NEWS PUBLISHERS'
INNOVATION OF PRACTICES
AMID PLATFORM DOMINANCE

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For Mabel, My North Star

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List of Articles

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Chua, S., & Westlund, O. (2019). Audience-centric engagement, collaboration culture and platform counterbalancing: A longitudinal study of ongoing sensemaking of emerging technologies. *Media and Communication, 7*(1), 153–165.

Article 2

Chua, S., & Duffy, A. (2019). Friend, foe or frenemy? Traditional journalism actors' changing attitudes towards peripheral players and their innovations. *Media and Communication, 7*(4), 112–122.

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Article 4

Chua, S. (accepted). Platform configuration and digital materiality: How news publishers innovate their practices amid entanglements with the evolving technological infrastructure of platforms. *Journalism Studies.*

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1. INTRODUCTION

It is the morning of January 16, 2020. The editors of *The Straits Times* (ST), an English-language, national news publisher in Singapore, are gathered in the conference room for the daily editorial meeting. Two weeks ago, the Chinese health authorities had officially reported to the World Health Organization that a new coronavirus had been spreading in Wuhan, China. Since then, news of its spread within China and to neighbouring countries had been gathering momentum globally. A senior editor, who is leading the meeting, turns to the digital editor and asks: "Is the infographic of the virus spread ready?"

The digital editor responds affirmatively and says it will be published by the afternoon, adding: "These infographics don't usually do too well on social [media], so we're doing (sic) a short video. That will go out on social [media] with a link to the story [on the publisher's website]."

"What's the hook of the video?" the senior editor inquires.

The digital editor explains it will start with footage showing the supposed "ground zero" of the outbreak, the Wuhan Wholesale Market, under lockdown.

"We'll also include some video clips and photos from social media of the hospital in Wuhan that is currently housing the infected patients," a video editor adds.

"Are we pushing the same video across all social (media)?" the senior editor asks.

The digital editor shakes his head and explains that a longer video of about five minutes will be published on YouTube, while shorter, edited versions of that video will be "pushed" on the publisher's social media accounts, such as Facebook, Instagram and Twitter.

"Our journalist in China tells me there is chatter on Chinese social media that the authorities are planning to lock down Wuhan. [The journalist] has been sending me screenshots of the chatter," says another editor. "But we're still verifying this," the editor clarifies.

After spending a few minutes deliberating on the number of infections and possibility of lockdowns in other cities surrounding Wuhan, everyone in the meeting turns towards a screen at the front of the room. On the screen is a chart displaying the previous day's top-performing stories on the publisher's website and social media platforms. Then, the digital editor discusses

the metrics with all those at the meeting, offering insights into why certain stories had performed better than others and which articles had led to digital subscriptions.

The above episode occurred while I was seated in the corner of the conference room, unobtrusively observing the meeting for this dissertation. I was a journalist and the editor of an affiliate publication who had worked closely with the staff of ST and my mind momentarily flirted with the familiarity I had with these editorial meetings. But more importantly, the above episode illustrates the extent to which the ST's practices concerning news production and distribution, audience engagement and the business of publishing have become intertwined with global technology companies and their platforms.

However, ST is not a unique case. It typifies the complex situation that news publishers around the world have found themselves in when it comes to their relationship with platforms. On the one hand, publishers have been introducing new practices or modifying existing practices to leverage the opportunities that platforms offer, such as news construction and dissemination tools, reaching a wider audience base, gaining insights into audience preferences through platform analytics, growing subscriptions, platform-provided training and funding, etc. Yet, platforms have gained an immense influence over the journalism and the business of publishers, so much so that publishers have become wary of the risks associated with being overreliant on platforms. Consequently, publishers change their practices in ways that allow them to maintain, or regain, control of their news work, data, audiences and revenue (see discussions in Nielsen & Ganter, 2022; Poell et al., 2022a; Steensen & Westlund, 2021).

Essentially, publishers have been continually innovating their editorially oriented practices to capitalise on the benefits of platforms, while also seeking to mitigate their dependence on them. In this dissertation, I consider innovation to be the process in which new things and/or changes, including discontinuations, are appropriated into everyday practice (which is discussed further in Section 2). I also define editorially oriented practices as practices that primarily relate to news production and distribution, but that also intersect with technology and the business of journalism (which is elaborated upon below). Examining ST as a case study matters because it offers a point of entry through which we can understand the larger phenomenon of how publishers continuously reorganise their editorially oriented practices vis-à-vis platforms.

In light of the above, this dissertation comprises a six-year longitudinal study (2015 to 2021) of a publisher's (ST) innovation of its editorially oriented practices in relation to platforms.

It adopts a practice-oriented approach that focuses on what the publisher did when innovating its practices concerning platforms and how the publisher's staff articulated their reasons for doing so.

Publishers' Innovations in Relation to Platforms

Scholars and industry professionals widely use the terms "platform" or "platform companies" to describe technology companies that own and manage digital infrastructures that allow for the interaction among various types of stakeholders, including but not limited to end-users, advertisers, developers and publishers, etc. (see Poell et al., 2019). These technology companies build their businesses primarily around their digital infrastructures, which allow them to host public information, organise and control access to it (Helmond et al., 2019). Over the last two decades, Amazon, Alphabet, Apple, ByteDance, Meta, Snapchat, Tencent, Twitter and Weibo, have been examples of technology companies that have come to dominate the digital media environment with their search engines and/or social networking services (Nielsen & Ganter, 2022; Poell et al., 2022a). They have garnered tremendous influence over people's everyday work and life – and publishers are no exception. For the sake of simplicity, this dissertation will write "platforms" when referring to technology and their digital infrastructures.

The rise of platforms, especially Alphabet and Meta, has had an enormous impact on publishers globally. Over the last two decades, publishers have been continually innovating their practices in relation to platforms. On the one hand, publishers leverage the opportunities that platforms offer by incorporating platforms into their operations (Nielsen & Ganter, 2022; Poell & Van Dijck, 2014; Poell et al., 2022b; Steensen & Westlund, 2021). Publishers use platforms to carry out background research, source for leads and generate story ideas (Belair-Gagnon, 2015; Newman et al., 2022). Publishers also communicate directly with audiences via platforms (Hermida, 2016, 2018), which they perceive as beneficial for branding and reputation-building (Molyneux et al., 2019). Furthermore, publishers utilise platform analytics and metrics to guide editorial decisions (e.g. Carlson, 2018; Dwyer & Martin, 2017; Tandoc, 2014), depend on algorithms to facilitate digital news distribution to audiences (Hansen & Hartley, 2021) and exchange data resources with platforms (Kammer, 2021). Publishers also employ platforms to drive subscriptions and advertising revenue (Myllylahti, 2018, 2021; Sehl et al., 2021). Additionally, industry reports and news articles, such as those from the World Association of News Publishers (WAN-IFRA), *What's New in Publishing* and *Journalism.co.uk*, have positively portrayed platforms for publishers. These benefits encompass the provision of tools to

publishers for enhancing their reporting capabilities, the facilitation of increased advertising revenue, improved audience engagement and substantial investments in supporting the news industry (see McErlane, 2022; Mirkovic, 2019).

On the other hand, publishers have realised that the opportunities that platforms offer them come with complications. Research that adopts a more critical stance has highlighted how platforms have amassed a significant degree of control over publishers' production, distribution, exposure and business (e.g. Lewis & Molyneux, 2018; Lindén, 2020; Nielsen & Ganter, 2022). Platforms also set and continually alter their digital infrastructures, and by doing so, influence publishers' practices (Nieborg et al., 2019). Publishers have become increasingly concerned about these imbalances and, thus, have continued to innovate their practices to counteract the immense influence of platforms over their journalism and publishing (Nielsen & Ganter, 2018). They have been reducing their use of platforms, both editorially and commercially (e.g. Meese & Hurcombe, 2020; Myllylahti, 2020; Poell et al., 2022b), while also channelling resources to develop their own proprietary news products and services (Rashidian et al., 2019). Furthermore, there are also developments in the news industries that highlight the fractious relationship between publishers and platforms. A report by the International News Media Association (INMA) that includes a survey of 90 North American and European news organisations notes that publishers are increasingly critical towards platforms. The key concerns that publishers raised in the report included a loss of control over distribution, data and monetisation (Whitehead, 2019). In the recent 2023 Innovation in News Media Report published by WAN-IFRA (Senõr & Sriram, 2023), a notable focus is placed on the tensions between publishers and platforms. Describing their relationship as a "long break-up" (p.68), the report draws attention to two main concerns: Meta's waning commitment to news and financial support for journalism, alongside the substantial loss of digital advertising revenue experienced by publishers due to the dominant duopoly of Google and Meta in the online advertising space.

The current publisher-platform relationship features multiple asymmetries that mostly favour platforms, leading to concerns about the ability of publishers to maintain their editorial independence and financial autonomy while fulfilling their civic duties (e.g. Toff & Matthews, 2021; Westlund et al., forthcoming). As a result, researchers urge for a closer examination of the interactions between publishers' practices and platforms. However, despite the immense influence that platform have over publishers, any examination of the publisher-platform relationship should not be based on oversimplified assumptions that platforms have complete control over publishers. Instead, studies should pay attention to the dynamic negotiations that

take place between both actors, or what Poell et al. (2022b) refer to as the "spaces of negotiation", recognising the "opportunities available to news organisations to determine how they produce, distribute and monetise content vis-à-vis platforms" (p.2). Seen in this light, it is essential to study how publishers are innovating their practices in relation to platforms because it allows for the posing of vital questions about whether and to what extent publishers can independently create and disseminate information that shapes our perception of the world (Graves & Anderson, 2020; Zelizer, 2019). Ultimately, the relationship between publishers and platforms is in a perpetual state of flux, necessitating ongoing research into how publishers are constantly innovating their editorially oriented practices in relation to platforms.

Research Aim

My overarching aim in this dissertation is to investigate how and why publishers innovate their editorially oriented practices in relation to platforms over time. This aim is further undergirded by a series of research questions, which I present in Section 4. With this overall aim in mind, I longitudinally examine the case of a Singaporean publisher.

Research Overview

This dissertation focuses on studying the publisher's innovation of editorially oriented practices vis-à-vis platforms. I am interested in investigating the process in which the publisher appropriates innovation in its editorially oriented practices by introducing new practices, and/or modifying or removing existing ones in relation to platforms. Furthermore, it is notable that although editorially oriented practices are chiefly concerned with news construction and dissemination, they nonetheless often involve technology and commercial aspects, as the boundaries between editorial, business and IT functions are increasingly blurred within contemporary newsrooms (Cornia et al. 2020; Drew & Thomas, 2018). Therefore, the editorially oriented practices of publishers in relation to platforms not only involve news practices (e.g. the incorporation of platforms in the process of creating and disseminating news), but also overlap with technology and business (e.g. the use of platform-provided audience metrics and data by editors to make news judgements and subscription-related decisions).

