Advertising funded video-sharing platforms under the revised AVMSD: Commercial Communication Functionalities

Sally Broughton Micova
University of East Anglia

Ivana Kostovska
Vrije Universiteit Brussel

Abstract

The 2018 revision of the Audiovisual Media Services Directive (AVMSD) defined video-sharing platforms (VSPs) and brought them into the scope of the Directive, holding them responsible, though not liable, for preventing certain types of harm from both the user-generated content and the commercial communication they carry. The AVMSD introduces the concept of *functionality* to distinguish a platform as a VSP and bring it into scope. In this article we present findings from an investigation applied the concept of functionality more widely and sought to identify and understand those VSP functionalities relevant to commercial communications. We elaborate the creator-facing, advertiser-facing and user-facing functionalities found in a sample of 13 VSPs by examining company documentation, and systematic testing through use, triangulated through semi-structured key informant interviews. Based on analysis of these commercial communications functionalities and the contractual relationships governing their use, we identify four *purchasing pathways,* each of which reveals roles played by stakeholders and distinct points of control. We therefore argue that the concept of functionality, which captures the platform design elements and the acceptance of a value proposition by various kinds of users can be useful in distributing co-operative responsibility within dynamic, polycentric co-regulation and informing systems for enforcing procedural accountability.

Key words: Video-sharing platforms, advertising, commercial communications, AVMSD, co-regulation, self-regulation

Introduction

The 2018 revision of the Audiovisual Media Services Directive (AVMSD) defined video-sharing platforms (VSPs) and brought them into the scope of the Directive, holding them responsible, though not liable, for preventing certain types of harm from both the user-generated content and the commercial communication they carry. This includes commercial communication that is "not marketed, sold or arranged" (AVMSD At. 28b.2) by the VSPs themselves. This presents a challenge for co-regulatory systems whose delicate balances have already been heavily disrupted by the spread of transnational advertising-funded online platforms (Dickinson - Delaporte et al. 2020). The implementation of the AVMSD can be seen as a test case in holding platforms accountable for content they do not control, as users themselves create commercial communications and advertisers are directly planning and placing campaigns.

VSPs may not have editorial control, but research into how platforms function has shown that they exercise power through their very design features. They can be at the centre of highly complex systems in which their standards and protocols shape how individuals and various categories of business users can engage with them (Eisenhardt et al. 2018; Jacobides et al. 2018; Schreieck et al. 2016). The value, and arguably lock-in effects (Kenney et al. 2019), of their features and tools, many of which are based on their ability to collect and control data (Turow & Couldry 2018; Gregory et al. 2020), enable them to set the terms of those relationships. The trade in commercial communications is now conducted through complex integrated ecosystems involving numerous intermediaries, that may or may not be owned by VSP providers (Broughton Micova & Jacques 2020a). Though VSPs may not market, sell or arrange commercial communication directly, they may still exercise control through the way they function.

Drafters of the AVMSD introduced the concept of functionality to distinguish a platform as a VSP and bring it into scope. According to the Directive, a platform qualifies as a VSP if its principal purpose or a dissociable section of it is to provide programmes and/or user-generated content to the public, or if such provision is an "essential functionality" of the service. The guidelines produced by the European Commission for applying this definition linked functionality to the economic activity of the platform, monetization options and the tools available (European Commission 2020). The core functionality of sharing videos, therefore, could be accompanied by various related functionalities that make up the value propositions Individual and business users engage with any given VSP based on these value propositions. We sought to advance this concept of functionality and apply it to understand how VSPs might be exercising or allocating control, and thus responsibility for preventing harm from commercial communications.

Our investigation therefore aimed to identify and understand the functionalities relevant to the implementation of the AVMSD's provisions on commercial communications on a wide sample of potential VSPs, and consider how this knowledge could inform the design of co-regulation in this area. The study included examination of VSPs' terms, guidelines, promotional materials and other corporate communications, as well as a systematic testing of the services and interviews with representatives of VSPs.[1] The first contribution of this article is new evidence on the ways VSPs allocate some elements of control to individual and business users through creator-facing, advertiser-facing and audience-facing functionalities, and on the contractual relationships governing the use of these functionalities across four pathways through which commercial communications are sold, marketed and arranged. Based on this evidence, the second contribution is a new understanding of the multiple stakeholders involved in commercial communication on VSPs and how responsibility might be distributed among them in its co-regulation. As per the EU's Interinstitutional Agreement on Better Law-Making, we understand co-regulation to be mechanism in which policy objectives set out in law are entrusted to recognized bodies enforcing voluntary codes (OJL 123 2016), and recognize that these often involve cooperative arrangements between self-regulatory organisation and national regulatory authorities.

We begin with a short review of the literature that draws on a multi-disciplinary body of research examining how platforms operate to explain the role of platform functionality. After briefly explaining the methodology used, we present the three groups of commercial communication functionalities we identified, highlighting their relationship to control. We then elaborate four distinct purchasing pathways for commercial communication that we found in our analysis of the functionalities. These revealed how responsibility was distributed and

indicated that some control being exercised by stakeholders may be currently under-represented in the co-regulation of commercial communication in Europe. Following these findings, we consider the implications for co-regulation in this area and the enforcement of the provisions of the AVMSD. Most of the implementation of the AVMSD is yet to come due to delays in transposition due to the Covid-19 crisis, and subsequent proposals for much wider reaching legislation in the form of the EU's proposed Digital Service Act and the UK's draft Online Safety Bill are also built around co-regulation and procedural accountability. In conclusion, we argue that the concept of functionality can be a useful tool in frameworks for allocating *cooperative responsibility* (Helberger et al. 2018), and for identifying both the stakeholders needed for polycentric co-regulation (Finck 2018) and the points of control where they can be held accountable.

