody (QC12B r1147). The ways the search algorithm ranks the results are non-transparent (QC12B r1070, r1335, r1368).

Google have refined their algorithms to “*direct people into certain categories of thought*” (QC12B r202) in order to promote corporate interests (QC12B r506). Examples include auto-completion or suggestion of keywords (QC12B r438). Google “*nudges the search query towards certain keywords and phrases (predictive text) which limits our ability to formulate our own questions. It tries to give you its own ‘answer’ (via snippets) which is often false or biased information. It’s no longer objectively presenting information, it’s now attempting to tell its own story about the world*” (QC12B r1199).

Users are given “*a limited view of the world based on the goals of satisfying user preferences instead of providing an accurate or truly helpful picture of the world*” (QC12B r325).

Google’s algorithms are vulnerable to both intentional and unintentional introduction of bias (QC12B r381, r2175), e.g., through the prioritization of the paid-for links (QC12B r1200, r1395). It presents results in a biased way, e.g. deciding on the order of presentation (QC12B r67, r292, r678, r1198, r1232), often according to what the advertisers want the user to see (QC12B r1214, r1217, r1238) or promoting the Alphabet corporations (QC12B r1288), “*meaning once again almighty dollar shapes the ‘free’ Internet experience*” (QC12B r1423). They privilege certain pages and types of pages at the expense of others (QC12B r779, r1150, r1345), according to their interests (QC12B r790), with net neutrality consequences (QC12B r292, r1185) as a page low in presentation is in reality non-existent (QC12B r1297). Certain sites are more visible than others according to the traffic they receive (QC12B r1136), which means that it has also an impact on the business environment as it determines which businesses are more visible (QC12B r899, r1134, r1187, r1253, r1623).

Some respondents argue that Google have started **filtering out** left-leaning or anti-establishment websites (QC12B r1996, r1468) and that it categorizes and filters information according to the Silicon Valley ideology (QC12B r1199). Others believe that Google is biased towards a Western cultural orientation and that much of the non-English Internet is not accessible (QC12B r1967). And some argue that Google do not take adequate measures to regulate racist, extremist or pornographic content on their platform (QC12B r2057).

Bias in searches and algorithms has wider social implications. Ranking orders forms opinions (QC12B r416). Strongly filtered results lead to **biased opinions** and create information bubbles, showing users the information they want to see (QC12B r81, r87, r90, r118, r143, r223, r229, r344, r764, r847, r1185, r1505). Particular sources, including news sources, are left out, with obvious implications for pluralism and democracy (QC12B r70, r534, r1170) and strong polarization potential (QC12B r1406). “*Google search ensures that people searching online find opinions and information which reinforces their existing worldview, regardless of whether contradictory factual information exists. In that way, Google reinforces prejudices and assumptions, rather than challenging them with reasoned knowledge. The result is not a knowledge society, but an opinion society. Google is reversing the Enlightenment*” (QC12B r149).

Or in a different way: “*With its business entanglements and trajectories, Google has interest in particular social, political and legal outcomes. There is nothing to stop them from supporting a knowledge gap that limits access to viewpoints antithetical to their aggrandizement*” (QC12B r1316).

Control over knowledge has been repeatedly stressed (QC12B r460, r680, r811). “*It’s going to be the complete knowledge archive of the world, and it is in a private company’s hand*” (QC12B r141). Google wants to manipulate all human knowledge by personalizing answers (QC12B r587). “*We are delegating the organisation*

and search of mankind's knowledge to a private company with economic interests that affect the way content is provided" (QC12B r239).

As a result, Google has **considerable influence on societal beliefs and values** (QC12B r332). "As a search engine of everything that is digital they have great power on our lives" (QC12B r901). "All information about desires end up at one place" (QC12B r1021). There are so many services provided by Google, which make them so pervasive in social life (QC12B r241). "Google is becoming the *deus ex machina* of our everyday choices and it is going to run the future of communication technologies worldwide with no restrictions by policymakers" (QC12B r1060).

The social and even political influence of Google cannot be underestimated. It has the power to manipulate emotions, boost hate (QC12B r1443) shape public opinion (QC12B r360) and "destroy democracy by uniformity and lack of reflection" (QC12B r356). It "could, and probably does, manipulate information, markets, elections and research (many universities use Google mail service nowadays!) worldwide" (QC12B r217). It pushes people towards filter bubbles and winner-takes-it-all economy (QC12B r412).

Privacy concerns have been expressed by many respondents, who are not sure how Google uses their search and other personal data (QC12B r49, r614, r617, r1165, r1287). Google is amassing a large amount of data on location, emails, search results, user preferences, tastes, tendencies (QC12B r841, r1614). The search history records all sites visited and relevant user preferences, which creates a profile for the user (QC12B r1299) and is violation of privacy (QC12B r1123). Users are concerned about the **data collection that happens through the Google algorithm** and the opacity of the process (QC12B r445, r1004). They fear misuse of data to an unknown extent (QC12B r318).

Users do not have control over their data (QC12B r82, r245, r629, r1328, r1520, r1607). Google knows too much about the users and is dominant in the market (QC12B r266, r431). "Google knows more about us than we do, since it accumulates information permanently about us" (QC12B r467), such as history, likes and dislikes (QC12B r1200). For some respondents, Google has "an incredible amount of spying power over the private thoughts of the entirety of society" (QC12B r524). And many people do not appreciate how much Google knows about its customers (QC12B r877).

Respondents feel that Google is the only owner of information about themselves (QC12B r61, r1571). For some, the problem lies with Google accounts and not so much with the search engine (QC12B r264). Because of the connections that Google does across its services this becomes scary (QC12B r807).

The **issue of sharing data** is also prominent among the concerns expressed (QC12B r328, r1236, r2146). Specifically, they are worried that "Google builds a profile of the user based on your searches and sells it to third parties (or uses it for other purposes)" (QC12B r48). These third parties can be commercial and government entities and this is done in ways that are non-transparent. Data is sold to companies who themselves compete to be visible and advertised on Google platforms (e.g. YouTube videos) (QC12B r548, r1614). The fact that Google ecosystem is so vast means that "information is shared with many thousands of strangers" (QC12B r325).

Many are concerned that monopoly of knowledge is in the hands of a company whose data has been used by the U.S. secret services (QC12B r217) or by the police (QC12B r1133). State surveillance is a fear of many respondents (QC12B r449, r985). Google has been complicit with certain countries in censorship actions (QC12B r208). Cross-referencing search behavior with data from health, education, intelligence and so on (QC12B r232) can have serious consequences (QC12B r1200) and the profiling process may lead to discrimination (QC12B r899).

Respondents are unnerved that Google tracks users and monetizes user data it harvests with every search (QC12B r981). **Personal tracking** (QC12B r223) **and corporate usage and sharing of data for marketing purposes and targeted advertising** (QC12B r449, r1032, r1089, r1371, r1967, r2057) **and exploitation of personal content and contacts** (QC12B r1018) **are extremely frustrating**. This is consolidation and commodification of information in return for user convenience (QC12B r415). Even those who argue that technically Google needs to be centralized, are concerned about ads targeting (QC12B r764).

Yet, some respondents believe that there is nothing secret about the practices of Google, which are linked with its own commercial interests and the political agenda (QC12B r429). There are also users who consider it a matter of convenience to received relevant ads (QC12B r2227), or who want Google to know things about them, *“people feel it like magic and love it”* (QC12B r902).

Most respondents are unhappy about **Google’s dominant position** (QC12B r50, r272, r543, r718, r1086, r1149, r1161, r1442, r1679). They are concerned about its monopolistic gains (QC12B r110, r388, r759) and suggest that its service should be open to competition (QC12B r261). It is a *“rather disturbing monopoly”* (QC12B r842), it has too much market power (QC12B r1311, r1346, r1416), it is dangerous (QC12B r1144) or evil (QC12B r1197, r1318). *“Just as other big tech companies like Facebook, Apple, Microsoft and Amazon, Google monopolises our usage of internet. The most symbolic representation of this is the verb we use when expressing that we look something up on the internet. We say that ‘we googled it’”*(QC12B r1474).

