DEMOCRATIC CONTROL OVER BIG TECH BUSINESS MODELS
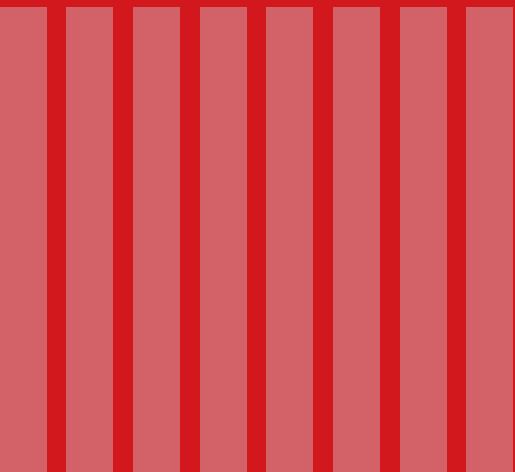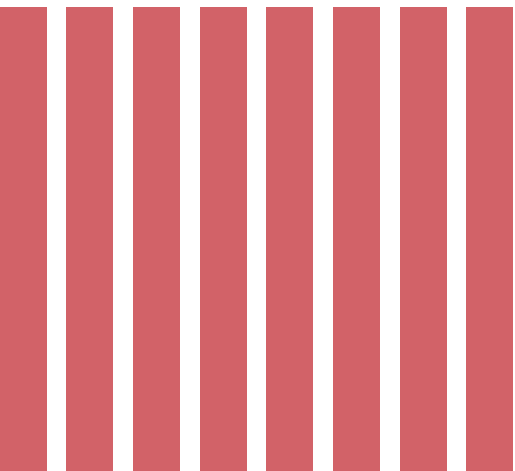
- Interim report from the Danish government's expert group on big tech -

FOREWORD

BY CHAIRMAN OF THE EXPERT GROUP
PROFESSOR, MIKKEL FLYVERBOM

Digital development is driven by a small circle of companies that have managed in a short time to take on a dominant role in our society. These companies, often collectively called 'big tech', provide search engines, social media and trading platforms to the global population and their services have in many ways become indispensable parts of our everyday personal and working lives. Big tech is changing and challenging the way we access information, communicate and form communities, and our lives are playing out digitally to an increasing extent in part as a result of their influence.

There is nothing new about technologies changing our society, and the key question is not whether we want technological changes to occur or not. In a democratic welfare state such as Denmark, it is most important to focus on the drivers of digital development, the conditions under which development is taking place and the societal consequences.

The expert group has chosen to focus on the business models of big tech as its first topic because many of the problems in today's digital world can be traced back to those business models. These include problems related to democratic dialogue, geopolitics, competition and consumer issues and the well-being of children and young people.

The problems come in many different forms, including extensive, commercial data harvesting, manipulative and addictive design practices and inadequate control and accountability with regard to what children and young people are exposed to on social media and digital platforms. These problems are partly due to the commercial focus of big tech on rapid growth and dominance, as well as a lack of regulation and inadequate enforcement of rules. To solve these problems, we need to mobilise our democratic institutions and develop a number of structural and regulatory initiatives to address big tech business models. These initiatives are not only about implementing and enforcing EU legislation that is already in force or set to take effect, but are also to a large extent about countries like Denmark setting clear boundaries for the behaviour of big tech. This requires decisive regulation of big tech as well as restrictions and other measures to limit the negative consequences of data harvesting, algorithmic influencing and addictive design for users.

The expert group's recommendations point out ways in which we can impose requirements on big tech to meet the standards of accountability, regulation and democratic control that we expect of businesses in other industries. This includes ensuring that harmful products and problematic design practices are regulated by our democratic institutions in the same way as in other sectors, where we impose requirements such as close oversight, risk assessments and product declarations, as well as effective age restrictions for certain products.

It is crucial that we carefully consider what role big tech should play in the development of society and what frameworks should be applied to it, not least to its business models. The steps presented here by the expert group will allow our society to set boundaries, shape digital development and make it possible for us as citizens to make free choices. This interim report and the expert group in general can help with these considerations, and we look forward to this important joint work.

INTRODUCTION

THE EXPERT GROUP'S UNDERSTANDING OF BIG TECH

There is no clear definition of big tech. The expert group has deliberately not based its work on a fixed definition, largely to avoid focusing on specific named companies. Instead, the group has based its work on a looser working definition: technology companies that, by rolling out their platforms and services, have acquired a special and in some cases dominant status in key areas of society and therefore have an effect on the basic rights of users. These are companies that base their business model on collecting vast amounts of data for their own use and for the use of third parties, which may use the data for advertising purposes.

Based on the challenges identified, the expert group makes 13 recommendations in this interim report regarding big tech business models. The interim report is the first publication from the expert group, which will issue recommendations to the Danish government on an ongoing basis. The interim report reflects the fact that the expert group is working in a constantly developing field. The expert group therefore reserves the right to revisit one or more topics if there are relevant developments in those fields. Similarly, the idea behind the interim report is not to identify every single challenge conclusively, nor to produce an exhaustive list of recommendations.

