

The role of news content on Danish broadcasters' streaming services

A longitudinal content analysis of two video-on- demand services

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Abstract

Amidst the shift from linear TV to streaming, public-service media face the challenge of reconciling commercial competition with their public obligation of informing society. This longitudinal content analysis investigates the curation and platformization of news on the front pages of the video-on-demand services of two Danish broadcasters, DRTV and TV 2 Play. Sampling four days annually from 2020 to 2022, we take a longitudinal approach to assess news curation (i.e., positioning and accessibility on the front page) and news platformization (i.e., video length, hard vs. soft news composition, and prevalence of streaming-first content). We did not find strong evidence of platformization overall. A main difference between the broadcasters was in terms of curation, with DRTV consistently prioritizing the news deck, while TV 2 exhibited a declining trend over time. This study contributes valuable insights into the treatment of news by broadcasters within the evolving context of streaming services.

KEYWORDS

streaming, news content, platformization, curation, content analysis

Introduction

The rapid increase of internet bandwidth has led to an unprecedented expansion of video streaming in the last decade, with estimates suggesting that it accounts for as much as 65% of global internet traffic (Gutelle, 2023). The dominance of linear television has been challenged by the fast rise of video streaming on social media and Video-on-Demand (VoD) services. With television audiences in Denmark undergoing a steady decline (DR 2023), television broadcasters have been forced to develop their own VoD services, broadcaster video-on-demand (BVoD), to compete with VoD natives with a strong international presence, such as Netflix, Amazon Prime, or Disney+. The transition from linear TV to online TV poses a special challenge to public-service media institutions like DR, who must balance their need to keep up with the commercial competition with fulfilling their obligations as governmentally funded entities with a public profile.

One of the main roles of public-service media (PSM) in democratic societies is to provide objective and reliable information about societal affairs in the form of news (Van Aelst et al., 2017). Although public funding for public-service media is conditioned on the amount of news content they must provide on linear TV, their contracts do not specify how or whether these broadcasters should prioritize news content on their BVoD services (DR, 2023). On DR and TV 2, the two leading television news broadcasters in Denmark, news content has a privileged position on their flow television channels during primetime slots with a relatively high degree of viewership. However, on their BVoD services, news content is suddenly in more direct competition for space and visibility with all other content genres, raising a need for news curation and a concern for the visibility of news content. This concern over a potentially decreasing visibility, which could eventually result in greater news avoidance for Danish citizens, is what has motivated us to conduct this study since we have struggled to find existing studies that document and compare the visibility of news content on these BVoD services. The question is whether these BVoDs are curating news content in a way that ensures that it is still being consumed in the high-choice context of online platforms, for instance by using strategies that improve visibility and accessibility. In addition to the matter of curation, the transition from broadcast news to BVoD might affect the nature of the news content itself. This process is described as news platformization, where news content is influenced by the characteristics of the platform where it is published (Hase et al., 2023). A growing body of platformization research has examined third-party platform news publishing driven by a concern that external actors might

hold too much power, potentially favoring popular topics over topics of societal interest (Hartley et al., 2023; Hase et al., 2023, García-Perdomo, 2021). In contrast, less attention has been paid to what happens to news content when it is published on the organization's own digital platforms, even though BVoDs benefit from the same affordances as other streaming services – for instance, by closely monitoring what content is more popular among viewers. Motivated by these concerns and by filling a gap in the research literature on this topic, we ask whether news content on these two BVoDs is showing signs of platformization.

This work examines the matters of curation and platformization of news on BVoD in the national context of Denmark and its two main state-affiliated broadcasters, DR and TV 2. To investigate our research questions, the study conducts a case study of Denmark. Denmark makes an ideal case for studying the treatment of news in BVoDs because it is a highly digitalized country, where the BVoDs are used to a great extent (Newman et al., 2023). Thus, it can serve as a reference point for societies with a less developed digital transition. We analyze the front pages on DR and TV 2's VoD services, DRTV, and TV 2 Play. By sampling four days each year from January 2020 to January 2023 for both streaming services, we track the evolution over time of different dimensions about the prevalence and characteristics of news content featured on the front page of the two services. Importantly, while both DR and TV 2 have public-service obligations (although these do not explicitly apply to TV 2 Play), only DRTV is publicly funded while TV 2 Play is a state-owned but commercially funded service (Lassen, 2023). Thus, they offer a second layer of analysis in terms of comparing whether the treatment of news on BVoD services depends on the degree of public versus commercial funding.

In what follows, we present our research questions within the theoretical frameworks of content curation and news platformization, we contextualize the Danish BVoD market as the case under study, and we describe the methods employed. Following this, we present our findings, which take a longitudinal perspective by looking at changes over time. Lastly, we discuss the implications of our findings with a focus on the differences between the two BVoD services. As public-service media experience a decline in linear TV viewership and a simultaneous rise in audiences on their BVoD platforms, preserving their fundamental role as news providers becomes crucial.

Content curation on VoD services

Video streaming refers to the transmission of video data over the Internet, digitally and in real-time, in a way that allows the receiver to watch the video content as it is being transmitted (Andersen & Lüders, 2021). While there are many types of streaming, this article is preoccupied with online TV, namely “[...] services that facilitate the viewing of editorially selected audiovisual content through internet-connected devices and infrastructure” (Johnson, 2019, p. 30), and more specifically on video-on-demand, a subset of online TV services that enable delayed watching of content, or self-scheduling.