By controlling the market, Google prevent competition (QC12B r207) and they promote their own services (QC12B r884). Competing search engines and similar services are crowded out (QC12B r125, r592, r1221, r1223), as the infrastructure requirements make competition difficult (QC12B r1302). The presence of many users results in increased quality of the results and makes it difficult to establish a competitor (QC12B r150). The implication of the fact that Google uses information on millions of people for optimizing advertisements, is that independent or alternative websites are crowded out (QC12B r375). The economies of scale, linked to advertisements, create severe barriers to entry for competitors (QC12B r837). This eliminates the possibility of privacy-friendly alternatives concentrating social power (QC12B r616).

The dominance of a single search engine leads to the acceptance of its algorithmic structure, which narrows search results (QC12B r331). *“Without reliable alternative options it may be impossible to tell when search responses are shaped by corporate drivers, and/or what content is not presented”* (QC12B r387). The effects are more prominent in cases of small countries where it is even more difficult to develop alternatives (QC12B r1219). Many are weary of the reliance of people on Google for their information needs. *“It is in general not a good idea if one company decides under opaque circumstances and their own rules what whole societies can find and what they cannot find. I also have the concern that people are in fact not able to use the web anymore, that they cannot find anything without Google”* (QC12B r208). **Indeed, many agree that Google’s monopoly gives them power as to what data people can find (QC12B r276) and makes it easier for them to apply censorship to information as there are no alternatives to hold them to account** (QC12B r1326). More search engines on the market would mean that people would be more aware or critical of the information they receive (QC12B r297).

For many, it is not the search engine that is a problem, as there are alternatives; rather it is the variety of Google services (including YouTube, Gmail, Google drive) that serve as a monopoly (QC12b r923, r1058, r1138, r1355). The dominant position in the advertising market (based on user activity) has contributed to uneven consequences for certain media, such as TV, at the expense of newspapers (QC12b r1687). Traditional media, which depended on advertising, find it hard to survive (QC12b r1206).

The business model is gaining income from mainstream media and content economies through pay per click advertising (QC12b r384, r1173). This is seen as generally negative, though some qualify the view by saying that, while unsolicited advertising is a problem, classifieds often are positive (QC12b r1206). Users are still concerned that it is a private monopoly which makes money out of users’ data (QC12b r245, r309, r316, r596, r615, r730).

Market concentration is a problem (QC12B r710, r2050). Google is one of the oligarchs in the new digital age (QC12B r841). Such services should be publicly owned and collectively controlled (QC12B r345, r600); a respondent suggested that they should be confiscated and placed within a UN institutional framework (QC12B r238). Some other argued that, while it was not possible to develop this infrastructure under the public sphere, there is a struggle for public ownership that has to be fought now (QC12B r986).

The potential for abuse is very high, as everything is tied to one platform (QC12B r651, r1398, r1421); same argument applies to cybercrime threats (QC12B r1103).

There are some, however, who argue that a global search engine needs to be centralized, unlike social media, where there is no such need (QC12B r764). Some think that a single search engine would improve the search results (QC12B r888). Certain respondents think that the more people use it the better the results, but the more the need for centralization is unavoidable (QC12B r994). Compared to Facebook, some respondents think that Google is less abusive and more respecting users' rights (QC12B r1005). Google needs to be a monopoly to continue innovating: *"I am not convinced that the competition would do a better job and I am not interested in slowing the rate of informational technology advancement in the name of high morals about a freer and less corporately controlled internet"* (QC12B r849).

Many have invoked the issue of **data power concentrated on Google** (QC12B r70, r598, r692, r776, r949). *"Like Facebook, Google is collecting a huge amount of behavioural data, which has put them in a position of considerable power, considering that new applications of how this data can/will be used are still emerging"* (QC12B r589).

"It gives Google way too much power to dictate how the web needs to work" and they are also influencing the Internet (QC12B r78, r1991, r1585) towards privatization (QC12B r1395). Too much power (QC12B r1319, r2044) and the absence of democratic control (QC12B r512) mean *"influence on our daily lives, society as we know it, and policymaking, if they want to"* (QC12B r82). Its monopoly gives Google significant arbitrage role in social and economic relationships (QC12B r688).

In addition, the dominance of Google enables them to influence public opinion (QC12B r749) and their data power has made them a *"powerful political agent"* (QC12B r1244). This is also significant if one takes into account that Google might have their own political motivations (QC12B r164).

There is incredible value in the user data collected by Google (QC12B r99). The unprecedented volume of information surpasses any government agency in history (QC12B r130) and creates state-like power (QC12B r124). It is like a *"supra-national State"* (QC12B r634) a kind of *"global power"* (QC12B r1143). Unprecedented informational power (QC12B r1160) and influence in a single organization is dangerous (QC12B r317, r414, r1013, r1014) as there is not guarantee that it will be used for good and ethical purposes (QC12B r495, r1375). Respondents think it is very problematic that all user data is held in one place (QC12B r242, r495, r1969).

Different views have been expressed on the **extent, possibilities and ways to regulate Google activities**, though most respondents do argue that Google should be regulated (QC12B r137, r1315). There have been, though, respondents arguing that Google is to some degree ethical, particularly compared to Facebook or Microsoft (QC12B r1325, r1374), or thinking that other search engines might monetize user data even more (QC12B r1389).

For many, Google is an **unregulated monopoly** that is abusing of market dominance (QC12B r421). Almost unaccountable (QC12B r245), it thinks that it is being beyond EU laws on privacy (QC12B r531, r629). It engages in tax evasion, which means that its supremacy cannot be battled easily (QC12B r395, r1654). The fact that Google is so pervasive gives it immense power and negotiating strength when it comes to regulation. These effects are detrimental for pluralism, civic autonomy and democracy (QC12B r593, r1163, r1319).

Respondents have suggested that there are different principles that could be used to regulate Google: *"In terms of market centralization ... the framing of SE [search engine] access as a right could help thinking about particular trajectories to follow (unbundling of services that are subject to a natural monopoly, like networks that enable functional SE's)"* (QC12B r1390).

Others have called for greater transparency (QC12B r1086), particularly in the exact ways user data is used (QC12B r2227). Search engines are seen as powerful curators of users' experience, so transparency of the ways they work is important (QC12B r702) and respondents are concerned about the lack of it (QC12B r1483, r2140). Nobody knows how Google links search data with data from other sources (QC12B r98). It is difficult to see what private information becomes available through Google tools (QC12B r183). Most of the users have no clue as to what happens with their data, and how Google uses it (QC12B r1010, r1204, r1251).

Some suggest greater involvement of users from different parts of the world (e.g., Africa) to increase their

understanding of how their data is used and to put pressure on forums such as the IGF to shape the Internet (QC12B r1174). Some respondents have gone as far as to suggest that Google should consider all users as shareholders who are entitled to share of the profit and a say in the direction of the company (e.g., QC12B r1315).

Further, a suggestion that has been made is that dominance comes with responsibility for Google around transparency and ethics (QC12B r1436), including the avoidance of bias in the presentation of information and the regulation of deceptive advertisements (QC12B r2069).

Some respondents are not quite sure to what extent Google is regulated or policed and what controls are put into place for that purpose (QC12B r845). Some claim that problems with host countries' legislation can be circumvented rather easily (QC12B r1156). Others believe that Google will eventually be controlled legally, but this will take some time (QC12B r1588). Indeed, the recent ruling in the UK about the 'right to be forgotten' case in which Google was obliged by a Court of Justice to delete information regarding past illegal activity of a claimant, suggests that some kind of regulation is possible and happening, though not all of Google practices can be regulated.

Many think that there are better ways to use Google and users need to be educated as to how they can protect their data online (QC12B r296). There are ways to keep your details from being shared (QC12B r328) and for this reason some respondents are not concerned (QC12B r912, r2246). Some respondents have pointed to the degrees of freedom that users have with regard to Google. These range from ignoring the ads to not looking into the top results, which include the Google preferences, or not clicking into those results (QC12B r843).