Platform function and commercial communication functionalities

There is an adage that with power comes responsibility. Research into how online platforms function suggests that commercial VSP providers exercise power through service design, architecture and tools in a manner that is distinct from other forms of media. Commercial media are necessarily at the centre of two-sided markets involving network effects between audiences on the one side and advertisers on the other (Anderson & Jullien 2015), each of which gets some value. Online platforms have been described as at the centre of multi-sided markets in which they engage with users, advertisers, intermediaries, app developers, data brokers and others who are all driven by different value propositions (McIntyre et al. 2020; Evans et al. 2011). Companies providing online platform services exercise considerable control over their relationships with those on the various sides, particularly if they manage a platform ecosystem (Jacobides et al. 2018). As Gawer (2020) and others have argued, platforms make strategic decisions in terms of the number of sides and who is allowed to join, the digital interfaces and the firm's scope. Through their technical design, the way they function, and the tools they provide, they shape ecosystems around them (Boudreau & Hagiu 2009; Eisenhardt et al. 2018; Schreieck et al. 2016).

With data capture and treatment at the core of the platform business models (Gawer, 2020; Kozyreva et al. 2020), the way platforms function as collectors and controllers of data has been of particular interest. This is especially true in relation to advertising. There can be significant differences across platforms in how much data is collected and how those planning and buying commercial communication can access and use it. Advertisers can have different levels of control when tracking and optimising ad campaigns based on generated data (Runge et al. 2020; Evans, Hoy and Childers 2018). This is intrinsically related to the tools platforms offer for purchasing advertising inventory that differs in terms of type, price and volume of impressions (Brar, Pipko and Saltzman 2017; Jacobson, Gruzd and Hernández-García 2020). The sophistication of these data enabled tools and the attractiveness of the inventory can be seen as elements of the value proposition for advertisers.

VSP providers sell advertising directly through premium or reserved sales and trade programmatically through auctions, also known as real-time bidding (RTB). Programmatic advertising is done in two ways: on the open web or through supply and demand platforms owned by the same companies providing services that are selling the commercial communication inventory (Competition & Markets Authority 2020). Platforms have been found to drive adoption of programmatic advertising within the "walled gardens" where they control all operations (Adshead et al. 2019; Broughton Micova & Jacques 2020b; IAB 2019). The literature seems to provide evidence for a link between the nature of platform functionality

offered to advertisers for the placement of advertising campaigns and the distribution of power between platform provider and advertiser.

However, companies also make deals with platform users who create content and have amassed an attractive audience. This kind of commercial communication, often referred to as influencer marketing, involves content creators who enter into sponsorship deals and paid collaborations for product placement or other promotion (Gräve 2019; de Veirman, Cauberghe, & Hudders 2017), not unlike in professional content on audiovisual media services. Advertising self-regulatory organisations in Europe have begun to bring influencer marketing into their remit and set standards, but under the AVMSD, some influencer channels may qualify as audiovisual media services (de Cock Buning 2020), thus complicating the allocation of responsibility. Companies engage with platforms as users as well, creating their own user-generated content for self-promotion. Companies may bear the responsibility for adhering to standards in their own self-promoting content, and influencers are increasingly being held responsible as well. However, both will be constrained by the tools provided by the platform for uploading and disseminating their content.

To summarize, literature has indicated that VSP providers exercise power through the functionalities that make up the value proposition they offer for users who simply consume content or share it for personal satisfaction, users that create and disseminate content for material gain, and companies that use VSPs in a variety of ways for commercial communication. There is some understanding of the distribution of control allocated by data-driven tools for the trade in advertising inventory, but this remains limited. Greater understanding of the affordances related to commercial communication that fall outside the trade in advertising inventory is also needed. Our investigation, therefore, aimed to capture functionalities that enable all kinds of commercial communication on VSPs.

Methodology

This research took a bottom-up approach that distinguished commercial communications functionalities from the full range functionalities found in our wider investigation that first mapped all functionalities relevant to the implementation of the AVMSD. This meant that we did not look at functionalities for app-developers or third party-data services, but those related to audiovisual content and commercial communication. We first mapped the functionalities of a sample of services that we determined could be considered VSPs based on the definition in the AVMSD, taking care to include a range in terms of size and reach and intending to capture most of those used in Europe. According to the AVMSD, a national regulatory authority in a service's country of origin determines whether it is in scope. As this process was not yet complete in the period when the data was collected, our sample may include some that later might not to qualify as VSPs. The data on functionalities was largely collected from March to May 2020, with an update to account for changes conducted in September 2020 when we found that some VSPs added functionalities already identified on others. The results presented here relate to 12 VSPs from the original sample plus LinkedIn, against which the framework was applied afterwards in March 2021 to test the robustness of the commercial communication functionalities identified.[2]

Table 1 List of examined video-sharing platforms and their providers

Video-sharing platform	**Providing company**	**Link to self-description**
Dailymotion	Vivendi, France	https://about.dailymotion.com/en/

Facebook	Facebook, USA	https://about.facebook.com/
Flickr	Smugmug, USA	https://www.flickr.com/about
IGTV	Facebook, USA	https://about.instagram.com/features/igtv
Instagram	Facebook, USA	https://about.instagram.com/
LinkedIn	Microsoft, USA	https://about.linkedin.com/
Liveleak	Liveleak, UK (Now Itemfix)	Stopped operations on 5 May 2021, replaced by Itemfix.com
Snapchat	Snap Inc., USA	https://snap.com/
TikTok	ByteDance, China	https://www.tiktok.com/about?lang=en
Twitch	Amazon, USA	https://www.twitch.tv/p/en/about/
Veoh	QLipso Media Networks, USA	https://www.veoh.com/corporate/about
Vimeo	Vimeo Inc., USA	https://vimeo.com/about
YouTube	Alphabet/Google, USA	https://www.youtube.com/about/

Functionalities were mapped through a mixed-method investigation that combines multiple ways of knowing (Tashakkori & Teddlie 2010). It involved a four-stage process that enabled both investigator and methodological triangulation (Flick 2018). The stages were:

1. establishing expected functionalities based on a review of academic literature and the European Commission's proposed criteria for determining essential functionality;[3]
2. identifying stated functionalities based on the VSPs' documentation;
3. discovering functionalities through use, both as an individual user who views and uploads content and through attempting to use advertising placement tools where available;
4. checking our understanding of operations with VPS representatives and stakeholder representatives.