For the theoretical framework of this dissertation, I draw on practice theory and the three elements of practice, namely activities, materiality and reflexivity (Ahva, 2017, 2019). Generally, practice theory regards practices as the basic unit of analysis around which empirical research can be systematically organised (Nicolini & Monteiro, 2016). Practice theory also

considers practices to be composed of as assemblages of "doings and sayings" (Schatzki, 2019) that are regularised over time, and that human actors (and arguably also non-human entities; see Ahva, 2019; Schatzki, 2019) are the conduits of those practices (Ryfe, 2018). In relation to the study of media and journalism, several scholars have argued for the suitability of using and advancing practice theory to examine innovation because of its potential in offering insights into how journalism practices are routinised or transformed (e.g. Ahva, 2019; Buschow, 2020; Raetzsch, 2015; Steensen, 2013). In light of this argument, employing practice theory as the theoretical framework is especially beneficial to my enquiry into the innovation of publishers' editorially oriented practices in relation to platforms.

Additionally, I build on the practice-oriented work of journalism scholar Laura Ahva to guide my study (see Section 4). Ahva (2017, 2019) suggests that practices may be conceptualised based on a trio of interconnected elements that together constitute a practice: 1.) activities (or constellations of activities) – how actors behave, do things or move about; 2.) materiality – objects, tools, technologies or places; and 3.) reflexivity – how actors make sense of their actions and the objects they use. Importantly, Ahva's suggestion opens up a vista for me to analyse the publisher's editorially oriented practices via these three interrelated elements.

With regard to methods and materials, this case study spans six years and adopts a qualitative mixed-method approach that includes in-depth interviews with 35 of the publisher's staff, some of whom I interviewed multiple times, newsroom observation, the monitoring of digital materiality that consists of charting the publisher's activities on various platforms, as well as key shifts in the technical protocols and governance structures of platforms. Furthermore, the period of this study was opportune as it was a time when the publisher, which was a for-profit newspaper, had experienced declining revenues and had invested considerable resources into digitally transforming its newsroom. This included innovating its practices regarding the use of platforms.

Research Contributions

This dissertation contributes to the scholarship on publishers and platforms by enriching theoretical and empirical knowledge in this area. Firstly, this dissertation has developed four overarching conclusions (see Section 7) that serve as an early iteration of an analytical framework that captures the evolving relationship between publishers and platforms. These conclusions foreground the multifaceted nature of the interactions between both actors and have significant implications for research from both a societal and practical perspective. They also address the

call by scholars who argue for contemporary research to shed light on the shifting dynamics between publishers and platforms, and avoid one-sided interpretations of platform domination over publishers (e.g. Poell et al., 2022b).

This dissertation also presents a practice-oriented theoretical framework that sheds light on the role that negotiations among individuals play in the innovation of publishers' practices. Traditionally, studies on innovation in news organisations lean towards structural approaches. These studies, largely influenced by media management theories, focus on structures that are internal and external to the publisher as the main drivers of innovation (Dogruel, 2014), and rarely consider the role that social negotiations among individuals play in innovation processes (Steensen, 2009). This has led several scholars to argue for the importance of devoting more attention to the negotiations among individuals through practice-oriented approaches (e.g. Paulussen, 2016; Wagemans & Witschge, 2019; Sehl et al., 2021). Thus, this dissertation contributes to a deeper understanding of how social negotiations and structure coalesce when practices are being innovated.

Additionally, this dissertation adopts a longitudinal perspective to investigate publishers' innovation of practices in relation to platforms. In doing so, it draws its analysis from a corpus of data that was gathered over six years and encompasses interviews and newsroom observation. This offers in-depth insights into how a publisher's practices were iteratively innovated over time. Knowledge from this multi-year case study augments the learnings provided by cross-sectional research of publishers and platforms. Scholars have underscored the value of longitudinal studies of innovation, arguing that such research provides a more informed understanding of innovation processes as it uncovers the ebb and flow of innovation over time, as opposed to capturing momentary snapshots (e.g. Orlikowski, 1996; Slappendel, 1996). Mitchelstein and Boczkowski (2009) emphasise that longitudinal research of innovation in newsrooms is vital as it affords the identification of continuous trends and distinguishes them from discontinuous ones. In regard to publishers and platforms, Poell et al. (2022b) observe that how publishers and platforms are positioned in relation to each other undergoes significant variation over time, thereby reinforcing the importance of longitudinal research on the publisher-platform interrelationship to understand how they evolve.

The most significant contribution of this dissertation, however, lies in the collective sum of the three contributions above. To the best of my knowledge, there has been no other longitudinal case study has been conducted on a single publisher that spans six years and adopts

a practice-oriented approach to provide an in-depth analysis of how editorially oriented practices are innovated in relation to ongoing platform developments. The period of this study saw the emergence of new global platforms (e.g. TikTok and Clubhouse) and consolidation among key players (Alphabet made Google a subsidiary; CrowdTangle was taken over by Facebook, which later became Meta). The increasing presence and influence of platforms also coincided with publishers continuing to report declining advertising revenues, exacerbated by the Covid-19 pandemic (Newman et al., 2021), and a generally low penchant among audiences to pay for news (Newman et al., 2019). Amid these circumstances, my dissertation advances knowledge on the publisher-platform dynamic by examining how and why publishers innovate their editorially oriented practices in relation to platforms over time.

Overview of Case Study and Published Articles

This case study, which stretched from 2015 to 2021, enabled me to publish four scientific articles that are all grounded in a practice-oriented approach. Each article delves into different aspects of how the publisher innovated its editorially oriented practices in relation to platforms from various analytical angles by paying attention to its activities, the digital materiality of platforms and the reflexivity of the publisher's staff.

The first article served as an exploratory study, investigating the years 2015 to 2018 and focusing on two publishers in Singapore, one of which is ST. The study examined how both publishers innovated their editorially oriented practices pertaining to platforms as a form of emerging technology in journalism, and the sensemaking (Weick, 1995) of the publishers' staff towards the innovation of those practices. This study heightened my awareness of various aspects of newsroom innovation – in particular, ST's innovation of practices in relation to platforms, which warranted further investigation. This study found that ST's innovation of practices was marked by a heavy reliance on platforms in its news work initially. However, the publisher eventually began to reduce its use of platforms for news distribution, communicating with audiences, data and monetisation, as it also grew more circumspect about collaborations with platforms. The publisher's recognition of the growing influence that platforms had over its news work and revenue contributed to the changes in the ways it used and approached platforms. This article introduces platform counterbalancing as a concept to explain publishers' attempts at negotiating their positions and commitments regarding platforms.

Continuing the investigation, the second article examines the interrelationship between the publisher's innovation of editorially oriented practices and the reflexivity of its editorial staff

towards new entrants to the field of journalism (Holton & Belair-Gagnon, 2018), such as technologists, business executives and platforms. Spanning from 2015 to 2019, this study incorporated new data and built on the data collected for the first article. It also included data that was collected by my co-author for an earlier study that examined how news publishers' practices were changing in relation to digitalisation and social media platforms, and featured ST as one of the newsrooms in the inquiry (Duffy et al., 2018). His previous study examined how the publisher's practices changed with digitalisation, which aligned with our longitudinal analysis. This article found that the journalists had, over time, expressed concerns over the publisher's reliance on platforms, but also acknowledged their benefits (e.g. speed in reporting, wider audience reach, remaining relevant in a digital news environment, etc.). Moreover, the journalists increasingly valued staff in hybrid roles who possessed a combination of editorial, commercial and/or platform-related technical competencies, often turning to them for advice and assistance, and to learn their skills and knowledge in purposively using platforms for news work. This article proposes four forms of proximity – physical, temporal, professional and control – to explain how different actors in newsrooms influence the appropriation of innovation in publishers' editorially oriented practices.

The third article focuses on examining how the publisher innovated its editorially oriented practices in relation to platforms from 2015 to 2021. Its analysis is based on the three elements of practices (Ahva, 2017, 2019) – what the publisher did (activities), with which platforms (digital materiality), and the reflexivity of the publisher's staff towards its activities and the platforms they used. The findings suggest the publisher innovated the way it used platform in news work by adding, modifying and removing specific activities. Its innovation was also dynamic as it capitalised on specific opportunities that the platforms offered, while at the same time seeking to reduce its reliance on platforms. Additionally, the staff expressed a tension between recognising platform benefits and the need to reduce dependence, particularly in news distribution, audience engagement and editorial decision-making using platform data. From our research review and the findings in this study, we introduce a practice-oriented concept, platform configuration. It posits that publishers innovate their editorially oriented practices by continuously adjusting their activities to specific platforms, while reflexively evaluating their commitments towards the use of platforms for fulfilling their editorial and/or commercial objectives.

Lastly, the fourth article, covering the period from 2015 to 2021, focused on studying how the publisher configured the innovation of its editorially oriented practices in relation to the

shifting digital materiality of platforms. It draws on the three elements of practices (Ahva, 2017, 2019) and the platform configuration framework (Article 3) to longitudinally assess the publisher's practices regarding two Meta platforms – Facebook and Instagram. The findings indicate that the publisher had innovated its practices by adding, modifying, and removing specific activities based on shifts in the digital materiality of Facebook and Instagram. The publisher was found to have increased the production and distribution of videos on both platforms, reduced their reliance on Facebook for distributing news and connecting with audiences, and discontinued using Instant Articles, a publishing feature within Facebook that natively hosts and distributes publishers' content and provides advertising revenue. Based on the research review and findings in this study, this article concludes that while publishers are circumscribed by platforms changes, they strategically innovate specific practices to both leverage platforms and reclaim or maintain independence from them.

Dissertation Outline

The summary section (*kappa*) of this dissertation consists of seven main sections, including this introduction. In the following two sections, Sections 2 and 3, I discuss the research literature related to innovation in publishers and the publisher-platform interrelationship, respectively. I present this dissertation's theoretical framework in light of practice theory in Section 4, outline my methods and materials in Section 5, and summarise the articles in this dissertation in Section 6. In the final section, I discuss how the findings across the four articles address this dissertation's aim and overarching research questions. I also present four conclusions that synthesise the key research findings with the relevant literature. My reflections on the implications of this research on society and the practice of journalism end the summary section.

2. INNOVATION AND JOURNALISM

This section discusses the prevalent concepts and approaches in journalism research that focus on innovation in news organisations. It provides the theoretical backdrop to the focus of my dissertation: the examination of a publisher's innovation of editorially oriented practices in relation to platforms. This section consists of two parts that discuss: 1.) the definition of innovation in the context of this study, which encompasses newness, change and appropriation, and 2.) two key approaches that have guided scholars' investigations of innovation in publishers, namely structural approaches and practice-oriented approaches. The purpose of these discussions is to highlight the important ideas and debates relevant to this study, and not to present an exhaustive review of the research on innovation in journalism.

Innovation: Newness, Change and Appropriation

This dissertation defines innovation as the process of incorporating new things or changes into everyday practice. It emphasises three key concepts: newness, change and appropriation. While innovation is closely associated with newness and change, I argue that a comprehensive understanding of innovation should extend beyond novelty and transformation to include an examination of how these aspects are appropriated as a social practice. The following discusses these concepts and illustrates them with examples from research.

