Investors Attitudes to Online Harms – Risks, Opportunities, and Emerging Trends

Contents

Ofcom Foreword	3
Executive summary	3
Online market segmentation	3
The appeal of investing in online services	4
Investors' assessment of the risks of online platforms and attitudes towards those risks	4
Investors' influence on online platforms' decisions	4
Attitudes towards regulation among investors	4
Introduction	5
Research approach	5
Research questions and interview structure	5
Interviews and respondent characteristics	7
Challenges and limitations	8
Online market segmentation	8
There is no agreement on how to segment online services and platforms	8
The appeal of investing in online services	9
The decarbonisation agenda has increased the appeal of technology investments	9
Scalability, low investment costs, and growth potential all make online services very attractive	10
The appeal of investment in online platforms seems to be eroding due to user churn and redu engagement	
Technology investors are searching for rare opportunities for differentiation—and a focus on safety can be one of them	12
Investors are concerned about the financial and reputational impact of regulation	13
Investors' assessment of the risks of online platforms and attitudes towards them	13
Most investors avoided online service types perceived as being risky, regardless of legality	14
Vulnerable users, especially children, are high on the list of online safety concerns	15
Some investors highlighted the risks of states, political groups and organised crime	15
Opinions are mixed, but overall investors are more aware of the risks of advertising business models	16
Approaches to managing the risk of online harms differed significantly across interviews	17
The quality of leadership and governance was a common factor in selecting investments	18
There is a need for ways of measuring the social part of ESG in online platforms	19
Examples of good practice around online safety exist, but are rare	19

Investors are concerned about online platforms having the power to decide what discourse is acceptable	. 20
Investors' influence on online platforms' decisions	
Dual-class share structures deprive investors of influence on most online platforms	21
Attitudes to regulation among investors	21
Investors are supportive of regulation, despite not knowing the details of the OSB	21
Many investors crave regulatory certainty and alignment	22
Investors wanted the regulation to recognise that moderating content is a complex challenge	23
Acknowledgements	23
Glossary of investment terms	24

Ofcom Foreword

According to the Online Safety Bill, Ofcom will be required to conduct a sectoral risk assessment to identify and assess the risk of certain harms to individuals presented by search services and User-to-User (U2U) services¹.

The risk assessment will consider different risk factors that can lead to harm to individuals relating to a service's user base, functionalities, business model and governance/systems/processes.

Investors are one of the actors who may consider the risk of online harms and potentially influence the approach of services they may invest in. Therefore, we commissioned this report from ACE² to better understand the factors affecting investment decisions, including user safety considerations. This will help inform our understanding of risks and how investors may influence the risk of online harms.

While this research contains many useful insights, it is qualitative in nature and represents the views of only a small number of interviewees and should not therefore be treated as wholly representative of the investor community. We will recognise the limitations of this research while considering its findings alongside the wide range of research that we are assembling to help understand the risks of online harms and how they are mitigated. We also consider that the insights provided by the research will inform our online safety work more broadly.

Executive summary

In preparation for taking on its responsibility as the designated regulator tasked with implementing the Online Safety Bill, Ofcom has commissioned this research to understand how investors make decisions around investment in online platforms. It also aims to understand investors' approach to dealing with the key issues around online safety and their attitudes to the upcoming Bill and related regulation.

Based on 12 interviews with respondents involved in technology investment, the research focused on exploring five key topics, namely:

- How investors segment the online services market
- What makes investment in online services attractive and why
- Investors' perceptions of and attitudes towards risk (with regards to online services)
- The degree of influence investors have on online platforms, and how they exercise that influence
- Investors' attitudes towards the regulation of online services

Online market segmentation

With regards to questions on segmenting the market, there was little agreement between respondents on how to segment the market into sub-sectors, with many different approaches that had little in common. Two interviewees also said that segmentation was of no value in helping them understand their investments and choose future investments.

¹ Please see definitions of 'User to User services' and 'Search service' in the Online Safety Bill

² Homeland Security Group (ACE Service)

The appeal of investing in online services

A perennial feature of online technology that makes it attractive is its scalability, low investment costs, and growth potential, as well as its ability to benefit from network effects, and expand quickly with very low marginal costs. The shift to more ethical, low-carbon and sustainable investments has benefited the online services sector. Investors looking to avoid assets associated with high-carbon emissions have also increased the proportion of online services in their portfolios. This is because the sector has historically had a good financial performance with a relatively low carbon footprint.

The views of some interviewees suggests that investors' confidence in the growth potential of technology investments, particularly online services maybe decreasing, in relative terms. Stricter regulation and greater awareness of risks around the industry's social performance and user safety are making online services less compelling as investments. This is especially true of investment in online social media platforms, with a few respondents going as far as saying that they have divested from or are now more reluctant to invest in. There was also a sense in some of the interviews that good investment opportunities in online services are becoming rarer. This does not mean that these services are no longer attractive to investors, but rather that investors are becoming more cautious and judicious with their investments in this sector.

Investors' assessment of the risks of online platforms and attitudes towards those risks

The research also showed a variety of opinions when it came to understanding the risks of online harms. Many agreed that stricter regulation is coming to key markets like the UK, the EU, the USA and China, and that there will be a cost to that regulation for the services.

A number of other themes emerged from the interviews when discussing specific online harms. The majority of responses prioritised safety for children and other vulnerable users. A smaller subset was very concerned with risks from organised campaigns by states, politically motivated groups and organised crime. Some also showcased some examples of good practice on online safety.

Although advertising business models have been the lifeblood of many online platforms, investors were ambivalent about the role of advertising models, due to their higher perceived risk. As a result, some investors are expecting them to become less important. Many felt that advertising still has an important place, and that it has potential to grow in some areas, with some respondents highlighting product and brand placement in virtual spaces like the metaverse or gaming environments. There was also a strong view that relying on advertising is financially risky, as its value is often dependent on the use of personal data or high levels of user engagement, both of which are not certain to continue in the long term. The same factors – the need for access to personal data and high user engagement and attention on the platform – can in some cases cause platforms to be less careful about online risks to users, according to investors.

Investors' influence on online platforms' decisions

Respondents felt that it is very challenging for investors to influence online platforms' approach to tackling online harms. One factor in this difficulty is that the dual-class share structures that are prevalent in the sector deprive investors of influence on most online platforms, since most of them are likely to have lower class shares that come with limited voting rights.

Attitudes towards regulation among investors

In terms of their attitude to regulation, the majority were supportive in principle and felt that regulation was necessary and potentially positive for the industry. However, there were concerns around ensuring regulatory certainty, and alignment between major jurisdictions beyond the UK.

There was also a desire for the regulation to explicitly recognize that online safety is a difficult problem and that harms can still occur, even if a platform has done its best to prevent them.