The interim report is structured around the following topics related to the recommendations:

1. Restrictions on and clearer choices regarding data harvesting by big tech

2. Restriction on big tech's use of retention mechanisms

3. More effective control of big tech's ability to influence and predict behaviour

4. The responsibillity of big tech with regard to access by children and young people to platforms with age-inapproapriate content must be tightened.

The purpose of the recommendations is to address the challenges entailed by big tech's business models. The proposed solutions therefore come in different forms. Some initiatives can be handled nationally, but the vast majority need to be pursued through alliances with other EU Member States and proposals to the European Commission.

Many of the challenges associated with big tech are international by nature. At the same time, consumer and data legislation is to a large extent harmonised at EU level. This calls for common solutions in Europe and cooperation with like-minded countries. Accordingly, the expert group takes the view that it is at EU level where there is the greatest potential for creating effective change, but that there are many measures that need to be strengthened nationally and internationally.

Consequently, the expert group proposes a special focus on ensuring that the Digital Services Act (DSA) will have the desired effect and be enforced, and a focus on how to build on it further. The DSA is a European regulatory framework for digital services that aims to ensure that the basic rights of all users of digital services are protected, with a particular focus on ensuring that children and young people are granted adequate protection when accessing big tech services.

During its work on big tech business models, the expert group has been in broad agreement about the very large scale of the issues. In the expert group there has been total agreement about how the work on further regulation, enforcement and strengthened institutions needs to dramatically move up a gear in order to handle problems on this scale.

BIG TECH BUSINESS MODELS

Many big tech services appear to be free or very low-cost, but the business model behind them is often based on collecting data from users, including personal data such as information about users' behavioural patterns. This allows big tech companies to predict and influence user behaviour to a significant extent. Prediction is also part of what big tech offers to advertisers in order to target content. There are also examples of data collected by big tech being sold to third parties[1].

The data collected is therefore highly valuable to big tech companies, and plays a crucial part in their profit generation. The data-driven business model which is the basis for profit for many big tech companies is thus built on attracting the time, attention and data of users.

For the vast majority of users, it is impossible to keep track of what data is collected, what is voluntarily and involuntarily disclosed to big tech companies and how that data is used to influence opinions, behaviour and consumption through targeted advertising, content etc.

The concerns surrounding social media relate not only to the collection of user data, but also relate to the impact exposure to certain content may have on citizens while they are using the services. Social media can be exploited by groups of citizens and governments alike to influence public opinion[2] not just domestically, but also in other countries[3].

As well as influencing the digital life and behaviour of individuals, big tech business models can also have consequences for society as a whole. If the collected data is sold to certain parties, it can be misused by malicious or criminal actors or foreign powers for monitoring, campaigns for interference and the spread of misinformation and disinformation, which can ultimately disturb public discourse and trust in society's democratic institutions[4]. In this context, big tech has been criticised for leading users to misinformation and conspiracy theories through their recommendation algorithms[5] and for being too restrained when it comes to removing misinformation[6].

THE EXPERT GROUP'S UNDERSTANDING OF BUSINESS MODELS

The largest tech companies may have multiple and different business models depending on whether they provide search engines, social media, trading platforms etc. They may also employ a combination of different business models. The expert group does not focus on just one type of business model, but considers the collection and use of data as the cornerstone of a number of big tech business models.

SUMMARY OF RECOMMENDATIONS FROM THE EXPERT GROUP ON BIG TECH

1

RESTRICTION ON AND CLEARER CHOICES REGARDING DATA HARVESTING BY BIG TECH

1.1
Changing the age limit for consent to the processing of personal data from 13 to 16 years

1.2
Enforcement of data protection rules against big tech

1.3
Option to decline data harvesting

2

RESTRICTION ON BIG TECH'S USE OF RETENTION MECHANISMS

2.1
Retention mechanisms switched off by default

2.2
Time limit for use of social media by children

2.3
Neutrality button and focus on eliminating harmful design practices

3

MORE EFFECTIVE CONTROL OF BIG TECH'S ABILITY TO PREDICT AND INFLUENCE BEHAVIOUR

3.1
Ban on profiling based on personal data

3.2
Requirements for the development of algorithms

3.3
Specification of the responsibility of big tech for their algorithms

3.4
Access to big tech data for researchers and the media

4

TIGHTENING THE RESPONSIBILITY OF BIG TECH WITH REGARD TO ACCESS BY CHILDREN AND YOUNG PEOPLE TO PLATFORMS WITH AGE-INAPPROPRIATE CONTENT

4.1
Requirement for effective age verification

4.2
Further development of the digital single market with the focus on children and young people

4.3
Introduction of an age-appropiate code of conduct in line with data protection rules

RECOMMENDATIONS ON BIG TECH BUSINESS MODELS

Big tech is already subject to regulation in a number of areas, including data protection, cookies and marketing, and there are new EU requirements on the way. In order for regulation to have the desired effect, it is, however, essential that the various rules are enforced effectively.