One of the main ways in which VoD differs from traditional flow TV is in *content curation*, which is a term previously used about art and museums, where the curator is responsible for the selection and organization of content, writing headlines and content labels, and with power to, for instance, increase the visibility, discoverability, and prominence of some content over other kinds of content (Graham & Cook, 2010; Johnson, 2019; Smits & Nikdel, 2019; Bruun, 2020). Linear scheduling is arguably the defining characteristic that distinguishes flow TV from other media (Bruun, 2021), and in linear scheduling, broadcasters play an important curating role by selecting which content is presented on a given TV channel, in what order, and at what time, with some timeslots such as prime time receiving great attention. In contrast, VoD is characterized by libraries where all content is available at once (Lüders & Sundet, 2022; Lotz, 2018) and where the user selects and decides the order of viewing. It should be mentioned that there are no strict boundaries between the two and that there is a trend towards convergence, which Bruun (2021) also calls “trans-programming”, with the content being produced to fit both linear and online services. Furthermore, some VoD services such as those originating from legacy TV broadcasters often integrate live broadcasts from their linear TV channels within their BVoD service. Lassen (2023) argues that BVoD services are “reappropriating” linear scheduling, and the experience of liveness that results from it gives them a competitive advantage over other prominent VoD players.

The fact that VoD relies on content libraries instead of linear scheduling would suggest that content selection is completely at the discretion of the viewer. However, curation still plays a big role in the VoD context even if through different mechanisms. Content in VoD is accessed through “tiles”, which are clickable thumbnails with a picture and a title or even a short descriptive text. These tiles are organized horizontally in “decks”, typically sharing a thematic connection within a deck. Often VoDs will include a highlights deck on the top of the page, a “carousel” (or “hero board”), where the tiles

are comparatively bigger. Thus, the spatial organization of the interface necessarily creates a hierarchy of content. Bigger tiles and decks higher up on the page have greater visibility and are more likely to be clicked on than things further down (Van Esler, 2021), which will only be seen if the user scrolls down to them. Content that is not included directly on the front page is less likely to be selected because it requires an active effort by the user to use the search bar. A second layer of curation is introduced if the service uses personalization algorithms that automatically organize content based on the prior behavior of the viewer. While this is common in digitally native VoDs such as Netflix, where each front page will vary immensely from user to user, PSM BVoDs tend to have less personalization and often show the same front page regardless of the logged profile (Bruun & Bille, 2022).

To summarize, curation is not exclusive to linear TV but is extremely important to all VoDs; it just operates in perhaps a more invisible way. This has raised concerns about potential power imbalances due to a lack of consumer awareness of the platform's influence on their choices (Lüders & Sundet, 2022). In contrast with this line of research, which adopts a critical lens towards VoD curation, this study analyzes the other side of curation of news as a necessity for public-service media to continue fulfilling their societal obligations via their VoD services. Accordingly, we ask:

RQ1. How has the curation of news content evolved on the front pages of DR and TV 2's BVoD services in the period 2020-2022?

News platformization

The transition of news from traditional media to online has spiked a growing interest in news platformization, namely whether news production is influenced by the platform where news is published. Platformization can happen at either the selection level (e.g., some topics get more published than others), adaptation level (offline content gets modified in a specific way for the online version), or production level (when journalists produce content natively to the platform) (Hase et al., 2023). Empirical research has mostly focused on third-party platform news publishing, what Nieborg and Poell (2018) call “platform-native strategy”. This focus has been driven by a concern regarding the power imbalance between the news organizations and their dependence on the platform, seen as an external actor with too much influence (Hartley et al., 2023). This is a view shared by journalists themselves, who report a concern about how the platform might affect the selection and production of news in a

way that is detrimental to journalistic values (García-Perdomo, 2021). For example, Tandoc and Maitra (2018) found that a 2014 change in Facebook's algorithm triggered an increase in the production of news videos over written news by media companies with Facebook presence, especially among broadcasters. Similarly, Mukerjee et al. (2023) found that audience metrics with news content had a significant impact on future news content, as news outlets prioritized content based on what was viral in the past.

Although less attention has been paid to what happens to news when they are published on the organization's own digital platforms, self-publishing media organizations online, including BVoDs, are likely to also be subject to the virality logic that characterizes third-party platforms. Virality is the "process which gives any information item (picture, video, text, or any other audiovisual textual artifact) the maximum exposure, relative to the potential audience, over a short duration, distributed by many nodes" (Nahon et al., 2011, as cited in Vázquez-Herrero et al., 2021, p. 4). Increasing exposure is certainly a goal of traditional media, but the capacity to track audience engagement metrics (e.g., time spent on the content, liking, commenting), in real-time and with vast datasets, is equally available for news outlets that publish on their own platforms as it is to third-party platforms.

A main concern in the platformization literature is that the prioritization of socially significant topics could be trumped by the pursuit of virality (Hartley et al., 2023; Hase et al., 2023; Nieborg & Poell, 2018), best captured by the distinction between hard and soft news (Reinemann et al., 2012). Hard news stories are prototypically those that cover topics of broad societal interest such as economy, politics, or science, while soft news stories lean more towards entertainment, focusing on topics such as celebrities, sports, and exemplar-based stories (Reinemann et al., 2012; Curran et al., 2010). However, as Reinemann et al. (2011) point out, the hard/soft distinction is not limited to the topic of the message itself and can be captured by other dimensions such as the focus, the reception, or the style employed to tell the story. For instance, news softening could happen for hard topics if they are presented with flashy stylistic aspects, such as fast editing or the use of emotional music. A main reason why journalists might be inclined to soften news is to increase their virality. In one of the few studies comparing across own-platform vs. third-party platform news, Lamot et al. (2022) found that softer news resulted in greater user engagement than harder news regardless of the platform (i.e., own site or Facebook). Interestingly, this was the case when softening was conceptualized both in terms of topic and style.

