Ofcom media plurality News ecosystem dependencies mapping

FINAL REPORT

9 AUGUST 2022

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Conrad Roeber conrad.roeber@me.com

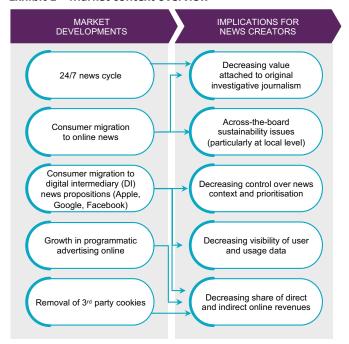
1. Summary and conclusions

The competitive dynamics faced by news creators are increasingly determined by the convergence of the news market into the online space. While legacy news creators are still committed to, and in many cases depend upon, the legacy distribution model with which they are synonymous, increasingly they are fighting for audiences in an online environment not only against other news creators but also against digital intermediaries (DIs) who disaggregate their news content and reconstitute it (or digestible snippets of it) into news feeds on their own platforms.

Local newspapers now compete online directly with BBC local News; national papers such as The Guardian compete with SkyNews.com. Newspaper publishers carry video content, video news providers produce reams of text-based material and radio broadcasters run video channels on YouTube.

This online convergence, the growth in significance of the DIs plus other key factors, provides the context in which the UK's news sector is evolving and drives the emergence of dynamics which have toughened the business case for many news creators (see exhibit 1 below):

Exhibit 1 - Market context overview



In this context, we have identified a range of dependencies we consider to be critical within the sector. See exhibit 2 below:

Exhibit 2 – Critical dependency areas - overview

NEWS CONTENT CREATION

News ecosystem is dependent on cross-fertilisation of investment in original investigative journalism and on journalism at the local level – both at risk

DISTRIBUTION

News creators are dependent on legacy distribution (print, broadcast) but viability under threat as online grows

News creators are dependent on user and usage data to verify audience reach, for product improvement and monetisation — intermediated consumption delivers less granular data

News creators are dependent on DIs for content filtering and selection – placing the DIs in a key role in news propositions and as gatekeeper between news creators and their audiences

VALUE CREATION

Direct revenues remain a key dependency for news creators but are in decline

News creators are increasingly dependent on online ad sales within which programmatic advertising is growing, but which undervalues publisher context and within which one player (Google) has considerable strength

News creators have a growing dependency on DIs for share of revenues generated on digital platforms

The changes in the dynamics governing news businesses are reflected in these critical dependencies and have several implications for how to approach regulation which is focused on sustaining media plurality:

- 1. The almost instant cross-fertilisation of news discovery between news outlets on different media, reinforced in a 24/7 market, implies that interventions targeted to specific media may be less relevant in this converging news ecosystem.
- 2. While the fulcrum of competition for all news providers, whether TV-first, radio-first or print-first, is moving towards web or app products and away from the legacy media, the journalistic activities which sit behind these products can serve all types of news outlet. Medium is therefore of diminishing importance when looking at news provision, which again supports the view that interventions targeted to specific media have diminishing relevance in the support of plurality.
- 3. The role of digital intermediaries in separating news items from their published context and using user data to which they have exclusive access to surface a personal selection of these items (from different publishers) places them in a central position in the emerging news ecosystem. This has an impact on plurality where and if these intermediaries create news propositions that come to dominate how news is consumed.
- 4. News creators have a growing dependence on the programmatic ad system. Notable features are: it structurally undervalues news inventory, and Google has considerable strength in the system, end to end. These features make it more challenging for regulators to ensure the balance which is effected in their approaches to news provision on legacy media between regulatory obligations and privileged access to revenue opportunities (TV advertising, position on EPG etc.).

2. Background and introduction

The ways in which consumers and citizens interact with news media have changed dramatically in recent years. New technology has enabled people to engage with news in previously unforeseeable ways and has challenged the business models of traditional news media organisations. Against this backdrop, media plurality remains the cornerstone of a well-functioning democratic society.

Ofcom has a statutory duty to secure and maintain a sufficient plurality of providers of different TV and radio services. It also has a duty to review the operation of the media ownership rules listed under section 391 of the Communications Act 2003, every three years. Alongside the rules review, in June 2021, Ofcom launched a programme of work to understand what impact changes in the market for news might mean for media plurality, looking beyond the existing media ownership rules.

To help inform this work, Ofcom is seeking to improve its understanding of specific dynamics in the UK news media market, and their implications for policy making. It has therefore commissioned us to develop a map of the structural dependencies across new and traditional news media in the UK and to address the following questions:

- What are the implications of these dependencies that we should take into account when considering the future regulation of media plurality?
- How do structural dependencies impact our ability to target measures at specific media or specific players in the supply chain?

To ensure that the output reflects current perspectives on these features of the news sector, we conducted interviews with 29 people representing a selection of the key players in the sector (see appendix). We also reviewed submissions and other documents describing the purpose and functioning of the complex interactions that support the supply of news content and deliver value from the consumption of news content.

Our approach to the task has been structured around an examination of dependencies in the creation of news content, the distribution of news content to consumers and the data and value flows generated by the consumption of news content. Within the supply analysis, we have separated content creation from content distribution and within distribution has treated direct distribution separately from indirect distribution (ie via digital intermediaries).

A large amount of content is distributed on social media and other platforms that consumers may regard as 'news' (much of it indeed 'fake news'), but this report is limited to an examination of the creation, distribution and monetisation of news that is created by 'news creators' in the UK. We have broadly categorised the relevant players into:

- **News creators**: those attached to a legacy format (TV and radio broadcasters and print publishers) plus those who are digital-only (either digital natives, such as HuffPost, or those who have ceased their legacy product production, such as the Independent).
- **Digital intermediaries**: a full list of digital intermediaries who package or simply distribute news content (or snippets of content with links) to consumers might include the likes of TikTok and SnapChat, but for expediency and because they represent the lion's share of digitally intermediated content this analysis has focused on the news products within the Google, Facebook and Apple product suites only (Google has a 86% share of search¹, Android has a 87% share of global devices², Facebook has a 59% share of social media³ and Apple has a 13% share of the smartphone market⁴).

¹ Source: Statista 2022

² Source: Statista 2022

³ Source: eMarketer (2020)

⁴ Source: Statista 2022

3. Market context

Exhibit 3 below describes the circular flow of content, data and value that sustains the news ecosystem, indicating the broad shifts in market dynamics currently being experienced by news creators in the UK's news sector.

Decreasing strategic and financial value attached to investigative journalism

With the growth of online news and a 24/7 news calendar, there is a narrowing window of value for breaking stories. Whereas a newspaper could be guaranteed at least a 24-hour window of exclusivity with an original story, this is now reduced to minutes. So, there are lower returns attached to original investigation, an activity that typically requires substantial resources (time and money) to deliver.

Decreasing control by news creators over context and agenda

There is increasing news consumption on news websites and apps and on apps and websites provided by digital intermediaries (DIs) such as Facebook, Google and Apple. This is reflected in falling newspaper sales and gradual declines in other 'legacy' media audiences⁵.

In this online news marketplace, DIs are distributors of news creator's content⁶, but they also compete with the same news creators for audiences.

In a direct news creator's proposition (eg The Times, BBC.co.uk/news, MailOnline etc.), the context – story selection and prioritisation – is provided by the news creator; where news is consumed within a DI's app, the context is provided by the DI, driven by a mixture of editorial curation and algorithmic selection.

Decreasing visibility to news creators of user and consumption data

User and consumption data are valuable to news creators as the basis on which audience reach is verified, products are improved, and advertising monetised.

Legacy media provide news creators with direct usage data from sales, readership and audience surveys and user data from subscriptions. Digital media provide more granular usage and user data. However, usage data generated from 'indirect' consumption of news content on DI platforms (where the user only reads a 'snippet' and / or does not click through to the origin site) is shared with news creators in aggregate (or not at all) and for privacy no user ID data is shared.