After Snowden's revelations many users have changed their habits and started self-censoring their searches or switched to an alternative search engine. (QC12B r877) It is significant to realize that "*Google is not an inherent or default option, but one that we willingly choose to use everyday*" (QC12B r1260).

Many respondents have switched to alternatives that do not track user data (QC12B r1338, r1515). Others do use alternatives but are not sure of their data usage by these alternatives, either (QC12B r1431). Others have tried alternatives but stress the habit of using what Google has to offer (QC12B r880), or have not tried alternatives at all, though they are aware of their existence (QC12B r1406).

Respondents stress that alternatives exist and are increasingly used (QC12B r93, r620, r1459), e.g., Ecosia (QC12B r270, r653), Duck Duck Go (QC12B r343, r390, r559, r693, r736, r1066, r1072, r1130, r1185, r1186, r1310), or Firefox (QC12B r727), or Yandex (QC12B r799) and so on, indeed also showing some approximation in the correct identification of tools and their availability. Some others, though, insist that the alternative services are not as efficient (QC12B r232, r1607, r1609, r2070). "*I use the DuckDuckGo engine as well, but I have to admit that Google knows me a lot better and thus gives me 'better' search results aligning to my interests. I find this useful and scary at the same time*" (QC12B r928).

Others wish that more alternatives appear (QC12B r110). The fact that there are not many, or they are not used shows that people do not care (QC12B r305). But many people are not aware of the alternatives that exist (QC12B r1310, r2050) or do not know where to find them (QC12B r815).

Some respondents stress that it is a matter of personal choice and one should understand that they should be careful and decide to what extent they want to share their data and make use of the services provided by these large corporations (QC12B r567). Signing the terms of usage implies acceptance of the terms and conditions, including those for sharing one's data (QC12B r1383). "*I have experimented with other search engines and still use Duck Duck Go for anonymity, but when doing in-depth academic research unfortunately it doesn't work so well (yet). I therefore am minimizing my use of Google services, and have gone into the Settings to minimize the amount of historical search that Google keeps – everything from map search to music streaming etc*" (QC12B r1313).

For a respondent, a more collective response is needed to reform Google:

“The only hope are certain communities that switch to other browsers or, for instance, the German government and people who opposed Google’s intention for installing street view maps in their country. In Germany, especially in Berlin, I have some sense of people being aware about privacy and data protection. In the UK, it seems like that majority just supports whatever will help business. Even BBC as public service made us all sign up and provide them with private information. No one in the mainstream media said a word against it” (QC12B r1474).

There is no doubt of the dominance of Google not only in the search engine market, but in the entire Internet service domain with its many horizontal and vertical activities. Notwithstanding the quality of the results it can provide, Google manipulates user data in ways that are non-transparent and shares with other commercial and government organizations, with privacy implications. The ways it filters knowledge have also implication for the quality and objectivity of information of the citizens, with consequences for citizenship, democracy and the public sphere. Last, but not least, Google as a business is inclined towards commercialization and seeks profit-making. Business revenue from advertising, as well as political interests and intricate relationships make Google a monopoly of data holding with huge importance, while users themselves continue expressing reservations.

“It appears to be a powerful monopoly. It’s like only having one library with a psychopathic, controlling book burning librarian that creates detailed surveillance files on people searching for books and improperly stores, shares, and sells those files. The psychopathic librarian engages in the burial of books, he/she thinks inappropriate, in secret rooms. The psychopathic librarian engages in featuring books for money, books that may have inaccurate or misleading information, including information that aligns with the librarians beliefs and goals” (QC12B r1451).

Question QC13 asks: “Would you consider using alternative platforms instead of Facebook, Twitter, YouTube, or Google to avoid such monopoly effects as these seem to have at the moment?”

A total of just over 52% already use or would definitely consider using an alternative platform instead of the above mentioned dominant ones. A total of roughly 12% would probably not or definitely not consider using an alternative platform. Significantly, a substantial number of 35% respondents would probably consider it but it would depend on what their friends would do. That makes a total of 87% of users who either use or would give consideration to the idea of using an alternative platform [Detailed, commented results are on the web site, node 443.](#)

2.5 Internet Governance and Electronic Democracy

The last set of questions in section C of the questionnaire relates to the theme of Internet governance and electronic democracy. It was modified in response to the feedback from the pilot stage, further considerations and re-organization of the questionnaire. In its final form, it consists of questions on: taxation of large Internet corporations, equality of access and skills (digital divide), unequal online visibility on social networks, access to online content (questions QC15 to QC18).

Question QC15 asks: “How do you feel about the fact that many of the large corporate Internet organisations have been found evading taxes in several countries?” [Taxation] Just under 61% of respondents have reported that they are very concerned or concerned, 12% are somewhat concerned, while a bit over 23% are not concerned. [Detailed, commented results are on the web site, node 418.](#)

Question QC16 asks: “How do you feel about the fact that not all citizens have Internet access or the necessary skills?” [Digital divide] Nearly 69% respondents have reported that they are very concerned or concerned, 23% are somewhat concerned, while about 17% are not concerned. [Detailed, commented results are on the web site, node 438.](#)

Question QC17 asks: “How do you feel about the fact that an Internet user might have a much smaller number of followers than a celebrity or a company that can afford to employ managers for their social media accounts

and build a large audience?” [Unequal visibility] Just over 44% of respondents have reported that they are very concerned or concerned, roughly 18% are somewhat concerned, while over 28% are not concerned. [Detailed, commented results are on the web site, node 428](#)

Question QC18A asks: “How do you feel about the fact that more and more online newspapers charge subscription fees for access of their articles?” [Unequal access] A bit over 45% respondents have reported that they are very concerned or concerned, almost 24% are somewhat concerned, while just over 27% are not concerned [Detailed, commented results are on the web site, node 444](#)

Question QC18B (open question) invites the respondent to justify their answer to QC18A.

Respondents recognize **contradictions**. The most prominent one is the **funding of journalism and content creation—and subscriptions to access such content resulting in exclusion**. Specifically, on the one hand, there is recognition that journalism and content production (especially high-quality, impartial, fact-checked journalism) require stable and adequate funding. “*Nothing comes for free*” is repeated in the comments quite a few times (e.g., QC18b r928), as well as “*we pay for a physical paper, why not for the online version?*” (e.g., QC18b r858). Many responses mention specifically the need for journalists to be paid a decent living salary. On the other hand, there is also recognition that subscriptions will push many potential readers out of the market as they will not be able to afford paying for content, with the associated risk of amplifying socio-economic divides, increasing cases of exclusion and disinformation, effectively pushing those groups to unreliable ‘free’ often lighter news sources such as social media (e.g., QC18b r1058). The risk for exclusion is explicitly and repeatedly mentioned as is the need to fund good journalism. One would expect this risk of exclusion to be bigger if, as some respondents noted, they would be **prepared to pay for subscriptions to access quality content on the condition that newspapers got rid of advertising income in order to avoid commercial pressures and control, and protect their privacy rights** (“*I think I should pay for access to quality journalism, but not with my data*” QC18b r984). If subscriptions are to become the sole (or the main) funding source, then one would anticipate higher subscription rates which would in turn exacerbate instances of exclusion as more people would not be in a position to afford them. The scenario would be paid-for quality and credible news for the few who can afford it and “fake news” and misinformation through “free” outlets for the rest. Indeed, some respondents explain that they stopped reading certain titles when these introduced paywalls. The quotes that follows are indicative of this attitude.

“I think that information needs to be spread to everybody, not only to who has money” (QC18b r934).

“[If subscriptions are introduced] most people won’t pay it and will be left to only have access to bad quality journalism/ fake news . . . ” (QC18b r1061).