Most big tech companies in Europe are registered in Ireland. This means that, in many cases, oversight of big tech needs to be handled by the Irish authorities. Danish and other European enforcement authorities, including data protection and consumer authorities, therefore

have to ask the Irish enforcement authorities to enforce the rules against big tech companies even if it is Danish or European users who are being harmed.

Partly in order to address this imbalance, the European Commission has made provisions in a number of EU sets of rules for centralised oversight of big tech to be placed with the European Commission. The expert group takes a positive view of this and believes that it will have a positive effect when it comes to big tech business models because the European Commission have more resources for enforcement. It will

also ensure a uniform interpretation of the rules and uniform case handling, which in general will make the enforcement more effective, as only one case will need to be brought to affect all EU citizens. This applies to rules that have already been adopted, such as the Digital Services Act (DSA) and Digital Markets Act (DMA), as well as to the Artificial Intelligence Act, which has not yet been adopted.

The expert group takes a positive view of the European Commission's efforts to put big tech business models on the agenda. The expert group considers the enforcement of existing and future rules to be crucial to solving challenges related to big tech, and broadly recommends prioritising the possibilities for oversight and enforcement of existing regulations

while seeking out new ways to strengthen oversight of big tech.

This could involve giving the European Commission a bigger role in terms of oversight and enforcement of the rules against big tech in the areas of data protection and consumer rights. It could also involve strengthening the oversight of the data protection and consumer protection rules at the national level, including prioritising the focus on big tech in the oversight by the authorities and developing new enforcement tools.

RESTRICTION ON AND CLEARER CHOICES REGARDING DATA

THE EXPERT GROUP'S RECOMMENDATIONS ON DATA HARVESTING BY BIG TECH

The expert group makes the following recommendations:
1.1 Changing the age limit for consent to the processing of personal data from 13 to 16 years
1.2 Enforcement of data protection rules against big tech
1.3 Option to decline data harvesting

The expert group thus recommends that the Danish government should initiate a discussion about whether the rules sufficiently take into account users' needs and rights and, if not, how the rules can be adapted.

The rules on both data protection and cookies require consent before data can be collected. However, lengthy and complex terms and conditions can make it unclear to users what they are actually consenting to.

It would therefore be helpful to rethink the rules on consent to give users a better insight into what they are actually consenting to when they accept declarations of consent.

Recent years have seen examples of decisions by European and national supervisory authorities in this area. For example, the Irish Data Protection Commission fined Instagram 405 million euros

and ruled that companies that process personal data on minors must exercise particular care because children are given special protection under the GDPR[7]. There is also a need to examine whether the rules for data minimisation are being complied with, which includes looking at whether existing big tech data harvesting practices are lawful under the GDPR. Effective enforcement of the existing rules is crucial, as many of the practices employed may in principle already be unlawful[8]. The expert group would like to see the enforcement of these rules strengthened so that compliance with the rules can be ensured.

Changing the age limit for consent to the processing of personal data from 13 to 16 years

The expert group recommends raising the age limit for consent to the processing of personal data in connection with the provision of information society services from 13 to 16 years, to allow more minors to benefit from the special protection granted by the GDPR. By raising the age limit, big tech will have to obtain consent from parents to process a child's personal data until the child is 16 years old. Big tech companies such as Facebook, Instagram, YouTube and Snapchat have an age limit for consent in Denmark of 13 years, the lowest possible limit under the GDPR, allows individual Member States to set the limit between 13 and 16 years. The 13-year limit is aligned with the 1996 Children's Online Privacy Protection Act (COPPA) in the United States, where legislators are now attempting to raise the limit to 16 years[9]. A number of EU countries, such as Germany, the Netherlands and Ireland, have set a limit of 16 years, and the EU also recommends a limit of 16 years. The expert group's recommendation should be viewed in connection with its recommendation 4.1 on age verification, since effective age verification is also crucial for ensuring that minors do not have access to services that they are not old enough to use.

Enforcement of data protection rules against big tech companies

The expert group recommends focusing more on the enforcement of data protection rules against big tech, at both the European and the national level. It is therefore recommended to work at EU level to make the European Commission the enforcing authority when it comes to against

big tech and the GDPR. This oversight model is already in place in the DSA and DMA. The advantage of placing oversight in the hands of the European Commission is that enforcement against big tech companies would not need to depend on the supervisory authorities of the individual Member States where the companies are established. The expert group also recommends working to ensure that the European Commission has robust and effective supervision with sufficient resources and expertise to carry out the oversight. This applies with respect both to rules that have already been adopted, such as the DMA and DSA, and to potential future enforcement tasks for the Commission.

Furthermore, the expert group notes that it remains important to maintain a robust Danish oversight of the data protection rules on issues relating to big tech.