The first stage produced an initial list that was added to in the subsequent two stages. We undertook a systematic examination of the terms and conditions, guidelines and rules, FAQs, instructional and promotional materials, all of which we considered factual sources of the intentions of their authors (Karppinen & Moe 2019; Scott 1990). Data collection was supported by two research assistants, each of whom also tested all the platforms in the sample, using them as casual users, creators and potential advertisers. They necessarily stopped short of purchasing inventory so for information on post-campaign functionalities we relied on step two. This was an iterative approach that identified and categorized additional functionalities during the investigation. If a functionality was found on at least two VSPs, it was then added to the list against which all were mapped. A total of 41 distinct functionalities were identified in steps 1-3. Semi-structured interviews with key informants (Aberbach & Rockman 2002; Harvey, 2011; Van Audenhove & Donders 2019) from VSPs and European-wide stakeholder groups were then used to check interpretation of the functionalities and attempt to ensure none had been missed, as well as to gain an understanding of the context.[4] For the research presented here we then re-examined the data to identify all those functionalities associated with commercial communication on both the user and on the advertiser side.

Three categories of commercial communication functionalities

The AVMSD defines audiovisual commercial communications as "images with or without sound which are designed to promote, directly or indirectly, the goods, services or image of a natural or legal person pursuing an economic activity" that either accompany or are within a

programme or user-generated video in exchange for payment or for self-promotion (AVMSD Art.1.1(h)). This definition therefore covers still or video advertising around user-generated content as well as some kinds of user-generated content itself, namely that which is uploaded by companies to promote themselves and content that contains sponsorship, product placement or other promotion in exchange for compensation. We, therefore, looked for functionalities that enable advertisers to buy ad inventory on VSPs and those involved in the sharing of user-generated content. The categories we establish here are based on the groups for whom they defined the value proposition offered by the VSP.

1. Creator-facing functionalities. All of the VSPs in the sample provided creators functionalities for uploading pre-recorded video to share, where videos were stand-alone content. Dailymotion, Facebook, Instagram, LinkedIn, Liveleak, Snapchat, TikTok, Twitch, Vimeo and YouTube all enabled live streaming, though LinkedIn only allowed professional users to do this. Guidelines and/or tools for labelling paid promotion or sponsored content were found on all but Liveleak and Flickr, apparently allocating responsibility to creators for self-declaring such content. All but Veoh and Liveleak enabled uploaders to control whether their content was public or limited to a specific group, and creators could set age limits or age ratings on their content on all but those two and Instagram. These two functionalities appeared to give creators some level of control relevant to protecting minors from certain commercial communication as prescribed by the Directive.

Both influencers and companies creating content for self-promotion could use features aimed at capturing audiences and the ability to track the performance of their content on all but Snapchat. Depending on their legal status, influencers can be private individuals, registered freelancers, or have founded companies, but all depend on performance analytics to establish their impact and value (Goanta & Ranchorás 2020). YouTube also allowed some channel holders to sell display advertising inventory around their content themselves. In our sample, only Dailymotion, Facebook, Twitch and YouTube offered creators shares of their ad revenues generated by the creator's content. These, along with Vimeo and Instagram, also encouraged multi-channel networks (MCNs) through specific advice, guidelines or directories. MCN are intermediary firms that operate in and around a platform's commercial communication infrastructure (Lobato 2016; Vonderau 2016). Evidence indicates creators are increasingly turning to them in order to maximize their value and navigate the tangled network of affiliate marketing (Arthurs, Drakopoulou and Gandini 2018). All the platforms that provided multiple functionalities to creators linked to monetization also could demonetize individual creators and/or pieces of content. Thus, the apparent control granted to creators, was tempered by demonetization functionality through which the VSPs could also exercise control.

2. Advertiser-facing functionalities. These functionalities were directed towards the demand-side actors in the video advertising ecosystem such as traditional advertisers, small advertisers such as local businesses and start-ups, larger and smaller agencies (see Broughton Micova & Jacques 2020a). Few VSPs offered functionalities that facilitated the advertiser/influencer relationship. The TikTok Creator Marketplace, for example, helped advertisers find appropriate influencers based on their criteria. The Twitch Bounty Board allowed brands to post descriptions of their intended campaigns and offer a "bounty" to creators. Most advertiser-facing functionalities we found related to the placement of display advertising in and around content.

These included tools for placing display advertising directly on the platform and tools for planning targeted campaigns directly on the platform using its data, including budgeting.

Dailymotion (only for pre-and mid-roll), Facebook, Instagram, IGTV, LinkedIn, Snapchat, TikTok and YouTube provided these tools, which gave advertisers, or agencies acting on their behalf, control over where ads were served and to whom. These decisions, however, were based on data owned and made available by the VSP provider. Although tracking of user behaviour on the platform was identified in all VSPs, there were vast differences across the sample in the extent and the ownership of the data generated. Those that provided extensive functionalities to advertisers for self-service campaign implementation, tracked user data themselves. Others, namely Liveleak and Veoh, did not have such capacity themselves but allowed third party services. Twitch, which only engaged directly with advertisers or their agencies, claimed to collect very little data on its own users and only allowed third party ad verification services. Our examination could only confirm that the three Facebook owned services, LinkedIn and YouTube had functionalities through which advertisers could also import their own first party data. Advertisers did not have much control over the data generated by their campaigns. Where functionalities enabled advertisers to export campaign data, such as on Facebook, TikTok and YouTube, it was only in aggregate anonymized form.