Decreasing share of revenues

As online consumption grows, news creators are increasingly dependent on online advertising revenues and subscriptions. Within online ad sales,

programmatic advertising is delivering an increasing proportion of revenues, but delivers less control for publishers and advertisers.

(Programmatic advertising refers to an automated real-time auction exchange system between advertisers and publishers that is focused on matching ads to target users and allows neither the advertiser to decide fully which publications its advertisements appear nor the publisher to decide fully which advertisers appear in its publication. It also encourages algorithmic content blocking — to avoid advertisements appearing in close proximity to 'negative' words or contexts — that structurally de-values news content, which often contains such words.)

Programmatic advertising diminishes the publisher's ability to charge a premium for its publication. The system is also largely dominated by one player (Google), so there are concerns around transparency and that it delivers a lower share of revenues to the news creator⁷.

In addition, as audiences migrate to DI propositions, news creators are faced with sharing an increasing proportion of their revenues with the DI where it runs its own ad sales operation around their content.

The market is shifting from one in which legacy news creators had quasi 'gatekeeper' control over the audiences within each distribution medium, to an online market where this gatekeeper control has been rescinded. However, the growth of digital intermediaries poses the question of whether they are themselves developing gatekeeper control to online audiences for news content.

Description of the exhibit:

The **green arrows** indicate content which is distributed within the legacy format, the direct online product or which is distributed by DIs. The **blue arrows** show the types of data generated from the consumption of the different news propositions and the flow of this data to support value-generation (**orange arrows**) for news creators.

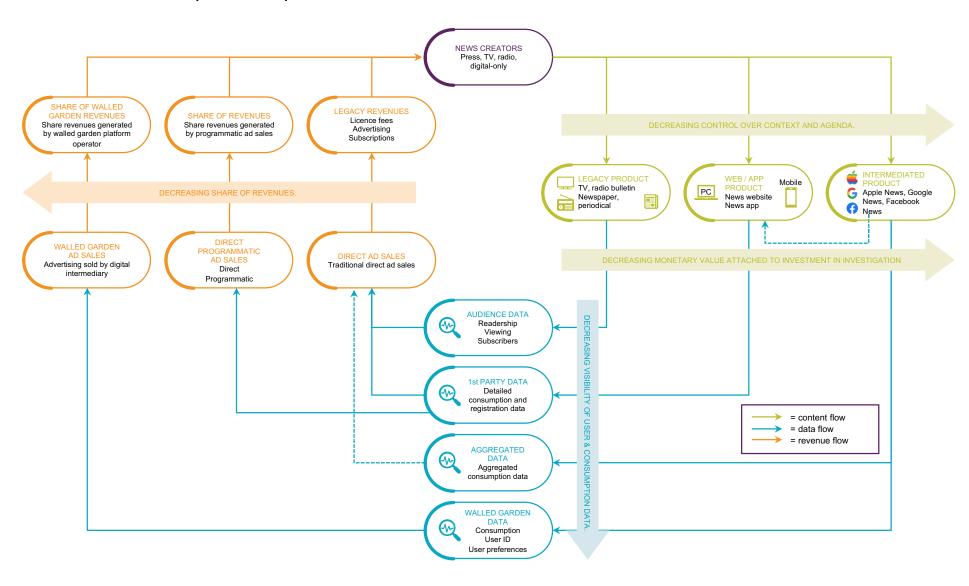
The wide arrows indicate the dynamics associated with each of these flows, broadly indicating that the more online consumption and the more consumption via DI products (the outer flows in the diagram), the less control over context, the less visibility of data and the lower share of potential revenues are returned to the news creator. The smallest (innermost) of the concentric rectangles depicts the legacy news business model; the largest (outermost) depicts a system in which digital intermediaries have a larger role.

⁵ Ofcom news consumption study 2021

⁶ Henceforth news 'items' or 'content' refers to full items or snippets of news content plus link

⁷ <u>https://www.gov.uk/government/news/google-probed-over-potential-abuse-of-dominance-in-adtech</u>

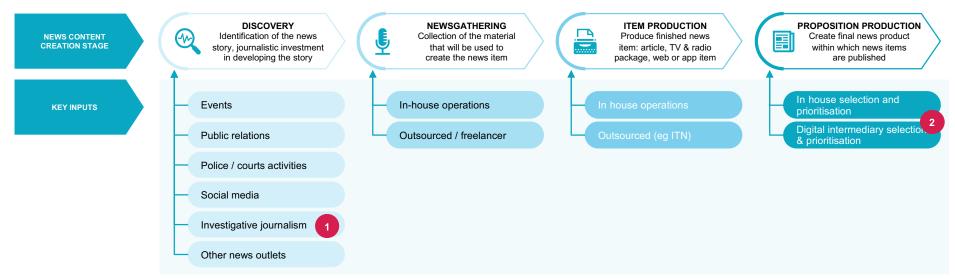
Exhibit 3: Overview of market dynamics faced by news creators



4. News content creation

Exhibit 4 below provides an overview of the broad stages involved in the creation of both news items (individual news stories) and the news proposition in which they are presented to their audiences (newspapers, broadcast news bulletins, news websites and feeds of disintermediated news stories such as Apple News). Interdependencies considered critical in this, and subsequent exhibits are indicated by the red numbers.

Exhibit 4: News content creation stages



The news creation process starts with **discovery**, unearthing facts through analysis, observation or investigation. The health of democratic public debate depends on the comprehensive scrutiny of events and responsible individuals at all levels and in all areas in society. Much of the agenda-setting that takes place depends on investment by newspapers in original research and investigation in each region of the UK.

"The unique nature of press is still very much agenda-setting, particularly investigative journalism and the hunt for the story" *Newspaper group*

This critical dependency of news creators on *investigative journalism* is discussed below

The **newsgathering** stage involves activities that create or collect the material that will be used to produce a news item, from interviews, archive research, filming, recording etc.

Item production involves the creation of the individual news story that will be assembled in the final stage – proposition production – involving the presentation of news items in a finished news product – a newspaper, periodical, TV or radio bulletin or news website or app – where order and prominence reflect a layer of editorial input which is part of the news creator's 'voice' inherent in their approach to news content creation. The separation of news item from news proposition is a key feature of the news market, in the context of the disaggregation by digital intermediaries of news items from their original news propositions and their reassembly (either in their entirety or in the form of a content snippet plus a link) in their own news products for their users, discussed in section 5 below.

Critical dependencies



Investigative journalism

Dependency: the news sector is highly dependent on original investigative journalism for story discovery.

"A story has to come from somewhere, so if it doesn't come from another news outlet, it must come from original investigation" *National newspaper*

"Investigation is important to counter local corruption." *National Newspaper*

Context and dynamics: broadcaster daily news operations generate fewer long and intense investigations (eg Snowden, Panama Papers, Windrush) than newspapers, so the sector has a clear dependency on investigative activity within newspapers. Whereas in the pre-internet age a newspaper could rely on having at least 24-hours' exclusivity for a breaking story, now the moment a story is published it is shared with, and lifted by, other news outlets (including broadcasters, who compete head on with newspapers in the web-based news market). Accordingly, newspapers are less inclined to invest in the time and resources required to deliver successful investigation.

"There is less investigative journalism than before, due to the pressures of the economic model." *Regional newspaper group*

The more complex stories, involving multiple facts, are harder to corroborate and can lend some window of exclusivity. Broadsheets such as The Guardian may specialise in such investigations (eg Windrush, Panama Papers, Snowden) but nevertheless seek collaboration where possible with outlets (eg BBC) that will amplify their investment without compromising its value.

Local newspapers are the primary source of original journalism at the local level and are particularly conscious of where their investment may be exploited by their direct competition. For example, whereas in the past their journalism afforded them a unique voice in the local news ecosystem as the only print outlets, now

that they serve their customers primarily on the web, they compete directly for audiences with BBC local news which once used to be a radio-only voice in the local sector.

"We used to have a USP in covering local court activity; now the BBC covers these same stories and in the same medium as us." *Regional newspaper group*

Impact: the combination of shortened or disappearing windows of exclusivity for commercial news outlets with the fact that all news creators now compete online (eroding the competitive protection afforded by a position within a legacy medium) is impacting the value that news outlets can reap from original investigation.