Option to decline data harvesting

The expert group recommends setting requirements for users to be able to access and use big tech services without the collection of data intended for profiling and tracking. This must apply regardless of whether the

service is accessed via an app or a browser or by any other means, and users must be able to decline data harvesting easily and transparently. At present it is only possible to use big tech services if users accept terms of use or cookies, thereby consenting to the collection and use of their data. It is also difficult for users to understand what they are consenting to. As a user of social media, for example, it should be possible to avoid tracking.

RESTRICTION ON BIG TECH'S USE OF RETENTION MECHANISMS

THE EXPERT GROUP'S RECOMMENDATIONS ON THE USE OF RETENTION MECHANISMS BY BIG TECH

The expert group makes the following recommendations:
2.1 Retention mechanisms switched off by default
2.2 Notification of time spent using social media
2.3 Neutrality button and focus on eliminating harmful design practices

The expert group thus recommends that the Danish government should work at the European level to make it possible for users to make an active decision on retention mechanisms and to put in place initiatives that can make users aware of the time they spend on social media.

The business model of the services offered by certain big tech companies is based on keeping users on their services for as long as possible and to encourage them to interact with the service as much as possible.

Big tech retains users by using design practices that in some cases can be manipulative or misleading, lead to users spending excessive amounts of time in front of the screen or encourage users to return to the platform. Examples of such design

practices include functions such as autoplay, infinite scroll, streaks, notifications and reminders to users that they are 'missing out'[10]. In addition to this, content on big tech services is optimised to ensure that users interact with the service as much as possible, which can lead to provocative, emotional and misleading content gaining a prominent position on the service[11]. This part is dealt with separately in the section on more effective control of big tech's ability to predict and influence behaviour.

Retention mechanisms can have negative consequences for users by being manipulative as well as addictive[12]. Children and young people in particular may need to be protected against these mechanisms in order to strengthen their autonomy and self-determination. There are several studies showing that there may be a link between young people with low self-esteem and the use of social media such as Instagram[13,14]. At the same time, users are not clearly made aware of the mechanisms and the consequences of their use of time, such as how it supports the business models of big tech.

Research and knowledge, along with focus on how the use of social media affects well-being are still in development. Until there is sufficient knowledge in this area, the expert group suggests applying a precautionary principle, meaning that users should be protected against retention mechanisms to the greatest possible extent.

The expert group would therefore like to impose requirements on big tech design practices and to give users a real option to accept or reject retention mechanisms. Finally, users must be better informed of the retention mechanisms they are being exposed to, and children and young people must be protected from them to the greatest possible extent. This could, for example, be done by banning specific practices that are considered manipulative or misleading in marketing legislation.

Retention mechanisms swithed off by default

The expert group recommends imposing requirements on selected digital services such as social media to have functions such as autoplay, notifications, algorithmic 'feed views' etc. switched off by default, with the option of switching them on later. For users to understand the individual functions, they should be explained in easily understandable language, and requirements could be imposed so users have to make an active choice on each individual retention mechanism to avoid users being able to make a 'blind' blanket choice about multiple functions in a single declaration of consent. Requirements should also be imposed for users to be able to change their choices easily for each individual function on an ongoing basis.

Notification of time spent using social media

New figures from 2023 show that Danish children aged 9–14, in spite of the 13-year age limit, spend 1 hour and 18 minutes per day on TikTok and 1 hour and 36 minutes per day on YouTube[15], while young Danes aged 16–17

spend 5 hours and 28 minutes per day on social media[16]. Although the findings from research into the effects of social media on well-being do not provide a clear picture, there are studies that indicate a link between social media and poor well-being[17].

With this in mind, the expert group recommends introducing requirements for time notifications on selected digital platforms such as social media, so that a time notification appears after a specified daily usage period. What this means in practice is that users will for example get a notification after they have been using a service for two hours. The recommendation is an attempt to address the large amount of time spent by Danish children and young people on services, with issues arising from big tech's business models in mind as mentioned above. The recommendation should not stand on its own as a safeguard against excessive use of time, but could work in combination with other tools such as effective age verification (recommendation 4.1) and having retention mechanisms switched off by default (recommendation 2.1) to enable users to have better control over their use of time. More invasive forms of time limitation, such as enforcing a break when the specified amount of time is exceeded, may also be considered.

Neutrality button and efforts against harmful design practices

The expert group recommends that the Danish government work for the introduction of EU requirements on a 'neutrality button' on big tech's services. The button would allow users to reset all viewing preferences based on the platform's algorithms and the data that the platform has collected on the user. Instead, the user would see posts/news/content presented in chronological order. This could also mean that new friends, connections, events or groups are not recommended to the user based on recommendations from the platform.

The expert group also recommends making proposals to the European Commission regarding aggressive and misleading online design practices that retain users and deprive them of autonomy on social media and in gaming. This could include banning specific aggressive design practices. Furthermore, the expert group recommends that the Danish government should actively provide input on addictive design practices and big tech business models for the European Commission's evaluation of the Unfair Commercial Practices Directive.