Introduction

The UK's Online Safety Bill (OSB), which is currently passing through the legislative process, has, at the time of writing, reached committee stage in the House of Lords. The Bill aims to establish a new regulatory regime for online safety in the UK and the Government announced that it plans to appoint Ofcom as the regulator for online safety under the provisions of the OSB.

As the legislation has not yet been finalised, some of its detail may change. However, the OSB will require firms subject to the regulation to assess the risks of illegal content that may appear on their service, ranging from online fraud to terrorist content. Services that are likely to be accessed by children will also have to do a risk assessment looking at content which is harmful to children. Online services will also have duties to mitigate these risks.

In anticipation of the Bill being passed, Ofcom is preparing for its role as the future regulator for online safety. This will include Ofcom assessing risks of online harms and producing codes of practice and guidance to help online services understand and meet the requirements of the regulation.

The Bill also gives Ofcom investigation and enforcement powers, including the ability to impose significant fines where platforms are not meeting their duties, and in the most serious cases of non-compliance, requesting a court order to impose business disruption measures.

As part of its preparation to take on the role of regulator on online safety, Ofcom has engaged extensively across industry, civil society, public bodies, and independent experts, as well as policy makers and other regulators around the world. Since investors' decisions on whether or not to invest in online platforms can influence these platforms, these decisions may also have an impact on the risks of online harms. This research was undertaken to better understand how investors affect the decisions of online services companies, including their approach to risk and explore investors' views on online safety risks.

Research approach

As part of Ofcom's continued preparations for the OSB coming into force, ACE was commissioned to conduct a research exercise examining investors' views on online platforms as investments, in terms of their appeal and risks. The research involved asking specific questions around assessing and managing the risks related to illegal and harmful content on online platforms including user-to-user services and search services. It also explored investors' views on regulation, and their knowledge and awareness of the OSB.

Between December 2022 and March 2023, ACE approached a range of potential respondents involved in investment in online services and platforms. The research aimed to understand investors' attitudes to investing in online services. Those approached for a response covered a wider spectrum of investment professionals including venture capitalists (VCs) and other early-stage investors, growth and private equity firms, large institutional investors, as well as advisors and subject matter experts.

Research questions and interview structure

The interviews followed a semi-structured approach with the intention of providing the right balance between keeping the interviews focused and ensuring consistency. Having open questions rather

than a structured question and answer approach also allowed the exploration of wider topics and gave respondents the opportunity to provide richer and more detailed input.

Broadly, the questions covered the following topics:

- What sets online services apart from other investments, both the positive (what makes them more attractive) and the negative (risks), and more broadly what attracts investors to the sector.
- How investors might segment the online services sector (for example, by type of technology solution, monetization approach or business model).
- Factors that investors take into consideration when deciding to invest in an online platform or service.
- Investors' assessment of the main social and governance risks facing search providers, social media, and similar online platforms (user-to-user and search companies), and how they factor these risks into their investment decisions.
- Investors' knowledge of and views on legislation in the UK targeting online harms and its impact on companies in this space.

However, discussions were not limited to these topics, and respondents had some freedom in introducing other points that they found relevant to the topic of tackling online harms.

Interviews and respondent characteristics

12 interviews were completed across a range of investment backgrounds and organisations. Codes are used for each respondent to ensure their privacy, but a brief description of each respondent's role and background is outlined in the table below.

Respondent code	Description	Organisation type
А	The lead on responsible investment approaches at a large pension scheme, with extensive experience in the field of ESG.	Pension fund
В	Provides advice and research on investments in the technology sector, focused on Europe, Middle East, and Africa technology investments.	Advisory
С	Manages the support and outreach programme for technology start-ups at an innovation accelerator.	Start-up accelerator
D	A senior director at a growth equity firm with a long history of investing in early-stage consumer technology companies, including online marketplaces and listings.	Growth equity and VC
E	A technology investor focused on consumer businesses, with prior experience as an executive in major tech companies.	Private equity and early stage
F	A Partner and co-founder at a VC specialised in European technology start- ups. Formerly founded successful technology companies, worked as a senior executive in the tech sector, and directed VC investment funds.	VC and early stage
G	The lead investor in a small and specialised VC fund focusing on supporting media-focused start-ups, including a challenger social media platform. Has additional expertise in media and advertising.	VC and early stage
Н	The lead investment decision maker in a specialist VC fund, focused on impact.	VC and early stage
l	Socially responsible investment lead at a medium-sized pension fund. Active in engaging technology platforms on online harms, with influence on the decision to divest from poor performers in terms of tackling harms.	Pension fund
J	Senior client manager at a large, diversified fund management firm.	Fund manager
К	Engagement manager working on behalf of the fund managers' clients to engage with investee companies ESG issues, with a background in research and ESG investment.	Fund manager
L	Equity strategist at a long-term savings and investment provider, with significant experience in the fund management sector. Currently increasingly focused on ESG.	Fund manager

In terms of the sample's breakdown by investment stage, three of the respondents were primarily focused on investing in start-ups and very early-stage companies as part of specialist VC funds. A

further respondent (D), while not formally a VC, also focused on growth equity (so investing at a slightly later stage, and with shorter return timelines). A further respondent (E) was primarily a private equity investor for his firm but stated that he was also a very active angel investor in a personal capacity, investing relatively small amounts at seed or pre-seed stage. All were technology specialists, and some were further specialised in consumer technology or new media.

Two respondents (A and I) work for large asset owners, namely pension funds, and have roles that focused on the funds' ethical and socially responsible investment policies and are in the process of exploring ways to assess and manage the social and governance risks involved in investing in consumer technology platforms.

Challenges and limitations

The research relies on interviews with investors, and it is possible that many investors do not wish to reveal commercially sensitive information, or anything that can put them at a disadvantage against their competitors. Additionally, there is a risk that responses may be influenced by interviewees' desire to influence the regulation to benefit their commercial interests, for example, by making their investments more attractive. Finally, as the research focused on a very specialist area—those actively involved in technology investments, and interactions with online platforms - it meant that the pool of candidates to approach for interviews was quite small.

Qualitative research based on longer and more in-depth interviews is very well-suited to examining complex and emerging topics and exploring multiple narratives. It does not, however, aim to produce representative results, like those produced from quantitative methods with random sampling. This means that the research does not claim to represent the views of all investors and is open to potential biases. For example, if certain types of investors are less likely to respond, then their views would not be adequately reflected in the research. Additionally, the research may attract those who already have an interest in or strong opinions on online safety risks, resulting in their views dominating the findings.

Another key challenge affecting this research was the difficulty in recruiting investors in VC funds – a group that has historically invested heavily in social media. Throughout this research, many VCs were contacted, many more than other target groups, but the response rate remained very low, this is despite some introductions from other interviewees.

Online market segmentation

One of the key objectives of the research was to examine how investors segment the market for online services (including user-to-user and search). When asked how they segment the market for online services, responses were very diverse.