Without investigation, news would be limited to stories generated by events (unforeseen wars, acts of God, political episodes etc) or public relations (PR) of one form or another (including announcements on social media as well as formal PR initiatives).



Item selection and prioritisation

Dependency: news creators are critically dependent on digital intermediaries (DIs) for the process by which they select and prioritise their news content within their news propositions.

Context and dynamics: for news creators, the production of a finished news proposition is an integral component in how a news outlet serves its audiences: the selection of news items and the priority given to these items through placement and prominence within the proposition. It allows the news creator to direct attention to stories and subjects that readers or audiences may not select themselves. Typically, this process is a seamless part of the editorial processes within a single news operation.

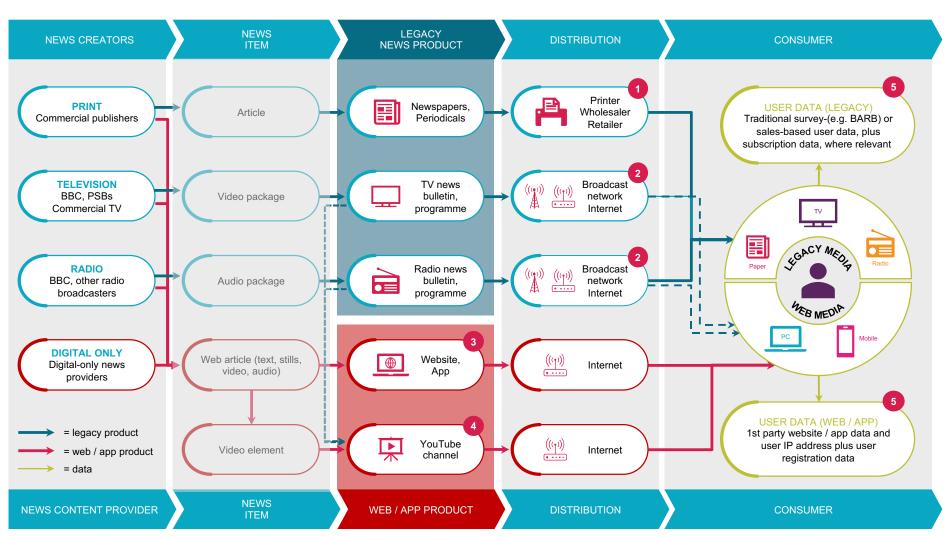
DIs such as Apple, Facebook and Google do not produce news items, but they do produce news propositions that select and prioritise 3rd party news items for their users. Selection is typically driven by a combination of editorial decisions (as found within traditional news operations) and algorithmic selection of stories.

Impact: this process is increasingly important in determining what news content reaches which of the DIs' audiences. This is discussed further in sections 5 and 6.

5. News content distribution – direct

This exhibit describes the flow of content from news creators to consumers where there is a direct, non-intermediated, relationship with the consumer. It depicts the distinction between distribution of a 'legacy' product (TV or radio bulletin, newspaper / periodical) and web- or app-based products. Note that legacy product distribution includes IP-based distribution and where a radio or TV programme is streamed on YouTube (blue dotted lines); an important distinction here is between the product types, rather than the technology deployed in distribution.

Exhibit 5: News content flows – direct distribution – plus user data generated



Critical dependencies

1 Print distribution

Dependency: our interviews confirm that many newspapers remain financially dependent on print sales, making it a critical dependency for reaching audiences.

Context and dynamics: as sales of newspapers decline, the retailer newspaper sales proposition declines in value.

"As print sales decline, there will be movement of the papers from front of shop to back of shop to not in the shop at all. Then there is a real danger of reaching a tipping point beyond which it will be a challenge to get copy into the hands of customers." National newspaper group

Impact: this increases pressure on non-print distribution for revenues, which to date have not generally substituted for lost print revenues, thus increasing sustainability concerns for the sector.

2 TV and radio distribution

Dependency: TV and radio news creators are dependent on broadcast networks.

Context and dynamics: most TV viewing and radio listening is still delivered through traditional broadcast networks (DTT, satellite, cable) where valuable prominence for news broadcasters is engineered via EPG positioning. Given migration to IP-based distribution (delivery via apps on connected TVs or devices) there may come a point at which broadcast distribution will be switched off.

Impact: while legislation is required to ensure prominence on digital platforms (eg Amazon), it is hard to deliver on mobile devices, so migration toward IP delivery erodes the value of shelf-space currently afforded on legacy broadcast networks.

3 News websites and apps

Dependency: news creators are increasingly dependent on their online products to reach audiences (as they migrate online).

Context and dynamics: while websites and news apps may carry within them a stream of the TV or radio service that is delivered on traditional broadcast networks, they are also a distinct news product.

"Our content goes online first...then it's sent to press. There may be different story prioritisation between digital and print versions (what's important tomorrow may not reflect the digital priority today)." Regional newspaper group

'Legacy' medium is of diminishing importance as online and print-first, TV-first, radio-first and native digital news creators all compete more equally as providers of web / app news propositions.

Impact: this begins to undermine any inherent advantages a news creator may have from its legacy distribution market and their ability to generate returns commensurate with their investment in news creation (see Section 6).

4 YouTube

Dependency: YouTube reaches 43% of global internet users each month⁸, so it is essential to reach audiences and is a key dependency for news creators.

Context and dynamics: news creators of all types operate YouTube 'channels' – pages on the platform where they curate a selection of video content or live stream their video services.

Impact: as with web- and app-based news products, YouTube represents a competitive equalisation between news creators; the YouTube channels of web-only creators like HuffPost compete alongside that of The Telegraph and other non-video news creators⁹.

5 User data

Dependency: news creators are highly dependent on the user and usage data generated by their products to confirm audience reach, support product improvement and revenue generation.

Context and dynamics: direct distribution generates consumption and personal data (sales, viewing, listening, data from web- and app-usage, subscriptions).

Direct distribution delivers this data directly to the news creator. But indirect (intermediated) distribution does not necessarily provide the same access.

Impact: this may compromise product development and revenue generation.

has clicked on a particular video, the video that follows this will not necessarily come from the channel provider. Instead, content is served by the YouTube algorithm (see section 6 below) surfaced from the entire YouTube catalogue.

⁸ Source: YouTube

⁹ Note: YouTube is included here as a direct distribution path for news content, but it is effectively only semi-direct as the publisher has limited control over the user experience on its channel; once the user

6. News content distribution – indirect

This exhibit describes the flow of content from news creators to consumers where the news content has been disaggregated from its native news proposition (eg BBC News website) and surfaced alongside news content from other news creators within a news proposition delivered by a digital intermediary (DI), Google, Apple or Facebook¹⁰. This exhibit illustrates the generic or typical flows of content; each intermediary operates differently, and the appendix contains more detail on the content, data and revenue flows associated with each approach.

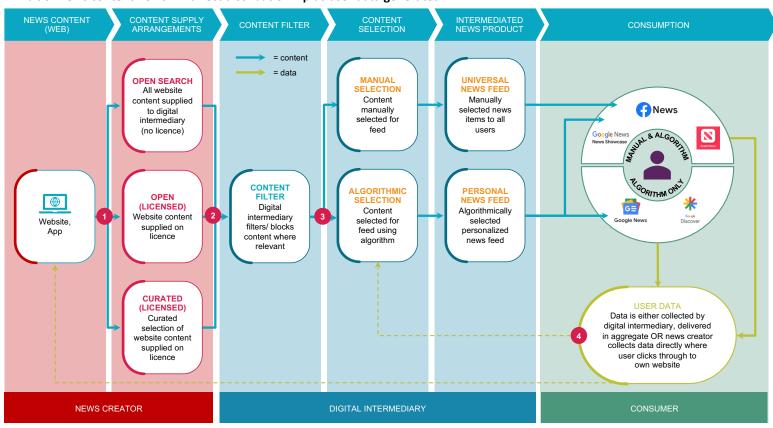


Exhibit 6: News content flows - indirect distribution - plus user data generated

Google search surfaces links to source content but it also surfaces content in its News Showcase proposition that is curated by news creators but hosted and rendered by Google. YouTube hosts all content on its platform except that which is live streamed. Consumption can therefore be of the snippet, or of the full item, hosted either locally (Apple, Facebook Instant Articles, some Google) or by the news creator source.