In particular, it is recommended that the wording of the Directive should be adjusted to address the fact that big tech business models often rely on the collection of data from users and not on payments from users.

MORE EFFECTIVE CONTROL OF BIG TECH'S ABILITY TO PREDICT AND INFLUENCE BEHAVIOUR

THE EXPERT GROUP'S RECOMMENDATIONS ON BIG TECH'S ABILITY TO PREDICT AND INFLUENCE BEHAVIOUR

The expert group makes the following recommendations:
3.1 Ban on profiling based on personal data
3.2 Requirements for the development of algorithms
3.3 Specification of the responsibility of big tech companies for their algorithms
3.4 Access to big tech data for researchers and the media

The expert group thus recommends that the Danish government should work at the European level on initiatives that increase control over the use of algorithms and personalisation in content recommendations.

Big tech services have a number of built-in functions that can influence both norms and communities, and are generally used both to predict and to influence behaviour. Although the research is not conclusive[18], a great number of studies indicate that social media has contributed to political polarisation in society[19,20,21].

The algorithmic filtering and personalisation of content can mean that different content is shown to different users. Moreover, content that is designed to be provocative or emotionally charged generates more rapid interactions from users and can therefore spread rapidly[22]. This can increase fragmentation and polarisation among the population[23]. There are also examples of recommendation mechanisms directing users to more extreme content. For example, users searching for content about health and fitness have been recommended content and communities relating to self-harm and anorexia[24,25,26].

Third parties may also exploit the ability to influence user behaviour. There have been multiple examples of foreign states or criminals attempting to use big tech's services to influence elections, the public discourse and trust in democratic institutions by spreading misinformation and disinformation[27]. Recent developments in the field of generative artificial intelligence and chatbots are only accelerating this development even more, and underscore the need to move forward on these issues.

It is therefore necessary to confront the negative effects of algorithmic control of information. The expert group therefore recommends working at the European level on initiatives that increase control over the use of algorithms and personalisation in content recommendations.

Ban on profiling based on personal data

The expert group recommends introducing a blanket ban on the automatic processing (profiling) of personal data on big tech services. The DSA introduces a ban on using targeted advertising based on the automatic processing (profiling) of minors' personal data. Accordingly, the expert group's recommendation is to broaden the requirements in the DSA to introduce a blanket ban on targeted advertising based on profiling of personal data regardless of age group. This has previously been attempted by a coalition of Members of the European Parliament and organisations[28].

Requirements for the development of algorithms

The expert group recommends setting requirements for an ex ante impact assessment and monitoring of big tech algorithms. This may be achieved by setting requirements for security in the development and use of artificial intelligence by big tech in relation to the data quality in order to avoid bias associated with changes to existing algorithms or the launch of new ones. This could help to create transparency and strengthen oversight of new algorithms that are launched, but could also help to increase the security of new algorithms before they are launched.

Specification of the responsibility of big tech companies for their algorithms

The expert group recommends evaluating at EU level the reasons for freedom from responsibility for big tech, when it comes to unlawful content on their own services with regard to content that has been promoted by algorithmic recommendation mechanisms. Similarly, broadening the responsibilities of big tech for content promoted by the platform via an algorithm should be explored with the advantages and disadvantages taken into account. The use of algorithmic recommendation systems requires that big tech is made more accountable for the (negative) effect its algorithms have on the basic rights of users.

Access to big tech data for researchers and the media

The expert group recommends broadening access to big tech data for researchers and the media (e.g. recognised research institutions and publishing media organisations registered with the Danish Press Council). Under the DSA, researchers have access to information to be used for research with the intention of identifying and understanding systemic risks. It is recommended that this should be broadened so that researchers gain greater access to big tech data, and not just to those aspects that big tech itself deems to pose systemic risks. In addition, publishing media organisations should have access to their own data held by big tech companies. To support access to data for researchers and the media, requirements should also be placed on the platforms in terms of ensuring guidance and simple, effective and user-friendly processes when researchers and the media request data from big tech companies. Other rights holders should have easy access to data relating to the content they own, free of charge.

TIGHTENING THE RESPONSIBILITY OF BIG TECH WITH REGARD TO ACCESS BY CHILDREN AND YOUNG PEOPLE TO PLATFORMS WITH AGE-INAPPROPRIATE CONTENT

THE EXPERT GROUP'S RECOMMENDATIONS ON THE RESPONSIBILITY OF BIG TECH WITH REGARD TO ACCESS BY CHILDREN AND YOUNG PEOPLE TO PLATFORMS WITH AGE-INAPPROPRIATE CONTENT

The expert group makes the following recommendations:
4.1 Requirement for effective age verification
4.2 Further development of the digital single market with the focus on children and young people
4.3 Introduction of an age-appropiate code of conduct in line with data protection rules

The expert group thus recommends that the Danish government should work towards effective age verification solutions that provide effective protection for children and young people from age-inappropriate content.