3. Audience-facing functionalities. VSPs ’business models are dependent on building as large a user base as possible, and the value proposition to the users whose attention is sold to advertisers is also shaped by the functionalities they provide. On some platforms there is an almost cyclical relationship in that user engagement with these generates data that is then used by the VSP providers to improve the functionalities and make them more attractive (Krämer et al. 2020; Turow & Couldry 2018). User functionalities were many and varied, but our interest here was in those directly related to commercial communication and the associated provisions in the AVMSD. We identified two functionalities that gave users some control in protecting themselves from harmful advertising, which also allocated to them some of the responsibility. Dailymotion, Facebook, Liveleak, TikTok (through family pairing), and YouTube enabled users to control their exposure to certain advertising, through parental filters or “safe” modes. This did not include the option of paying for ad-free service as those would then no longer be advertising supported services, though YouTube also offers this option. All the VSPs we found to be selling advertising inventory directly provided tools for users to report or flag commercial communications as problematic.

The functionalities we identified in this investigation were not static. VSP functionalities continuously evolve on the level of platform architectures, interfaces and control mechanisms because of shifts in the business models and changes in markets and regulatory environments (see also Helmond et al. 2019). VSPs use commercial communication functionalities to create direct and indirect network effects, which is at the core of platform business model, shaping the value propositions for users who create content, advertisers, and users who simply consume content. Functionalities are therefore an area of continual innovation as VSP providers aim to increase their reach and revenues. The results here showed that there were vast differences among the VSPs in terms of the extent of their functionalities. The larger platforms, such as YouTube, Facebook and TikTok, offered apparent control to both kinds of users and advertisers through an array of commercial communications functionalities. Others, such as Liveleak and Veoh had minimal functionalities across all three categories, which gave users limited control and meant the VSPs themselves had little means through which to exercise control. The use of these functionalities per se does not translate into a form of responsibility for which any given actor can be held accountable, but the acceptance of the value proposition by any private or business user is a form of exchange, a purchase. Therefore, as a next level of analysis we used the understanding gained from examining functionalities to identify and then

elaborate four purchasing pathways through which commercial communication was purchased and disseminated.

Purchasing pathways for commercial communications

We use the term *purchase* to indicate that an exchange has taken place and that there are contractual relationships that govern that exchange, however it may be that data rather than money is the currency involved. Each of these pathways is associated with the presence, or absence, of the functionalities described above, and with contractual relationships among actors that govern their use.

1. Native pathway Through this pathway, advertisers engage with the VSP as users. They may be required to pay for a "pro" account to access all the available functionalities, as found on Vimeo, or they may be treated the same as any user, which was the case on YouTube, TikTok or Liveleak. In this pathway, the commercial communication content is uploaded and disseminated in the same way as an individual user's content. Where no subscription version is required, companies "pay" with the data gathered around user interaction with their content. There may also be display advertising around their content. Some VSPs, such as Instagram and TikTok were found to also allow businesses to create augmented reality filters or badges that then joined the collections offered by the platform itself. Snapchat also had this functionality but it had to be paid for through its Ads Manager or a direct purchase. These modern forms of native advertising are shared organically by individual users who apply them to their own uploaded content. This pathway is enabled by the creator-facing functionalities described above. It is the contractual arrangement between the VSP provider and its users for the use of those functionalities that governs the commercial communication.

2. Influencer pathway Through this pathway businesses engage individual users in a variety of ways to promote their product or service in a manner that has been likened to word-of-mouth (Goanta & Ranchorás 2020). It includes arrangement for sponsorship and product placement that are arguably similar to those for professional content on audiovisual media services. This pathway is enabled by all the creator-facing functionalities characteristic of the native pathway, as well as those through which VSPs directly facilitate arrangements between advertisers and their content creators or encourage the use of MCNs. Defining this pathway are also those for which the value proposition includes other monetization options such as the ability to get a share of ad revenues generated around their content, sell display advertising directly or even to sell merchandise, such as on Twitch. All the VSPs in our sample that offered revenue sharing functionalities also retained the right to demonetize content or individuals that did not comply with their terms or guidelines. In this pathway there are contractual arrangements between the influencer and the advertiser that can be through intermediaries such as media agencies and/or MCNs. The terms and conditions of the VSP also govern influencers' use of its functionalities and the VSPs can enforce these terms.

3. Proprietary tools pathway The proprietary tools pathway is one through which businesses can use tools of varying levels of sophistication provided by the VSP to purchase display ad inventory to deliver campaigns. This is the type of commercial communication that is increasingly traded programmatically but is also sold through reserve channels (see Adshead et al. 2019). On nearly all the VSPs in our sample that offered the functionalities associated with this pathway, display advertising could not be placed except using the platform's own programmatic tools or reserve channels. The only exception was Dailymotion, which had proprietary tools for purchasing video display inventory, but traded spots for still or gif images

around its video content through the open web (see below). Purchasing in this pathway relies on at least some data from tracking user attention and behaviour and varying collections of advertiser-facing functionalities. Because of this variation, we distinguish between two groups in our sample for which this was the purchasing pathway for display.