There is no agreement on how to segment online services and platforms

Approaches to segmenting the market were extremely varied across interviews. Several respondents (particularly two of the more experienced investors, E and F) were of a strong view that many categorisations are artificial and unhelpful for their work.

"We don't think about things in terms of what segment they are in. I don't know how terribly useful that is. Because we're just trying to figure out a very simple thing: can this business become a big business? That's all we're trying to figure out, you know...everything so specialised. Everything is so different...the idea of compartmentalising things isn't terribly useful" (F).

"Look, I mean all segmentations are, by definition, artificial. So I would say more that there's broad themes that we invest against. But they are not, if you're familiar with the term 'MECE' (mutually exclusive, completely exhaustive). We have a...sometimes religious debate about what's a tech business versus a traditional consumer business. And the answer is there is no good answer, right. But internally I think we make a little bit of a distinction about whether we think the sources of value creation are more driven by the underlying brand or product itself, or if they're more differentiated by some kind of technology edge or even business model innovation... I just think these are actually very arbitrary distinctions and [reflect] internal structural issues" (E).

The appeal of investing in online services

The online services sector continues to attract many investors of varying strategies and specialisms. However, the sector also poses unique risks and engagement challenges to investors. This is true of many technologies but is especially true of the large online platforms that touch on consumers' daily lives and have vast stores of user data and content.

Although it suffered from boom-and-bust cycles (and may be in the midst of one now), online services have historically performed well for investors over the long term. However, the research aimed to provide a richer and more up-to-date account of the decision making around investment in online services. This involved asking investors questions around what attracts them to investing in the sector and why, as well as their views of the concerns and risks of those investments. This section details the main findings from this line of enquiry, examining both the positive perceptions and emerging challenges of investment in online services.

Broadly, the interviews show that the decarbonisation agenda has increased the appeal of technology investments in general, including online services. Respondents also agreed that the scalability, low investment costs and capital requirements of online services are still attractive features of that sector. Most also agreed that the growth potential of online services is still appealing.

Discussions with the investor community also exposed some challenges that have reduced the appeal of investment in online platforms somewhat. User churn seems to be increasing and the level of user engagement with the platforms has declined. Also, many respondents felt that good opportunities for differentiation have become rarer (though the focus on safety can be one of them). There was also a concern about the impact of increasing regulation of online platforms and content, and how the trend of stricter regulation would affect platforms' finances and reputation.

The decarbonisation agenda has increased the appeal of technology investments

The growth in environmental, social and governance (ESG) and climate-friendly investing has increased the appeal of technology, especially for institutional investors and fund managers. This is because institutional investors are looking to construct portfolios with a good aggregate ESG rating, and that aggregate rating is very strongly influenced by the environmental performance of the individual holdings within the portfolio, especially lower carbon emissions.

This situation strongly favours the inclusion of technology investments in portfolios and investment funds, as they can have very low levels of carbon emissions per unit of revenue. This view was reflected in 8 of the 12 interviews.

However, this also means that technology companies are less concerned with improving their social performance, since their environmental performance is relatively very good. Investors felt that ESG ratings tend to be dominated by environmental factors, so social factors such as online harms do not affect them significantly. This has also meant that engaging with technology companies, including online services, on improving their social performance has been more difficult, as they have less of an incentive to prioritize online harms to attract large institutional investors.

The development of ESG metrics to more adequately reflect the risks of online harms and other social factors may have two effects that are relevant to this research. Firstly, they create a more balanced assessment of online services' ESG credentials giving investors stronger tools to justify the inclusion of platforms with better social performance in their portfolios. They can also use these ratings as a way of putting pressure on the platforms to improve their social performance as part of their engagement efforts.

Environmental and social issues were discussed by VCs and other early-stage investors. However, ESG ratings were much less relevant for this group of investors (although one did mention this issue). This is because start-ups are often too small to have a formal ESG rating. Additionally, early-stage investors have fewer investments and a much closer relationship with their investees, and therefore do not require third-party ratings.

"Responsible investors are applying carbon-related filters...looking to decarbonise the portfolio...then if you're screening out certain high carbon companies, the ones that rise to the top, are automatically, almost, [some kind of] ICT communication services [company]. Most responsible investors probably have a heavy overweighting of big tech. And you know, the negative side of that is obvious" (I).

"They [online platforms] do feature quite heavily...because they've performed well recently and they're good growth investments, so they have featured well and we have them...in all of our listed equity funds...from the climate perspective, if we launch a fund that's supposed to be Paris aligned or it's a climate transition fund, then you're getting quite a lot of money for your [carbon] footprint with these types of consumer tech companies compared with other traditional sectors. I think that will only increase, but we've seen that there have been stewardship challenges with these types of organisations because they're so massive, they don't necessarily respond well to[engagement]" (A).

"...especially as they try and transition to more ESG-type funds, those online platforms because they look really good on the environmental side. In the ESG ratings, they're quite low carbon for the amount of profit...they're outsized investments for a lot of the more...ethical funds" (G).

Scalability, low investment costs, and growth potential all make online services very attractive

The technology sector – including online services - has historically been very appealing for investors as it promises rapid and scalable growth, low marginal costs for adding new users or services, and relatively low up-front capital requirements.

One respondent (J), representing a growth-focused fund manager, articulated the attraction to technology investment in the past very clearly, in terms of low capital requirements and potential for rapid growth and scalability. This respondent stated that what they seek in their investment choices is companies that have the potential to still be growing rapidly in 10 years, and hold those

investments for long periods of time, and this is much more likely with an online business that can scale and expand quickly. This contrasts with businesses that rely on physical locations or production—such as a retailer—which could only expand to a new location after acquiring land for a new site and building and fitting out a store. The interview mentions specific examples of investments the fund made, including an e-commerce site and a media streaming company.

Another respondent (D) echoed similar points around investments in online platforms potentially benefiting from network effects and having very low marginal costs. Discussing online marketplaces and online classified ad platforms (which rely on user generated content), the respondent emphasized that a key benefit of their business model is that they can derive sustainable competitive advantage from the persistence of network effects—whereby users come to the platform because it already has a critical mass of users that they want to interact with. Another reason that these online businesses are attractive is that the content on the platform, for example the pictures and descriptions of listed items (in the case of an online marketplace) are created by users with no cost to the platform itself. This makes them potentially very profitable investments and attractive to investors since user generated content can enable faster growth at a lower level of capital investment.

Specifically for user-to-user services, investors continue to be very attracted to the possibility of network effects and positive feedback generating sustainable user growth. One specific example is a major online game creation platform, which one investor highlighted as a recent example of this process.

"One thing that we've noticed in terms of [the game creation platform] is...so it's user generated content which starts off with just games being created by individuals, it's a kind of virtuous cycle that pulls more users in, which creates more user generated content, which actually then brings in developers to create more complex games" (Respondent J).