¹⁰ Each digital intermediary has a different approach to 'content': Facebook feeds contain *links* to original source content, but the link typically contains a 'snippet' of headline and other summary information that constitutes some element of news content. Facebook also hosts news items in their entirety on for its Instant Articles proposition (which therefore obviates the need to click through to the source). Apple hosts all the news content it surfaces itself, rendering identically to the source site.

Critical dependencies

1 Content supply arrangements

Dependency: DIs are dependent on news creators for the licensed supply of content which populates their news services. News creators are also dependent on DIs for the traffic they deliver to them.

Context and dynamics: Facebook and Apple's news products, YouTube and Google News Showcase only surface content that has been licensed for use on their platforms or to which links (Facebook) have been posted by users (see section 6 below).

Impact: some news creators have remained outside DI platforms (eg Guardian content is not available on Apple News products); the decision to supply depends on the net value such an arrangement will deliver. But as DI platforms grow, news creators have become more dependent on these supply arrangements.

"We have a sort of 'frenemy' relationship with Facebook: we're significantly dependent on them for traffic because they command such large audiences...but we earn very little ad revenue from it." *National newspaper group*

2 Content filter

Dependency: news creators are dependent on the process by which DIs adjudicate what is suitable content for inclusion of their content in the news propositions.

Context and dynamics: Google surfaces content in its news products which is transparent about origin and which does not run counter to the law, scientific or medical consensus; the other platforms operate dynamic content filtering processes that involve a combination of onboarding and algorithmic and / or manual review of content to ensure they meet platform guidelines.

Apple places most emphasis on a rigorous on-boarding process to ensure the content it selects meets its standards. Facebook and YouTube operate complex processes driven by algorithm, user flagging and manual review to filter individual pieces of content.

Impact: these processes represent filters on the distribution of content which can have a significant impact on value delivered to the news creator (where a piece of content is blocked, preventing associated ad sales).

"When access to the Facebook audience is reduced by being blocked from the newsfeed this is a challenge. *National newspaper*

3 Content selection

Dependency: news creators are dependent on the DIs' manual and algorithmic processes that select and prioritise specific news items (that pass their content filter) for inclusion in the news propositions served to their users.

Context and dynamics: Apple and Facebook employ editorial staff to select content which is served in the top part of their news products.

"Our job is not to set the agenda; our job is to reflect the agenda in a balanced and objective way. Our focus is on serving stories that are reputable, well-sourced, objective as possible." *Digital Intermediary*

Each intermediary also uses algorithmic selection to surface and prioritise news stories for individual users. Each platform uses its own criteria to drive this selection, which are published, but there is little transparency about how the algorithms weight factors in delivering this.

"Once you start reading, the app learns what you're interested in and gradually creates a personalised feed over time. The ultimate objective is a better experience." *Digital intermediary*

Impact: these selection processes deliver story selection and prioritisation that would be an integral component of a direct news creator's proposition. They therefore fulfil an editorial role (even where their selection and prioritisation criteria are designed to deliver an objectively determined set of outcomes).

4 User data

Dependency: news creators are dependent on intermediaries for providing user data that is essential for product improvement or revenue generation.

Context and dynamics: within indirectly distributed news content, users consume news content either by browsing headlines and straplines (snippets) or whole articles while remaining on the intermediary's platform or click through to the source article. Data generated within the platform is typically shared with news creators only in the aggregate and for privacy reasons no personal data is shared. Where a user has clicked through to the source of the story, the news creator is able to collect usage data for its own use.

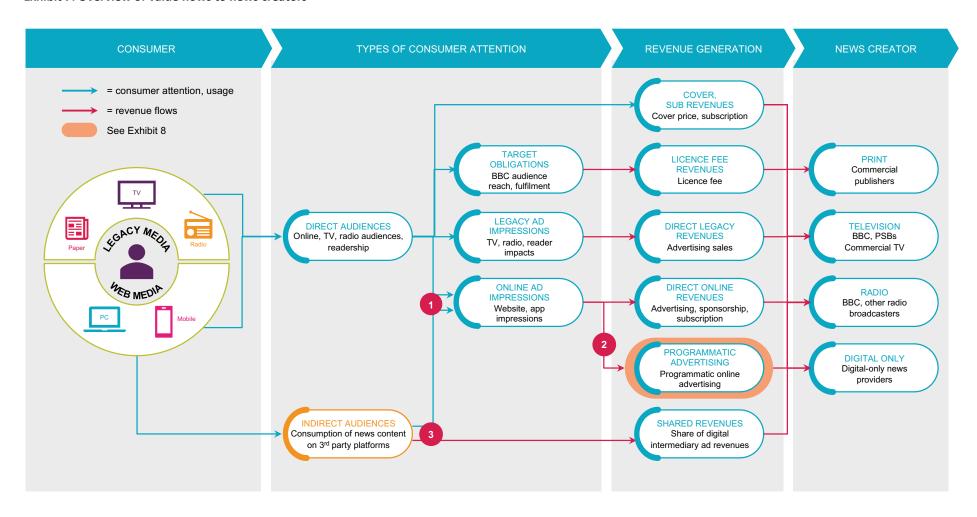
Impact: less granular usage and user data compromises the news creator's ability to understand and monetise its audiences.

7. Value creation

The UK news ecosystem supports news creators through a range of different revenue mechanisms, which are captured in simplified form in the exhibit below, all driven by consumer attention or usage. These include: licence fee revenues to the BBC; TV advertising; radio advertising; print advertising; online advertising sold directly, and online advertising sold by digital intermediaries and shared with news creators.

The following slides examine the three dependency areas in turn: 1) legacy revenues, 2) programmatic advertising and 3) digital intermediary revenues.

Exhibit 7: Overview of value flows to news creators



Critical dependencies



Online revenues

Dependency: while print and broadcast news creators continue to depend heavily on the revenues attached to their legacy media the structural decline in these revenue sources is driving a growing dependence on online audiences and revenues.

Context and dynamics: the pressures on legacy revenues are well understood: as legacy audiences decline, the advertising and subscription revenues associated with broadcast and print media continue to fall (notwithstanding the recent good performance of radio advertising in its recovery from the pandemic). At the same time, the BBC's funding is under pressure, with a real-term licence fee cut (nominal freeze until 2024) and a review of the funding mechanism pending for the next Charter renewal in 2027.

Therefore, both commercial and non-commercial news creators have a growing critical dependency on online audiences: it is imperative that the BBC delivers reach, which is increasingly secured online, and for commercial players, monetising online consumption of their content is critical.

"Digital has risen, but it's a constant struggle to increase digital advertising revenue faster than losing print revenue. Newspaper ad revenue is on a downward trend, inevitably." *National newspaper group*

Broadly speaking, they can do this either directly (selling their online advertising inventory to advertisers who wish to advertise in their publications, arranging content sponsorship or selling subscriptions) or using programmatic advertising models (see 2 below).

Successful direct online ad sales approaches depend on a combination of factors, which may include: sufficient sales operations scale; good relationships with advertisers who are keen to place advertisements in your publication; securing an ad price premium for your publication; scale and quality in your user data.

Impact: for local news publications which have direct relationships with local advertisers, direct ad sales account for most of their advertising revenues.

However, an ongoing concern amongst larger online publishers is that successful direct ad revenues are challenging and costly to secure when compared to the efficiency of programmatic ad options.