Although platformization in the form of softening is typically seen with concern, strategies to adapt news to the affordances of the online platform could also be positive, especially if they help news to compete with other more viral content. An example of this is the stylistic trend of shortening the length of messages. While TV news is typically presented in lengthy news bulletins, short standalone videos have become the norm on online platforms using a bite-sized entertainment strategy. For example, the maximum duration of YouTube Shorts is 60 seconds, and Instagram Reels is 90 seconds. For TikTok, one of the most popular video platforms, the average video length for accounts with a significant number of views (i.e., more than 25,000) is around 50 seconds (Ceci, 2024). Conversely, the average length of a news message on American network TV is estimated at around 2 minutes and 23 seconds (Pew Research Center, 2012). If BVoD news turned out to be on the shorter side, it could be considered a negative example of softening because shorter duration leaves less room for in-depth coverage of information. At the same time, it might help news messages be more competitive and receive more attention in a context where the attention span is short, and viewers are used to quickly switching content.

A last measure of news platformization in BVoDs that we consider here is the presence of native digital content, that is, the production of content for the platform instead of the simple reposting or adaptation of content originally produced for flow TV. The production of native digital news would indicate a positive effort by the news organizations to adapt to the affordances of the platform, making news content more competitive. In the context of third-party platform publishing, two content analyses by Vázquez-Herrero and colleagues (2021; 2022) found a growing trend among media and news organizations to adapt their content to the video-based platform TikTok. Up to 85.3% of the content from news profiles on TikTok was originally crafted for the platform (i.e., native-digital) (Vázquez-Herrero et al., 2022). Non-traditional formats were prevalent instead of a more standard informative content (Vázquez-Herrero et al., 2021, Vázquez-Herrero et al., 2022). Conversely, in a study by Hase et al. (2023) looking at cross-platform news publishing across Facebook, Twitter, Instagram, and TikTok, the authors found that only 2.4% of all news posts in their dataset were produced natively for the platform, with the highest percentage found in TikTok (33% of the digital native content). While those studies have focused on third-party platforms, no research to our knowledge has studied the production of native content in a BVoD context.

To assess news platformization in BVoD along the dimensions introduced, we ask:

RQ2. How is news content on DRTV and TV 2 Play influenced by platformization, as indicated by softer news, shorter videos, and digital-native vs. flow-first content?

Presenting the case study: Two Danish BVoDs

Among the three models that Hallin and Mancini (2004) suggest for categorizing and comparing media systems in various countries, Denmark adheres to the democratic corporatist model alongside other Nordic countries, characterized by a dynamic in which the state wields substantial influence over the media without media losing their autonomy. The Danish Broadcasting Corporation (DR) was founded in 1925 and has received state subsidies ever since. Currently, the Danish media market has two strong public television stations, the tax-funded DR and then TV 2, which was established in 1988 and is a commercial but state-owned operator. Both DR and TV 2 are popular among the general population and have a significant reach (DR, 2023). There are substantial differences between DR and TV 2 both in terms of the funding models and in terms of organizational structures. First, DR provides radio, television, and web services, while TV 2 only provides television and web services. DR operates 100% under public funding with its corresponding public-service obligations, while TV 2 has both a public-service division and a commercial division, the latter funded by a mix of subscriptions and advertisements (Bruun & Bille, 2022). Bruun and Bille (2022) further explain that TV 2's public-service division includes the main broadcast channel TV 2, and the commercial division includes the VoD service TV 2 Play.

On a policy level, both broadcasters have public-service obligations towards the Danish state that they are contractually obliged to fulfill. DR has many such obligations that include delivering Danish-language drama series, music, cultural content, content for children and young people, sports, content from all regions of the Danish nation, Danish film, and of course news. Their contract states that they must offer news content on TV, radio, internet, and other relevant platforms and adapted to all target groups to ensure the “[...] best distribution of news to the population” (Danish Ministry of Culture, 2022, p. 2). Regarding this, DR writes in their strategy paper from 2019 that news is a priority area for them (along with culture and children's content) and states that they have “[...] an ambition to make an attractive news offer on DRTV, which provides access to news, wherever and whenever you want” (DR, 2019, p. 16). By having this rather wide-ranging and unspecific goal for their VoD news content, they are perhaps trying not to promise too much while still

signaling that news is important to their institution. However, their contract does not describe to what extent DR should prioritize their news content on their VoD service or how visible it should be compared to other genres. We suspect that the absence of such requirements regarding news content on DRTV is probably due to a lack of political awareness about this issue, which indeed makes it even more important to study what they then have chosen to do on their own accord with this content area on DRTV.

TV 2 also has a list of public-service obligations that include sports, Danish-language drama series, cultural content, content for children and young people, Danish films, and news (Danish Ministry of Culture, 2018). As mentioned earlier, these obligations apply to TV 2's public-service division, including their main broadcast channel, but not TV 2 Play since this is included in their commercial division, which is probably why the contract does not describe any such obligations relating to TV 2 Play.