“Newspapers and the media in general are vital to shaping the public opinion, ensuring transparency and accountability within a democratic society, and promoting an informed citizenry. When segments of the population cannot access it, it exacerbates the digital divides, but also tarnishes democracy in practice” (QC18b r994).

“In democratic societies, news is a public good. Print newspapers can be left behind or loaned out, whereas online subscriptions totally block access” (QC18b r1165).

“limiting the emancipatory potential of information access” (QC18b r1234).

“freedom of information is a basic right and shouldn’t depend on one’s ability to pay” (QC18b r1253).

“News is not just an entity; it is [a] human right. We shouldn’t be charged for consuming it at all” (QC18b r1643).

“While the higher-quality journalism gets locked behind paywalls (and is therefore unavailable to those worst-off socioeconomically), the “free” (propaganda or “fake news”) options seem to be proliferating” (QC18b r1146).

“For democracy to work, knowledge and information must be freely available or at least very easy and very cheap to obtain” (QC18b r955).

Related to exclusion is the adverse impact of charging for news upon plurality of sources. Put differently, even if one was able to afford to pay for a subscription to one news source, he/she might not be able to afford to pay for more subscriptions to access additional news outlets, meaning that he/she would be stuck with one news provider. People would need to have more than one news subscriptions in order to have plurality. In other words, **subscriptions work against variety of journalistic offers and access to diverse news outlets**.

A minority of responses expresses preference that news and current affairs should be free without, however, in most cases any reasoning or discussion about how journalism and journalists would be funded under such a case. *“[Charging] goes against the principle of the Internet”* (QC18b r967).

Many respondents take this topic one step beyond. They are critical of the mainstream press which they find commercial, corporate and highly concentrated ((cross-)media market concentration) and as such not able to perform its fundamental normative democratic function to act as the fourth estate. They argue in favor of **alternatives** in both market structure and organization (who provides the news? How is it funded?) and in terms of behavioral intervention (what legal and regulatory provisions are there to promote freedom of the press; quality, reliable and independent news relevant to the society/ community they operate in).

With regard to market structure, responses call for non-corporate news provision, such as public libraries, public service media and other non-profit media, including community media. Indeed, many express the view that the online environment should nurture new news ventures and models, breaking away from the dominance of mainstream corporate media. *“Newspapers are not the sole source of information, nor necessarily high quality sources of information”* (QC18b r957). Other respondents note the critical role that new digital intermediaries (e.g. the dominant search engines and social networking sites such as Google and Facebook) play in controlling what Internet users see and in promoting misinformation. *“... large monopolies increasingly begin to control what we see (via search engines and news feeds)”* (QC18b r1160)

With regard to funding, many respondents are critical of commercial models. For instance, they express concerns about the data harvesting and privacy-unfriendly model of advertising-financed (fully or partially) news outlets which in addition, they argue, provides “pseudo” as opposed to valuable and critical information which can advance informed citizenship. As alternatives to commercial funding and to paywalls which will exacerbate exclusion in society, the responses suggest an array of options such as state subsidies (*“[T]here needs to be some publicly funded basic news services”* such as the BBC (QC18b, r1086)), micro-payments, donations, crowd-funding, the freemium model whereby a basic diet of important news items is free in order to enable everybody to function in the society and fulfill their citizens’ right, and a compulsory *“news licence”* akin to the TV licence whereby all would pay the same basic fee for access to news with the added benefit of sustaining a plurality of news outlets as opposed to all the funds going into one outlet (QC18b r1597).

At the same time, respondents recognize the need for and importance of behavioral interventions, that is rules aiming at safeguarding the freedom and independence of the press, and at laying the ground for quality and impartial news.

In conclusion, the analysis of the comments about newspapers behind paywalls shows strong feelings about the need for reliable, credible and independent news sources (including local and community ventures), available to all or at least to as many as possible within society to minimize exclusion.

2.6 Community Networks and Alternative Internet

As mentioned in deliverable D5.2, Section D of the survey seeks to capture perceptions of users about community networks and the extent to which they could provide alternatives to their concerns. This might be a difficult question for the respondents as not many of them are expected to know what community networks are. We therefore provided a short description before asking two related questions: The first (question QD1), was about

the attitudes of the respondents vis-a'-vis the potential of community networks to address user concerns (this can be loosely seen as a measure of attitudes towards sustainability of community networks); the second (question QD2), was about whether the respondents would themselves consider switching to a community network. We have kept the questions short so as to give the opportunity to the respondents to provide their insights.

Question QD1 asks: “Do you think there is potential for such local community networks to overcome your concerns about the Internet identified in this survey?” Almost 52% of respondents think that there is a definite or likely potential for CNs to overcome the above expressed concerns; nearly 50% think that it is not very likely or it is definitely not the case; and nearly 9% have chosen the Do not know/No opinion answer. [Detailed, commented results are on the web site, node 451.](#)

Question QD2 asks “Would you consider using such a community network instead of, or in addition to, your current Internet provision?” Almost 70% of respondents think that they would definitely or likely consider using CNs; a bit over 15% report that it is not likely or that they would definitely not consider CNs; just over 13% have chosen the Do not know/No opinion answer, a significant number, which reflects perhaps the limited understanding of what CNs are. [Detailed, commented results are on the web site, node 450.](#)

QD1 and QD2 are followed by an open question which gives the opportunity to the respondents to elaborate on their answers.

Many responses express **strong support for alternatives** in general and CNs in particular. It is worth noting that some points made were already picked up in previous deliverables. Respondents like the idea of choice (e.g., QD2B r230), especially for those residing in rural, remote or insufficiently served areas. In D2.1 (Fuchs et al. [June 2016](#)) we linked the availability of options to the notion of sustainability. Personal involvement too is believed to promote sustainability as “*people would feel more invested in the work/cause*” (QD2B r483). Others mentioned that they would like to give CNs a try “*to experiment how it is like*” (e.g., QD2B r299, r307). This is another interesting point; experimentation is one element we mentioned in D2.2 (Fuchs et al. [June 2016](#)) in relation to the viability and future of CNs.

Respondents identify various **advantages CNs can offer**, notably affordable Internet connection, closing the digital divide, participation, democracy, promotion of digital rights such as better privacy and data protection, gaining technical expertise, enhancing social cohesion, and strengthening community ties.

Although predisposed in favor of CNs and alternatives in general, many respondents find the idea **challenging** at various levels. To begin with, they think it will be hard for alternatives to gain **scale**, especially in face of the oligopolistic/monopolistic positions of a handful of dominant internet platforms, such as Google and Facebook, which enjoy huge scale effects. According to one response: “*This solution [CNs and alternatives] is very interesting, however it should have been done at least a decade ago, before the rise of the current oligopolies*” (QD2B r239, similarly r244 and r306). Some speak from experience and explain that they have tried alternatives to the established social media platforms but their family and friends did not follow them (QD2B r232) to conclude that “*a lot would depend on how many other people I needed to communicate with would join me on these networks*” (QD2B r435). Similarly, commenting on the huge scale effects of existing dominant social media platforms, another respondent notes: “*I’m [...] unconvinced that systems such as the one described would make people break away from the domin[ant] commercial social media platforms, simply because people go where their friends are. It’s rather the point of social media*” (QD2B r1291).

Building on this point, some explain that they are satisfied with the Internet they are getting at present and that what concerns them most is the **concentration of power** in the hands of a few companies/platforms (e.g., QD2B, r508). For these respondents, a CN equals Internet connectivity alone and therefore further action, notably regulatory intervention, is required to address the power of the big Internet platforms. In other words, while CNs could provide a viable alternative for Internet access, that will not “*address concerns about the dominance of google and Facebook etc.*” (QD2B r66). The question is **whether CNs can provide alternatives to existing services and platforms**. Here are some indicative comments: “*Access to the net is not the problem*” (QD2B r617); “*Local networks provide connectivity, not content*” (QD2B r379); “*I like the communal basis of cost sharing, but not sure how a local, shared Wi-Fi network solves any of the problems of platform monopolies.*”

Most of what I do on the internet is not about local contacts or content. So the ubiquity of FB, Google, Twitter, etc. are not disrupted by this model. I just get a different pipe to the big platforms” (QD2B r1335).