"In an ideal world we would have direct relationships with advertisers. We could vet for quality, ensure they're fraud-free, follow editorial guidelines, and we wouldn't have to pay intermediaries to get ads to the website. But it doesn't work like this any longer. Tech has allowed advertisers to target individuals across the web, but the effect has been to commoditise advertising inventory." *National newspaper*

2

Programmatic advertising

Dependency: news creators have a growing dependency on the programmatic advertising approach to online advertising.

Context and dynamics: Programmatic advertising is a system that emphasises the delivery of advertising to specific target user types, which places less weight on the value of the publication than with direct ad sales approaches. Exhibit 8 below provides a high-level overview of how the programmatic advertising system functions. Publishers release inventory into the system via a Supply Side Platform (SSP), setting a price floor and broad stipulations about advertiser type. Advertisers specify the type of audience they wish to reach and the price they are willing to bid (plus any brand safety guidelines, see below) via a Demand Side Platform (DSP).

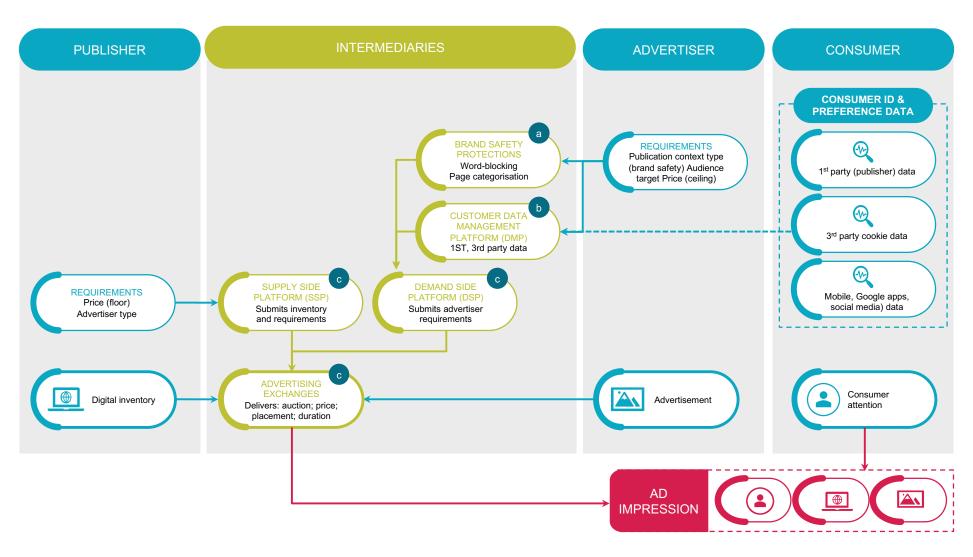
The system matches these two sets of requirements in an auction between multiple DSPs and SSPs that secures delivery of the ad to a specific page being opened by a user who meets the advertiser's target audience requirements, at an agreed price, all in real time while the user opens his or her web page (or app).

Impact: the efficiency of this system makes it a compelling option for selling online ad inventory and programmatic advertising now accounts for an estimated 85% of online ad sales¹¹, and the news ecosystem is increasingly dependent on it. A key feature of this system is that it does not allow publishers to choose the advertisers that appear on their pages, nor does it allow the advertiser to choose which publications their ads appear in.

. .

¹¹ Source: Publift.com

Exhibit 8: Overview of dependency 2: programmatic online advertising sales model



For news creators, there are three areas of sub-dependency within this (programmatic advertising) dependency:



a Brand safety protections

Dependency: the ability of news creators to monetise their ad inventory is critically dependent on the operation of brand safety measures used by advertisers.

Context and dynamics: while advertisers are not able to determine exactly in which publications their ads appear (something they can achieve using direct ad sales) they can set 'brand safety' stipulations. These ensure their ads do not appear in contexts which may compromise their brands (eg pornographic sites).

Advertisers use intermediaries that may deploy algorithms that exclude ad inventory that appears in proximity to certain words frequently used in news coverage. So, while a publisher may be perfectly happy to advertise directly in The Times, a programmatic ad bid may exclude any pages that refer to 'death' or 'disease', which could exclude programmatic ad delivery to Times coverage of the pandemic, for example.

> "Page categorisation and word-blocking (brand safety) seems arbitrary; it's done by algorithm and is difficult to challenge. We can find our home pages performing or under-performing without obvious reason. Eg it contains a picture of a nude from the National Portrait Gallery, and we find the page has been switched off." National newspaper group

Impact: hard news inventory is therefore generally more challenging to sell using the dominant programmatic ad sales system. (An initiative to counter this problem by creating a special category of news publishers, recognised by the system, has yet to gain traction.)

Another consequence is that this may divert resources away from valuable hard news journalism.

> "The danger of advertiser word-blocking and page categorisation from a plurality perspective is that you incentivise a publisher to spend more on anodyne (eg celebrity) stuff, less on hard news, which therefore becomes less profitable." National newspaper



User data

Dependency: news creators (like all content providers that generate ad revenues) are highly dependent on user and usage data as it is essential to the working of online ad sales systems.

Context and dynamics: programmatic advertising depends heavily on data that helps advertisers target specific user types and to monitor the impact of their campaigns. Data is collected by websites (1st party data), by platforms (eg Apple, Facebook, Google) and by 3rd party cookies, which track a user's journey and actions using their web browser. Though much of this data is of variable quality, it is combined by the various parties and intermediaries in the system, to enable advertisers determine which inventory is most likely to deliver the audiences suited to their advertising goals and then to verify that a sold ad was served.

Apple has already strictly limited the use of cookies on its platform and Google is planning to prohibit the use of 3rd party cookies from 2023. When Facebook users click on a news story, they are taken to the article in Facebook's own browser, which limits the collection of 3rd party data for advertising monetisation.

Impact: these restrictions limit how much valuable data a 3rd party can gather from across the various platforms used to consume news content, which enhances the value of data that the digital intermediaries gather on their own

Another concern amongst news creators is that this may reduce the value of their inventory.

> "Publishing context is less valuable than identity, which is delivered by cookies. If you block 3rd party cookies, you reduce the income for newspapers." Industry group

A counter consideration is that this move will increase the value of publisher context, enabling them to leverage both their publishing brand and their 1st party data for growing advertising revenues.

> "The online ad industry must figure out how to create relevance without using the tags provided by cookies. This could be good for premium publishers as context will become more important." National newspaper

However, combined with the difficulties associated with brand safety protections, described in (a) above, the fight to establish contextual value may make the programmatic advertising system highly challenging for news creators.



Role of Google

Dependency: a further concern about programmatic ad sales is that the system (on which news creators depend) is itself largely dependent on one player, Google,

who has significant ownership both on the seller and buyer side¹². Google accounts for 50-60% of transactions on the Demand Side Platform (DSP), 50-60% of transactions on the Supply Side Platform (SSP) and over 90% of transactions within the exchange and inventory and ad delivery parts of the system¹³.

Impact: this means there is a lack of transparency in how much value is transferred from ad spend to publisher.

"Google has a stranglehold on the ad sales system: they operate the biggest supply side platform; 75% of their advertising is placed by SMEs in search: all goes through Google Ad Exchange so if you want to access this demand you have to use their ad exchange. Then Google has a supply side platform. It's in the nature of supply-side platforms that it's an expensive and complex business to change, and you can't use more than one; so almost all publishers use Google. So, there's not much competition. They've managed to build market dominance." National newspaper group

3 Digital intermediary revenues

Dependency: exhibit 7 indicated the 3rd critical dependency within the value creation ecosystem, which is by news creators on revenues generated by digital intermediaries. It is important to note that the nature of this dependency is determined by the specific approach of each DI.

Context and dynamics: each of the digital intermediaries examined in this analysis takes a different approach to how news content is selected and presented, how traffic to that content is directed and how revenues associated with the content are generated and distributed. An overview of the approaches is provided in Exhibit 9 below.

Apple users consume all news content on the Apple platform, so all of it has been licensed directly to Apple. Since Apple keeps close control over data generated on its platform, direct ad sales opportunities for content providers are limited.

"We are on Apple News because it generates huge reach for us, but revenue opportunities are limited." TV news provider

The News+ proposition provides a share of subscription revenues to participants and paywall news creators are also able to activate subscriptions from users on the site.