Denmark makes a strong case sample for the topic at hand because of the strength of its PSM, and because it is a highly digitalized society. According to the most recent Reuters Digital News Report, Denmark is one of the countries in the world with the highest trust in news media, and the number two country globally in terms of where citizens place the highest personal value on PSM, only behind Finland (Newman et al., 2023). Regarding digitalization, the number of viewers of streaming TV surpassed that of broadcast TV in 2022 (Schröder, Blach-Ørsten & Eberholst, 2023), suggesting that the TV streaming market is at an advanced stage compared to other national markets. Danish public-service media institutions are investing heavily in their streaming services, DRTV, and TV 2 Play, following a “digital-first” strategy (Bruun, 2021; Lassen, 2023; Lassen & Sørensen, 2023), and this seems to be a fruitful effort. Danes subscribe to four streaming services on average (Newman et al., 2023), and the number of minutes spent on streaming services daily shows that TV 2 Play tops the list with 12 minutes daily, followed by Netflix (10 minutes) and DRTV (9 minutes) (Olsen, 2023). These figures show that Danish BVoD services are just as popular as the major international services like Netflix. TV news consumption in Denmark has declined by more than 20% over the last decade but has stabilized in the last few years because of increased viewership related to COVID-19. Apart from this decline in audience interest in TV news, the shift to streaming comes with great challenges. Achieving news information seems to be an almost irrelevant motive for streaming audiences (Leiner & Neuendorf, 2022), and streamers spend less time on news content than flow TV viewers (Breunig et al., 2020).

The increasing trend toward digitalization within Danish broadcasting has sparked research examining the two main BVoD

services, DRTV and TV 2 Play. DRTV has undergone quick changes over 15 years in terms of both quantity and organization of content (Lassen & Sørensen, 2021). The number of videos on DRTV increased from 31 in 2005 to 1,400 in 2020, and its content curation was refined in 2019 when it adopted a horizontal row style (Lassen & Sørensen, 2021), following Netflix's visual strategy, which was the leading commercial service at the time (Andersen, 2020). A common thread in the Danish BVoD literature is the study of how broadcasters manage to differentiate themselves from other streaming services by drawing from strengths that were already present on their linear TV channels. For example, Bruun and Bille (2022) focus on the documentary genre, and how it has been curated on DRTV and TV 2 Play to receive greater visibility than on their corresponding linear TV channels. Importantly, news content has been pinpointed as playing a major role in making DRTV and TV 2 Play competitive because it is absent from the competing international streaming services (Lassen, 2023; Sørensen, 2023). Despite DR's recent claim of following a new strategy focused on the priority areas of news, culture, and children's content, a study by Lassen and Sørensen (2023) revealed that only news is effectively prioritized on DRTV. The news made up roughly 6.15% of the content on the BVoD service, and in line with Lassen's findings (Lassen, 2023), they found that news decks are consistently placed higher up on the front page and constantly updated – unlike the content on the bottom of the page, which rarely changes.

The difference in regulatory requirements between public-service television and commercial television is thought to lead to a different treatment of news, for example by featuring harder news topics in public service than in commercial television (Reinemann et al., 2012). Following this reasoning, there may be differences between the coverage of news between TV 2 Play, which is a state-owned but commercially funded service, and DRTV, which is fully publicly funded. At least one study has compared the two BVoD services, finding that DRTV has a bigger documentary catalog than TV 2 Play (Bruun & Bille, 2022), but no study to date has looked specifically at differences in their news offer. Our analysis takes a comparative approach, examining differences between DRTV and TV 2 Play regarding the research questions raised.

Lastly, VoDs have a short history compared to other types of media, so they are still in an experimental phase which results in changing models and formats, making them an ephemeral object of study that poses analytical challenges (Van Esler, 2021). The front page of a VoD is frequently updated, and this is especially true of news content on BVoD services (Lassen & Sørensen, 2023). Thus, a frozen picture at a given point in time will likely miss important nuances and

information. To address this, we adopt a longitudinal perspective on the analysis of news curation and platformization by looking at trends over three years, comparing differences across the two BVODs under study.

Methodological considerations

To conduct this study, we collected screenshots of the front pages of DRTV and TV 2 Play from January 2020 to January 2023, a method partially inspired by Johnson (2019). The goal was to be able to conduct a longitudinal content analysis of how these services' front pages evolve and to analyze developments within a specific genre like news content. Specifically, our focus is on the amount and characteristics of news content in terms of platformization, as well as its placement and priority on the VoD service's front page.

There is currently no systematic and reliable collection of streaming services by the Royal Danish Library. This is a major challenge for any researchers (current or future) interested in studying streaming services who either must collect their material (see also Kelly, 2022) or rely on open archives like The Internet Archive's Wayback Machine or the Danish Netarkivet. Neither of these harvest webpages inside logins or paywalls, which means that while they may have some samples of DRTV's front page, they cannot provide regular information about what the interface on TV 2 Play's front page looks like after logging in and therefore have been discarded for this study.

By collecting our sample and conducting a content analysis of these services' front pages, we can learn which types of content they repeatedly choose to give prominence, in this case news content. Content analysis can be used to systematically analyze any recurring themes, concepts, images, or words in a dataset (Krippendorff, 2013). However, doing content analysis of online content is particularly challenging because this is dynamic and often subject to regular changes (Riffe et al., 2019). A potential downside of our sampling method is the services' use of personalization, but we have bypassed this by using a clean browser (without saving cookies) and by using new profiles to collect a neutral version of the front page. In addition, other studies have stated that the use of personalization is still rare in DRTV and TV 2 Play (Bruun, 2020; Lassen & Sørensen, 2021). In the context of our study, we are interested in both the quantitative and qualitative aspects of content analysis. With this approach, we wish to analyze specific quantitative tendencies in their interfaces, while we also contribute with a qualitative interpretation of the

context around the numbers (e.g., by discussing the differences in the two organizations behind) to make sense of the quantitative results.