In the first group are VSPs that belong to wider proprietary ecosystems within a single company, which in our sample were YouTube (Google/Alphabet), Facebook's three services, and TikTok (ByteDance). These VSPs offered sophisticated tools with functionalities that allow advertisers to plan, target and optimise campaigns using data generated from the entire *platform ecosystem* (Jacobides et al. 2018). These could be used by anyone, (service sector, micro businesses) from a local hairdresser or café running a very limited campaign themselves using VSPs' tools to media agencies using VSPs' professional tools to access premium display inventory at great scale on behalf of clients. In all cases, the personal, albeit mostly pseudonymized and aggregated data, used to target advertising and evidence the effectiveness of campaigns remained contained within the proprietary ecosystem of the platform.

In the second group are VSPs who also restricted the trade in display commercial communications to their own proprietary means but were not part of larger data-rich ecosystems. In our sample, Snapchat, Twitch and LinkedIn fit into this group. Snapchat and LinkedIn were found to offer tools for planning, creating, and optimizing campaign that advertisers could use themselves, but based on much smaller data pools than the larger ecosystem platforms. Twitch has been owned by Amazon since 2014, a company that possesses a wealth of consumer data based on its e-commerce, video-on-demand, and other services. However, we did not find evidence that Twitch was integrated into this or that its tools relied on this data for commercial communications functionalities. Twitch did not offer self-service tools but engaged with companies and their media agencies directly for bespoke and reserve buying. Its documentation claimed the service gathers little first party data on its users and only allows third-party tracking for verification.

As illustrated in Figure 1 below, VSP providers that could offer greater data-dependent advertiser functionalities seemed to give advertisers a great deal of control, but still retained much themselves. Advertisers could be relatively sure of where their ads were going and what the terms were that governed that space. However, the VSP providers controlled the contractual relationship, setting the terms and conditions governing the transactions and enforcing often extensive and detailed guidelines.

Figure 1 Proprietary and open web pathways for VSPs offering display commercial communications inventory

[Inesrt Figure 1 here]

4. Open Web pathway As shown in Figure 1, three of the VSPs in our sample were characterized by very low numbers of commercial communication functionalities and low levels of data ownership. This did not mean that data was not collected, simply that this was not done by the VSPs. There were no self-service tools for advertisers or functionalities that allowed for planning or optimizing provided. On these platforms, commercial communications were limited to relatively basic display ad inventory. Liveleak, for example, only had fixed still images or gifs outside of its video frames and pop-up sound-off video, and Veoh only had still images. This inventory was traded programmatically via the open web, in other words through intermediaries. The commissions taken by the intermediaries can amount to a large portion of

the revenues derived from the ad (Adshead et al. 2019), which in the open web pathway goes to third parties. More importantly for the implementation of the AVMSD's provisions on commercial communication, these VSPs did not have control over the transaction and the data extracted from users and generated by the ad campaigns. On the open web an advertiser buys audience in the form of groups of individual impressions that might be spread across a host of publishers and platforms who sell through any given ad exchange. Advertisers are contractually bound to the intermediaries, whose functionalities for planning and implementing campaigns they use, rather than the platforms upon which their advertising appears. The VSPs in our sample using this pathway did not have guidelines or rules for advertising at the time of our study.

Figure 2 Overview of purchasing pathways' defining functionalities and control points

[Insert Figure 2]

This analysis that identified the four different pathways uncovered several contractual relationships that govern the commercial communication carried by VSPs, not all of which were defined by the VSP providers. As illustrated in Figure 2, the native pathway is characterized by creator-facing functionalities, so the contractual arrangement between the VSP provider and its users governs the commercial communication. In the influencer pathway, creators and disseminators of commercial communications may be contractually obliged by advertisers and/or MCNs, as well as by the terms of use set by the VSP. In the proprietary pathways, VSPs not only set the contractual terms, but also exercise control through their ownership of data and the design of the tools for using that data. In the open web pathway, VSPs may have contracts with multiple advertising intermediaries, but do not have a direct relationship with advertisers. Therefore, while as Figure 2 shows, this pathway is defined by advertiser-facing functionalities, these are offered by the intermediaries, not the VSPs. Our evidence indicates that those relying solely on this pathway had little to no control over the commercial communication they carried. Without data-enabled advertiser-facing functionalities, the primary contractual relationship that governs commercial communication in the open web pathway is between the advertisers and the intermediaries. Another control point exists in the power audience-facing functionalities grant users to protect themselves or participate in protection mechanisms through age-based or other filters and by flagging problematic commercial communications. As Figure 2 indicates, these were only applicable to the top three pathways, and not the open web pathway.

For the purpose of analysis, we have distinguished these four pathways but of course many of the VSPs in our sample utilized more than one. On YouTube, Instagram and TikTok, for example, commercial communication was traded through the first three pathways. Our findings also showed a group of low functionality VSPs whose commercial communication was limited primarily to the open web, with some evidence of the native pathway being used. The providers of these VSPs appeared to lack the contractual control over commercial communications that may be required to ensure compliance with AVMSD requirements.

Implications for co-regulation under the AVMSD

Advertising standards have been part of the AVMSD since its beginning as the Television without Frontiers Directive, applying first to television and then to audiovisual media services. They have always echoed international standards of advertising practice that date back to 1937

and that have been reflected in the self-regulatory codes of countries throughout the globe. Enforcement of standards in commercial communication in Europe has long been the domain of self-regulatory organisations (SROs) often operating in co-regulatory systems with national regulatory authorities or other state institutions acting as second instance decision makers or oversight bodies. As Dickinson-Delaporte et al. (2020) have argued, the delicate balance of these systems, which allocated responsibility to advertisers and involved consumers, media and SROs in enforcement backed up by legislation, have been disrupted by the proliferation of online advertising-supported media. Our findings have implications relevant for the implementation of the AVMSD and the adaptation of these systems governing advertising.