Children and young people are living an increasing proportion of their lives online. Danish studies from 2018 and 2022 have shown that in-person interaction with other young people for 11–15-year-olds has been falling markedly and steadily over the past 30 years, while online contact has been rising [29,30].

Some forms of content on platforms can be either unlawful or directly harmful to children, but children can still access them[31].

This may affect well-being, loneliness, body image, the formation of identity and culture etc. Many of the most popular social media platforms have an age limit of 13 for creating a user account with full access to content. However, the actual number of children under the age of 13 on social media is unknown, as it is up to the companies themselves to decide how to verify a user's age. YouTube, for example, despite having an official age limit of

13[32], is used by 70% of Danish children aged 7–12 according to research by Gallup[33].

In principle, the expert group wants big tech services to be safe for children. However, the services should also have space for content that is suitable for adults, as one of the major challenges is that children and adults share the same digital space. Solutions which ensure the protection of children while also respecting the freedom of expression and information of children and adults are therefore necessary. Effective age verification mechanisms are therefore needed.

Accordingly, the expect group would like it to be determined which solutions for protecting children from age-inappropriate content will be effective. The expert group is aware that the Danish government has set in motion a white paper with initiatives that could protect children's use of the internet, as well as a commission to protect quality of life for children and young people, which focuses in part on social media and digital life, and in which digital behaviour is likely to be better addressed. The expert group consequently does not deal with digital education in this interim report because digital education only make sense against the backdrop of the other, more structural and institutional regulatory measures proposed by the expert group.

Requirement for effective age verification

The expert group recommends developing effective age verification tools so that children and young people can only access services with age-appropriate content. This will make it possible to confirm whether users are adults before giving them access to services that are designed in a particular way or that contain content that is not suitable for children. For example, this could be done by setting requirements at the European level for age verification when downloading

apps and games via app stores or similar. Specifically, this would mean that, when downloading an app, users would have to use an approved age verification tool such as the upcoming common European wallet solution eIDAS before being able to download it. Another solution could be to impose a requirement, inspired by France and Germany, for the platforms to introduce age verification when logging in that is considered effective by the authorities, and to have platforms blocked by telecommunications services if the providers do not meet the age verification requirements. For example, the German authorities have approved Yoti, which provides facial recognition tools and uses artificial intelligence to estimate age. Yoti is currently used by the biggest pornography sites and is also being rolled out by Meta on its services[34]. By introducing age verification, society is sending a signal in the same way as it did with age restrictions on alcohol and tobacco. It will of course be possible to circumvent age verification using VPN connections or by parents giving children access, but this is the same issue we have with children and young people being able to access alcohol and tobacco even though it is illegal. The recommendation is consistent with a similar recommendation from the Nordic Think Tank for Tech and Democracy[35].

Further development of the digital single market with a focus on children and young people

The expert group recommends a proposal to the European Commission to evaluate the DSA with the aim of further developing the digital single market. Several of the recommendations in this interim report are suitable suggestions for the further development of the digital single market, but this recommendation focuses on how the digital single market could be better suited to children and young people. The following suggestions are recommended:

1. More stringent requirements for identification and the handling of systemic risks to basic rights with a focus on independent and external oversight;

2. Requirements making it as easy to report content as it currently is to 'like' and 'share' content;

3. Deactivating e.g. the ability to share content that has been reported and is being processed by big tech;

4. Focusing on enforcing rapid and effective removal of unlawful content, particularly if the content relates to child pornography or other unlawful content involving children, for example.

In connection with this, it is also important for the requirements of the DSA for rapid action on reports to be fulfilled in practice, particularly where children and young people are involved.

Introduction of an age-appropiate code of conduct in line with data protection rules

The expert group recommends introducing a code of conduct (Age Appropriate Design Code) at either the national or international level, linked to the existing rules in the GDPR and inspired by the United Kingdom, California and the Netherlands. The UK code of conduct includes 15 standards for online services that process data from British children, regardless of where the service provider is established. The code emphasises that the providers of the services must comply with the code of conduct even if children are not a target group or users of the service. It is sufficient that children are likely to have access to the service[36]. The code must demand a level of 'high privacy' as a default setting, give more control to parents and more information to the child and protect against the use of misleading design patterns, so-called 'dark patterns', that push children to provide unnecessary personal data or reduce or deactivate their privacy protections.
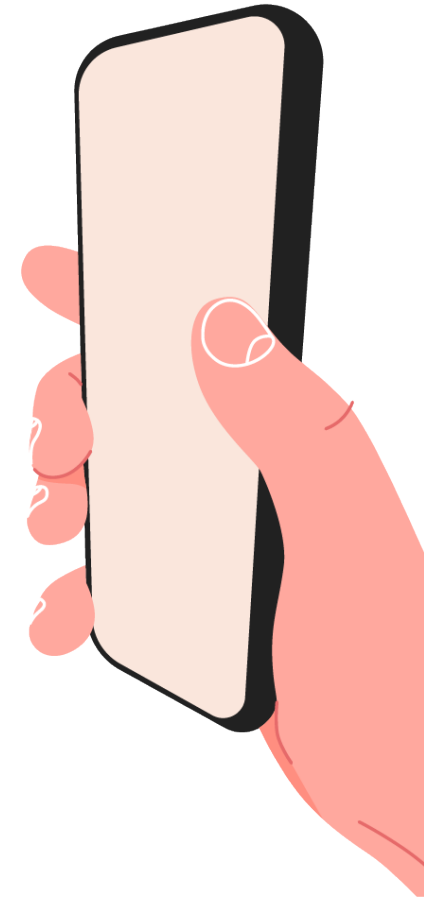
COMPOSITION OF THE EXPERT GROUP