We have taken screenshots once every quarter on a random weekday in January, April, July, and October. The screenshots focused on the front page as the most important page for these services. Altogether, this amounts to 13 days sampled for each service or 26 samples of screenshots in total. This approach was inspired by Riffe et al. (2019), who specifically recommend using so-called “constructed weeks” by combining samples from different weekdays to create a statistically more effective sample. The explanation for why we have sampled 13 days is that our study prioritizes a longitudinal focus with fewer days over a long period and, additionally, that our handheld coding process makes coding just one single “day” quite time demanding. On each day, we evaluated all the decks on the front page to locate those dedicated exclusively to news content. In the few cases in our sample where there were two news decks in a day (e.g., a second deck dedicated to news about the national elections or the COVID-19 pandemic in addition to the news deck), the one higher up on the page was the one included for this specific analysis. We manually wrote the number of tiles and the news content in the carousel, the number and position of news decks on the front page, and the characteristics of the tiles in each news deck in terms of the different variables of interest (e.g., soft vs. hard news, length of the video, etc.). We have also focused on the first four to six tiles in each deck and not every single tile in the deck based on the assumption that these are the most important and receive the most exposure.

All news tiles in the sample were categorized as either soft or hard news through consensus coding between the three authors. Topics such as economy, public health, foreign affairs, and politics were coded as hard news, while topics such as sports, celebrities, and case-focused reports (e.g., an interview with an exemplar focusing on personal aspects of their experience) were coded as soft. Specifically, political and current affairs programs such as *Deadline* (DR) and *Besserwisserne* (TV 2) were coded as hard news while programs such as *Sportsmagasinet* (DR) and *Prins Harry taler ud: Eksklusivt interview* (TV 2) were coded as soft news.

Only one item in the news deck data and one item in the carousel data were discarded because they could not be categorized. The discarded item in the carousel was an episode of *Kernen* that treated both hard and soft topics, while the discarded item in the news deck was an item with an ambiguous title, and after searching online, we could not find any information about it to help us elucidate its topic.

To assess the prevalence of streaming-first content, the two authors of this paper who were familiar with Danish broadcasting consensus-coded all news items in the news deck and the carousel. When they were not sure about a specific item, they double-checked by searching for information about the content on the PSM's web pages and via the service Mediestream, which contains recordings of all Danish flow TV channels. Lastly, the length of the news video, which was less subject to interpretation as it was stated in the news tile by the platforms, was coded just by one coder. As a note, we found that TV 2 Play did not advertise video duration in its tiles in January 2020, so that sample is excluded for TV 2 Play.

Results

News curation in DRTV and TV 2 Play

Our first research question (RQ1) explores the curation of news content on the front pages of the BVoD services of DR and TV 2. Differences between the two broadcasters and changes over time were analyzed in two different elements on the front page, the news decks and the carousel.

As it has already been noted the spatial positioning of the decks within the vertical axis of the front page creates a hierarchy of content (Johnson, 2019; Lassen & Sørensen, 2023; Lüders & Sundet, 2022; Van Esler, 2021). Things higher up on the page receive greater visibility and attention than things further down, which require more scrolling. Across all years sampled, we found that the average position for the news deck was 4.46, that is, between the 4th and 5th position, with DRTV's news deck closer to the 4th (4.15) and TV 2 Play closer to the 5th (4.76). This is rather high up on the page considering that their front pages have many decks, ranging from 18-30 decks (22-23 on average). Thus, and in line with prior research (see Lassen & Sørensen, 2023), we found that news content tends to be prioritized and appear high up on DRTV. Interestingly, the differences between the two BVoDs become greater when we introduce the time factor in the analysis (see Fig. 1).

POSITION OF THE NEWS DECK ON FRONT PAGE

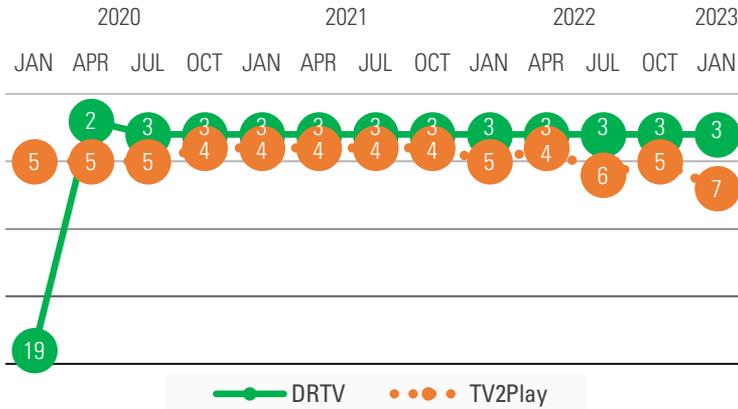


Figure 1: Position of the news deck on the front page over the years sampled

From January to April of 2020, coinciding with the onset of the COVID-19 pandemic, the news deck of DRTV dramatically jumped up within the front page from the 19th to the 2nd position and since then it has kept the news deck on the 3rd position. Conversely, TV 2 Play’s news deck has been experiencing a slow decline in visibility over the last year, going down to a 7th position in January of 2023 from a high of 4th position within the entire sample (see Fig. 1).

Another area of interest is the carousel at the very top of the page, which will usually be one of the first things that audiences see, so it has great potential for impacting the visibility of news content. The total number of tiles within the carousels sampled was 211, of which only 22 (12.3%) were news, and the figure below illustrates how much news content the two BVoD services had in their carousels in the sampled period.