Indeed, a few respondents make a strong **distinction between access/infrastructure and services/applications** that run over it. *“Physical infrastructure is only half the story ... I don’t see how this could change the monopolization in services on these networks that we see today with Google and the likes ... There are scaling effects”* (QD2B r1253). **Regulation** is the solution to platform power according to these respondents: *“There should be more and better platform regulation ... in short: empower users, modify competition and consumer [protection] laws to the modern requirements”* (QD2B r1253). The call for a regulatory solution is echoed by others (e.g., QD2B r1157). For another respondent, whereas there are rules for the infrastructure layer covering, for instance, data retention, anonymization and usage as well as pro-competitive rules on the access layers, there are no equivalent rules for the applications layer *“no procompetitive rules, no portability/interconnection/interoperability; too little competition, too much concentration”* (QD2B r688). Following the same line of thought, other respondents too support platform regulation as the way towards an “alternative” Internet: *“I can’t see much advantage in changing my ISP, but would be interested in **alternative platform services**—however, they would not have to be local”* (QD2B r699). We come back to the question of “local” services and content later.

Challenges that initiatives which rely on volunteers commonly face are also mentioned such as **demands on expertise, time, resources together with the gap between theory and practice**: *“There is often a discrepancy between one’s value[s] and one’s actions”* (QD2B r454). Some are frank and state that although they would not themselves get involved in the construction and maintenance of such a network, they would nevertheless consider using it if available and able to offer cheap or free and, at the same time, reliable Internet access. Put differently, such free-riders could not see any motives, at least not strong enough, to contribute themselves practically (be it in terms of knowledge, expertise or time) to the building and governance of a CN (e.g., QD2B r1287). Interestingly, whereas the general perception was that CNs would be particularly suited to rural areas, one respondent observed: *“it would be harder in smaller, rural communities with perhaps an older generation or young families [implying that one would find it harder to recruit volunteers from these two groups] to find the necessary critical mass of volunteers”*. Others mention that they would need motivation to get involved, such as a political or civic reason, the possibility stronger privacy, managed as a common good (QD2B r792; QD2B, r832; QD2B, r814) as well as motives to change providers (QD2B r276).

Some respondents explain that they would **consider switching only if** the alternative is equal to or better than what they already have, for instance in terms of affordability, speed and user-friendliness (e.g., QD2B, r233, also r268); *“as efficient as commercial networks”* (QD2B, r237); or *“with more security provisions and control”* (e.g., QD2B, r247). Even if these conditions are satisfied, others will use it in addition to, not as a substitute for, their current commercial provider, founding it particularly attractive when they would be on the move (QD2B, r259). Despite concerns about these very issues in relation to the standard Internet, **some do not think that CNs could be reliable, secure or maintained sufficiently** (QD2B r240, r264, r429: *“these networks are notoriously slow, fragile and unreliable”*). Ironically, **others support CNs for precisely these reasons**:

*“This is exactly the type of initiative needed to rest back some of the **control over our data, privacy and online infrastructure** from these companies. It would be directly **empowering** to those participating and indirectly empowering to the local community once sufficient numbers of people became involved. It would also be a positive development for **democratic** control and it would open up all sorts of opportunities for enhancing democratic involvement in the operation of critical infrastructure”* (e.g., QD2B, r245 emphasis added).

Others note: *“Seems to be a good idea and wor[th] trying since it better fits the requirements of a public good, which internet infrastructure is to me”* (QD2B, r294); *“it would be a kind of returning to the early Internet era, more free and participative”* (QD2B, r297).

Another challenge identified is the absence of **fundamental prerequisites to get a CN initiative off the ground** in the first place: “*no community in my area*” (QD2B, r251); “*lack of sufficient community cohesion*” (QD2B, r416). A final challenge mentioned is that CNs will face **opposition for established big commercial players**.

It is interesting to discuss how the notion of “**alternative**” is viewed in the comments. Some respondents like the philosophy behind CNs, the idea of an alternative: “*There is a real need for an alternative internet*” (QD2B, r310). Although there are many references to an “alternative” Internet, there is no consensus on what that means. Often the term “alternative” is used without a definition. When it is defined, it is clear that meanings differ. **Different respondents understand “alternative” differently**. Understandings vary from simply increasing market competition (e.g., QD2B r309 and r1639) to more nuanced interpretations: “*Currently there is only an illusion of choice with the mainstream internet—no harm exploring an alternative, and shift the power dynamics*” (QD2B r323); for some, it relates to “*power of people and being self-sufficient*” (QD2B r308); decentralization power and infrastructure (e.g., QD2B r319); democratic control (QD2B r316); noncommercial (QD2B r364 and r242); “*less surveillance, less expropriation of mental and social work, less centralized power structures, more flexibility etc.*” (QD2B r1156); “*alternatives to the corporate/ state profit control*” (QD2B r986).

Others meet the potential of CNs to act as an alternative with skepticism. Building on the argument above regarding scale effects, some are of the view that CNs will not make much difference (QD2B r303); cannot work as a “*true substitute*” (QD2B r306) as, in order to have an impact, a CN “*would need a substantial user base, which might be difficult to achieve*” (QD2B r438). For them, CNs cannot achieve a sufficient scale to challenge the dominant neoliberal commercial model of telecommunications and Internet provision. An idea put forward was for many CNs to join forces globally: “*many small community platforms form a global social platform on the basis of their own networked connectivity*” (QD2B r567).

Some comment that “*An alternative would be to transform existing services into public utilities controlled by independent bodies and in which ordinary citizens could participate*” (QD2B r375). This last remark perhaps shows a certain lack of understanding of what a CN is, a point we’ll come back to later. Community and municipal networks offered as public utilities (QD2B r325) and public funding of alternatives were seen favorably only for some respondents to quickly add that government involvement comes with its own risks, in particular the potential for abuse by law enforcement interests (QD2B r325).

Skeptics raise two important issues in relation to term “**community**”. The first issue concerns the fact that “alternative” does not by definition equal “progressive”. Indicative comments include: “*Does [“community” in the title] make it better?*” (QD2B r352); “*A network isn’t necessarily more responsible just because it’s local/small*” (QD2B r428); “*Seeing [CNs] as a solution is re-committing the error of technological determinism—there is nothing inherent within them which would guarantee they did not merely reinforce existing power structures, just like the internet has. They can easily become tools of oppression where local communities are dominated by local elites*” (QD2B r957).

Indeed, a few respondents elaborate on this. Although supporting the idea, one respondent calls for caution as the potential for censorship and control would remain:

“...and perhaps even be worse because narrowed with less mitigating influences, i.e., local autocrats/moralisers would likely impose the think of the children/save us from terrorists agenda. potentially with worse outcomes for dissenters because local” (QD2B r449).

Similarly, other respondents think that privacy concerns are bigger in the case of a CN:

“I don’t think Google engineers or my ISP engineers go to look for my personal activity online. What they do is to aggregate the data from many people to make Marketing studies. But the local provider, that has access to personal log data for the local community, that is scarier. The local IT guy could be curious to look at the logs to see what people are doing, spying on them” (QD2B r888 typos corrected).

“My main concern with these alternative networks is their possible exploitability. It would take only one person in a key position to, for example, extract information and sell it forward. This information might end up being used by the same corporations that are making profit with metadata even today. I like the idea of community closeness and volunteering in order to make it work, but personally I would look more into it before deciding to use it” (QD2B r1338).