One VC argued that while investing in online services can be risky investments from a financial perspective, they have the advantage that success and failure are easy to measure and readily apparent. Both investors and founders can experiment with a business model or a venture, but if they are going to fail, they can fail quickly, without consuming capital. This means that the financial and market risks for founders and investors can be understood and quantified quickly.

"...The beauty of venture capital in Europe today, it's sufficiently sophisticated that, in the early stages of a company's life, it clearly isn't working, then most entrepreneurs, and indeed VC's, recognise that, which wasn't the case 10 years ago. It wasn't the case when I was building companies. We would just grind on thinking we'd get there in the end and some did and some didn't. And therefore, you consumed your capital and your cost of failure was quite high. Now it's very low...You know the beauty of those kind of[online] businesses is you can find out relatively quickly. You know, you're not shipping physical stuff. You haven't got to manufacture anything...it's easily discoverable...online businesses. You just get your stuff out there and you can iterate very quickly, you know, you can see that something is working and other things are not" (F)

The appeal of investment in online platforms seems to be eroding due to user churn and reduced engagement

Despite these positive drivers, the market challenges facing online platforms mean that they are becoming less attractive investments. Factors such as increased user churn and reduced platform engagement weaken platforms' business model. Additionally, VC funding for online platforms and

related start-ups has declined recently, possibly due the perceived lack of opportunities in this space, and the worries about online safety. These trends are discussed in detail in the remainder of this section.

This does not mean that they have become unattractive as investments, but that investors have become more aware of the risks involved in investing in them and more sceptical about the robustness of their business models.

"...We've been pretty large significant investors and a lot of the tech platforms over the last decade, but it's in the past couple of years that we've probably had slightly less enthusiasm around them and been selling out of them...losing a little bit of conviction in their competitive advantages" (J).

A group of investors (five responses) felt that recent developments in some of the major online social networks have shown that users can and will switch or leave platforms—essentially that network effects did not lock users into the platform as much as they have in the past. This has an impact on the cost of user acquisition and on churn and in turn affects the ability of the platforms to maintain their advertising revenue streams. While more frequent switching may lower the cost of user acquisition for new potential market entrants, that is likely to be counteracted by the effect of users switching multiple times, or platforms having to keep investing in attracting new users, rather than relying on users staying once they have joined the platform. Some investors are concerned that this situation means that the costs of keeping users engaged and on the platform will increase, and that they are less confident that existing users would continue to use the same platforms or maintain the same level of interaction with it. According to 4 respondents, online platform revenues are very sensitive to levels of churn and user engagement, and, for investors, this translates to a direct impact on the value of their investment in the long term.

"...especially for companies in the online services and software space, churn is one of the most important metrics the net retention rate is basically... for a consumer company I expect the retention rate above 80 to 85%. For Enterprise that sort of start to be in the 95 to 98 per cent, I think if it's lower than that it does become an issue for us because no matter how many users you're going to have, the market is limited, right. There's a limit to how many users you can keep winning if you're still bleeding users out" (B).

One respondent (C) pointed out that direct-to-consumer technology start-ups are finding it much harder to raise funds. They cite a statistic that only around 4% of Technology VC funding being available to consumer-focused start-ups, with VCs being more interested in funding less risky B2B businesses, partly as a result of much higher user acquisition costs. Another respondent (G), who is active in the VC space and invests in start-ups felt that their investment in online platforms is quite rare, and that most of their peers are unlikely to invest in new online social media platforms, due to difficulty in completely breaking the dominance of incumbents and attract users, despite that dominance eroding slightly.

Technology investors are searching for rare opportunities for differentiation—and a focus on safety can be one of them

The uniqueness of the technology, business model or proprietary data is something that many investors look for, especially early-stage investors. When asked about business models, three respondents (H, G, and B) emphasized that having something unique and difficult to replicate can be

a source of long-term competitive advantage, but this has become increasingly difficult to find in online services and social media.

Some of the ways of finding a unique proposition suggested by respondents in this difficult environment include looking for online services companies that are focusing on user safety or have an ethical or principled stance around interacting with users or serve a niche audience well (though that would limit its potential scale) or are trying to be more robust by having diversified income streams.

"It is hard for us to find something that is truly like unique in this space and that's one of the things we look at is the innovation or uniqueness of an investment and it has been quite difficult. But for us, what would make it attractive is diversified revenue streams. The second is 'are you tapping a unique like audience?' or 'what is the unique perspective that you have?'. Something you have that these other millions of media platforms don't have" (H).

"I think it's super, super hard to take on the digital giants...but there was a little kernel of hope. If other users feel the same way about this information and understand not just the harms which are commonly reported in the press but also, that there's a really good body of literature now talking about the toxicity of the behaviours that are driven on certain platforms. Then there was room for something like this [alternative social media] to coexist [with the large platforms], that's enough for us. The hope that it could coexist" (G).

Investors are concerned about the financial and reputational impact of regulation

Respondents expressed a desire to understand the impact of regulation on the sector. One way this trend is expressed is through investors subjecting investee companies to greater scrutiny around their preparations to deal with the risks of changing regulation, and their awareness of differences in regulation across borders.

From an investor perspective, any regulation that would put a value on such risks, for example by imposing a fine on a company, would attract their attention. As a result, there is growing concern among investors that a company that is reliant on large amounts of data to train its model could fall foul to regulation in some countries that ban large-scale harvesting of data. This means that a business model that was successful in one jurisdiction, might not be transferable to another jurisdiction.

A respondent representing a fund manager explained the direct connection between concerns around regulatory scrutiny, and the decision to divest from a major social media company. Referring to the senior managers of the company, the interviewee said:

"...when you're having to go up in, in front of Congress every couple of months, clearly the priorities of that business had to shift to placate whatever pressure they were getting from those authorities...well, what's our conviction in this company continuing to focus on interesting growth opportunities? That's part of the reason for selling it. It was incredibly good for five to 10 years and now is it too big and there's going to be regulation that comes in that clips its wings...they are, as a result, no longer a growth company that we're interested in" (JJ)

Investors' assessment of the risks of online platforms and attitudes towards them

This section covers another main objective of this research, namely investors' approach to understanding and managing the risks of investing in online platforms, and their assessment of these

risks. Respondents were asked how concerned they were with the risks of investing in online platforms; what they consider to be risky; and how they assess and evaluate those risks.

Most investors avoided online service types perceived as being risky, regardless of legality

The research shows that some business models (or sectors) that are seen as inherently risky to user safety were simply excluded as possible investments by the majority of respondents. Examples of such categories include:

- Online pornography (despite high profitability) explicitly stated by two of the VCs, as well as two of the institutional investors.
- Payment services two interviewees highlighted online and cryptocurrency payment services as risky, because as intermediaries they can end up facilitating transactions that investors don't want to be associated with.
- Anything with an overtly political motivation or that is using controversy to attract attention—partly because it's not seen as financially viable, and partly because of reputational risk.