Our investigation identified several commercial communication functionalities that give creators some control enabling them to ensure it complies with AVMSD rules. Indeed, SROs across Europe, for example the Dutch, Spanish and UK ones, have already been attempting to address creators, or influencers, with specific codes of conduct and guidelines (see de Cock Buning 2020). However, we found functionalities across our sample that enabled advertisers to engage in self-promotion as well as promotion through arrangements with other creators, yet we did not find functionalities facilitating AVMSD compliance on all or even most of the VSPs. Some did not even address disclosure in their terms or advertising to children, much less provide easy tools for declaring commercial communication or designating age ratings. Including these functionalities in their value proposition to creators could be called for by the SROs and regulators holding VSPs accountable as a necessary measure for protecting users.

Advertisers themselves have long been those primarily held responsible for upholding standards such as those outlined in the AVMSD. They participate in SROs, developing and agreeing to the standards and accepting decisions when breaches are found. As SROs throughout Europe have extended their remit to cover online advertising they have been dealing with complaints about online display or influencer commercial communications and requiring advertisers to withdraw content if needed. However, this system has been challenged by the role users themselves are playing in commercial communications as creators and by the volume of small advertisers now able to place directly online, many of whom are not party to SROs and may not even be aware of standards (Dickinson - Delaporte et al. 2020). The media on which commercial communications are carried have long played an important role in enforcement, especially broadcast media subject to regulation by national regulatory authorities. The purchasing pathways revealed by our examination of commercial communications functionalities indicate players who, based on our analysis, we argue should be directly engaged in enforcement in a similar manner. Firstly, several VSPs encouraged MCNs, which in the influencer pathway often represent creators as their agents and serve as intermediaries between brands and influencers. They have contractual relationships with creators that could serve as another enforcement point to ensure that creators engaged in commercial communications comply with the requirements of the AVMSD and other advertising standards.

Secondly, the distinction between the two purchasing pathways we found for display advertising indicates an enforcement gap in the open web pathway where VSPs had little or no control over the advertising they carried. VSPs whose functionalities supported purchasing commercial communication inventory through proprietary systems, some of which offered highly sophisticated self-service tools, shared control with advertisers over the conduct of campaigns and held ultimate control over the terms under which they were conducted. On those trading through the open web, those functionalities were offered by advertising intermediaries, while the VSPs exercised little or no control. Some of the intermediaries involved in the

complex programmatic advertising systems are already represented in SROs via their participation in industry associations such as the Interactive Advertising Bureau (IAB). We suggest these intermediaries be more directly incorporated.

The evidence from our mapping of functionalities across 13 VSPs showed a group of high functionality ones, such as YouTube, the Facebook properties, TikTok, and to some extent LinkedIn, whose value propositions to advertisers and creators seem to give them a great deal of control. Some of the functionalities providing this control seem to enable advertisers placing campaigns or creators engaged in commercial communication to ensure compliance with advertising standards themselves. The evidence from our analysis of the purchasing pathways demonstrates that terms set by the VSPs govern the use of these functionalities. Though it was outside the scope of this study to assess the extent and vigour of VSPs' enforcement of their contractual relationships, our findings identify this as an important control point where VSPs could be held accountable, even if responsibility is shared between them and their users.

The AVMSD foresees national regulatory authorities to be directly involved in the co-regulation of VSPs as they are called upon monitor measures being taken by VSPs to protect users. They are charged with examining specific VSPs over which they have jurisdiction, which our evidence indicates can vary extensively in their functionality. Though our evidence presents only a snapshot of the functionalities that could be found at a particular point in time, they can serve to direct efforts to assesses measures being taken by VSPs. It has also been suggested that the channels of some creators on VSPs could meet the criteria of audiovisual media services (de Cock Buning 2020; ERGA 2020). The establishment of "editorial responsibility" through the use of "advanced features", or functionalities, of the VSPs would be a crucial step if this is to be done (ERGA 2020, p. 9). Some of the commercial communication functionalities that form the value proposition accepted by the users may be useful in establishing this type of responsibility.

Conclusions

Debates about how best to govern online platforms have generated ideas about how to distribute responsibility across industry players, state or government institutions, and users (Helberger et al. 2018) and involving various stakeholders in *co-governance* (Gorwa 2019). In Europe, the way advertising standards are set and enforced could already be seen as *polycentric co-regulation* in which responsibility is distributed among multiple stakeholders (Finck 2018). SROs tend to be broad churches in which advertisers, media agencies and media organisations participate. They also rely heavily on audience complaints for enforcement, thereby sharing some responsibility with individual citizens and are backed up by government legislation and often a national regulatory authority in some capacity. The European Advertising Self-regulatory Association (EASA) even has a transnational coordination mechanism among its member SROs for handling cross border complaints. Our investigation into functionalities provided evidence indicating that additional industry stakeholders need to be fully integrated into systems for the creation and enforcement of standards. It also showed and that creators can be given control through which they can be expected to take responsibility. We therefore argue that the concept of functionality, which captures the platform design elements and the acceptance of a value proposition by various kinds of users can be useful in distributing co-operative responsibility (Helberger et al. 2018) within dynamic, polycentric co-regulation.

Examining commercial communication functionalities also revealed specific control points where platforms could be held accountable for protecting users. As policymakers in Europe are

considering how to assess the level of risk of harm posed by particular platforms, and how best to hold them accountable for preventing harms, we suggest examining functionalities may be useful for both these tasks. It has been argued that the character of a platform service should be considered in addition to its reach in determining risk (Broughton Micova & de Streel 2020; De Streel & Husovec 2020), and the extent of control exercised by a platform through its functionalities could be a telling characteristic. More research is needed into platform functionalities beyond those related to commercial communication and into the extent to which they serve to mitigate risks. National regulators, who are expected to assess VSPs' measures under the AVMSD, have already proposed holistic and cooperative approaches to holding platforms accountable (ERGA 2020). According to proposals on the table in the EU and the UK at the time of writing, these same regulators will be engaged in the co-regulation of a variety of online services. They will need to know where to look to hold platforms accountable for the implementation of measures to protect the public. We suggest functionalities are a good place to start.