Similarly, *“if people who use the network have to work to maintain it, is their privacy kept? Somehow privacy and “strong community ties” sound contradictory” (QD2B r506).*

Some express reservations about the equal representation of all community members *“I fear that the interests of some groups of users (e.g., older or those with less technological skills) won’t be as represented” (QD2B r506).*

Such concerns could arguably be addressed through discussions and resolved prior to the launch of a CN initiative. Participation, inclusion, transparent processes, and trust are all very important. Indeed, when coming to “global”, and in particular data analysis done by global platforms, several respondents have a perception that the people working for these global platforms have no interest to spy, while local people may have. These answers highlight how there is still a lack of proper understanding of how data is manipulated, how Artificial Intelligence (AI) and deep learning algorithms work, and how privacy violation and behavioural conditioning are not necessarily implemented through the intervention of a human being. Furthermore, there is a clear underestimation of how data inference become more and more powerful when data is aggregated.

For others, **experience with other community media ventures shows that such initiatives end up being controlled by some interests**, be they public or private, with adverse consequences for freedom of speech *“Think of the community radios and televisions: they are mostly racist, nationalist or religious provocat[eurs] who preten[d] to be in the service of community or society” (QD2B r636, typos corrected).* *“The local KKK could have a fantastic local internet service/ platform” (QD2B r1316).* **“Local” is by definition neither benign nor apolitical.** In the words of one respondent:

“It would so entirely depend on the non-profit running it. For example, what if the non-profit was an evangelical church and that was the only way to access the Internet - through them? I’ve seen the local battles to control what books are in the public schools, and what’s in the textbooks used. I can see something similar happening in many parts of the country, while other areas are far more open, free, and protect privacy” (QD2B r1539).

Similarly: *“I have absolutely no interest in involvement in my local community. Local communities aren’t an essential good. Local communities are, on the whole, closed, bigoted, prejudiced, narrow minded, uncomfortable places. ... I want to participate in a global community” (QD2B r944).* Finally, another respondent, while acknowledging the risk of CNs to be misused, thinks that such networks present benefits especially in emergency situations (QD2B r736).

The point that the term “community” is by definition neither benign nor progressive relates closely to the second point concerning the **local vs global nexus**. Some respondents see no, or very little, benefit in having local services as they have very few, hardly any in some cases, local community connections. For them, the idea of a CN understood as providing local content and services presents no (or little) advantage(s). On the contrary, **some respondents saw potentially serious exclusionary risks** in such a local scenario as it would make people narrow- and locally-minded at a time when the world needed broader, not parochial, perspectives. Here are some indicative quotes:

“...the big advantage of the internet I am used to is the irrelevance of geographical distance. I want/need to collaborate with people who are in distant locations” (QD2B r1074).

“One of the main selling point[s] of Facebook, Twitter, etc. is its ability to act and connect globally” (QD2B r1597).

“... local networks have limited content and are limited to local community. Internet is interesting precisely because it is global, universal and it offers unimaginable great number of choices, possibilities, variety of choices, global contacts and communication etc.” (QD2B r366).

“... the problem with local communities is the risk that local issues (or even national ones) dominate [...] while globally relevant issues remain unconsidered. the internet is a global network which is basically great! making everything local again is not a good alternative” (QD2B r1559).

“It would not solve the problem of communication with geographically distant friends. It would potentially create new walled-gardens. It would potentially prevent users from learning anything from people outside their geographic area” (QD2B r365).

“I am concerned that these communities where you communicate only with the users that are part of it will become “too close”” (QD2B r425).

“... closed network” (QD2B r710).

“[local services] might develop fragmentation into silo-type information networks, especially if based on like-minded communities/ communities of practice” (QD2B, r272).

“I have doubts about the scalability of such local offerings, or their ability to support areas of content production with high levels production values ... A non-profit **large scale** social media platform might be a useful alternative to Facebook and could be provided in a less intrusive and exploitative fashion” (QD2B r384 emphasis added).

“... this is a globalised world. Beyond infrastructure this doesn't really make sense.”

Referring to the distinction between infrastructure and platforms/ applications the same respondent went on to say:

“Facebook emerged as a community network which grew and grew until it became the huge company it now is. It used to be a community platform, but because this is a globalised world, it spread out from there” (QD2B r653).

“It is difficult to imagine how it would work out. much internet communication happens at a global level, and if there is a community level platform (presumably we are meaning like a neighborhood by community), then this would only enable communication at a small area, or within small networks” (QD2B r779).

This last respondent would consider using a CN as an add-on to get these local services. Another respondent touches on personal circumstances when referring to the local–global nexus: “my community is dispersed across several countries and cities within those countries” (QD2B r653).

Yet, **others perceive the local focus as an advantage**: “[I live] on a small island and there are clear practical advantages (as well as privacy lens) for **dealing with local traffic at a local level**” (QD2B r261, emphasis added). Others are equally favorable: “rebuild local and not only communities” (QD2B r283); “a platform made for a specific community could be very useful” (QD2B r289); “... the community network will have localized content that's relevant to the people and at no cost, informing the audience while creating a market for the content generators” (QD2B r750); “Local news, local information that is publicly accessible in an open, transparent manner is critical” (QD2B r772).

There are two main implications of the above comments on the local-global nexus. The first is that for a “community” to work together, both geographical proximity and concentration of people in one place for critical

mass matter. The second implication is the complementary between global and local services. It seems that users are interested in accessing primarily global services but would consider local services too, especially if these respond to a specific need. An example raised here was local news.

Another set of comments touching on the local/global and infrastructure/applications issues relates to the potential powerlessness of a locally operated internet provider to stop the monitoring of its users by bigger companies further up (QD2B r523); *“even if local services were available, there would still be a need to use mainstream platforms meaning that personal data could not be totally protected and data mining would continue”* (QD2B r857); *“ultimately all the data needs to flow upstream, so the ISP of the local network can pull the same tricks as current ISPs. Replacing twitter/Facebook/google is nontrivial and probably not something that these networks could accomplish, especially given the network effects at play in the first two”* (QD2B r1327).

Finally, it is interesting to discuss the comments of a few respondents involved in CNs initiatives. They explain that, even though they have been around for a long time, **CNs lack “adequate promotion to create broad-based awareness”** (QD2B r292). **Gaining and maintaining people’s interest** in a CN initiative and giving it scale was another challenge recognized by others involved in CNs: *“Making the community grow is REALLY difficult. People here are not concerned about technology ownership nor digital rights nor privacy. The only appeal to join the network is to have a cheap or free alternative to a commercial ISP”* (QD2B r1651 original emphasis).

Respondents involved in CNs add that *“regulatory bodies need to increase their support for these movements—make it easier for them to start up and operate”* (QD2B r292). For instance, a response refers to access to radio frequencies for nonprofits and local initiatives, the potential for abuse by dominant commercial operators in interconnection and access rights (QD2B r445). A few respondents mention that they would like to have **more information about such initiatives** before they were to commit to anything, and some raise specific questions about ownership and management of the network, and control of personal data (e.g., QD2B r388). Some question the likelihood of regulation taking into account the needs and benefits of CNs given that, for them, policy deliberations are taking place behind closed doors, national regulators are captured by big commercial interests and, generally speaking, the philosophy of telecommunications/ Internet policy prioritizes commercial endeavors and profit and so by default is against such community or nonprofit ventures (e.g., QD2B r593 and r1112). *“[T]here is a very strong lobby in favor of corporate services (Google, FB, Twitter, Microsoft) even from local government/universities etc. forcing people to accept their services. Also the community based projects are struggling against restrictive laws, regulations and reforms or unjust economical help provided to monopolistic companies”* (QD2B r899).

In summary, respondents consider favorably the advantages potentially offered by CNs, such as affordable Internet connection, closing the digital divide, enhancing social cohesion, strengthening community ties and associate them with democratic participation and involvement in the running of the network, promotion of digital rights and gaming of technical expertise. At the same time, they acknowledge challenges, such as scale, resources, community spirit, motives, but also the opposition from established market players and the risks that community initiatives can be subjected to local power dynamics. Finally, they pose the need for positive regulation and publicity to promote the agenda of CNs.