Most of those interviewed (and all early-stage investors) argued that mainstream investors were simply not interested in investing in anything that could promote harms or damage their reputation as responsible investors. This consideration trumps cash flow, profitability, scalability, and innovation.

"Look at [online user-generated pornography site], no mainstream investor invests in it despite it generating hundreds of millions of EBITDA³ a year, look at what's happened with...[online adult content site], right? They've desperately been trying to pivot into a business that can be invested in. It's not just that mainstream investors can't invest in it, there's no exit for the entrepreneurs, they can't sell it to anybody" (E)

"There are businesses that I think are very clever at sort of sitting on the edge between mainstream acceptability and outrage. You know Reddit, I think has tried to walk that line. There is no question that outrage generates a lot of engagement...politically motivated businesses...I am saying that there are businesses that use outrage to generate attention to themselves, shock, you know, shocking brands. But these are a tiny minority, and they just they just scare off mainstream investors" (E).

Another example of services that investors avoided, were those social media platforms that had more permissive content policies. This is partly due to commercial reasons, but also linked to the reputational risks involved in being associated with the controversial content available on those platforms.

One specific example was a company that creates marketing stunts to sell products, one respondent decided to cancel an investment in it because of concerns that it would "cross a line" – again, despite good financials and a unique brand.

"We looked at an early stage, an unusual early-stage investment in a pretty exciting and very clever business. They basically did these stunts. They were almost like an art project...like each stunt would sell 10s of millions of dollars of products, but as an investment committee, we said

³ Earnings before Interest, Tax, Depreciation and Amortisation. A measure of the profitability/returns made by a business

to the partner look the problem is they're in the business of outrage to drive it to cheap attention, and someday they're going to cross the line...and during our diligence process, they crossed the line. So this is now un-investable for us. So we pulled our term sheet. Mainstream investors just...don't want controversy. They don't want outrage" (E).

All early-stage investors interviewed are increasingly concerned about their reputation and did not want to be associated with any controversial practices. Interestingly, this also extends beyond concerns about individual investments failing. Investors also felt that a reputation for investing in good companies is vital for their ability to raise capital, find partners and find investment opportunities. It also extends to a worry that founders would refuse to take capital from a VC associated with businesses with poor social responsibility and ethical standards. This point was expressed very strongly by one VC:

"...you'd be surprised that there's a very long list of things...that you cannot invest in. they try to blur the line occasionally, but this this very clear. This is cut and dry. There are no exceptions. You know we have to be very conscious that we're investing in technologies to make a better world, a better place, a more efficient world and a safer world. A world where there is equality in financial activity and there is equality in health. Except you know these are all the aspirational things that our companies are doing. So investing in companies that harm consumers is unthinkable" (F).

Vulnerable users, especially children, are high on the list of online safety concerns

There is substantial variability in respondents' views regarding the materiality of different types of online harms but almost all of those interviewed (11 out of 12), said that online harms in general are a factor in their investment decisions.

When discussing specific harms, the safety of vulnerable user groups, particularly children, was a very high priority; almost all respondents (10 out of 12) mentioned it.

"...one of our priorities is about obviously vulnerable users. So children...and others who for whatever reason are vulnerable, and unfortunately that doesn't narrow the scope because obviously that applied to pretty much all of, I mean it applies to all of the platforms" (I).

How this concern affected investment choices differed, with some saying that they simply would not invest in anything that could be risky for children, while others had specific engagement with online platforms to improve safety online or invested in companies that were working on improving safety for children.

"Do we think about it as parents of children? Absolutely. Do we think about it as investors, we actually backed a company, which has now been sold to [a games development company] some time ago. But why did we do a co-investment in that company? Because that was protecting kids being online. So we do think about this a lot and I think it's going to be something that our VC's will think about as they make investments" (F).

Some investors highlighted the risks of states, political groups and organised crime

Some investors (four respondents) were also concerned about actions by coordinated and organised groups manipulating social media content and compromising the safety of users or threatening political systems and interfering in election campaigns.

For those respondents, such risks are more serious in the long-term because these types of malicious actors, unlike individuals, are organized and well-resourced, as well as having very strong

motivation. They can therefore have a much higher level of sophistication in terms of how they promote illegal, harmful, or problematic content. Additionally, two respondents felt that these types of risks are much harder to flag using existing moderation and filtering approaches used by the platforms.

"...what I worry about the most as somebody who knows about the industry...is state actors, I actually think this is the most dangerous of all...I personally had experience with governments targeting me or my companies...you're dealing with massively resourced state actors. These are societal level issues. The second thing is highly politically motivated content that may be harmful...we can see that people who have a political interest in a certain outcome can be highly motivated, can be very clever, can often be very well-funded. And I think it's great that these platforms provide a form for political discourse, but it is very, very easy to skew that discourse. Just yesterday there was an excellent...piece written by one of the world's leading security researchers pointing out that generative AIs [can be] potential tools to engage in mass lobbying by special interests. They can in a few months mass dial, you know, legislatures, offices with what will seem like authentic grassroots interest" (E).

Opinions are mixed, but overall investors are more aware of the risks of advertising business models

Advertising has historically been the main source of revenue for most online platforms, including user to user and search services. At least one respondent (JJ) felt that there are still some opportunities to grow advertising revenues in the metaverse, especially around brand advertising, and that some platforms that traditionally relied on charging user for services (such as streaming or gaming platforms) are trying to diversify into advertising. However, the additional risks of advertising in the metaverse, in terms of online safety and the potential for reputational damage for brands have not been fully explored yet.

Despite the positive trends above, five respondents were concerned with the reliance of many companies in this space on advertising revenue, and what that entails in terms of reliance on user attention, clicks, and user targeting data. This includes the same respondent above (JJ) who also (along with respondent K) discussed the risk of losing access to sources of customer data, citing the example of Apple's introduction of much stricter app data transparency requirement, which then resulted in online platforms being cut-off from a key source of customer data. This resulted in their advertising becoming less targeted, and therefore less valuable, overnight.

Four interviewees also discussed the tension between trying to improve online safety and being reliant on attracting users' attention and engagement with the platform. This creates a potentially risky situation in which a platform is desperate for page views since its revenue depends on them.

"One of the challenges that we've encountered with making media investments specifically is that... most of the business models...depend on advertisements. Advertisement is very risky for us as investors when 80% of your business model is dependent on someone...wanting to put an advertisement, and unless you're able to get the hits, get the clicks for that advertisement then that customer will go away" (H).

"...anything that relies on advertising...what you're delivering to advertisers is the promise of eyes on the screen or the page or whatever. So within that, there is therefore a built-in imperative to be suckering people in, attracting people in, making it that kind of dopamine hit...of making sure that people are coming back... [we have threshold or exclusion policies on] businesses that rely on the addictiveness of their product obviously and basically that's what

Big Tech is like, if they don't have, if they don't have traffic, they don't have users, then the value of the marketing space obviously plummets" (I).