Facebook carries news content links that are either posted (by news creators or by users) in user news feeds or are licensed specifically to the platform. Facebook's 59% share of social media¹⁴ gives it a powerful position relative to content providers.

"Facebook is hugely important to gain access to readers, so we have a 'frenemy' relationship with them. It delivers very little actual value, but we have to be there." Regional newspaper group

News content appears in news feed posts or in Facebook's dedicated News tab available to all users on their home page. A universal feed of top stories is selected by Facebook's editorial team, followed by an algorithmic selection which makes use of user profile and platform behaviour data to identify content that matches the users and their interests. Users can consume snippets of news content or full articles (Instant Articles) on the Facebook platform or can click through to the source (though the site is opened in Facebook's own browser¹⁵). Usage data on the platform is shared in aggregate only with no personal data, for privacy reasons.

"They don't provide data on consumption until reader clicks through, so we have no visibility on how much news content is being 'skimmed' without clicking onwards." Regional newspaper group

"What we get from Facebook is nothing like direct user data." TV news provider

News creators can directly monetise traffic delivered from Facebook or can take a share of revenues generated by Facebook's ad sales operation, but they generate little value from the consumption of news snippets on the Facebook platform.

Google surfaces news content through general search. This deploys the Google search algorithm which is subject to much debate amongst news creators about whether the results it delivers are consistent.

Google uses the same algorithmic approach to surface news content within its Google News products, the app which is available by default on Android devices and by choice on Apple OS devices, and its dedicated News website. These

¹² Google and Meta collaboration in Jedi Blue is subject to antitrust investigation (2022) by both the EU and the Competition Markets Authority (CMA). The CMA also conducted an investigation into the workings of the online ad sales market in the UK (2020)

¹³ Source: Platform Observatory (2021)

¹⁴ On cit

 $^{^{15}}$ The intermediation of the Facebook browser impedes data collection and user recognition by $3^{\rm rd}$ parties while providing consumption data for Facebook / publisher. Users have to click further to view the site in their device's internet browser, at which point $3^{\rm rd}$ party data collection may be possible.

services include curated news content that is licensed by Google from news creators (News Showcase).

The services present a selection of headline news plus a personalised feed, which deploys data generated by use of the various Google apps (when a user is signed in) or device-specific data (when not signed in).

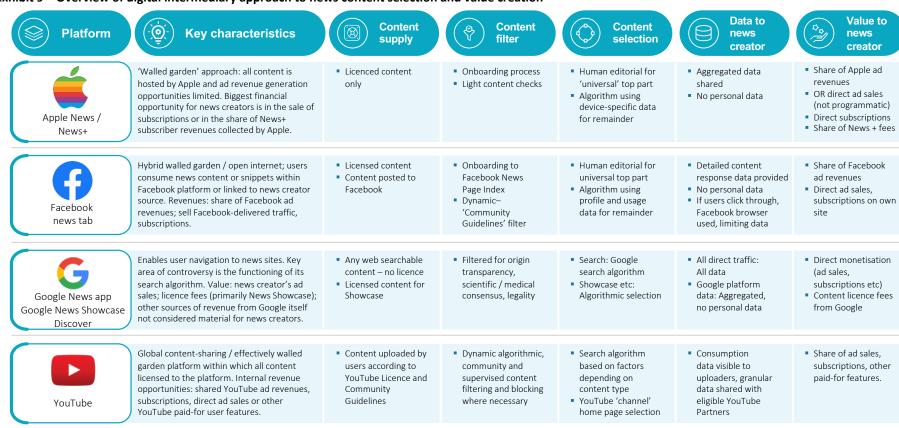
All the content that appears on **YouTube** is effectively licensed specifically for the platform by the user that uploads it. While news creators curate the first page of their 'channels', the user journey is broadly determined by the YouTube algorithm, which seeks to deliver 'quality viewing' measured primarily by viewing time and which deploys user data from YouTube primarily. News creators can use the platform to build brand awareness, for selling subscriptions or can monetise ad

inventory around their content directly, if they become 'YouTube partners'. Alternatively, they can receive a share of ad or other feature revenues sold by YouTube.

Impact: the impact of this area of dependency depends on the arrangements associated with each DI. Broadly, where a news creator is free to monetise its digital inventory and has access to all user and usage data, the value delivered is greater. Where the DI is sharing revenues generated around news content within the DI platform, the returns are not – generally speaking – considered attractive, though the reach delivered by DI audiences is valued in itself.

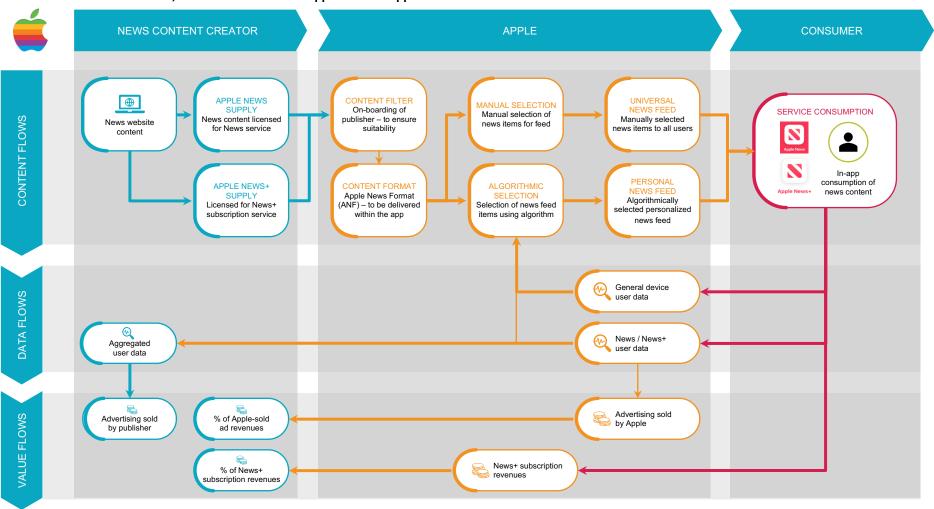
Section 8 – appendix – provides more detail on the content, data and revenue flows associated with each DI platform.

Exhibit 9 - Overview of digital intermediary approach to news content selection and value creation



8. APPENDIX – Apple, Facebook, Google and YouTube: approach detail¹⁶

Exhibit 10: Overview of content, data and value flows - Apple News & Apple News+



¹⁶ The diagrams and descriptions in this appendix have been derived from conversations with representatives from each of the digital intermediaries. The flows of content, data and revenues are inherently more complex than can be captured comprehensively on these pages and have not been explicitly approved by each digital intermediary. Accordingly this section provides an overview and may not depict every data, content or revenue flow or relationship related to the provision of news content on each platform.

Apple

The proposition: Apple provides two news services to users of its mobile devices: Apple News and Apple News+.

- Apple News is a pre-installed iOS app which is free to all users.
- Apple News+ is a subscription service within the Apple News app that
 aggregates a selection of magazines and newspapers that operate behind
 paywalls for a single monthly fee.

Key characteristics: Apple news products represent a 'walled garden' approach whereby all content is hosted by Apple and ad revenue generation opportunities are limited. Biggest financial opportunity for news creators is in the sale of subscriptions or in the share of News+ subscriber revenues collected by Apple.

Content: all content carried on Apple News and News+ is licensed to Apple for the service (and as a result some major news creators are absent from the service (eg The Guardian). The onboarding process is designed to ensure that suppliers are legitimate news outlets, and content is then monitored by Apple's teams.

Selection: Apple News presents to its users a selection of stories, the most prominent of which are curated by Apple's in-house editorial team. Apple's editorial approach is designed to deliver a curated feed that reflects (but does not determine) the news agenda. The remainder of the feed is surfaced using an algorithm which uses device-specific user data to identify stories that it believes will be of interest to each user.