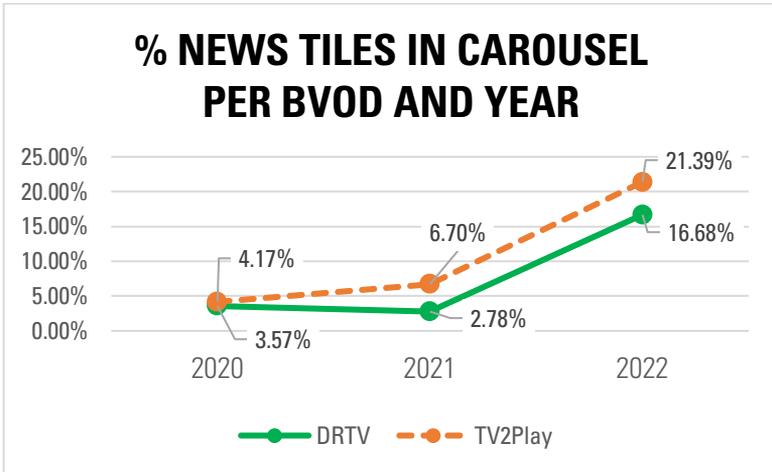


Figure 2: Percent of total news in the carousel

When considering the trend over time, as shown in Fig. 2, we see that both BVoD services show a steep increase in news in the carousel in 2022 compared to the two previous years. Additionally, in all three years sampled TV 2 Play presented more news content in their carousel than DRTV, and at the same time, the two services seem to follow a similar trend with rather small amounts of news content in the carousel in 2020 and 2021.

To sum up, both BVoDs seem to rely on active curation for promoting the accessibility and visibility of news content but they follow different strategies. DRTV prioritizes the news deck by positioning it high up on the front page, while TV 2 Play is increasingly placing it further down on the front page. Conversely, TV 2 Play relies more than DRTV on the carousel to give prominence to specific news items.

News platformization in DRTV and TV 2 Play

Our second research question (RQ2) looked at whether there are signs of platformization of news on the BVoD services, as indicated by three dimensions: the percentage of soft news in terms of topic, the amount of digital native or streaming-first content, and the length of the videos.

Hard vs. Soft news

Starting with the news deck analysis, out of the 144 tiles across all news decks, 120 (83%) were hard news, with some differences across the two broadcasters. For DRTV, 91.1% were hard news, while this was only the case for 73.8% of the news tiles in TV 2 Play. When looking at the trend over time, we see that the difference between the

two BVoDs has narrowed over time, with the proportion of hard news in TV 2 Play surpassing that of DRTV in 2022 (see Fig. 3).

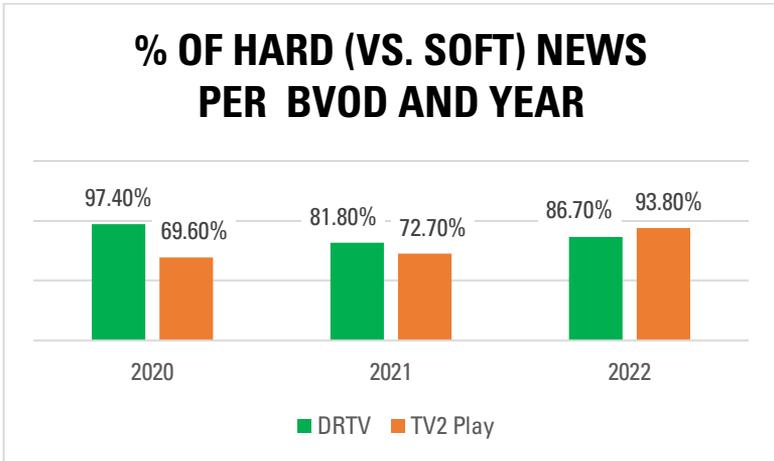


Figure 3: Percent of hard vs. soft news in the news decks

The carousel data offers a slightly different picture. There was more soft news across both BVoDs in their carousels (31.8% soft vs. 40.9% hard news) than in their news decks (83% hard news). Breaking that down by broadcaster, DRTV's carousels showcased more hard news (55%) than TV 2 Play (30.7%). It should be noted that for TV 2 Play more than one-third of the carousel tiles (38.4%) were an ad for TV 2 Play's dedicated news channel, falling outside the hard/soft category.

Streaming-first content

Following other studies (Hase et al., 2023; Vázquez-Herrero et al., 2021), we looked at the presence of digital native or streaming-first content as a measure of platformization. A greater percentage of streaming-first in contrast with news content reposted from flow TV would indicate more platformization. For the news deck, only 16.1% of the news tiles were identified as streaming-first content across both BVoD services and all years sampled. Furthermore, the percentages were nearly the same when comparing DRTV (16.5%) to TV 2 Play (15.6%). When considering change over time, we see that both BVoD services increased their share of streaming-first content in 2022 compared to the preceding year (see Fig. 4). This might be indicative of a potential commitment towards adapting their news content to the platform in the future. Taking a closer look at the characteristics of the streaming-first content, we see that on DRTV, all but one streaming-first tile were their "Explainer" videos, the

other one being a sports highlight. Explainer news videos are designed to teach the viewer about a specific topic, and this is often done through compelling storytelling and visuals. Interestingly, even though the Explainer format was developed for the BVoD first, it later started airing on flow TV, in line with the trans-programming trend between different media (Bruun, 2021). Conversely, streaming-first content in TV 2 Play was more varied, including a mix of formats including Explainers, news highlights, and documentaries. However, 50% of TV 2 Play's streaming-first content was represented by their program *Kernen*, which is a streaming news program at TV 2 Play. Each episode focuses on a protagonist who is experiencing something that is of interest to the general public, so this can be both hard and soft news depending on the case story.