Newness

Research on innovation in publishers emphasises newness. Literature reviews reveal that innovation in journalism studies is portrayed as the development and implementation of something new, such as a new product, a process or an idea, that is subsequently developed and implemented (e.g. Belair-Gagnon & Steinke, 2020; Bleyen et al., 2014; García-Avilés, 2021b; Storsul & Krumsvik, 2013). The significance of newness becomes evident when examining various academic definitions of innovation. For example, Pavlik (2013) defines journalism innovation as the process of "taking new approaches to media practices and forms while maintaining a commitment to quality and high ethical standards" (p.183). Schmitz Weiss and Domingo (2010) see innovation in online newsrooms as "the development by the online staff of new production practices, new product features or new technological tools" (p.1158), and García-Avilés et al. (2018) see journalism innovation as "the introduction of something new that adds value to customers and to the media organisation" (p.27). Steensen and Westlund's (2021) review of the literature highlights the focus on newness and its consequences, "whether it is a

new idea, a new technology, a new commodity or a new combination of existing ideas, technologies, or commodities" (p.81). However, the authors identify a bias towards newness in the journalism innovation scholarship suggesting that scholars may overestimate the importance of new things simply because they are unique, without necessarily considering their role in news production.

Change

Besides newness, innovation is also associated with change, although scholars acknowledge that differentiating between newness and change can be challenging because they often intertwine (e.g. Dogruel, 2013, 2014; Posetti, 2018). Krumsvik et al. (2019) propose that innovations fall on a spectrum of novelty, ranging from incremental advancements to more substantive changes and new inventions. Through their analysis of the research literature, they find that most innovations in the news industry are connected with incremental changes rather than entirely new inventions. Similarly, Dogruel (2014) argues that innovation is more than just new products and services, but a continuous, non-deterministic process of incremental changes over time. Journalism scholars have focused their empirical research on examining the incremental nature of innovations in publishers. Arrese (2016), for example, studied how publishers have been innovating their online paywalls since the 1990s, suggesting that their seemingly new practice of introducing paywalls is more an incremental and iterative change over time that represents a return to the pre-Internet practice of charging for newspapers that have been adapted for the online environment. Both Küng (2013) and Mari (2017) highlight the ongoing technological innovations in news productions, like the evolution of publishing technology from manual typewriters to electronic word processors, as ongoing innovations in technology – rather than entirely new inventions. These incremental technological innovations, which have been gradually implemented by publishers, have also allowed them to progressively innovate their practices. Importantly, by studying change alongside newness, researchers can mitigate the newness bias in their studies.

Appropriation

Traditional definitions of innovation focus on newness and change. However, it is also essential to consider the value of adopting a broader conceptualisation of innovation that encompasses appropriation. Appropriation refers to the process of integrating new things or modifications into everyday practice (Djerf-Pierre et al., 2016). It comprises two key elements: the complex social negotiations among diverse actors and the iterative nature of innovation. In

their study of journalists' use of social media, Djerf-Pierre et al. (2016) argue that appropriation is connected to the learning of a social practice, shaped through the production and negotiation of social norms among users. The authors highlight that appropriation also involves discontinuation. Similarly, Boczkowski (2004) focuses attention on how appropriation in newsrooms is influenced by social processes, involving tensions and negotiations among professionals, which contributes to the ebb and flow of innovation. Likewise, Westlund and Lewis (2014) emphasise the importance of analysing how different organisational actors interact and negotiate during innovation processes. By adopting a broad definition of innovation that incorporates appropriation, this dissertation goes beyond newness and change, and considers how new things and modifications to what is existing, including discontinuations, are appropriated into a social practice. This understanding provides a conceptual and methodological breadth that enables a comprehensive exploration of how a broad range of actors engage in complex interactions while carrying out activities related to innovation and the iterative character thereof.

In sum, this broad definition of innovation, encompassing not only the implementation of newness and change but also appropriation, guides my investigation of a publisher's innovation of editorially oriented practices in relation to platforms. In the next section, I will discuss the approaches that scholars have used to examine innovation in news organisations.

Approaches to Examining Innovation in Publishers

Scholars have primarily adopted two approaches to investigate innovation in publishers: structural and practice-oriented approaches. In the following, I provide an overview of each approach by discussing their key ideas and highlighting examples from the literature.

Structural Approaches

Research that adopts structural approaches to study innovation in publishers sees innovation as being shaped by structures, and focuses on investigating the ways in which structures contribute to and/or limit innovation in publishers (e.g. Küng, 2013; Schlesinger & Doyle, 2015; see also Steensen, 2009). Although these studies do not pinpoint the meaning of structures, they commonly consider them to be connected to strategies, resources and rules (Paulussen, 2016).

Research following structural approaches identifies the internal and external structures that impact innovation in publishers (e.g. Krumsvik et al., 2019). The types of internal structures that have received attention from scholars include the organisational structures of publishers, management and leadership strategies, and resource allocation. Studies focusing on organisational structures examine how factors such as workspace design, company hierarchy and communication channels impact innovation processes (Paulussen, 2016). In terms of organisational structures, a study of US publishers found that those with established data departments had a greater advantage in innovating their data-driven storytelling than those relying on individual journalists with data journalism skills (Boyles & Meyer, 2017). Another study of German publishers found that changes to the physical newsroom positively impacted workflows and journalists' ability to innovate their multimedia news production processes (Garcia-Avilés et al., 2014). Regarding management and leadership strategies, research has examined how news companies approach and respond to innovation from a managerial perspective (cf. Pavlik, 2013). These investigations emphasise the role that management plays in shaping a publisher's innovation efforts and determining their success (Bleyen et al., 2014). A study of US publishers found that newsrooms' strategic management of industry-wide technological changes significantly influences the development of their data, analytic and platform-related capabilities (Kosterich, 2021). Furthermore, scholars who have compared the strategies of legacy publishers and digital news startups have concluded that the latter often adopt more flexible and agile approaches, which enable them to be nimbler in responding to disruptions than the former (e.g. Ali et al., 2019; Carlson & Usher, 2016). In relation to resources, studies in this area emphasise how publishers allocate specific resources to drive innovation. Such studies have highlighted how for-profit publishers face challenges in balancing financial objectives with investments in areas such as technology, recruitment and training that enable innovation (e.g. Küng, 2015; Quinn, 2005). These studies imply that for innovation to be successful, resources must be allocated in an intelligent manner.

Structurally oriented research also focuses on how structures external to publishers impact their ability to innovate. Scholars have analysed how governmental policies, market competition and technological advancements all play a role in shaping innovation in news organisations. As regards government policies, researchers have found that media regulation, taxation and direct subsidies are all significant in either encouraging or impeding innovation within publishers. For example, studies have explored the types of media regulation policies that support and incentivise publishers' innovation (Wiley, 2021), and how taxation impacts their resources for investments in new initiatives (Sjøvaag & Krumsvik, 2018). Other scholars have

examined the effect of direct subsidies in boosting publishers' innovation efforts (Murschetz, 2020; Van Kranenburg, 2017). In terms of market competition, scholars have found that staying ahead of competitors and keeping abreast of industry trends are crucial motivators for publishers to continue innovating (García-Avilés et al., 2016). However, scholars also claim that this competitive pressure among publishers has resulted in them mimicking each other instead of experimenting with radical innovation (Hermida & Young, 2021; Villi et al., 2020). With respect to technological advancements, studies have noted that the development of infrastructures that support emerging technologies, such as blogging (Singer, 2005), unmanned aerial vehicles (Holton et al., 2015) and automated journalism (Caswell & Dörr, 2018), plays a vital role in influencing whether these innovations are adopted by publishers.

Ultimately, the structural approach analyses innovation in publishers from a managerial perspective (see Dogruel, 2014). This approach considers the influence of internal structures, such as management strategies, organisational structures and resource allocation, on innovation. It also highlights the impact of external structures, such as governmental policies, market trends and advancements in technology and their accompanying infrastructures, on a publisher's ability to innovate. Overall, the structural approach sheds light on innovation in publishers by emphasising the interplay between internal and external structures, and how this confluence shapes innovation in news organisations (Krumsvik, et al. 2019: Storsul & Krumsvik, 2014).

Practice-oriented approaches

Studies that adopt practice-oriented approaches to examine innovation in publishers posit that innovation is not only influenced by structures, but also by how these structures are interpreted and negotiated through the practices of various actors involved in innovation (see Paulussen, 2016). These approaches place emphasis on examining publishers' practices and highlights the role played by actors and the material objects they use in the innovation of these practices (Anderson, 2020; Ryfe, 2018, 2019).

Practice-oriented research on innovation has stressed the importance of studying interactions between journalists and new actors both within and outside the field of journalism. For instance, in a special issue of the journal *Media and Communication* (of which Article 2 in this dissertation is a part), scholars advocate paying attention to how the interactions among journalists and a variety of "newcomers" to journalism challenge and shape current journalistic practices (see editorial introduction by Belair-Gagnon et al., 2019).

As regards actors inside the publisher, scholars have directed their attention to studying interactions among journalists, technologists and commercial executives (e.g. Westlund & Lewis, 2014). For instance, a study of the interactions among journalists, data journalists, coders and news managers in the UK found that data journalists and coders were highly valued by their peers for their expertise in data storytelling. They are perceived to be increasingly important to audiences, which enabled them to play a central role in the newsroom's innovation processes (Borges-Rey, 2016). In another study that investigated the interactions among journalists, marketing personnel and technologists in a Norwegian newsroom, it was found that two senior personnel had used their influential positions to rally support from their colleagues and successfully opposed the initial plans of the publisher's management. The study concluded that this episode highlighted the critical role that social interaction plays in innovation within the Norwegian online newspaper, where certain actors can influence others' reflexivity through their interactions (Steensen, 2009).

Practice-oriented studies have also illuminated interactions between actors inside the newsroom and those who operate outside. For instance, a German study that explored the practices of data journalists in publishers and independent computer programmers found that their unique combination of practices and common goals resulted in the formation of complementary relationships and the development of new practices in both fields (Baack, 2018). Similarly, an examination of the interactions between traditional journalists and hackers in US publishers discovered that they were able to merge their practices and innovate, despite having distinct social and occupational backgrounds (Lewis & Usher, 2013). Another US study that investigated interactions between publishers and external web analytics managers found that these managers sought to position themselves as collaborators and advocates of innovation within newsrooms. They emphasised to publishers that their own companies' success was tied to the success of journalism, rather than seeking to alter journalism practices (Belair-Gagnon & Holton, 2018).

Practice-oriented research has also focused on interactions between actors and the objects they use. Practice-oriented scholars opine that studying interactions between actors and artefacts is crucial because it sheds light on how their interplay shapes the innovation of practices (Primo & Zago, 2014; Ryfe, 2018). For example, Steensen (2016) studied how journalism interns in Norway related to the newsroom as a sociomaterial space and the digital materiality of the tools they used. He concluded that their ability to understand the significance of these spaces and software was crucial to their learning of journalistic practices and their sense of belonging

within the news organisation and the profession. In another study of European reporters' use of a new proprietary information-sharing platform for cross-border journalism (Heft & Baack, 2022), the authors found that although the tool had facilitated collaboration and coordination, the country-specific journalistic practices of the reporters gave rise to differing interpretations of how the platform should be used. Likewise, in a longitudinal investigation that tracked the development of a new technological journalistic tool, Wagemans and Witschge (2019) found that although actors from diverse professional backgrounds and with differing practices – journalists, technologists and academics – had aided each other's understanding of the possibilities and limitations of the product's innovation, their diversity was also a source of friction and a barrier to innovation. This led the authors to opine that negotiations among diverse actors contribute to the iterative nature of innovation.