Investors are also expecting a tightening of regulation around online platforms generally, and for this to result in restricting platforms' freedom to collect user data. As a result, targeted advertising will become harder and less valuable.

"I think regulation is definitely another area of concern. Where basically, If they start to become restricted on user targeting then...if it's going to become much more difficult, so they will be competing more with more traditional advertisers, so their dominant position in the advertising industry becomes a bit more threatened" (B).

Three of the respondents who are focused on ethical investment (A, H, G) were also concerned about the impact of advertising models on vulnerable users and communities, and that online services should pre-empt such concerns to avoid reputational damage and further regulatory pressure.

Approaches to managing the risk of online harms differed significantly across interviews

Investors consider a range of variables in their investment decision-making, with a mix of qualitative and quantitative factors being important.

For example, one institutional investor (I) said that they are trying to develop concrete (albeit qualitative) criteria for assessing an online platform 's approach to online harms. This is part of a wider initiative to develop ways of measuring the social performance of online services companies. The investor explained that the aim of the initiative is to reduce their reputational risk of investing in online platforms and create incentives for the platforms themselves to adopt clear methods for reducing their exposure to risks from online harms. They go on to say that what is needed is:

"Identifiable practises and policies of the biggest benefit...so the verifiable transparency, the human-centred design, enabling the flourishing of children of vulnerable groups, and foster a tech ecosystem that serves the common good" (I).

Another institutional investor described a similar approach to assessing social risks, although much more fully articulated and detailed. Interestingly, one of their main ways of assessing the risk of an online platform is how well it handles the safety of children and young people, using that as a proxy for evaluating social risks more generally.

"There are different ways to evaluate companies, you can just read the news and see who's being, described, discussed in the media, there's also a couple of rankings and benchmarks like the Digital Rights Index. But...we actually home in on certain...points that we think are material. One of them would be children and youth...and so the percent of revenue or the percent of their user base that is underage and the enforcements and protections they have in place accordingly, that's one key indicator that we look at...sort of as a proxy, I guess, with the assumption that if they're good at protecting children, they're good at protecting everyone else" (K).

One veteran investor was of the view that specialist or niche online platforms, such as vertical search engines or niche marketplaces, have a reduced risk of online harms and are less likely to attract malicious actors or harmful content. At the same time, they potentially have greater value per user

interaction because they have deeper and more focused interactions with their users, and can therefore have greater relevance to users, and more targeted advertising.

"... That's one of the reasons we've been relatively selective when engaging in that category [online services]. if you're on a [major online listings site] type platform, it is a strong market for illegal services and nobody wants to get exposed for being the platform that hosts that illegal or immoral service...and you worry about it...it's very hard to be generalist, you have to kind of get quite specific...advertisers tend to be very concerned about their adjacency. You know where, for example, a [property listings site] can charge a lot more per advert. Not for a listing but an advert, because the adjacency is going to be high-value, high-quality, genuine audience [and] it's safe versus something like a [major social media platform] which has a load of junk content, some of which may or may not be offensive" (D).

The quality of leadership and governance was a common factor in selecting investments

This mix varies between investors, particularly for early stage/VC investors. One factor that almost all investors (10 out of 12) prioritised is the quality of the company's leadership and governance – essentially the degree of trust in the leadership's ability to deliver and focus on governance.

In terms of factors influencing the choice of investment, one respondent from the VC space (F) said they focus on the quality of the managers running a company they are planning to invest in and whether they believe that these managers can make a better than average return, even if they are new managers. Secondly, they want to invest in something that adds something new to their portfolio, either in terms of geography, technology, or sector. Finally, they also want to be active partners in the funds or businesses they put capital into—and not simply provide funding and "be tolerated at an annual general meeting".

Leadership seems particularly important to investors for start-up investments, but governance is important across the board. It is particularly important in establishing investors' trust in a company's ability to handle issues around online harms.

"We understand that a lot of these topics [around the risks of online safety] are complex. There are no easy answers. It's very unlikely that you'll find a neat solution...but one thing that we care a lot about is getting to know the management team" (J).

One investor, perhaps because of their specialism in media and content services, stated that working through potential harms is a key part of their due diligence process. This process involves asking a series of questions on how a service might be used to cause harm, and to examine the start-up's data room (the collection of all data types collected and used by the company).

"We ask 'how might this cause harm?' and 'how are you mitigating the risks of this causing harm?' or 'who might use this [platform] for harm?'...We're investing at early stages and so we use those questions more as guides to have the founder think through them and to see their willingness in engaging in the conversation. Because sometimes they [the founders] don't have a fully blown out team, or they don't have a fully blown out business yet. So we don't expect them to have a mitigation of risk strategy right now ... But we are looking for...an openness to talking about this? Can you even accept that your technology might be used for harm? ...and if you haven't? Let's talk through them right now and see how you're thinking through this so that we can get ahead of some of these things. So we do include that [process]...as part of our diligence conversations and information gathering with the founders, and when we're looking

at their data room, obviously we're seeing what type of data they're gathering on their users" (H).

There is a need for ways of measuring the social part of ESG in online platforms

ESG and ethical concerns were mentioned by most respondents and highlighted as an important area of further work. However, for now it is mostly seen as a reputational issue rather than a quantified factor. This was the view of all institutional investors, and many of the others (9 of the 12 interviews).

Some investors have a growing need for finding ways of quantifying social harm, including online harms to users, with some participating in early attempts to develop such tools. This relates to the wider issue of engagement with technology companies by investors and of the ESG performance of most technology investments being very favourable (see above), which makes it harder to challenge their poor performance on social issues.

"In terms of the quantification, Department for Work and Pensions has launched a task force on social factor. Q2 2021, the DWP had put out a call for feedback on how investors and asset owners were actually active on social issues, and I think the results that they got from that were underwhelming. Just the past autumn have launched a task force on social factors. Getting investors and some other stakeholders...providing oversight on social issues, what the data sources are, and I'm part of a working group looking at data sources." (I).

Examples of good practice around online safety exist, but are limited

When discussing investors' expectations from platforms around online safety, most of the discussion of good practices by online platforms was high-level, focusing on moderation, transparency, and willingness to think through the risks.

Specific examples of good practice were rare, but one came from a VC (H) highlighting how one of their investees managed to scale up and diversify its revenue streams while minimizing the risks to its users. The company is a content platform focused on Black millennials in the US. As the platform built up its content and scaled up, it started attracting more users. Instead of relying on advertising revenue, they diversified their revenue streams by creating new services around travel, events and other real-life experiences. The online content and interactions became a way of building trust with the audience and then became a launchpad for in-person events, which are sponsored by brands. These sponsorships became one of their biggest sources of revenue, and they were able to vet their sponsors more closely than would have been the case with online advertising. The investor felt that they have been able to scale successfully as a business, while also maintaining and protecting the privacy of their users and their audience.