References

Aberbach, J. D. and Rockman, B. A. (2002), 'Conducting and coding elite interviews', *PS: Political Science & Politics*, 35:4, pp.673–676.

Adshead, S., Forsyth, G., Wood, S. and Wilkinson, L. (2019), *Online Advertising in the UK. A report commissioned by the Department for Digital, Culture, Media & Sport*, London: Plum Consulting.

Anderson, S. P. and Jullien, B. (2015), 'The Advertising-Financed Business Model in Two-Sided Media Markets', in S.P. Anderson, j. Waldfogel and D. Stromberg, (ed.) *Handbook of Media Economics* (Vol. 1A). North Holland: Elsevier. pp. 41-90

Arthurs, J., Drakopoulou, S. and Gandini, A., (2018), 'Researching YouTube', *Convergence*, 24:1, pp.3-15.

Boudreau, K. J. and Hagiu, A. (2009), 'Platform rules: multisided platforms as regulators', in A. Gawer (ed.), *Platforms, Markets and Innovation*. Cheltenham: Edward Elgar Publishing.

Brar, A., Pipko, O. and Saltzman, R., (2017), 'Optimal Allocation of Programmatic Video Advertising Inventory', *Journal of Supply Chain and Operations Management*, 15:2, pp.151.

Burleton, E. (1982), 'The self-regulation of Advertising in Europe', *International Journal of Advertising*, 1:4, pp.333-344.

Broughton Micova, S. and de Streel, A. (2020), 'Digital Services Act: Deepening the internal market and clarifying responsibilities for digital services', Brussels: Centre on Regulation in Europe (CERRE), https://cerre.eu/publications/digital-services-act-responsibility-platforms/ Accessed 14th February 2021.

Broughton Micova, S. and Jacques, S. (2020a), 'Platform power in the video advertising ecosystem', *Internet Policy Review*, 9:4, pp.1-28.

Broughton Micova, S. and Jacques, S. (2020b), 'The Functions of Data in the Competition between Audiovisual Media and Video Sharing Platforms for Advertising', *Journal of Information Policy*, 10, pp. 514–548.

Competition and Markets Authority (2020), 'Online platforms and digital advertising. Market Study Final Report' https://www.gov.uk/cma-cases/online-platforms-and-digital-advertising-market-study, London: The Competition and Markets Authority

de Cock Buning, M. (2020), 'Life after the European Audiovisual Media Services Directive: Social media influencers through the looking-glass', in C. Goanta and S. Ranchorás (eds.), *The Regulation of Social Media Influencers*, Cheltenham: Edward Elgar Publishing, pp.47-73.

De Streel, A. and Husovec, M. (2020), The e-commerce Directive as the cornerstone of the Internal Market: Assessment and options for reform'. Strasbourg: European Parliament

De Veirman, M., Cauberghe, V. and Hudders, L. (2017), 'Marketing through Instagram influencers: the impact of number of followers and product divergence on brand attitude', *International journal of advertising*, 36:5, pp.798-828.

Dickinson‐Delaporte, S., Mortimer, K., Kerr, G., Waller, D. S. and Kendrick, A (2020), 'Power and responsibility: Advertising self‐regulation and consumer protection in a digital world', *Journal of Consumer Affairs*, 54:2, pp. 675–700.

Eisenhardt, K., Gawer, A. and Hannah, D. (2018), 'Shaping Sectors, Changing Architectures, Constructing Ecosystems' *Academy of Management Proceedings* 2018:1, pp. 12100 Briarcliff Manor, NY: Academy of Management, 2nd July.

ERGA, (2020), 'Activity Report on the ERGA Workshop: Regulation of Vloggers on Video-Sharing Platforms' Brussels: ERGA https://erga-online.eu/wp-content/uploads/2021/01/ERGA-SG1-Report-Vlogger-Workshop-Sept-2020

European Commission, (2020), 'Communication from the Commission, Guidelines on the practical application of the essential functionality criterion of the definition of a 'video-sharing platform service' under the Audiovisual Media Services Directive', https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020XC0707(02)&from=EN Accessed 14th February 2021

Evans, N.J., Hoy, M. G. and Childers, C.C. (2018), 'Parenting "YouTube natives": The impact of pre-roll advertising and text disclosures on parental responses to sponsored child influencer videos', *Journal of Advertising* 47:4, pp. 326–46

Evans, D.S., Schmalensee, R., Noel, M.D., Chang, H.H. and Garcia-Swartz, D.D. (2011), 'Platform economics: Essays on multi-sided businesses', in David S. Evans, (ed.), *Platform Economics: Essays on Multi-Sided Businesses*, Competition Policy International.

Finck, M. (2018), 'Digital co-regulation: Designing a supranational legal framework for the platform economy, *European Law Review*, 43:1, pp. 47–68.

Gawer, A., (2020), 'Digital Platforms's Boundaries: The Interplay of Firm Scope, Platform Sides, and Digital Interfaces', *Long Range Planning*, https://doi.org/10.1016/j.lrp.2020.102045.

Goanta, C. and Ranchorás, S. (2020), 'The regulation of social media influencers: an introduction', in C. Goanta and S. Ranchorás (ed.), *The Regulation of Social Media Influencers,* Cheltenham: Edward Elgar Publishing, pp.1-20.

Gorwa, R. (2019), 'What is platform governance?' *Information, Communication & Society*, 22:6, pp. 854–871.