All in all, studies that adopt practice-oriented approaches posit that innovation is not only shaped by structures but also by the interactions among actors and the objects they use, which manifest in their practices. This approach sensitises me to how structures and interactions among actors, and the objects they use, coalesce when practices are being innovated. Furthermore, among the group of actors, the practice-oriented approach emphasises examining the interactions among diverse actors with differing practices and backgrounds. Applied to my study, it focuses my attention on how the continuous engagements between traditional and new actors in journalism contribute to the evolution of practices. This accentuates the notion that innovation involves an ongoing process of negotiation among a myriad of actors, and is thus, iterative in nature. Additionally, the practice-oriented approach underscores the importance of scrutinising interactions between actors and the materiality of the objects they use when practices are being innovated. This is relevant to my study, which focuses on publishers' innovation of editorially oriented practices in the context of platforms, where human actors and technology are intricately linked. The focus on the interrelationship between actors and technological objects underscores the importance of understanding how they mutually shape and influence each other in the process of innovation. Essentially, the practice-oriented approach offers me a holistic perspective in examining innovation in publishers.

3. PUBLISHERS AND PLATFORMS

This section presents an overview of the key findings in the research literature that examines the intersection between publishers and platforms, paying attention to what publishers do to innovate their editorially oriented practices in relation to platforms, and their reflexivity associated with their innovations and the platforms they use in their news work. This section consists of two main parts. In the first part, I explain how publishers innovate their editorially oriented practices regarding platforms by adding, removing and modifying. This sets the context for the second part, which discusses how publishers innovate their platform-related practices considering these three dimensions.

Innovation as Adding, Removing and Modifying

In the preceding section, I discussed innovation in the context of this dissertation. To reiterate, innovation refers to the process of developing and implementing something *new* or bringing about *change*. Innovation also involves *appropriation*, which encompasses the discontinuation of certain practices. When we apply this three-part understanding of innovation to conceptualise the innovation of editorially oriented practices by publishers with regard to platforms, it can be seen in terms of how publishers: (1) add new practices, (2) remove (discontinue) and/or (3) modify (change) existing practices. For clarity, I will use these conceptual categories to classify the relevant research on publishers' innovations in relation to platforms and guide the discussion of the literature in the following section. These concepts also serve as a common thread throughout the summary section, as I will revisit and discuss them in the concluding section. Before delving into the research review, I will first provide an explanation of these concepts.

Adding refers to instances when publishers add new practices associated with platforms. This approach is connected to "building platform presence" (Steensen & Westlund, 2021, p.42), a concept that captures how publishers leverage on the benefits that platforms supposedly provide. The authors opine that for most of the last two decades, publishers have been building a presence on platforms to leverage their immediacy and reach for their news production, distribution and audience engagement activities. "Building platform presence" is also associated with a positive value in the reflexivity of publishers who see it as a means of maintaining and growing their readership, and attracting online traffic to their websites, which in turn helps them to generate digital advertising revenue. With these ambitions in mind, publishers have turned towards platforms to host their news content and promote participation around it.

Removing, on the other hand, refers to instances when publishers discontinue current practices related to platforms. This approach is linked with platform counterbalancing (Article 1), which indicates how publishers strategically attempt to introduce countermeasures aimed at reducing or balancing their dependence on platforms. Platform counterbalancing relates to publishers' reflexivity in becoming more cognisant of the disparity between their reliance on platforms and the comparatively limited benefits that platforms have offered. As such, publishers are taking steps away from building a presence on platforms and are instead engaging in activities that allow them to reclaim a greater degree of control over their news production, distribution and participation.

Modifying entails instances when publishers alter existing practices with respect to the use of platforms in news work by either increasing or decreasing them. Increasing is linked with "building platform presence", while decreasing leans towards platform counterbalancing. On the one hand, publishers innovate by increasing practices that allow them to capitalise on certain platform affordances, such as circulating more news on platforms for a wider reach or boosting the frequency with which they respond to audiences on platforms (e.g. Boczek & Koppers, 2020; Duffy et al. 2018; Giomelakis et al. 2019). On the other hand, publishers also decrease practices that enable them to reduce their dependence on platforms. For instance, publishers are decreasing the use of platforms for lead sourcing and information verification, lowering the frequency with which they disseminate news on platforms, or being more purposive in using platforms to engage with specific audience segments (e.g. Ekström et al., 2021; Myllylahti, 2020, 2021; Walters, 2021).

In sum, these three conceptual categories – adding, removing and modifying – offer a means to classify and understand how publishers innovate their editorially oriented practices in relation to platforms. They also highlight the various aspects of publishers' reflexivity that are associated with the innovation of their editorially oriented practices. The following discusses the key findings in the research literature in light of these three concepts.

Research Review: Publishers' Innovation in Relation to Platforms

Adding

Research suggests that, for much of the last two decades, publishers have been innovating by adding practices in their news work to leverage the opportunities that platforms offer, such as immediacy, reach and a channel of communication with audiences (Hermida, 2018;

Nielsen & Ganter, 2022). Studies show that publishers have added new practices that leverage platforms for news monitoring, sourcing, generating story ideas and verifying information. For instance, a study of European publishers found that newsrooms are incorporating new computer programs that allow them to search and identify trending news stories on social media platforms, as well as verifying social media contributors and content (Thurman et al., 2016). Other research has also discovered that publishers are seeking out the latest versions of software that could provide them with data to better gauge the types of content that "do well" with audiences on various platforms (Nelson & Tandoc, 2019; Welbers & Opgenhaffen, 2019). Scholars have also observed that platforms and their users are playing a progressively larger gatekeeping role in publishers' editorial practices (Bro & Wallberg, 2014; Tandoc & Vos, 2016).

Publishers have also been found to be producing new types of original content for platforms, having been attracted to the financial incentives and promises of greater audience engagement that platforms offer (Bell et al., 2017). The types of content publishers produce for platforms are wide-ranging and include: virtual and augmented reality (VR and AR) stories for distribution on specific platforms that offer VR and AR technology (Newman 2017; Pavlik, 2022); videos that are tailored to specifications of different platforms that cater to different audience demographics (Tandoc & Maitra, 2018; Vázquez-Herrero et al., 2019, 2022); audio content such as podcasts and talk shows for distribution on various digital audio platforms (Nee & Santana, 2021; Newman, 2020); and long-form, multimedia articles to be hosted directly on Facebook's Instant Articles, a product that was developed exclusively for publishers to reduce load time for users clicking on news stories (Caplan & boyd, 2018).

Publishers also incorporate new platforms for news dissemination and audience engagement. Studies note that emerging platforms such as Clubhouse, TikTok, Snapchat and WeChat (in China) have been growing rapidly in popularity among publishers for distributing content and interacting with audiences over the last few years (Denisova, 2022; Long & Shao, 2021; Newman et al., 2022). Furthermore, publishers have also been found to be eager to experiment with novel features on existing platforms. One study of an Australian public broadcaster documents how it had collaborated with Meta to develop and implement a chatbot on its Facebook Messenger account that could interact with audiences (Ford & Hutchinson, 2019), while another study of the journalistic uses of the Meta Ad Library, a database of advertisers who have advertised on platforms owned by the company, found that publishers have incorporated it as a tool for reporting on political campaigns and the amount of money spent on advertisements by politicians, as well as to uncover malicious advertising,

disinformation and hate speech (Leerssen et al., 2021). These studies underscore that publishers believe that platforms can extend the reach of their content, drive traffic to their websites and attract users who otherwise might cease to engage with news providers on traditional channels (Boczek & Koppers, 2020; Hendrickx, 2021).

Research has also found that larger news organisations have been adding new platform-oriented roles in their newsroom, such as social media editors and audience engagement editors, to optimise the visibility of their content for search engines and social media platforms (e.g. Cherubini & Nielsen, 2016; Ferrer-Conill & Tandoc, 2018). These studies indicate that the people at the centre of this development possess the skills to distil and utilise data from a combination of both web and social media analytics tools to support both editorial decision-making, which includes finding ways to extend the shelf-life and distributed reach of their digital content, and commercial objectives, such as growing their audience base and brand loyalty.

In essence, the innovation of publishers' editorially oriented practices associated with adding is marked by a pro-platform bias, both in the scholarship and the journalism industry (Bell et al., 2017; Steensen & Westlund, 2021). In this case, publishers' reflexivity towards platforms is distinguished by a perception that platforms enable them to strengthen their online presence and relevance as news providers. Consequently, publishers innovate their practices by relying on platforms for news production and distribution, interacting with audiences and reaping the commercial opportunities that platforms supposedly offer.

Removing

Scholarship that focuses on how publishers innovate by removing (discontinuing) practices typically approach the publisher-platform relationship through a more critical lens that acknowledges the shortcomings associated with a reliance on platforms (e.g. Lewis & Molyneux, 2018; Nielsen & Ganter, 2018; 2022; Rashidian et al., 2019). These studies highlight how publishers have become circumspect of their dependence on platforms for distribution, exposure and participation. Having realised that the potential that platforms had promised them has not come to fruition, publishers have been found to have removed certain practices in relation to the use of platforms (e.g. Bailo et al., 2021; Meese & Hurcombe, 2020; Myllylahthi, 2018).

One way in which publishers have been noted to be removing practices is in the use of platforms for sourcing, verifying and reporting. A study of *The Guardian UK* reveals that the publisher's financial journalists have discontinued using social media for fact-checking

information (Papanagnou, 2021), while another investigation finds that several Egyptian newsrooms have ceased using social media posts from the public as eye-witness accounts in their reporting (Schapals & Harb, 2022). The authors of these separate studies commonly point out that publishers and their journalists have raised concerns over the credibility and reliability of the information from social media sources. Research also suggests that even though publishers perceive that platforms have provided them with speed in news production, it comes with the risk of inaccuracy, which damages their reputation in the long-term (Vliegenthart & Boukes, 2018). Furthermore, several publishers have been found to be returning to traditional methods of sourcing for leads and verifying information through their network of established personal contacts (Belair-Gagnon et al., 2019; Henrichsen, 2020).

Publishers have also been found to have discontinued the use of platforms to interact with audiences. The findings of several studies suggest various reasons for this cessation: (1) for-profit publishers who have invested resources in engaging audiences on platforms have not reaped the expected commercial returns (Olsen et al., 2021); (2) journalists lack the time and resources to take on the additional workload of managing social media accounts on top of their editorial work and thus have resisted this responsibility (Chadha & Wells, 2016; Sacco & Bossio, 2017); and (3) platforms expose publishers and their journalists to online harassment and trolling and have been largely inadequate in addressing this issue (Al-Rawi et al., 2021).

In sum, research that spotlights how publishers innovate their editorially oriented practices by removing certain practices associated with platforms indicates that publishers' reflexivity towards platforms is increasingly characterised by an acknowledgement of the immense influence that platforms have over journalism. As such, publishers discontinue certain practices in a bid to lower their reliance on platforms and repossess control over editorial processes, data and revenue (Ekström & Westlund, 2019; Nielsen & Ganter, 2018, 2022)

Modifying

Studies have also examined how publishers innovate by modifying current practices in relation to platforms. In this regard, the scholars have given attention to how publishers modify their practices by either increasing them ("building platform presence"), or decreasing them (platform counterbalancing), and often simultaneously engaging in both (Steensen & Westlund, 2021; see also Poell et al., 2022b). Essentially, these studies represent an interest in investigating the nuanced approaches that some publishers have taken to regulate the level of activity in

specific practices when it comes to using platforms in their news production, distribution and audience engagement.