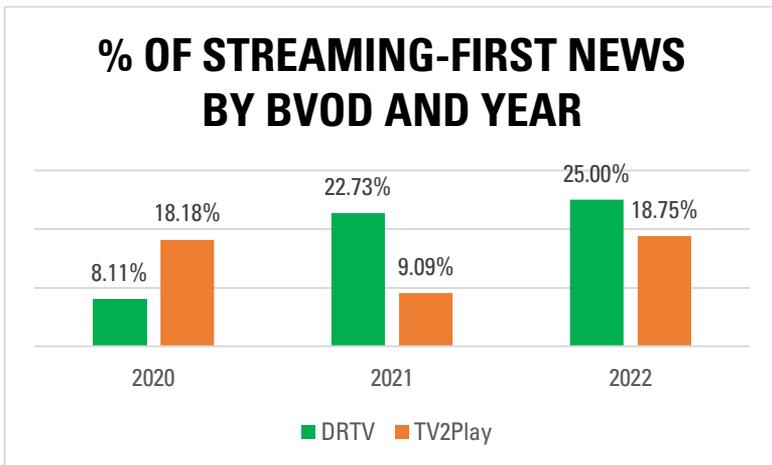


Figure 4: Percent of streaming-first news in the news decks

Length of news videos

As it has been pointed out, the duration of news videos can be indicative of platformization because video-based online platforms tend to use shorter videos than news on flow TV. As can be seen in Table 1, there is a considerable spread in the duration of news videos. As can be seen in Table 1, the minimum length is 2 minutes, and the maximum is 360 minutes – a 6-hour news special on DRTV in 2022 covering the Tour de France. This wide range results in a noticeable difference between the mean (34.22 min) and the median (25 min). To analyze differences between the two BVODs over time we focus on the median because the mean is skewed by videos that have extremely long durations.

TV	Year	Mean	Median	Min.	Max.
DRTV	2020	41.6	29	5	125
	2021	26.2	22.5	6	123
	2022	57.0	27	5	360
TV 2 Play	2020	25.4	19	6	117
	2021	21.4	21.5	2	52
	2022	40.0	29.5	14	140

Table 1: Descriptive information regarding the duration of video messages by BVoD and year, in minutes.

When comparing DRTV to TV 2 Play, the median duration of their videos is very similar: 24 minutes for TV 2 Play, and slightly longer for DRTV at 27 minutes and a half. Regarding change over time, videos tended to get longer in the last two years of the sample, for both BVoDs (see Fig. 5). Along the same lines, we see that the minimum length for TV 2 Play jumped to 14 minutes in 2022, more than doubling the minimum duration of previous years.

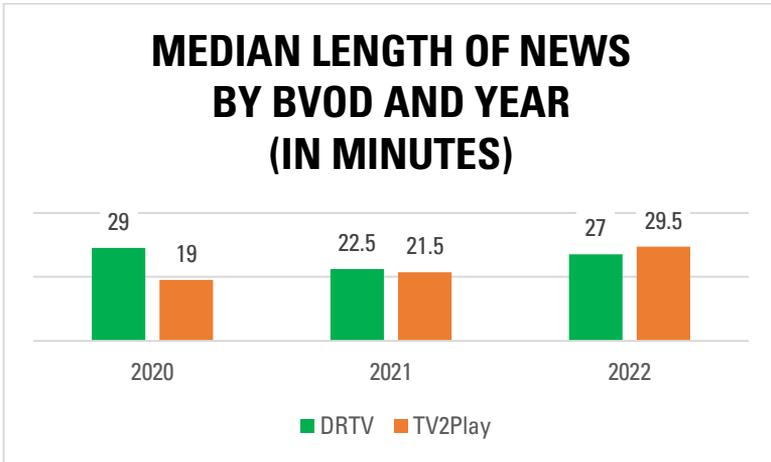


Figure 5: Median length of news in minutes

To summarize, the platformization measures used here do not indicate strong signs of platformization for any of the two BVoDs. An important and positive finding is that hard news is more represented than soft news, which is the case for both BVoDs. That said, the percentage of soft news goes up in the carousel compared to the news deck, suggesting that those managing the front page might follow the virality logic more when it comes to the use of the prime

location on the front page. Regarding the production of digital native, or streaming-first content, we see that this kind of content is still not that commonly used by these BVoDs, but there has been a small increase over the years sampled. This could reflect a growing awareness by the two broadcasters of the need to adapt to the platform instead of exclusively recycling their flow TV content.

Discussion and conclusion

We have presented a longitudinal analysis of news curation on the front pages of the video-on-demand services of Denmark's main broadcasters: DRTV and TV 2 Play. Our findings suggest that these BVoD services do actively rely on curation to give prominence to news content, and based on the measures examined here (i.e., hard vs. soft news, length of video, and amount of digital native content) it seems like BVoD services in the Danish market have not yet embraced widespread platformization. However, there is ongoing experimentation by these broadcasters, so it is still unclear what these strategies will entail in the future. For instance, TV 2 Play only began providing video length information relatively recently, and its minimum video duration has increased rather than decreased over time, which is against the generalized trend of shortening videos on online platforms. Additionally, we observe some reversal of the influence of broadcast on BVoD services, where streaming-first content like DRTV's Explainer videos is now being broadcasted on DR's linear TV channel. This observation reinforces the growing trend among content producers to embrace trans-programming (Bruun, 2021) and could point to a future where instead of BVoD services diverging dramatically from linear TV, we may see other new ways of combining these two forms of distribution.