Gräve, J.F., (2019), What KPIs are key? Evaluating performance metrics for social media influencers. *Social Media+ Society*, 5:3 https://doi.org/10.1177%2F2056305119865475

Gregory, R.W., Henfridsson, O., Kaganer, E. and Kyriakou, H., (2020), 'The role of artificial intelligence and data network effects for creating user value', *Academy of Management Review*, https://doi.org/10.5465/amr.2019.0178

Harvey, W. S. (2011), 'Strategies for conducting elite interviews', *Qualitative Research*, 11:4, pp. 431–441.

Helberger, N., Pierson, J. and Poell, T. (2018), 'Governing online platforms: From contested to cooperative responsibility', *The Information Society*, 34:1, pp. 1–14.

Helmond, A., Nieborg, D.B. and van der Vlist, F.N., (2019), 'Facebook's evolution: development of a platform-as-infrastructure', *Internet Histories*, *3:*2, pp.123-146.

IAB, (2019), 'IAB Internet Advertising Revenue Report', https://www.iab.com/wp-content/uploads/2019/05/Full-Year-2018-IAB-Internet-Advertising-Revenue-Report.pdf Accessed 14th February 2021.

Interinstitutional Agreement between the European Parliament, the Council of the European Union and the European Commission on Better Law-Making, (2016) *Official Journal of the European Union*, OJ L 123, 12.5.2016, pp. 1–14

Jacobides, M. G., Cennamo, C., & Gawer, A. (2018), 'Towards a theory of ecosystems', *Strategic Management Journal*, 39:8, pp. 2255–2276.

Jacobson, J., Gruzd, A. and Hernández-García, Á., (2020), 'Social media marketing: Who is watching the watchers?', *Journal of Retailing and Consumer Services*, pp. *53*.

Karppinen, K. and Moe, H. (2019), 'Texts as Data 1: Document Analysis', in H. Van den Bulck, M. Puppis, K. Donders and L. Van Audenhove (ed.), *The Palgrave Handbook of Methods for Media Policy Research*. London: Palgrave Macmillan, pp.249-262.

Flick, U. (2018), 'Triangulation in Data Collection', in U. Flick (Ed.), *The SAGE Handbook of Qualitative Data Collection*. Thousand Oaks: SAGE Publications, pp. 527-544.

Kenney, M., Rouvinen, P., Seppälä, T. and Zysman, J., (2019), 'Platforms and industrial change', *Industry and Innovation*, 26:8, pp. 871-879.

Kozyreva, A., Lorenz-Spreen, P., Hertwig, R., Lewandowsky, S. and Herzog, S., (2020), 'Public attitudes towards algorithmic personalization and use of personal data online: Evidence from Germany, Great Britain, and the US'. *Humanities & Social Sciences Communications*, 8:1, pp.1-12.

Krämer, J., Schnurr, D. and Broughton Micova, S. (2020), *The role of data for digital markets contestability: Case studies and data access remedies*, Centre on Regulation in Europe asbl (CERRE) 9th September, https://cerre.eu/publications/data-digital-markets-contestability-case-studies-and-data-access-remedies/ Accessed 10th February 2021.

Lobato, R., (2016), 'The cultural logic of digital intermediaries: YouTube multichannel networks', *Convergence*, 22:4, pp. 348-360.

McIntyre, D., Srinivasan, A., Afuah, A., Gawer, A. and Kretschmer, T. (2020), 'Multi-sided platforms as new organizational forms', *Academy of Management Perspectives*, https://doi.org/10.5465/amp.2018.0018

Schreieck, M., Wiesche, M. and Krcmar, H. (2016), 'Design and Governance of Platform Ecosystems: Key concepts and issues for future research', *ECIS 2016 Proceedings Research Papers 76*, 24th European Conference on Information Systems, ECIS 2016, Istanbul, Turkey, June 12-15.

Runge, J., Geinitz, S. and Ejdemyr, S. (2020), 'Experimentation and performance in advertising: An observational survey of firm practices on Facebook', *Expert Systems with Applications*, https://doi.org/10.1016/j.eswa.2020.113554

Scott, J. (1990), *A matter of record: Documentary sources in social research*, Hoboken: John Wiley & Sons.

Tashakkori, A. & Teddlie, C. (2010), *Handbook of mixed methods in social & behavioral research*, Thousand Oaks: SAGE Publications.

Turow, J. and Couldry, N. (2018), 'Media as data extraction: Towards a new map of a transformed communications field', *Journal of Communication*, 68:2, pp. 415–423.

Van Audenhove, L. and Donders, K. (2019), 'Talking to People III: Expert Interviews and Elite Interviews', in H. Van den Bulck, M. Puppis, K. Donders, & L. Van Audenhove (ed.), *The Palgrave Handbook of Methods for Media Policy Research*, Palgrave Macmillan. pp. 179–197

Vonderau, P., (2016), 'The video bubble: Multichannel networks and the transformation of YouTube', *Convergence*, 22:4, pp. 361-375.

[1] The work presented here represents a reexamination and expansion of a portion of the data collected for a much wider study on VSPs. The results of the full study on the implementation of the new provision of the AVMSD on VSPs, which was conducted on behalf of the European Commission were published in January 2021 and can be found *Study on the implementation of the new provisions in the revised Audiovisual Media*

Services Directive (AVMSD) Final report and can be found at https://digital-strategy.ec.europa.eu/en/library/study-implementation-new-provisions-revised-audiovisual-media-services-directive-avmsd.

[2] The original sample consisted of 15 VSPs. One service (Trilulu) was discontinued during the investigation and two (Archive.org and D.tube) we determined did not contain commercial communications.

[3] The Commission's proposed criteria used for mapping were only draft form when the bulk of the data collection took place and differ from the final Guidelines on Video-Sharing Platforms adopted in July 2020, which can be found here: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020XC0707(02)&from=EN

[4] A total of seven semi-structured interviews were carried out in September 2020 with representatives from five VSP providers and two pan-European associations. Further details cannot be given due to the conditions of consent.