2.7 Demographics

As explained in D5.2, the last section (section E) of the survey contains demographic questions to create a profile of the user. Questions QE1-QE5 inquire about age, gender, educational attainment, and occupational classification. QE6 asks about country of residence. Question QE7 asks about the place the respondent resides (e.g. urban, rural etc.). QE8 asks whether the respondent has participated in local and social activities and organizations. The graphs that provide the breakdown of the 1000 respondents according to the above questions can be found in [Section E of the Survey](#) on netCommons web site.

An element that is interesting and worth mentioning is the breakdown of respondents by country. The numbers are:

- 282 respondents from the UK
- 101 respondents from the US
- 98 respondents from France
- 83 respondents from Germany
- 75 respondents from Italy
- 51 respondents from Greece
- 31 respondents from Canada
- 20 respondents from Spain
- 18 respondents from Switzerland
- A large number of countries with 10 or more but less than 20 respondents, including Australia, Argentina, Brazil, Austria, Slovenia, Sweden
- An even larger number of countries with less than 10 respondents, including Algeria, Angola, Tanzania, Thailand, Zimbabwe

3 Interpretation of results

The scale and variety of answers that we have received provide useful input for interpretation. One common lens of analyzing the qualitative results (comments) is to recognize the contradictions inherent in the Internet and the ways of using it.

Privacy issues are considered important by a significant majority of respondents. The intricate ways in which privacy is violated has been acknowledged and documented in quite a few of the responses. Yet, on the issue of enhancing one's privacy, there is a certain degree of ambivalence. While it is the case that many of the respondents have resorted to a number of different steps to protect their privacy, there is a significant share who are not willing to consider changing their practices, either due to limited knowledge of alternatives, or because of being used to engaging with the Internet and services in certain ways.

On the large topic of monopolies, many respondents recognize the ways in which Facebook limits user choices, acts as an information gatekeeper and presents a selective view of reality through the prioritization of certain sources of information and content. They do express serious concerns about the opacity in which user data is handled, shared, communicated and sold and the commercial and personal ramifications of these practices. They do understand the ideological dimensions of FB practices and the need for more regulation. However, they also stress that regulation might be difficult, if not impossible, while many are also unclear as to whether they would be prepared to change their practices towards a more privacy protecting platform. On the other hand, several participants have already done so and have made clear that alternatives do exist.

The engagement with Google has also demonstrated similar tensions. The selectivity and non-transparency of the algorithms together with the expansion of the company in horizontal and vertical ways have raised serious concerns. The question of alternatives has featured quite prominently in the responses, albeit with the underlying assumption of the necessity and superiority of the Google search services for many. Ultimately, the balance of using Google and seeking alternatives remains unresolved and the dynamic might change in the forthcoming years. The following quote perhaps summarizes the tensions inherent in Google as we know it today and the associated ambivalence of the users:

“Google is far too big and has its tentacles in too many contexts. It probably knows more about me than I know about myself. Google and I have a very long relationship and I have experienced benefits from that relationship that so far have exceeded the drawbacks. I am concerned, but not enough to sever the cord . . . which I am not sure is possible” (QC12B r1084).

When it comes to newspaper content, contradictions are again visible. The funding of quality journalism is necessary for sustainability and reliable and accurate information provision. At the same time, charges for content generate social divides and introduce an overall philosophy of commercialization of content which is exploited by larger companies at the expense of smaller ones.

The consideration of CNs as an alternative way of providing Internet access independent from the incumbent telcos, and possibly generate local services and contents of different nature from the commercial ones that emanates from the large corporations has also exposed certain contradictions on the part of the respondents. Many have been favorable, but hesitant to invest in personal resources. Others have been skeptical as to the efficacy of CNs in providing some alternative state of affairs. Yet others have demonstrated a deeper ambivalence towards the idea of local organization, local sharing and local existence, finding it susceptible to exploitation by local power dynamics and moving away from idealizing it.

There has certainly been no consensus among respondents on the above important issues about the character of the Internet and its alternatives. The survey results, though not representative of the entire population, have

exposed such contradictions even in the sample collected, which we consider more informed on the Internet dynamics and on the possibilities offered by technology to find alternatives. Thus it is now clearer that the availability of alternatives is not enough, but more information and education is required to create viable alternatives to the existing situation.

4 Conclusions

This deliverable presents the analysis of the results of the online Alternative Internet survey about concerns associated with Internet usage. It is a continuation of D5.2 (Boucas et al. [Mar. 2017](#)), which explained the design of the survey, and D5.3 (Boucas et al. [Jun. 2017](#)) which discussed its implementation. It contains a summary and detailed interpretation of the survey data obtained.

The goal of the survey has been to target competent and frequent Internet users who, though not representative of the Internet user population, would be knowledgeable and experienced enough to provide us rich material in the open questions and thus useful input for the promotion of the CNs agenda (as described in D5.2 and D5.3). For the purposes of the analysis, we drew on the 1000 completed questionnaires, leaving out the additional 1244 incomplete ones.

The analysis presented has focused on the material provided in the open questions regarding in particular privacy and data control, monopolies of information provision, Internet governance and electronic democracy, and thinking around CNs, while the quantitative questions, considered less interesting have been collected on a [dedicated section of netCommons web site](#). The responses to the open questions express the perceptions, attitudes and sense-making of the chosen public of Internet users with regard to the existing Internet but also, and more significantly, with regard to potential alternatives where concerns and problems are identified, exploring in particular the potential future of CNs, their purpose and sustainability. The analysis presented is qualitative and interpretive and is expected to be useful for CNs but also national and European policy-makers and regulators.

Regarding **privacy and data control**, respondents have expressed strong concerns about the monopolistic power of a handful of commercial companies that rely on harvesting personal data using extensive tracking and profiling practices, and the use of data for commercial but also political benefit. They have demonstrated frustration about the lack of alternatives and the inability to use a service unless one surrenders personal data. In response to these concerns, respondents indicate what steps they have taken, including the use of anonymization and encryption tools, which overall they find cumbersome and not necessarily effective.

Equally, regarding **monopolies of information provision**, the responses to the questions on Facebook and Google reveal strong concerns about their ad-driven business model which relies on personal data, their increasing market power and intrusiveness, the potentially severe adverse effects for citizenship, democracy and the public sphere. At the same time, even if a few responses mention alternatives to these dominant platforms, there are doubts about whether one can stop using them totally.

Regarding **Internet governance and electronic democracy**, the open question on subscriptions to news content reveal contradictions, the most notable being that between the funding of (quality and credible) journalism (and content generally) on the one hand and the potential for exclusion and implications for democracy on the other. In terms of alternatives, respondents suggest market structure and organizational models (e.g., new news ventures and non-profit news provision, including community, media; and various funding methods such as state subsidies and public service media, micro-payments, donations, crow-funding etc.), as well as behavioral interventions (e.g., regulation for free and independent press).

Finally, the survey reveals strong support for **alternatives** (Section D), even though understandings for alternatives vary from increasing market competition, noncommercial arrangements, decentralization of infrastructure and power, less surveillance and less expropriation of work. Overall, respondents perceive alternatives as favorable to choice, allowing personal involvement and experimentation, which, in turn, link to sustainability. With respect to CNs, in particular, respondents acknowledge challenges (e.g., scale, resources, community spirit, motives, opposition from established market players); yet, they see CNs as offering various advantages such as affordable Internet connection, closing the digital divide, enhancing social cohesion, strengthening community

ties. They associate these with democratic participation and involvement in the running of the network, promotion of digital rights and gaining technical expertise. The need for greater awareness and more information about CNs has been emphasized.

Turning to the term “community”, some respondents explain the term is neither progressive nor benign by default. Some warn that community initiatives can end up reinforcing local power structures, rather than empowering more citizens, and question whether such initiatives can address privacy issues.

Finally, some respondents equate CNs merely with Internet connectivity and are unsure whether CNs can provide alternatives to existing powerful services and platforms. Here, some caution is expressed that local content can reinforce closure and exclusion; others see the local focus as an advantage, or regard global and local services as complementary.