In regard to modifications to news production practices, publishers have been found to be increasing practices in relation to using platforms for story ideation, gathering leads, verifying information, and including user-generated social media content either as sources or as a form of vox populi in their reporting (e.g. Hermida, 2016; Humayun & Ferrucci, 2022). More specifically, publishers are increasing their use of platforms for news construction in times of breaking and evolving news situations, when publishers closely monitor quick-fire developments on social media and refer to user-generated content for eye-witness accounts of happenings on the ground in their reporting (Ekström et al., 2022; Hermida & Mellado, 2020). Conversely, publishers have also been found to be taking more calibrated approaches to reduce their reliance on platforms when producing news. For example, two studies of publishers in the US and Germany respectively show that their political and sports journalists have modified their use of Twitter as a tool for generating new story ideas, sourcing and verification (Mourão & Molyneux, 2021). Both studies highlight that the journalists were increasingly restricting their connections on Twitter to those which they considered to be reliable expert sources, other journalists covering similar beats and competing publishers. Furthermore, studies have also found that several publishers in Europe, in line with being more cautious when using social media to verify information, have employed various multimodal verification tools to verify user-generated content before including them as sources in their reporting (Følstad & Brandtzaeg, 2016).

Publishers also turn towards platforms as news dissemination tools and have employed them in various ways. For example, publishers have been noted to increase the distribution of content via platforms in times of breaking news, especially to provide live updates (e.g. Barkho, 2021; Konow-Lund et al., 2019). They have also been found to have increased the frequency of "livestreaming" news on social media platforms. Studies note that livestreaming on platforms represents a valuable tool for newsrooms to enhance their storytelling (Artwick, 2018), and an opportunity for newspaper publishers to compete with broadcasters to deliver breaking news in live video format (Puijk et al., 2021). Furthermore, publishers have been increasing their efforts to augment their discoverability on platforms through search engine and social media optimisation (SEO and SMO) techniques when distributing news, including introducing guidelines for optimising content (Bossio, 2021), and hiring "experts" in these domains to manage their optimisation strategies (Newman et al., 2018; Nielsen & Ganter, 2022). Essentially, SEO and SMO practices have been found to be valuable for driving online traffic from

platforms to their websites, which in turn spurs advertising and subscription revenue (Giomelakis et al. 2019). On the other hand, publishers have also been decreasing the distribution of news via social media platforms in an attempt to reduce their reliance on them for exposure (Nielsen & Cherubini, 2022). Instead, several publishers have been found to be guided by metrics and analytics when distributing, which sees them limiting the number and types of articles they share to those they believe would perform "well" on specific platforms that cater to certain audience segments (Lamot, 2021; Lischka, 2021; Walters, 2021). Importantly, these examples suggest that even though publishers attempt to decrease their use of platforms for news distribution, they have inadvertently increased their use of platform-associated audience metrics to guide news dissemination decisions.

On the use of platforms for audience engagement, a recent literature review of research pertaining to platforms and publishers argues that there is ample evidence to suggest that publishers have been increasing their use of platforms for audience engagement (Humayun & Ferrucci, 2022). The authors highlight that studies have demonstrated how publishers continue to devote resources to increasing engagement with audiences via platforms, including responding to audience comments and questions on social media, creating private chat groups on Facebook, WhatsApp and Telegram, reaching out to specific users on Facebook Messenger and actively participating in discussion threads on digital forums like Reddit. Other newsrooms have been found to be engaging with audiences on platforms to expediently harness information and insights from the public, while others do so to get a sense of the topics that audiences are interested in (Nelson, 2018). Publishers also increase interaction with audiences on multiple platforms in recognition of the fact that they need to reach different audience segments (Xia et al., 2020), and foster communities who are loyal to the brand (Chen & Pain, 2021). Essentially, publishers who increase the use of platforms to engage with audiences often perceive them as a means to grow or sustain their brand presence online. Conversely, research has also discovered publishers' growing malcontent with the loss of control over their audience to platforms, and that they have thus decreased their use of platforms to engage with the audiences (Nielsen & Ganter, 2022). A study of public media organisations in the US has found that many have decreased their level of engagement with their audience via platforms. Instead, they have sought offline methods to interact with the public, in what they perceive to be a way to develop "more enduring and mutually beneficial" (Belair-Gagnon et al., 2019, p.558) relationships. Another study of US publishers reveals that they are increasingly bypassing platforms for audience engagement and in turn, developing more direct channels for communicating with their readers,

such as private email newsletters and hosting exclusive events for subscribers (Seely & Spillman, 2021).

Ultimately, the key takeaway from the discussion of the research literature that investigates the relationship between publishers and platforms is that it foregrounds three ways that publishers innovate their editorially oriented practices vis-à-vis platforms: they add, remove or modify certain practices across the repertoire of platforms they use in their news work. Importantly, adding is connected to "building platform presence" and to the perception among publishers that platforms provide a means for them to fulfil their editorial and commercial goals. Removing, on the other hand, is associated with platform counterbalancing. Publishers acknowledge that platforms have an immense influence over news work, but they are deploying countermeasures to reduce their reliance on platforms and reclaim a greater degree of control over their news production, distribution and participation. Modifying encompasses an increase, or a decrease, where each adjustment is linked to either "building platform presence" or platform counterbalancing, respectively. Moreover, it is vital to note that publishers often innovate by adding, removing and/or modifying practices simultaneously, and change them over time.

4. THEORETICAL FRAMEWORK

In this section, I present the theoretical framework that guides my examination of a publisher's innovation of editorially oriented practices in relation to platforms. The theoretical framework draws on practice theory and the three elements of practices: activities, materiality and reflexivity (Ahva, 2017, 2019). This section is divided into four parts: 1.) a concise introduction to practice theory; 2.) a focused research review of previous empirical studies that have employed practice theory to investigate innovation processes in news organisations; 3.) an explanation about the three elements of practices and how they are applied in this study; and 4.) an outline of the overarching research questions guiding the analysis in this dissertation.

A Brief Introduction to Practice Theory

Practice theory is influenced by the work of two generations of scholars. The first generation of scholars include Pierre Bourdieu, Anthony Giddens, and Sherry Ortner, who built on the work of philosophers such as Ludwig Wittgenstein, Martin Heidegger and Michel Foucault, to focus on the practical nature of human action. Essentially, they argue that social structure and individual agency are co-constitutive and produced (and re-produced) through practices. The second generation of practice theorists, beginning in the 1990s, expanded upon the earlier literature and underscore that the dynamics of social life (e.g. social order, knowledge, institutions, identity, power, resource allocation and transformation, etc.) result from and are reflected in everyday practices (Schatzki, 2001; Shove et al., 2012). Generally, practice scholars regard practices as routinised behaviour over time. For example, Giddens (1984) writes that practices are contingent on the regularisation of specific facets of everyday life, while second-generation scholar Schatzki (2001) posits that practices comprise mundane "doings and sayings" that are repeatedly carried out over time.

In the social sciences, practice theory has gained importance and informed research in a myriad of disciplines, including sociology, anthropology, knowledge management, science and technology studies, organisational studies, media studies and journalism studies (Nicolini, 2013). Given this array of interdisciplinary influences, there are multiple "versions" of practice theory, and it has been referred to using different labels, including "practice approach", "practice-based studies" and "practice lens". Despite its lack of epistemological unity, scholars note that practice theory can collectively be regarded as a "praxeological family of theories" (Reckwitz, 2002, p.244) that considers practices to be the basic unit of analysis around which empirical research can be systematically organised (Nicolini & Monteiro, 2016).

Ultimately, practice theory is useful for my study in several ways. It focuses on practices as the object of study, which benefits this study as my intention is to understand the innovation of a publisher's editorially oriented practices. Practice theory also elucidates the role that social negotiation plays in innovation and avoids overemphasising the role of structures. Furthermore, practice theory pays attention to the nature of how practices are carried out over time, which offers a means to understand how new practices take shape, or how existing practices are perpetuated, transformed and/or discontinued. This in turn allows me to distinguish between continuous and discontinuous trends when practices are innovated (cf. Mitchelstein & Boczkowski, 2009).

Research Review: Practice Theory and Innovation in Journalism

This subsection discusses key insights from a focused research review of scholarship that have used practice theory to study aspects of innovation within or in relation to publishers. The purpose of this review is to build upon these insights to establish a basis for employing practice theory as the theoretical framework in this dissertation, and to develop research questions that guide this dissertation's investigation into publishers' innovation of editorially oriented practices in relation to platforms over time.

This focused review is based on a collection of 34 empirical studies published between 2010 and 2022 in scientific peer-reviewed journals that cover the topics of journalism, media and communication. This timeframe was chosen because an earlier research review indicates a growing interest among journalism scholars within that period who had used practice theory to investigate transformations in news practices (Ryfe, 2018), thus providing a suitable corpus for this review[1]. The final collection of empirical studies was published across 11 peer-reviewed journals[2]. The following discusses key observations about the articles pertaining to their: (1) theoretical application; (2) empirical foci; and (3) methodology. This subsection closes with the key takeaways from this research review.

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[1]To perform this review, I relied on keyword searches in the Web of Science database ("practice theory" AND "journalism" OR "news" OR "media"). This search excluded conference proceedings, book reviews, and books, and returned a total of 168 results. Thereafter, each article was read and evaluated to ascertain whether it had discussed and/or employed practice theory in relation to the study of innovation in or pertaining to news organisations. This screening process eliminated conceptual articles, literature reviews, research that had employed practice theory but were focused on audience studies, and those that had cursorily mentioned practice theory.

[2]The 11 journals are: 1. *Convergence*; 2. *Digital Journalism*; 3. *International Journal of Communication*, 4. *Journalism*, 5. *Journalism Practice*, 6. *Journalism Studies*, 7. *Media and Communication*, 8. *Journal of Media Business Studies*, 9. *Journal of Mass Communication Quarterly*, 10. *New Media and Society;* and 11. *Teaching Journalism and Mass Communication.*

Firstly, with regard to theoretical application, one commonality among the articles is their use of practice theory to elucidate the transformation of journalistic practices, which involves an evolving process that sees the emergence of new practices, and the alteration and dissolution of existing ones. For example, researchers have applied practice theory to examine how journalistic practices have been transformed by non-institutional journalism actors such as activists, academics, civic technologists, etc., and vice versa (Ahva, 2017; Baack, 2018; Heft & Baack, 2022). These studies suggest that practice theory has been useful in spotlighting how shared professional practices among different groups of actors align them together towards common objectives. Studies have also employed practice theory to understand in what ways and the extent to which news construction practices in publishers are shaped by their interactions with audiences and audience-generated content (e.g. Álvarez-Macías, 2022; Bodrozic & Paulussen, 2018). These studies advocate using practice theory as a conceptual lens to assist in understanding how interactions between audiences and journalists contribute to the innovation of journalism practices in newsrooms. Scholars have also used practice theory to examine the entrepreneurial practices of owners of digital news startups (e.g. Brouwers, 2017; Buschow, 2020). The authors of these studies similarly argue that practice theory has helped to explain how the success or failure of these entrepreneurs is shaped by the extent to which they are competent in business, technological and editorial practices. Importantly, the articles in this review underscore the usefulness of practice theory in not only bringing practices into focus for researchers, but also for its ability to capture and illuminate how practices are developed, changed, and/or discontinued.