Another positive example detailed by a respondent is a gaming and game creation platform, which this fund manager assessed, in terms of its ability to manage online harms to children, as part of the decision to invest in it. While much of the positive assessment relies on trust in the platform's leadership, it was also seen as a good example of how to tackle the risks around online harms.

"...we were significant investors in that business have been for the past couple of years, and really like [the platform's founder] and what he's done with that business over the past 20 years...we started buying in the past couple of years and...the concern is the fact that there are children on that platform. There's an amazing statistic that something like 80 to 90% of 7- to 12-year-olds in the US are on [this gaming platform]. every time I hear that stat, I'm slightly taken aback. And so it's an incredibly engaged platform, but we know the business takes that threat incredibly seriously, understand the role that they need to play...we try and get different

perspectives on topics, so we have a number of academic relationships that we value and one person that we spoke to on the back of this topic when were just getting around to the position of potentially investing in it was [an academic] from the Tech Futures Lab in Sydney...who'd done a lot of research on...digital gaming as problematic or dangerous for children, so that allowed us to get more confidence in the investment case, understand the potential problems from platforms like this, but also inform us when we then speak to the company in terms of what they're trying to do to address those concerns...we know that problems will occur, it's about whether you have conviction in the culture of that business to then address them" (J).

Investors are concerned about online platforms having the power to decide what discourse is acceptable

Several investors were concerned about the impact on freedom of expression since they expect many tech companies to avoid any controversial content even if it is legal. This is liable to create ambiguity around defining content that is legal but not acceptable to the platforms themselves. This essentially means that there will be situations when certain platforms may end up deciding what speech and discourse is permitted, while others may happily host harmful content that is right on the edge of what is legal. Views on the impact of such a situation on democracy featured heavily in discussions with many investors (8 out of 12, across both VCs and institutional investors).

One investor suggested that since online platforms can amplify content and spread it rapidly this can be an advantage to free speech, but also a boon for those seeking to spread harmful content. This makes it difficult for the platforms to decide when and how to step in when content is being shared.

"It's an extraordinarily difficult thing because, of course I firmly believe in the power of free speech. At what point do the platforms which enable free speech and enable the mass propagation of single individual messages [take responsibility]? ... We've always had Hyde Park Corner, but now Hyde Park Corner can reach, you know, 5 million people a day" (G).

Another response highlighted the difficulty in using automated systems or to monitor messaging on platforms, expressing the concern that such a monitoring system would feel Orwellian, and not achieve its objective of policing communications on the platforms. Motivated users will find ways, like coded language or slang, to circumvent the systems, while ordinary discourse is made more difficult.

"As a user, as a father, then as an investor, I think most people have in mind things like online bullying, harmful content like pornography or hate content. I actually think those are really difficult [to regulate] because it's not that easy to get into real time messaging... so I'm not really sure how...and by the way they kind of technological systems to deal with them, those are pretty draconian they look very Orwellian – your messaging app saying 'I rate this as 6.2 on the harmful scale'. Al's aren't good enough to do that. I doubt they ever will be, and if they are people, one thing I've learned is people who want to engage in any kind of harmful content are really good at reverse engineering what the technology can do, just look at what people do on WeChat, who want to criticise the government [in China], but know that there's an army of bots, censors, and they just come up with a new clever way every day to say the things they're going to say. So I think, you end up just making ordinary discourse hard" (E).

However, some investors argued that the platforms were not doing enough in this area, especially around transparency, and that some form of reporting on the levels of moderation and enforcement would be beneficial.

"Engaging with our platform, there has to be some level of some kind of periodic disclosure that is available, saying well actually this is the proportion...this is the number of times that this is resulted in an account being terminated or in something being moderated" (I).

Investors' influence on online platforms' decisions

Dual-class share structures deprive investors of influence on most online platforms

Dual class share structures are also a barrier to engagement and lessen the influence investors have on big technology companies.

Investors, especially institutional investors, highlighted the problem of the dual-class share structure prevalent in many of the big technology companies, including online platforms and search engines. This is the share structure, whereby some shareholders have full voting rights (typically founders) and the remaining shareholders have very limited or no voting rights. This type of arrangement has significant impact on the ability of investors to engage with the company.

This is partly because these share structures allow a few individuals to dominate decision-making at board level, and to do so for long periods of time, and partly because it limits the ability of activist investors to put forward a more ethical agenda or highlight additional risks such as those of online safety. The frustration with these dual-share structures is prevalent in many investor interviews, with one (I) stating that it means that engagement does not work and that company boards are not responsive to investor concerns, many others (such as respondents K and L) state that some of the biggest technology companies, including major social media and search platforms have these structures, and that it limits their ability to engage with these companies. Another investor went as far as to state that:

"It's impossible to be an activist shareholder on some of these two-class arrangement, so it's...saying look, you know that this matters less because it's a dual class-structure for these big platforms, but what they're worried about is reputational damage" (G).

Attitudes to regulation among investors

Investors are supportive of regulation, despite not knowing the details of the OSB

In general, there was very little knowledge of the details on the OSB amongst investors. Most (8 out of the 12 respondents) were aware that legislation around online safety was coming but could not name the Bill. A few (2 respondents) had heard of it or knew about it "at a Radio 4 level" as one put it — but most did not know much about the detail of the OSB or what stage of the Parliamentary process it had reached.

In general, investors were in favour of better regulation of online platforms and greater clarity around online services' responsibilities on safety and harms.

"I'm broadly very supportive of the Bill. I think it's long overdue. I think there's a complete disconnect between how a public service broadcaster is regulated and how, from an advertising point of view, I would say that [broadcasters] have a much higher bar for advertising...There is much higher risk of on, you know, truly harmful content on these platforms, which needs to be legislated for" (G).

"I don't know the detail of this bill, but I think this [regulation] is probably a good thing to make people more aware of this, because I think that is going to be important. No one particularly wishes these things happened, but there are processes that you can put in place that matter, it comes to a more philosophical question about do you grow at all costs? And what this [regulation] is saying actually, maybe not" (F).

"There are upsides to social media, to what Big Tech has brought in terms of the potential and the reality of community kind of connectedness...but there are also really significant downsides. The Bill...it's a useful, I mean, any government legislation...would be a useful tool in terms of helping to determine the rules of engagement and...creates the space for other stakeholders to step into that gap and to...create metrics off the back of that, to use that as the determinant of...the relative kind of positioning of different companies with similar business models [in terms of handling online safety]" (I).

However, respondents also acknowledged the difficulty in balancing direct regulation and consumer responsibility and choice, and the complexity of dealing with online harms.

"We have to rely somewhat on regulation, which is what's happening. You also have to rely on the common sense of consumers...that's a difficult thing to say, but these companies only live and breathe because people consume what they [offer in terms of services]" (F).

"We need legislative and regulatory frameworks that recognise that that these problems actually don't have simple solutions and...don't outsource the decisions about what content or discourse is legitimate to corporate interests because that's just really bad. I know it's very hard to do in legislation but recognise that you know there are good actors out there who will sometimes have bad results" (E).