Data: all content is rendered into the Apple News Format which replicates the visual experience of the source website or app, so all news content consumption takes place within the Apple platform. This means that Apple controls all the data that is generated by the news content it carries. Apple passes back to news suppliers a range of data that describes the consumption patterns around their news content (number of views, most popular articles, aggregated demographic data), plus data on the performance of advertising carried within their content.

Revenues: news providers within the News service can monetise the ad inventory within their content directly and keep the revenue they generate, though potential is limited due to the lack of user data to which they are given access, which also means that programmatic ad sales are not allowed. Apple can also sell the ad inventory on their behalf in which case they pass on 70% of revenues to the content supplier.

News publishers within the News+ service receive a proportion of subscription and advertising revenues generated within the service, according to the relative performance of their content within the service.

News publishers are also able to activate direct subscriptions to their services from within News and News+, so they serve as a conduit to direct subscription revenues where relevant.

CONSUMER NEWS CONTENT CREATOR FACEBOOK (PUBLISHER ELIGIBILITY PERSONAL POSTED CONTENT NEWS FEED MANUAL Posted onto News website Publishers must **SELECTION** Algorithmically and SERVICE CONSUMPTION publisher feed content editorially selected be registered on Manual selection of news items for feed Facebook news content presented in integrated news feed page index News Licensed to Facebook News User consumption of news CONTENT FILTER stories within Facebook app / Dynamic screening ALGORITHMIC option to click through to SELECTION of content to ensure publisher website **INSTANT** meets Facebook Selection of news feed ARTICLES items using algorithm Community Licensed for Standards etc Instant Articles Publisher Instant Articles website General . user data General Facebook Aggregated user data Facebook Facebook News News website user data browser user data User browser Advertising sold by publisher Advertising sold % of Facebook-sold by Facebook ad revenues

Exhibit 11: Overview of content, data and value flows - Facebook News tab

Facebook

The proposition: Facebook surfaces news content links in two ways:

- Personal feed: where users are served news content links in their personal feed because either a news outlet or someone they follow has posted news content.
- Facebook news tab: a separate tab where Facebook surfaces a selection of news content links for each Facebook user.

Key characteristics: Facebook's news tab represents a hybrid walled garden / open internet approach whereby users can access news content links via a tab dedicated entirely to news (and will be redirected through to the news creator source). Revenue opportunities range from a share of Facebook-generated ad revenues via Instant Articles to selling advertising from Facebook-delivered traffic, or through subscriptions.

Content: the Facebook news tab surfaces content links that is supplied to Facebook in one of four ways:

- content links posted by the news provider on its Facebook feed
- news content posted by users in their own Facebook feeds
- content that has been licensed to Facebook, which means all the publisher's content is included, and not just that which has been posted in a Facebook feed
- content that is posted by publishers using Instant Articles (whereby the content is hosted by Facebook for quicker rendering to the user)

To be included, the content provider must also be part of the Facebook News Page Index, a tool which ascertains whether it comes from a legitimate news provider.

Facebook operates a system of dynamic content review to ensure that content that appears within the platform meets its Community Standards. This determines whether content is violent or criminal, protects user safety (eg hate speech), has 'integrity and authenticity' and respects intellectual property. Clearly, this content filter (which is applied not just to news content, which accounts for just 4% of total content posted to Facebook) represents a judgment about content suitability, which has caused some controversy, not just in content which is

excluded but because Facebook has been found to be the referrer site of untrustworthy news sources significantly more than of trusted sites¹⁷.

Selection: for the news tab, Facebook employs editorial staff whose job it is to select stories manually that 'elevate high-quality, original and relevant journalism and share diverse perspectives'. This process of selection and prioritisation represents an editorial role in the creation of the Facebook news proposition. Such content sits at the top of the News Tab.

The remainder of news content links presented are selected by an algorithm based on user behaviour on the platform (likes, shares, interactions etc.). Content is therefore more likely to match existing interests than to expand a user's range of interests.

Data: News content links refer the user from the Facebook platform through to the story on the news publisher's website (though headline and strapline can be viewed without leaving Facebook). Granular consumption data is shared with content providers but due to privacy considerations no identity data is shared (except some aggregated demographic data).

The reach and scale of Facebook means that the platform generates a high volume of traffic for news providers.

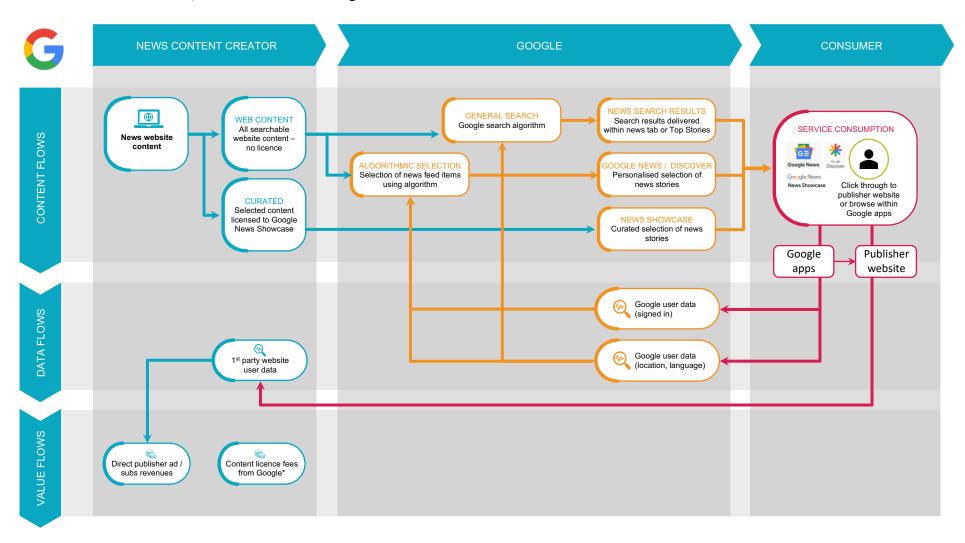
Revenues: publishers opting to use Instant Articles (whereby Facebook renders and hosts content for quicker rendering) take a share of revenues generated by Facebook. Where the content is accessed on the news provider's own service, it can monetise the traffic itself (ad or subscription revenues). Some publishers do not consider this an attractive source of value.

"It delivers a lot of traffic to us, but the quality of the traffic isn't high, which is the problem with a Facebook-type feed. It's 'brand blind'; readers click on the headlines they find attractive, then just click back to Facebook once they've looked." *National newspaper group*

"On the Facebook news feed, ad revenue, once clicked in, is shared, but most of the news consumption is outside the click, where FB keeps ALL revenue." *National newspaper group*

¹⁷ Source: Nature: Human Behaviour (2020)

Exhibit 12: Overview of content, data and value flows – Google news services



Google

The proposition: there are four main areas within its service suite where Google surfaces links to news content, along with headlines and sometimes short text extracts (snippets) or small preview images (thumbnails):

- Google search results: a sub-set of search results from news sites related to the original search term – in the News tab or Top Stories on search results page.
- Google News (website or app): a news page that contains a range of news content, including 'For You', 'Headlines' and 'News Showcase panels' (see below).
- Google News Showcase: a section of Google News (product and licensing programme) in which 3rd party news publishers curate panels of news content with links to source stories.
- Google Discover: a selection of content personalised for to a user's interests, which may include news content (including Showcase panels).

Key characteristics: Google's value to news creators, as to any website, is that it allows users to navigate to their sites. The key and very well-debated area of controversy with Google is the functioning of its search algorithm. Value is delivered primarily through news creator's monetisation of its traffic¹⁸ (where users click beyond the news 'snippet' that describes a link in the search results) and users (advertising, subscriptions); licence fees (primarily relating to the News Showcase proposition) and other sources of revenue from Google itself are not considered material for news creators.

Content: Google's access to content depends on the service it supplies:

- Search surfaces content from all searchable¹⁹ websites, and since Google does
 not host the content, no licence agreement is required. This also applies to
 news stories surfaced within Google News and Discover.
- For News Showcase, Google reaches an agreement with selected news providers whereby the provider curates a selection of news stories, which are rendered within the Google platform. The publisher is remunerated for this curation.
- Furthermore, Google pays some paywall news providers for a selection of articles that are served to users for free.