Secondly, in terms of the empirical foci, the corpus of studies focuses on how journalists engage in their work (activities), the technological elements they interact with (digital materiality), and the reflective processes inherent in their practices (reflexivity). For example, Brookes and Waller (2022) investigated the collaborative fact-checking practices between journalists and academic institutions during the Covid-19 pandemic, analysing the actions of reporters and academics, the digital tools they used and their sensemaking processes. García-Avilés (2021a) analysed the activities of newsroom managers, the technological tools they utilised and their perceptions to understand the changes in news production practices during the pandemic. Other studies focused on interactions between journalists and content management systems (Rodgers, 2015; Schmitz Weiss & Domingo, 2010), and the implications of smartphones and digital information-sharing platforms for cross-border collaboration practices among journalists (Bødker, 2019). Essentially, the recurrence of the "elements" of practices as posited by Ahva

(2017, 2019) among the studies demonstrate their centrality in practice-oriented research that aim to understand the innovation of practices in journalism.

Methodology-wise, two considerations emerge. First, studies in the collection of articles largely depend on indirect evidence – interviews and content analyses – to make inferences about innovation in journalistic practices, rather than observing how the doing of journalism has changed. For instance, one study investigates the increasing incorporation of computational technology in news reporting by only interviewing journalists (Wiley, 2021), as does another that examines cross-border collaboration practices among reporters through their accounts of what they do (Heft & Baack, 2022). Studies that rely on qualitative content analysis include Burchell (2020), Eldridge (2019) and Pan et al. (2020), all of which glean information about changes in journalistic practices by analysing either news output or the social media content of journalists. While interviews and content analyses are fruitful in providing insights in the transformation of news practices, such approaches remain a step removed from observing how they are being innovated (Ryfe, 2018). Thus, I posit that it is valuable for practice-based studies that examine ongoing shifts in practices related to journalism to also include observation as it allows for the witnessing of the *doing* of practices and how they change over time.

Another observation regarding methodologies is that there are more cross-sectional than longitudinal ones among the selection of articles. Among the collection of essays, only three studies adopt longitudinal approaches. One study traces over six years how the transformation of news practices in legacy publishers was tied with the rise and eventual demise of their in-house web content management system (Rodgers, 2015). Another study, which spanned 18 months, examined the development and implementation of a new digital news production tool among European newsrooms. The third study examines how journalists innovate their news reporting practices during elections over a two-year period (Álvarez-Macías, 2022). However, this study is based on interviews with journalists at only one point in time (in 2020), during which interviewees were asked to reflect on their practices during a project that entailed collaboration between their news organisation and the researcher two years earlier. Ultimately, the fact that there are comparatively few longitudinal studies implies that researchers invariably pay more attention to the relatively "newer" journalism practices and characterise innovation as a stable process. Consequently, it highlights a need for research that uses practice theory to examine the innovation of practices to devote more attention to studying how practices evolve over time.

In conclusion, this focused research review yields three key takeaways. First, practice theory is beneficial as a theoretical and empirical approach for researchers who want to understand how dynamic negotiations among diverse actors involved in innovation contribute to the ongoing process of practices being developed, changed or discontinued. This is important for my dissertation as it reinforces the relevance of using practice theory as a theoretical framework. Second, the actions of actors, their utilisation of digital tools, and their sensemaking processes are crucial dimensions in practice-oriented research aimed at understanding how practices in journalism are innovated. This observation bolsters my decision to focus on the three elements of practices – activities, digital materiality and reflexivity (Ahva, 2017, 2019) – when examining a publisher's innovation of practices in relation to platforms. Lastly, there is a need for more practice-oriented studies to adopt a longitudinal approach to comprehend how practices evolve over time. In response, this dissertation takes a longitudinal perspective, tracing the innovation of a publisher's editorially oriented practices in relation to platforms over six years.

The Elements of Practices

Practice theory espouses that practices entail an arrangement of interconnected elements and practice scholars have examined various types of elements. Scholars have introduced arrangements consisting of understandings, procedures and engagements (e.g. Warde, 2005), and material, image and competence (e.g. Shove et al.. 2012); others have highlighted doings, objects and meanings (e.g. Magaudda, 2011). Nonetheless, these scholars agree that deconstructing practices into their elements and examining their configurations allows researchers to understand their constitution and uncover how and why practices come into being and/or are transformed over time. One such approach is proposed by journalism studies scholar Laura Ahva (2017, 2019), who posits that practices are constituted by the elements of activity, materiality and reflexivity. Ahva (2019) argues that the analytical benefit of this approach lies in the fact that it allows for practices to be deconstructed into three basic elements, which serve as a simple but useful guide to gather and assess research material. I align with this approach to analyse practices based on this trio of elements and their interrelationships. The following explains each element and elaborate how they apply to my study.

Activities

This refers to the performance of sets of organised actions, or aggregations of "doings and saying" (Schatzki, 2001, p.10). To wit, practices constitute actions – both physical and

speech acts – that are interconnected to form constellations of activities (Schatzki, 2019). Activities are also seen as "collective accomplishments" of social actors who act in concert through shared "standards and paradigms" (Barnes, 2000, p.76). Generally, practice theorists acknowledge that examining activities is critical for understanding the production, reproduction, and change of social phenomena (Nicolini & Monteiro, 2016). Furthermore, for activities to become practices, they interplay with the elements of materiality and reflexivity (Ahva, 2017). In this dissertation, "activities" focus attention on how the publisher innovates its editorially oriented practices by adding, modifying and/or removing certain activities in its news work.

Materiality

All practices involve material components that allow or constrain certain activities. These material components include objects, tools, space, time, human bodies, symbols, technologies and infrastructures that are employed in, and/or connected to, a practice (Spaargaren et al., 2019). Practice theorists use different labels to describe materiality (e.g. "things", "stuff", "artefacts"), but they commonly recognise the materiality of entities as an essential component that is intrinsically imbricated with practices (Nicolini, 2013; Shove et al., 2012). Materiality also links with reflexivity through individual and shared meanings that actors give to the objects they use. Certain technology-oriented practice scholars (e.g. Leonardi, 2010; Orlikowski & Scott, 2016) argue that the materiality of digital artefacts is largely determined by the significance that actors reflexively ascribe to their use.

In this study, I approach platforms as technological infrastructures that have digital materiality. This digital materiality consists of both front-end (e.g. graphical user interface, terms and conditions, etc.) and back-end (e.g. application programming interface, algorithmic processing, etc.) features that enable or constrain publishers' activities (Bucher, 2018; Riedl, 2022). The digital materiality of platforms is continuously reprogrammed and evolve over time (Poell et al., 2022b), which impacts how publishers arrange their activities in relation to the platforms' technological changes (Cornia et al., 2018). Ultimately, I examine how the evolving digital materiality of platforms interrelates with the publisher's activities and the reflexivity of its staff.

Reflexivity

Reflexivity describes the symbolic meaning that actors individually and collectively give to their practices (Shove et al., 2012), i.e. the subjective interpretations that they discursively

attribute to their activities and the objects of their practice. For some practice theorists, reflexivity is a form of interpreting based on actors' mental activities, emotions and motivational knowledge (Reckwitz, 2002, p.259), as well as their "purposes, beliefs, feelings and moods" (Schatzki, 2019, p.86). Reflexivity is also closely connected with the sensemaking of social actors, and how they discursively reflect on the activities and objects (materiality) in their practice. Reflexivity is an important aspect of practices for two reasons: first, actors are not mere automatons who execute actions on command, but deliberative beings who possess the capacity to contemplate their circumstances and actions; and second, because actors' reflexivity is constantly evolving, it becomes an important element when considering permanence or changes in practices, and how they interrelate with social structures (Ahva, 2017).

In relation to this dissertation, reflexivity refers to how the publisher's staff articulated their ongoing sensemaking towards their activities, and the digital materiality of the platforms employed in their news work. Journalists have been found to attach meanings to their activities in relation to the platforms they use in their editorial work (Djerf-Pierre et al., 2016). For example, publishers' reflexivity towards platforms has shifted from initial enthusiasm to scepticism, and many publishers have changed the way they use platforms to reduce dependence on them. At the same time, publishers also believe that platforms can generate short-term gains and offer them a path to pursue their journalistic and commercial ambitions and they have continued to engage with platforms in their news work (Nielsen & Ganter, 2022).

Ultimately, seeing practices as being constituted by activities, digital materiality and reflexivity provides three benefits for my case study. First, it offers clarity in conceptualising the publisher's editorially oriented practices in terms of the three elements, and in turn paves the way for an inspection of how aspects of each element had been altered over time. Second, it also affords an understanding of the interrelationships between the elements – i.e. how changes in one of the elements are interconnected with transformations in the others. Third, analysing the changes in each element and their interconnections with each other allows me to scrutinise and call out the salient processes connected with the publisher's innovation of its platform-related professional practices over time.

Research Questions

Overall, the aim of this dissertation is to investigate how and why publishers innovate their editorially oriented practices with regard to platforms over time. In the following, I present three research questions (RQs) that address different aspects of the overarching aim. These RQs,

which highlight the activities, digital materiality and reflexivity components of practices, guide my analysis of the publisher's innovation of its editorially oriented practices in relation to platforms between 2015 and 2021.

RQ1. How did the publisher innovate its activities with respect to the digital materiality of platforms?

This RQ has two dimensions. The first dimension is to ascertain which activities the publisher had innovated over time and understand how the publisher organised those activities by adding, removing or modifying them. The second dimension seeks to ascertain how the publisher innovated its activities in relation to key shifts in the digital materiality of certain platforms.

RQ2. Who were the actors involved in the innovation of these platform-related activities?

The second RQ is interested in identifying the key actors who were involved in the innovation of the publisher's platform-related activities. Identifying the key actors would allow for an analysis of their roles in the innovation of the publisher's activities in relation to platforms, and the negotiations among them, which are addressed in the third research question.

RQ3. How did the publisher's staff articulate their reflexivity towards the innovation of their activities and the digital materiality of platforms?

The third RQ focuses on analysing the symbolic meaning that the publisher's staff had expressed towards the innovation of their activities and the platforms they use in their news work. It assesses the characteristics of the staff's reflexivity (positive, negative or ambivalent), how their reflexivity changed over time, and the interrelationships between the three elements of reflexivity, activities and the digital materiality of platforms.

Overall, analysing the publisher's activities in relation to the digital materiality of platforms offers insights into how it had innovated its editorially oriented practices over time, while studying the reflexivity of the publisher's staff allows me to understand why the publisher innovated certain activities in certain ways and not others. The four articles in this dissertation each address the RQs above from different angles and I elaborate on them in the concluding discussion.

5. METHODS AND MATERIALS

This section presents my methodological approach. I adopted a mixed-method qualitative case study approach that longitudinally examined the publisher from 2015 to 2021. In this section, I explain my methodological considerations in five parts: 1.) the case study approach and a description of the case; 2.) the collection of data; 3.) the analysis of the data; 4.) reflections about my positionality as a researcher; and 5.) ethical considerations.