Investors' knowledge of the detail of the OSB was limited, and whenever Illegal harms were discussed directly investors struggled with distinguishing between legal and illegal harms and defining specific types of online harms. However, it is worth noting that investors were more likely to avoid controversial investments with the potential for causing online harms, even if they were legal, going beyond what the Bill mandates.

Many investors crave regulatory certainty and alignment

Regulatory uncertainty, vague regulation, and cross-border differences in regulation on online harms were all issues that investors raised regarding the UK's regulatory regime.

"So, the thing we hate the most is always regulatory uncertainty. Because...if we know this is going to cost us, you know, X% a year and that is what it is, but at least we know what we're trying to aim for and direction of travel" (D).

Beyond regulatory certainty and predictability, three respondents also expressed the need for cross-border alignment of regulations and argued that this issue is particularly important for online services, that operate across border and regulatory jurisdictions.

"I guess one helpful attribute would be consistency, because there is a patchwork of regulations. I mean starting with GDPR, but also uh, more stringent regulations are now coming out of Europe and out of several States. I would think any tech company or any company that's a global company and that is operating in multiple countries is going to want as much consistency as possible, and we did sign EOS, signed an investor statement in support of the EU Digital Markets Act and the Digital Services act" (K).

One respondent (I) suggested that Ofcom's position as a regulator of traditional media, in addition to its anticipated role as the regulator for online services, gives it a unique opportunity to tackle some issues that result from the interactions between the two sectors. This investor was of the view that some harmful social media content gains exposure by being covered on traditional media, and vice versa creating an unintended "multiplier effect" and making the wide dissemination of such content a "self-fulfilling prophecy".

Investors wanted the regulation to recognise that moderating content is a complex challenge

A few emphasized that it is a very difficult problem and wanted regulation to acknowledge that even with the best intentions, sometimes online platforms will struggle to keep harmful and illegal content off their platforms. This would happen particularly when more sophisticated actors are the source (such as organised crime, political, and state actors)

"You have a lot of businesses if [a large e-Commerce platform] Of course you have to deal on the margin with offensive content or foul language, but it's really not that hard to moderate whereas you know on...a direct publishing platform where anybody can self-publish their own e-book in about five minutes. You have to deal every day with not only offensive comment, but racist, even potentially illegal content...and it's existential to you, not just reputationally, but in terms of ability to comply with the laws and not scare off your users, right" (E).

Another investor highlighted issues of scale and the use of different languages and terms that make it difficult to moderate content effectively. The investor also pointed out that it is difficult for platforms to decide on how much resource to allocate to moderation. While some events require hiring many moderators, such as elections, much of the harmful content trickles onto the platforms slowly.

"The sheer scale of the content that there is on platforms and obviously the issue around multiple languages and dialects. There's nothing like utilising some obscure or archaic dialect in terms of using it as a way of getting an insult across that, yeah, someone might not pick up on. That's certainly a huge risk because the way big tech companies tend to allocate moderation or look at staffing, resourcing moderation, would be when there are things a national election that's coming up. So let's put some resource into this because we need to be seen to be active on this. But actually, the drip, drip that there is. All the time [of harmful content] is not something that can kind of be resourced in that way" (I).

Acknowledgements

This research was made possible with the generous assistance of many in the investment community, as well as subject matter experts on online advertising, technology investment, and ESG. We would like to extend our thanks to all those named below, and their organisations, for their assistance. We would also like to thank all those who helped and provided information for the research but did not wish to be named.

Arma Partners, Jad J. Younes, Technology Investment

Baillie Gifford, Stewart Hogg, Director

Channel 4 Ventures, Vinay Solanki, Lead Investor

Church of England Pension Board, Clare Richards, Director

Digital Catapult, Sophie Lonergan, Lead for Investor and Start-up Engagement

Federated Hermes, Nick Pelosi, Engagement Manager

General Atlantic, Chris Caulkin, Managing Director, Head of Technology for EMEA

Global Alliance for Responsible Media (GARM), Rob Rakowitz, Initiative Lead

ISBA, Phil Smith, Director General

Isomer Capital, Chris Wade, Partner

London CIV, Jacqueline Jackson, Head of Responsible Investment

New Media Ventures, Jessica Salinas, Chief Investment Officer

Glossary of investment terms

Angel Investor: An angel investor is an individual who provides financial support to early-stage start-ups or entrepreneurs, often in exchange for equity or convertible debt. Angel investors typically use their personal funds and invest in businesses they believe have high growth potential. Besides financial support, they may also offer industry knowledge, mentoring, and networking opportunities to help the start-up succeed.

Dual-Class Share Structures: A dual-class share structure is a corporate structure where a company issues two or more classes of shares with different voting rights and dividend policies. This allows founders or controlling shareholders to maintain control over the company's decision-making process while offering shares with limited or no voting rights to public investors.

Early-Stage Investor: Early-stage investors are individuals or firms that provide capital to start-ups or young companies that are still in the early stages of their development. These investors often take on more risk in the hope of higher returns if the company becomes successful. Early-stage investments can include seed funding, angel investing, or venture capital.

EBITDA: Earnings Before Interest, Tax, Depreciation and Amortisation. It is a measure that investors use to assess a company's operating performance.

ESG: ESG stands for Environmental, Social, and Governance. It refers to a set of criteria used to evaluate the sustainability and ethical practices of a company or investment. ESG factors are increasingly considered by investors and asset managers as they make investment decisions, as companies with strong ESG performance are believed to be better long-term investments and more resilient to potential risks.

Growth Equity: Growth equity is a type of private equity investment that focuses on providing capital to mature, high-growth companies to help them expand or restructure their operations. Growth equity investments are typically less risky than venture capital investments since the companies receiving funding have already demonstrated some level of success and profitability.

Impact Investing: Impact investing is an investment strategy that seeks to generate both financial returns and positive social or environmental outcomes. Impact investors actively pursue investments in companies, organizations, or funds that align with their values and contribute to addressing global challenges such as climate change, poverty, or inequality.

Private Equity: Private equity (PE) refers to investments made in privately-held companies or the acquisition of public companies that are then taken private. PE firms typically invest in established

businesses with a proven track record of profitability, seeking to improve their operations and financial performance before eventually exiting the investment through a sale or public offering.

Start-up Accelerator: A start-up accelerator is a programme or organisation that offers support to early-stage companies, typically in the form of mentorship, education, networking opportunities, and resources. Accelerators often provide funding in exchange for equity and usually have a fixed-term, cohort-based structure, culminating in a demo day or pitch event for investors.

Venture Capitalists: Venture capitalists (VCs) are investors or firms that provide capital to start-ups or early-stage companies with high growth potential in exchange for equity or ownership stake. VCs typically invest in businesses across a variety of sectors, often focusing on innovative industries such as technology, biotechnology, and clean energy.