At the time of submitting this interim report, the expert group was composed as follows:

- Mikkel Flyverbom (chair), *Copenhagen Business School*
- Lars Thinggaard, *Tech for Life*
- Lone Sunesen, *TV MIDT/VEST*
- Mie Oehlenschläger, *Tech & Childhood*
- Miriam Michaelsen, *Media Council for Children and Young People*
- Pernille Tranberg, *DataEthics*
- Rebecca Adler-Nissen, *University of Copenhagen*
- Rikke Frank Jørgensen, *Danish Institute for Human Rights*
- Sune Lehmann, *Technical University of Denmark*
- Thomas Bolander, *Technical University of Denmark*
- Peter Svarre, *digital strategist, lecturer and author*

The Danish Ministry of Industry, Business and Financial Affairs has constituted the expert group's secretariat in cooperation with other relevant ministries, including the Ministry of Foreign Affairs, the Ministry of Justice, the Ministry of Culture and the Ministry of Digital Government and Gender Equality.

THE EXPERT GROUP'S MANDATE

International big tech companies have a huge influence on society, the economy and the everyday lives of ordinary people, both nationally and internationally. The Danish government has set a series of initiatives in motion, but there will still be a need for political development and new measures.

In view of this, and as part of its August 2021 initiative 'Big tech: fairer competition and better consumer protection', the Danish government has set up an exter-nal expert group. The purpose of the expert group is to support the Danish government's work to deal with issues related to the big tech agenda from a national and international perspective.

Background

The consequences of the development and influence of big tech can be felt in many different areas, including taxes, culture and competition. What the big tech companies have in common is that their entry into the Danish market was accompanied by a high demand for their services from both businesses and the public.

However, the presence and development of big tech companies entails a series of challenges, many of which are of a cross-border nature.

Big tech usually operates with a business model that is based on collecting as much data about its users as possible. In practice, it is impossible for users to know what data they have voluntarily and involuntarily provided to big tech or how that data will be used for resale, marketing etc.

Many of the most widespread online platforms are owned by international big tech, and make up the forum for communication and public debate today. This gi-ves big tech huge influence over the rules of play in public debate and democratic discourse.

Similarly, there are also challen-ges linked to the spreading of unlawful and harmful content, unfair competitive conditions, taxation, poor digital habits among children and young people, opaque algorithms and polarising mechanisms. Moreover, big tech also poses challenges for fair labour market conditions, including employee rights in particular.

Finally, big tech is playing an increasing role in foreign and security policy in the context of the continued technological rivalry between the superpowers of the United States and China, and it will therefore be impor-tant to balance critical dialogue against perspectives on oppor-tunities for knowledge sharing, innovation and cooperation.

Mission statement

In general, the expert group aims to serve as a forum for discussing structural issues where big tech business models are challenging our society, culture, economy, well-being etc. By extension, the Danish government will be able to ask the expert group to take a position on and assess specific matters and dilemmas within the tech agenda.

Specifically, the expert group will:

- Discuss the challenges of the big tech business model and its impact on Danish society, including on democratic discourse;

- Come up with proposals, highlighting po-tential positive and negative consequences, for how to strengthen democratic control over big tech, focusing particularly on its business model;

- Identify other issues for Danish society in light of the structural challenges resulting from the big tech business model, and classify them and their consequences for Danish society;

- Put forward proposals and specific re-commendations to deal with these issues, considering whether they should be resolved at the national or EU level;

- Bring in and discuss international expe-rience in this work to ensure responsible technological development that supports Denmark's democracy, prosperity and security in a globally connected world.

Individual ministers will be able to present requests for the expert group to be involved on specific issues and dilemmas within their ministry's scope.

In its work, the expert group must ensure the ongoing involvement of the Danish Data Ethics Council.