As a search engine, Google has more limited content policies for search results than for products which host content. It does not generally apply content criteria to websites surfaced in search. It has stronger policies for its 'search features', which may give prominence to certain results and it has policies against 'legal but harmful' information. Google's internal policies do not require it to take action in relation to content it indexes in search unless it is notified of potential illegality and if it acts promptly to remove such content after notification.

For its news-specific services, Google surfaces content which is transparent about origin and which does not run counter to scientific or medical consensus.

Selection: Google's search product surfaces content according to its relevance to the query as well as structural qualities, such as freshness, source authoritativeness, location, language etc.

Content surfaced within Google News or Discover, is chosen algorithmically according to the user profile. Google has access to a very wide range of data relating to each user, from use of apps such as Google Maps, Gmail etc but Google says its use of this data for news selection is limited. Where the user is not signed in, the algorithm surfaces content popular in the location and language of the user.

The weighting of the various factors that the algorithm uses to determine which content is surfaced in which context is the subject of debate, given search results which are considered anomalous by some publishers²⁰.

Content presented within Google News Showcase is curated by the news publishers themselves; Google ranking algorithms determine the selection for each user.

For Google news services, therefore, the editorial role in producing its news propositions is fulfilled algorithmically and is based primarily on user profile data.

Data: Whenever a Google user clicks on a news item from within its services, the user is taken to the news provider's own website²¹. Therefore, all consumption data is visible to the publisher.

Revenues: Google pays news providers a consideration for their work in curating stories for the News Showcase window. Other than this, revenue opportunities for news providers derive from selling their advertising inventory (directly or using the programmatic system) or generating subscription revenues from referral traffic.

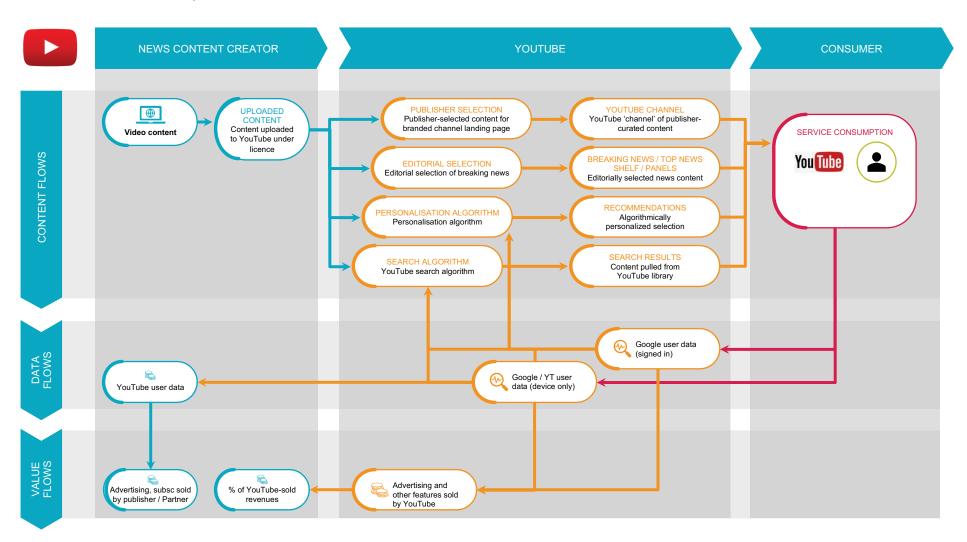
¹⁸ The CMA estimates 25% of news traffic in the UK comes from Google

¹⁹ Where the news creator has determined that Google may index its content

²⁰ DMGT submission to Ofcom media plurality consultation (2021)

²¹ Except for hosting products like Blogger, YouTube and AMP, which may also appear in search results

Exhibit 13: Overview of content, data and value flows – YouTube



YouTube

The proposition: there are a number of areas within YouTube where news content may be surfaced, which include:

- News creator's YouTube channel: landing page dedicated to a specific news creator, containing a selection of their video content, including live streaming.
- On the YouTube home page, including on shelves, eg Breaking news 'shelf': containing a selection of breaking news stories for when the big stories are happening or the Top News Shelf.
- Search: results surface in response to a user request, including the Top News shelf on search.
- Recommendations: recommended videos (including on the Home page) which may include news content.

Key characteristics: while being an open, global video-sharing platform, YouTube can also be seen as a walled garden content proposition since all content has been explicitly licensed for the platform. Internal revenue opportunities include ad sales, either conducted by YouTube (and shared with the content provider) or directly by the YouTube Partners (content providers, ad sales service providers), subscription fees and alternative monetisation sources (eg Channel Memberships). External value can be generated through brand building or the sale of subscriptions or e-commerce.

Content: all content surfaced by YouTube must be purposefully uploaded to the platform by the content owner and is subject to a licence agreement with YouTube and YouTube's Community Guidelines. YouTube reaches almost all the under 18s in the UK each month²² so it represents an invaluable window for this otherwise hard-to-reach demographic.

YouTube removes content that violates its YouTube Community Guidelines (is pornographic, spam, deceptive, threatens child safety, constitutes cyberbullying, is harmful or dangerous, constitutes hate speech etc). The process operates with a combination of machine learning and human moderation (both professionals and members of the community) to flag, review and then exclude (or accept) problematic content.

Given there are ~500 hours of content uploaded to YouTube each minute, the process is necessarily approximate to an extent and can lead to content being excluded that does not warrant it.

Selection: Content on a news creator's channel is curated by the news provider (uploading publisher, journalist), so no selection by YouTube is applied when landing on the channel page. Once a video is viewed, however, the YouTube algorithm recommends videos from the YouTube corpus to surface according to the YouTube personalisation algorithm, which may or may not be from the same channel brand.

All other areas of content selection within the YouTube platform are governed by the YouTube algorithm which is designed to deliver a personalised and relevant viewing experience to the user based on a number of factors. For content where accuracy is key, including news, politics, medical, and scientific information, YouTube uses machine learning systems that prioritize information from authoritative sources in search results and recommendations.

As with other Google news services, content surfaced within YouTube's website or app is chosen algorithmically according to the user profile (based on signal criteria including prior expressed viewing preferences, in conjunction with the user's self-selected data and privacy settings). Google has access to a very wide range of data relating to each user, from use of apps such as Google Maps, Gmail etc. However, YouTube primarily uses profile data relating to YouTube consumption and if the user is not signed in, the algorithm uses device-level YouTube consumption data.

Data: YouTube provides its content providers with data relating to the consumption of their content. It does not provide any specific profile data but passes on aggregated consumption and engagement data at a granular level to content partners.

Revenues / value: content providers can generate value from the platform by monetising ad inventory, selling YouTube channel memberships, SuperChat, or SuperStickers, SuperThanks or through YouTube Shopping, or using traffic to increase brand value or reach.

Some channels may be eligible for YouTube Partner Sales Program and/or Player for Publishers, which allows channels to sell their own ad inventory and receive the majority of the revenue from such sales (up to 100%, in certain cases).

²² CR interview with Google and YouTube representatives (2022)

9. APPENDIX – List of project interviewees

Table 1: List of organisations contributing to interviews

Company	Representatives
News Media Association	Senior management, legal and public affairs
Newsquest	Senior general and editorial management
DMGT	Senior editorial management
GMG	Public policy
News UK	Operations, policy and public affairs
The Telegraph	Senior management
Bauer Radio	Senior general and news management
ITV	Regulatory and news management
BBC News	Strategy and local news partnerships managers
Movement for an Open Web	Senior representatives
Mediaforce	Commercial management
Google	Government affairs, public policy, UK publisher partnerships, news ecosystem development
YouTube	Public policy, partnerships UK & Ireland
Meta	Public Policy, and Northern Europe News Partnerships
Apple News	UK management
HuffPost UK	Strategy and business development

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Conrad Roeber

conrad.roeber@me.com