The themes of this deliverable (perceptions and attitudes towards the existing Internet but also towards potential alternatives and in particular CNs), are some of the main themes of the netCommons project. At a more specific level, this Deliverable complements D2.1 (Fuchs et al. [June 2016](#)) and D2.2 (Fuchs et al. [Jan. 2017](#)) on sustainability. These deliverables address not only the issue of sustainability of CNs but also the issue of a sustainable information society from a theoretical point of view, as well as the European telecommunications landscape from a policy perspective. The survey work and this final deliverable build on that work by exposing the contradictions of the Internet in its current form and pointing clearly to its sustainability issues according to the premises of the work in D2.1 and D2.2. In doing so, it also informs the rest of the work in WP5 on alternative Internet’s social analysis. Specifically, it feeds Task 5.2 and D5.5 currently under preparation on the rights to the hybrid city: these rights include access and connectivity, but also protection of personal data, transparency in the mechanisms and mediators of Internet engagement, as well democratic participation in shaping one’s communication needs. It also serves as input to WP4, specifically as a contribution to Task 4.2 on the (forthcoming) ethical and policy guidelines for a more participatory and democratic Internet. It does so by providing a plurality of views of a large number of experienced Internet users on issues such as: access, availability and affordability of information resources (material level); education and relevant skills (cognitive level); information structures (power and governance level) and information practices (behavioral level). For example, the concern of users about lack of transparency of the practices of Facebook and Google can be an input to ethical guidelines related to transparency and objectivity of information. In a similar way, the concerns about closed and paid for content can inform guidelines on information openness, accessibility and affordability. Likewise, the calls for greater regulation of monopoly power can serve as a useful dimension in information ethics from a pluralism and diversity perspective; whilst the alternative practices (including consideration and use of CNs) that users engage with can inform the concept of a more active ‘information citizenship’ as an ethical guidelines at the level of practice. These issues taken together can lead to the generation, in Task 4.2 and D4.4, of a set of ethical guidelines related to Internet philosophy, organization, governance and practice that will be closer to the original democratic, open and participatory character of the Internet.

Last but not least, the results of the survey, specifically the support for services which can be offered in a decentralized as opposed to the current centralized manner, can support the adoption in some communities of the applications developed in WP3, in particular Cloudy and PeerStreamer (local community cloud and video services respectively).

4.1 Contribution to netCommons goals

By drawing on the attitudes of a number of users on key themes of the political economy of the Internet, the work carried out in Task 5.4 has contributed to achieving netCommons goals in the following ways.

- It has demonstrated and recorded the perils of centralization and lack of user control in the current Internet model. Such perils range from the lack of objective and diverse information, to sharing of user data for commercial and political purposes in non-transparent ways, and to influencing society towards certain ways of engaging with information and ICTs.

- It has increased awareness of the possibilities of alternative ways to engage with the Internet and of the principles that are important in imagining and building a more participatory, less centralized and less commercial Internet. Some of these aspects are largely imaginary, not least as far as the level of awareness of the relevant tools are concerned, while quite a few of them are already in existence and use.
- It will provide useful input to CNs, through the attitudes of Internet users both towards the standard Internet and regarding the prospects of community networks as alternatives. By invoking limitations of community networks and by linking these to their own ambivalence as to whether they would use them, respondents have touched upon sensitive sustainability issues, which are at the core of the netCommons project overall.

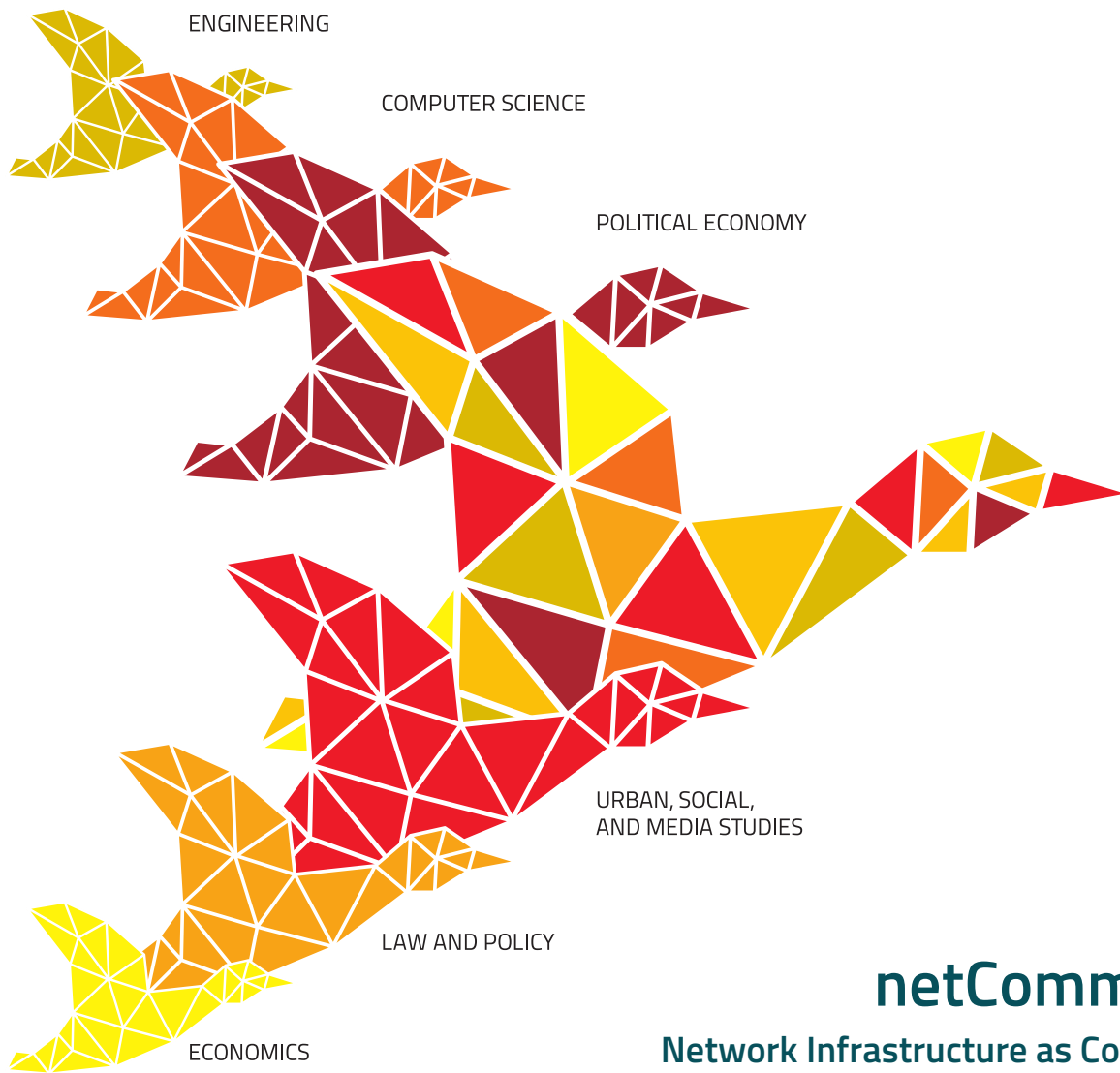
4.2 Expected impact of the work

Besides contributing to achieving the scientific, societal and policy goals of netCommons, D5.4 on the Alternative Internet Survey can have a broader impact in the following ways.

- It is unique within the netCommons project, in that it ranges beyond the idea and practice of CNs as alternative telecommunications support and infrastructure, and exposes a number of issues in the character of the standard Internet. By raising and recording the relevant concerns, the deliverable provides useful input to policy-makers whose remit is within information access and use as a social right.
- Such input can be seen as radical, in that it aspires to contribute to the discussion about changing the present Information and Communication Technologies (ICT) arrangements in Europe and beyond, through its aim to record views on the importance of communications, information and knowledge, and through collecting attitudes and practices that are more empowering with respect to the control and management of fundamental information assets.

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netCommons
Network Infrastructure as Commons

Alternative Internet's Political Economy Survey Analysis and Interpretation of Data

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