Organisation

The expert group's chair and members are personally appoin-ted by the Minister for Industry, Business and Financial Affairs. The expert group is expected to consist of 12 members with expertise and experience related to the big tech agenda.
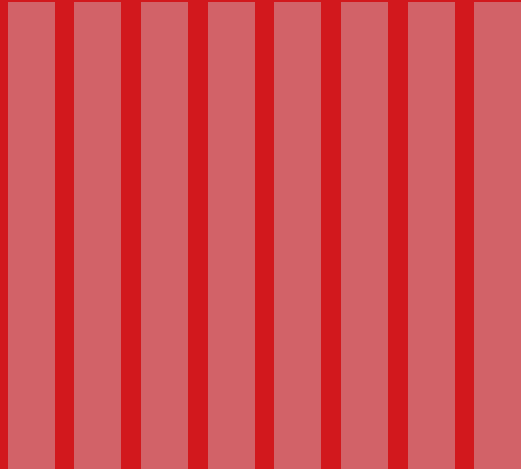
The expert group is initially con-stituted for a two-year period.

The secretariat of the expert group will be constituted by the Danish Ministry of Industry, Business and Financial Affairs.

BIBLIOGRAPHY

1. 2020-01-14 Out Of Control final-v2 (forbruk-erradet.no)

2. https://s3-ap-southeast-2.amazonaws.com/ad-aspi/2020-09/TikTok%20and%20We-Chat.pdf?7BNJWaoHImPVE_6KKcBP1JRD-5fRnAVTZ=

3. https://gking.harvard.edu/files/gking/files/50c.pdf

4. https://www.fbi.gov/wanted/cyber/russian-interference-in-2016-u-s-elections

5. https://www.newsguardtech.com/misinformation-monitor/march-2022/

6. https://foreignpolicy.com/2022/08/22/information-warfare-in-russias-war-in-ukraine/

7. Det irske datatilsyn udsteder bøde til Instagram på 405 millioner euro (datatilsynet.dk)

8. https://edpb.europa.eu/system/files/2023-02/edpb_03-2022_guidelines_on_deceptive_design_patterns_in_social_media_platform_interfaces_v2_en_0.pdf

9. https://www.reuters.com/legal/transactional/us-senate-panel-approves-update-childrens-online-privacy-bill-2022-07-27/

10. Sherman LE, Hernandez LM, Greenfield PM, Dapretto M. What the brain 'Likes': neural correlates of providing feedback on social media. Soc Cogn Affect Neurosci. 2018 Sep 4;13(7):699-707.

11. Facebook prioritized 'angry' emoji reaction posts in news feeds - The Washington Post

12. Anna Lembke (2021): Dopamine Nation-Finding Balance in the Age of Indulgence, Headline Book Publishing

13. Digitale mediers betydning for børn og unges trivsel - Børns Vilkår (bornsvilkar.dk)

14. Sociale medier giver lavt selvværd og fører til spiseforstyrrelser (phuset.dk)

15. https://www.dr.dk/static/documents/2023/01/24/medieudviklingen2022_a50af9a5.pdf

16. Danske unge bruger dagligt over to timer på TikTok - Dansk Markedsføring (markedsforing.dk)

17. Braghieri et al, 2022, Social media and Mental Health, American Economic Review, 112(11):3660-3693

18. Social_media_echo_chambers_and_political_polarization.pdf (cambridge.org)

19. Frenemies (cambridge.org)

20. The Welfare Effects of Social Media - American Economic Association (aeaweb.org)

21. A systematic review of worldwide causal and correlational evidence on digital media and democracy | Nature Human Behaviour

22. Facebook prioritized 'angry' emoji reaction posts in news feeds - The Washington Post

23. Sunstein, C.R. (2018). #republic. Divided democracy in the age of social media. Princeton University Press, s. 25, 71f.; Mehlsen, C. & Hendricks, V.F. (2019). LIKE. Shitstorme, fake news fear of missing out. What's not to like?. Center for Information og Boblestudier (CIBS), Københavns Universitet, s. 167,

24. https://cfdp.dk/cases/indsigt/det-vrede-internet-vrede-unge-maend/

25. https://www.theguardian.com/technology/2022/dec/15/tiktok-self-harm-study-results-every-parents-nightmare

26. https://www.dazeddigital.com/life-culture/article/57833/1/demystifying-algorithm-social-media-tiktok-eating-disorder-self-harm-twitter

27. 'Troll factory' spreading Russian pro-war lies online, says UK | Ukraine | The Guardian

28. Tracking-Free Ads Coalition (tracking-freeads.eu)

29. Møhl, Bo & Lotte Rubæk (2020): Kapitel 6 af FAQ om Selvskade. Hans Reitzels Forlag

30. Børn og unge i Danmark – Velfærd og trivsel 2022 (vive.dk)

31. "The effects of pornography on children and young people", rapport af the Australian Institute of Family Studies (AIFS)

32. YouTube Servicevilkår: https://kids.youtube.com/t/terms

33. https://bornsvilkar.dk/familiensdigitalehverdag/youtube/

34. Meta udtaler, at Yoti på Instagram har forhindret 96 procent af teenager i at ændre deres fødselsdato. . https://www.biometricupdate.com/202303/instagram-takes-yoti-facial-age-estimation-to-europe-australia-canada-japan

35. En nordisk tilgang (kum.dk)

36. Introduction to the Age appropriate design code | ICO

Regeringens ekspertgruppe

TECH-GIGANTER