Case Study

There are three reasons why it is relevant to approach the publisher in my dissertation project, ST, as a case study. First, organisations are common examples of case study research, and organisational case studies are often only concerned with certain parts or processes that occur within an organisation (Yin, 2009). Thus, focusing on ST's innovation of its editorially oriented practices makes it a suitable case study. Second, it is relevant to apply case study research to longitudinal examinations of single cases as it allows for scrutiny into how certain conditions within the case change over time (Yin, 2018). My case study is longitudinal for this reason: it scrutinises the ebb and flow of the publisher's innovation of editorially oriented practices in relation to platforms over a six-year period. Third, case study is an optimal method for examining contemporary phenomena in their real-life context, allowing researchers to focus in depth on the case at hand, while retaining a holistic, real-world perspective (Yin, 2018). In this case, ST represents a theoretically informed case study that typifies the empirical phenomenon I am interested in – the complex interrelationship between publishers and platforms.

Case Description

Founded in 1845 and employing about 300 staff, ST is considered a "mainstream" news publisher that operates in a country media environment that is characterised by a strong government presence and an extensive press regulatory system (George, 2015). The publisher is one of Singapore's most read English news providers, both online and in print (Newman et al., 2022). However, ST's advertising revenues and circulation had been falling over the last decade, and since 2013, it has been attempting to transform itself from a print-focused newspaper to a "digital-centric" publisher (Lai, 2019). This included working with platforms to produce and distribute content, interact with readers and exploit monetisation potential. During the period of this study, ST was a for-profit publisher and one of the publications owned by Singapore Press Holdings (SPH), which, according to a *Bloomberg* news report, had surpassed that of the New

York Times Company in terms of market capitalisation until 2017 (Yap, 2017). In December 2021, the publisher, together with the affiliate publications owned by SPH, was transferred to a not-for-profit subsidiary company financed by a trust fund that is supported by private donations and the government. However, it remains a subscription-based news publication. Nevertheless, the change in business model occurred after the period of this study and does not directly impact the data collection and analysis.

Data Collection

I used a combination of qualitative methods in this research project. The emphasis of the data collection is on in-depth interviews with the publisher's staff, and is augmented with newsroom observation and the observation of the publisher's activities on social media platforms. This triangulation of methods reduces the risk of systematic bias in my conclusions and affords an investigation of the publisher's innovation of editorially oriented practices regarding platforms from multiple angles. In essence, it allowed this dissertation to develop breadth, depth and consistency (Flick, 2018).

All field work for this research project was gathered between the end of 2015 and mid-2021. This longitudinal multi-method qualitative approach aligns with practice theory research methodologies as it allows for the rich details of practices to unfold over time (Spaargaren et al., 2016). The following subsection outlines each element of this study's data collection.

In-depth interviews

I conducted semi-structured, in-depth interviews with the publisher's staff at four different points in time: end of 2015 to mid-2016, end of 2018 to early 2019, in early 2020, and in the first half of 2021. In all, I interviewed 35 staff, comprising: the editor-in-chief; senior editors; section editors; social media editors; an audience engagement editor; digital, video and newspaper journalists; technologists (digital graphic designers); commercial executives; and product managers (see Article 3 for a table of study participants). This diverse range of study participants cuts across editorial, business and technological functions in the newsroom, and includes those who are at intersections of these functions (e.g. product managers). The reflexivity of the interviewees provided insights into the publisher's innovation of its editorially oriented practices in relation to platforms from multiple viewpoints. All interviews for Articles 1, 3, and 4, were done by me, while interviews for Article 2 were conducted by me and the article's co-author. Each interview lasted between 35 and 70 minutes and several staff were interviewed

multiple times. All interviews were recorded and transcribed using Otter.ai, a digital transcription software. Thereafter, I listened to the full recordings multiple times to verify them against the speech-to-text transcripts to ensure accuracy.

Newsroom Observation

In January 2020, I carried out 20 hours of non-participant newsroom observation over consecutive days to ascertain how platforms featured in the publisher's editorial work. This involved sitting in for six editorial meetings, a meeting between digital journalists and technologists, and observing two digital journalists and a social media editor while they worked at their desks. I sat alongside the staff during these sessions and asked questions based on my observations. Specifically, this afforded me an understanding of their activities related to platforms, and their reflexivity about their activities. Each observation session lasted between 60 and 90 minutes. During these sessions, I took photos and hand-written field notes. After the observations, I also made memos in which I captured noteworthy observations, potential patterns and clarifications that I wanted to make at subsequent interviews (Charmaz, 2006).

More observations were initially planned but were thwarted by travel and social distancing restrictions in Singapore during the Covid-19 pandemic. Nonetheless, to determine that the activities I had observed were routine occurrences, I repeatedly sought confirmation from the staff I interviewed – both during the observations and interviews in 2020, and in subsequent online video interviews in 2021. All interviews and observations for all periods of data collection were conducted in-person except in 2021.

Observation of Digital Materiality

The observation of digital materiality consisted of two components: observing the publisher's activities on its social media accounts and charting the evolving digital materiality of the platforms, particularly Facebook and Instagram. Regarding the former, I observed the publisher's activities on Facebook, Instagram, Twitter, YouTube, WhatsApp, Telegram and Clubhouse (an audio social media platform). Apart from Clubhouse, I paid attention to these platforms because they are the popular social media platforms used by publishers in Singapore to disseminate news, and by Singaporeans to consume and share news (Newman et al., 2022). I followed the publisher's accounts on Facebook, Instagram, Twitter and YouTube, and on multiple occasions assessed their posts on these platforms by scrolling as far as the platforms would allow. For WhatsApp and Telegram, I subscribed to the publisher's news alerts

disseminated on both platforms (WhatsApp discontinued bulk messaging in 2019, which forced the publisher to stop using this platform). I joined "live" audio programmes hosted by the publisher on Clubhouse, which was launched in 2020, to evaluate the publisher's new activities on that platform. I took note of how the publisher added, removed, and/or modified the ways it used the various platforms to distribute news and interact with audiences.

However, I observed the publisher's activities on these platforms not for the purpose of a systematic analysis, but to keep tabs on the significant developments in the ways the publisher had used these platforms for news dissemination and audience engagement. This observation also allowed me to use them as points of interest when developing my interview and observation guides, refer to them as examples when asking questions during interviews and observation, and to verify certain claims that the interviewees had made about the innovations that the publisher introduced on these platforms.

In terms of observing the platforms' evolving digital materiality, in particular Facebook and Instagram (Article 4), I identified the key changes that Meta, the company that owns and operates these platforms, had introduced to them. To this end, I referred to a trio of secondary data sources: academic literature focusing on these two platforms, relevant industry reports and Meta's websites. This process allowed me to track the key changes on Facebook and Instagram that had impacted publishers' activities globally. Thereafter, I asked the interviewees about their activities with respect to the platforms' notable changes, and the data – both observations and interviews – were analysed in conjunction with the evolution of the platforms' digital materiality.

Data Analysis

The data analysis in this dissertation involved a constant comparative approach, meaning that I iteratively assessed the data as they were being collected (Glaser & Strauss, 1967). This process generally involved three main stages across the articles. In the first stage, the data from the interviews and/or observation were coded to identify how the publisher had used platforms in its news work over time, paying attention to how platforms (and their digital materiality) featured in specific journalistic activities. In the second stage, I took note of the actors' reflexivity that was associated with specific activities and the platforms that were used. After combining the data I had progressively collected into a single dataset, I categorised both the interview and observation data according to specific activities related to news production, dissemination and audience engagement. Thereafter, I coded the data based on how the publisher had used specific platforms in each of its activities, including instances when it had discontinued them. Following

this, I highlighted the actors' reflexivity in relation to the activities and platforms. In the third stage, the data were thematically organised to allow for salient patterns of change (or stasis) over time to emerge. This involved paying attention to whether the publisher's activities, the digital materiality of platforms, and actors' reflexivity had evolved over time. All the data were analysed and coded using Atlas.ti, a qualitative data analysis software.

Positionality

The positionality of the researcher refers to the complex and fluid process whereby the researcher and research participants construct and position each other within the field (Mason-Bish, 2019). I was familiar with the publisher's practices as I had worked closely with some of its editorial staff as a former journalist and editor at an affiliate publication under the same parent company. This had several implications for the data collection and analysis. In the following section, I reflect on the implications of my positionality and explain the methods I used to address them.

In terms of my positionality as both a researcher and ex-journalist, the perception that the publisher's staff had of me was varied. Most staff were willing to be interviewed and observed, and accommodated my questions. This often led to open and in-depth discussions that were relevant to the topic of my dissertation, and on occasions, commiserating about similar experiences in the newsroom. However, for some participants, especially those who were younger and less experienced, my experience as a former editor and journalist may have come across as intimidating. For example, some interviewees were hesitant in their responses because of what I interpret as a fear of offering "wrong" answers. In such cases, I reassured them that I was not looking for "right" or "wrong" answers but was interested in their personal opinions. For other participants, my background was taken to mean that I possessed a deep knowledge of the workings in the newsroom, and thus, they felt they did not need to explain the rationale behind their activities to me in detail. For instance, several participants had said "you should know, you were a journalist" during both the interviews and observation when I had probed them for reasons that guided their decisions and/or actions. In these instances, I explained that despite my prior experience, practices had changed over time, and I was keen on understanding issues from their perspective. A few other research participants were dismissive of my research and role as a researcher. For example, one participant curtly told me during an interview that there was no value in my research, and I was wasting my time. In another, the participant insisted that there was "no such thing as innovation" and I did not know what I was doing. I

responded to these situations by maintaining my equanimity and letting these participants know that I thought their ideas were interesting and should be heard.

Discussions of positionality often refer to the concepts of "insider" and "outsider" to consider the researcher's position in relation to participants in the field (Doykos et al., 2014). Being a former journalist who had worked with the publisher, I may be considered an "insider" in the organisation and in the field of journalism. This was both an advantage and a limitation. On the one hand, I had tacit knowledge of certain practices and innovations in the newsroom. This familiarity allowed me to connect with many of the staff as I could speak their "lingo" and participate in discussions about news work. However, it also made it difficult to discern between what was tacit knowledge and what should be of interest to me as a researcher. This meant that I may have unwittingly taken for granted certain practices and thus not considered them more deeply as I could not adequately apply an "outsider's" perspective. As such, my tacit knowledge may have biased my interpretation of certain practices and innovations. To minimise these limitations, I constantly sought views from fellow researchers who could provide an unbiased perspective to my research. My co-authors, PhD supervisors and scholars who were well-informed about my research area were consulted on the validity of my findings and analyses.

Ethical Considerations

A common prerequisite for participation in academic research is that participants give their informed consent before the commencement of the study (Mertens, 2013). I first approached the publication's editor-in-chief at the beginning of this research project to gain his concurrence. The research topic and objectives were explained to him, and he was informed of my intention to interview and observe the publisher's staff. The editor-in-chief granted access to the newsroom, but reminded me to respect the decision of individuals who did not want to be part of this study, and to omit sensitive information that may unwittingly divulge the publisher's trade secrets. Over the course of this project, I ensured that all participants were familiar with the topic of my research before collecting any data. I obtained their informed consent to participate in my study, record interviews, take notes during observations and discussions, and use these materials for scientific publications. I respected the requests from individuals to omit "sensitive details", or that certain information should be "for my eyes only" (e.g. certain photos). One participant's appeal to withdraw from the study after he had been interviewed was also accepted.