Based on the analysis presented, we find some important commonalities between DRTV and TV 2 Play in how they treat news content on their front pages. They both actively use curation to promote news by including it in their carousels and by positioning the news deck in a prominent position. However, as we have illustrated in Figure 2, both BVoDs had as little as 2-6% news content in their carousels in 2020 and 2021, which could be seen as quite troubling numbers when you consider how news production and consumption were in some ways boosted during the pandemic in 2020/2021. These low numbers can be interpreted as a sign of how other genres were preferred by these public-service institutions in their carousels and how this direct competition between genres for space in the carousel can sometimes be detrimental to the visibility of news content. Interestingly, these numbers then changed in 2022, when news

content in the carousel started gaining prominence on both services, denoting a positive trend regarding visibility. Another positive finding is that hard news (i.e., public affairs topics of broader societal interest) dominates the news content in both services. This dispels any immediate concerns regarding a potential softening of news, which would be one of the worrying aspects of platformization. They also show similar trends regarding the length of the videos and their production of digital native content. Both BVODs showcase news video content with a median duration ranging from 20 to 30 minutes. The most obvious would be to compare this length with the length of news videos in SVOD services, however, the main SVODs such as Netflix and Disney+ do not carry news and current affairs programs. If third-party video platforms such as Facebook and Instagram, which provide lots of news content, are used as a comparison instead, it seems that their news content is significantly shorter compared to DRTV and TV 2 Play's news content. Upon closer inspection, it becomes apparent that most tiles on these BVOD services contain full news programs containing multiple stories, such as a news bulletin and usually not stand-alone news stories. If third-party platforms are once again used as a comparison in need of more appropriate options, this does not indicate widespread platformization on these BVODs. Their production of digital native content is also remarkably similar (15-16% of all news content). While these numbers might not seem high, they are in fact way higher than what could be expected based on the research contributions about third-party video platforms. For example, Hase et al. (2023) found that only 2.4% of the content published across four different social media platforms was originally produced for the platform instead of reposted from the media's own websites. Since we see that the presence of this content has increased in the most recent year sampled for both BVOD services, it could be indicative of a growing effort to adapt news content to what is needed for the platform.

There are also some differences in the treatment of news between the two broadcasters that might derive from their different funding models. On the one hand, TV 2 Play uses the privileged positions in the carousel to showcase specific news items more frequently than DRTV. However, soft topics are more common in the carousel than in the news deck, and this is especially the case for TV 2 Play. Compared to the carousel, the news deck on both services seems to regularly ensure that a wider variety of news content is accessible to the viewer. Coinciding with the onset of the Covid-19 pandemic, DRTV consistently held the news deck at the third position on the front page – a prominent placement with only one other deck separating it from the carousel. In contrast, TV 2 Play has gradually positioned

the news deck deeper within the page over the years, diminishing the likelihood that users will encounter it. Additionally, DRTV showcases a greater amount of hard news overall than TV 2 Play, in both the carousel and the news deck.

In summary, there might be a stronger commitment on DRTV to give preferential treatment to news compared to TV 2 Play, which is something they have explicitly stated in DR's most recent strategic plan (Danish Ministry of Culture (2022)). This is also in line with the notion that public media tend to prioritize news more than commercial ones (Reinemann et al., 2012), as DRTV is fully publicly funded, while TV 2 Play is fully commercially funded. As a counterpoint, besides the positioning of the news deck, we see that other indicators such as the amount of news in the carousel or the percentage of hard news may be improving for TV 2 Play. Overall, both BVoD services seem to be following a positive trend in their treatment of news. This could be driven by a wish to fulfill their public role in informing society but could also indicate that they believe that news content, characterized by immediacy and liveliness (Lassen, 2023), gives them a competitive edge against the other streaming services that focus on all other genres but not news.

Like other studies, this study comes with some limitations. We cannot definitively claim that platformization is or is not happening on these services without a comparative analysis with traditional broadcasting. Such a comparison could be challenging because it would depend on which exact linear flow channels you choose to compare with since both VoD services are a melting pot of many different channels with different percentages of news content and different proportions of soft and hard news. Additionally, our examination has focused mostly on quantitative aspects, leaving room for future research to explore deeper qualitative differences. An interesting line of research would be to compare the storytelling strategies between traditional broadcast news and those featured as streaming-first content, to see if journalistic models are being influenced by the online medium (Cores-Sarría et al., 2024, in review). While our study has provided a content analysis with quantitative insights about news on these BVoD services, it would be valuable for future researchers to study audiences' experiences of BVOD news content as well as study the intentions of the industry people at DR and TV 2 who manage these services. Such studies might also further investigate the difficult prioritization and competition between news content and other genres such as fiction, entertainment, reality shows, and sports, which all compete for space and attention within the same interface.

Our study has contributed by studying the curation, visibility, and degree of platformization of news content on DRTV and TV 2 Play

and has thereby delivered valuable insights about how these broadcasters prioritize and adapt their important societal role as news providers on their BVoD services. This study has documented several different aspects of how Danish public-service media treat news content on BVoD services and found both troubling numbers and recent tendencies towards improvement. To do this, we have also developed and contributed with a new approach that has combined terms from two different research fields – journalism research and video streaming research – which can hopefully benefit and inspire others who have an interest in studying TV news content in a streaming era. These findings contribute with important nuances that can have implications for both practitioners and policymakers and which are not only relevant in a Danish context but can hopefully also serve as a basis of comparison for other nations' providers of television news content. Because Denmark is at the digital forefront, the selected case can inform future trends for public-service media BVoD services in national contexts with lower levels of digitalization than the Danish media market. We hope that our study will have a significant impact by providing vital information and, at the same time, we still encourage other researchers to conduct similar studies and to continue to investigate how the growing use of VoD services may affect the visibility of television news and potential news avoidance. News on BVoD services is currently in a state of transition, and its trajectory in an evolving digital landscape warrants further investigation.

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