One key principle of academic research is to respect the privacy of those you study (Babbie, 2011). Hence, all data were collected under conditions of anonymity. However, for analysis, distinctions are made in their job descriptions. In instances where a role was performed by only a few individuals (or just one person), I ensured that these individuals consented to being identified by their designation.

Maintaining data confidentiality involves ensuring that only authorised persons (typically the researchers) may access and share the data collected for a study, including personal information about study participants (Tiidenberg, 2018). For this study, no personal data other than the names of participants were recorded. I also did not ask either for the participants' age or personal contact details (except business email address) as this information is not germane to this study. Nonetheless, all digital recordings of interviews, notes and transcripts were securely stored on my university-issued, password-protected laptop. Photos taken using this author's mobile phone were later transferred to his laptop and deleted from the phone. A copy of the data was backed up on a portable hard disk that is also password protected and stored in my office under lock and key. All physical notes were also placed there.

6. SUMMARY OF ARTICLES

This section provides a summary of the four articles in this compilation dissertation. These articles examine the publisher's innovation of its editorially oriented practices in relation to platforms from 2015 to 2021. The articles evaluate the publisher's activities in relation to the digital materiality of the platforms and the reflexivity of the publisher's staff from different analytical vantage points. These findings address this dissertation's overarching aim and research questions posed in Section 4, and I further elaborate on them in the next section.

The articles presented in this section are summarised based on their purpose, conceptual points of departure, methodology, key findings and contributions. They are discussed in the order in which they were written and published. Table 1 at the end of this section provides an overview of how my empirical investigation progressed over time. The table also includes each article's research questions and shows how they map towards addressing this dissertation's overarching research question. This chronological presentation not only shows the evolution of the publisher's innovation of its practices with respect to platforms, but also offers a sense of how my research developed over the course of this dissertation project.

Article 1 (published): Audience-centric Engagement, Collaboration Culture and Platform Counterbalancing: A longitudinal study of ongoing sensemaking of emerging technologies

This is an exploratory study co-authored with Oscar Westlund. The study has two purposes. The first purpose is to investigate what publishers do (activities) to appropriate innovation in their editorially oriented practices in relation to emerging technologies in news work, including platforms. The second purpose is to understand the sensemaking (Weick, 1995), or reflexivity, of the publisher's staff towards the innovation of their practices. To these ends, we longitudinally examined ST and a digital news startup in Singapore between 2015 and 2018. The dataset for this study includes new interview data, as well as earlier data gathered for my master's thesis, which encompassed a study of the convergent journalistic practices of both ST and the news startup (Chua, 2017). This study sensitised me to various aspects of innovation that were taking place in newsrooms, and to ascertain that ST's innovation of practices in relation to platforms was indeed a salient aspect worth deeper investigation. In regard to ST, this study is based on two rounds of in-depth interviews with 10 staff in 2015 and 2018, including senior editors, digital editors, reporters, and digital graphic designers, some of whom were interviewed multiple times.

The findings suggest that between 2015 and 2018, ST had innovated its activities to reduce its dependence on platforms for news distribution, communicating with audiences, data, monetisation and collaboration. At the same time, the publisher also improved its proprietary news products and services (e.g. website, news apps, email newsletters, content recommendation algorithms) to incentivise its audiences to use these direct channels and bypass platforms. In terms of the reflexivity of the publisher's staff, the findings indicate that their growing cautiousness towards platforms stemmed from their recognition of the increasing influence platforms had over the publisher's news work and revenues, and that the benefits platforms had promised in terms of readership, revenue and data had not materialised.

In this article, we introduce the concept of platform counterbalancing. This refers to how publishers are developing more "balanced" approaches which sees them negotiating their commitments to and reliance on platforms, having recognised that they have become inherently dependent on platforms for news production and distribution, audience engagement, data and revenue.

Article 2 (published): Friend, Foe or 'Frenemy'? Traditional Journalism Actors' Changing Attitudes towards Peripheral Players and their Innovations

This article is co-authored with Andrew Duffy and its purpose is twofold. First, it aims to understand the interrelationship between journalists' reflexivity towards peripheral actors and the innovation of publishers' editorially oriented practices. This study approaches peripheral actors as "non-traditional journalism actors" (Holton & Belair-Gagnon, 2018) within the newsroom, which consists of commercial executives and IT professionals (Westlund & Lewis, 2014). Second, it aims to identify the key traditional and peripheral actors who are involved in appropriating innovation in publishers' editorially oriented practices. We examined ST from 2015 to 2019, and the findings of this study are based on in-depth interviews with 20 of the publisher's staff – journalists, commercial executives and IT professionals – that were done over the four-year period, and newsroom observation in 2016. This article includes fresh data and builds on earlier data from Article 1, as well as an ethnographic study done by my co-author that included ST as one of the newsrooms (Duffy et al., 2018). His earlier study congruently investigated how the publisher's news practices were changing in relation to digitalisation, and this synergised our longitudinal analysis by providing further insights into how the publisher's practices had changed over time.

We found that two groups of actors who possessed platform-related technical competencies were increasingly valued by the publisher's staff. One group consisted of staff who had both editorial and IT skills, such as digital editors, social media editors, audience engagement editors and product managers. The other consisted of IT professionals, such as coders and digital graphic designers. Both these groups of staff were generally perceived by their colleagues as possessing digital skills that would enable the publisher to adapt to a digital news landscape and remain a relevant news provider. The publisher's newspaper journalists often turned to them for advice, assistance and to acquire their skills and knowledge on how to purposively use platforms in news work. Despite increasingly valuing people with platform-related technical competencies, the journalists' reflexivity towards platforms and analytics were marked by mixed reactions. While they had expressed scepticism towards the reliance on platforms and analytics in news work, they also acknowledged the benefits that platforms offered (e.g. speed in reporting, a wider audience reach and staying relevant in a digital news environment).

From the findings in this study, we introduce four forms of proximity – physical, temporal, professional and control – that explain the dynamics involving peripheral actors and publishers' appropriation of innovation in their editorially oriented practices.

Article 3 (published): Platform Configuration: A Longitudinal Study and Conceptualisation of a Legacy News Publisher's Platform-related Innovation Practices

The first two articles enabled me to develop a broad sense of the publisher's innovation of practices in relation to platforms, identify the key actors involved in the appropriation of innovation and understand the reflexivity of the publisher's staff towards those innovations. In this article, co-authored with Oscar Westlund, we analyse the publisher's editorially oriented practices through the lens of practice theory and the three elements of practices: activities, materiality and reflectivity (Ahva, 2017, 2019). We focus on three aspects: 1.) the publisher's platform-activities with regard to six stages of news production (Domingo et al., 2008; Lewis & Westlund, 2015); 2.) what the publisher did with the digital materiality of particular platforms; and 3.) the reflexivity of the publisher's staff towards its activities and the platforms they used. This longitudinal case study (2015–2021) builds on the data collected for Articles 1 and 2 and includes new interview and observation data. The dataset involved in-depth interviews with 35 of the publisher's staff done over six years and newsroom observation in 2020.

The findings show that the publisher engaged in an ongoing process of adding, modifying and/or removing certain activities regarding the use of platforms in the six stages of

news production. Furthermore, the publisher's approach to platforms at any one time and over time was "multidirectional", meaning that it engaged in "building platform presence" (Steensen & Westlund, 2021, p.42) to capitalise on certain opportunities that specific platforms offered and "platform counterbalancing" (Article 1) to reduce its reliance on platforms. Also, the analysis of the staff's reflexivity revealed a tension between accepting that platforms contributed to some of its journalistic and commercial ambitions, and being aware of the need to reduce platform dependence, particularly in news distribution, audience engagement and the use of platform data in editorial decision-making.

Based on our review of the research on publishers and platforms and the findings in the study, we propose a practice-oriented concept, platform configuration, that advances the notion of platform counterbalancing in Article 1. Platform configuration posits that publishers continuously configure their activities to specific platforms and their digital materiality, while reflexively assessing their commitment to using platforms for achieving certain editorial and/or commercial goals. We also introduce a 2 X 2 matrix that can be used to classify how and explain why publishers engage in platform configuration.

Article 4 (accepted): Platform configuration and digital materiality: How news publishers innovate their practices amid entanglements with the evolving technological infrastructure of platforms

This is a single-authored study that examines how publishers configure the innovation of their editorially oriented practices in relation to the evolving digital materiality of platforms. In this article, I approach platforms as technological infrastructures that have digital materiality. I also draw on the three elements of practices (Ahva, 2017, 2019) and the platform configuration framework (Article 3) to longitudinally assess ST (2015–2021) with regard to two Meta platforms, namely Facebook and Instagram. This study builds on the data collected for Articles 1, 2 and 3, which covers a span of six years, and features new data: the charting of the key changes in the digital materiality of Facebook and Instagram. The charting of the platforms' changes was done by referring to a trio of secondary data sources: academic literature that focuses on the changes of both platforms, relevant industry reports and Meta's websites. The analysis of the data focuses on: 1.) the publisher's activities; 2.) shifts in the digital materiality of the two Meta platforms; and 3.) the reflexivity of the newsroom staff in relation to changes in platforms' digital materiality and the publisher's activities.

This study finds that the publisher had innovated its practices by adding, modifying and removing specific activities based on key shifts in the digital materiality of Facebook and Instagram. Firstly, the publisher had embraced platform videos by adding and increasing (modifying) the production and distribution of news videos for Facebook and Instagram. These activities were perceived by the publisher's staff as a way to appeal to younger readers, leverage on platforms to drive traffic to the publisher's website, and as a way for journalists to gain recognition for their work from the public and colleagues. Secondly, the publisher had gradually decreased (modifying) the use of Facebook for distributing news and interacting with audiences following the platform's downranking of publishers' content on News Feeds and the introduction of specifications governing how publishers use Instant Articles, a feature within Facebook that natively hosts and distributes publishers' content and provides advertising revenue (which Meta discontinued in April 2023). Over time, the staff's reflexivity changed from being positive about using Facebook to promote the publisher's brand and content, to being frustrated with Meta's algorithmic changes that reduced the visibility of their content on users' Facebook News Feeds. Thirdly, the publisher had discontinued the use of Instant Articles. Initially, the publisher's staff believed that the use of IA was beneficial for getting a wider reach for its content and generating advertising revenue. However, they later became disappointed with it for reasons such as limited audience data provided by Facebook, the overly restrictive specifications of the platform and underwhelming commercial returns.

Overall, this study concludes that the publisher both embraced and resisted the platforms' algorithmic changes. While it enhanced video production and distribution to align with the platforms' preference for audio-visual content, the publisher also developed new practices to counterbalance its reliance on Facebook for news distribution and digital advertising revenue. Based on a synthesis of the findings of this study and a research review regarding publishers' approaches to platforms, this article concludes that while publishers are circumscribed by changes in the digital materiality of platforms, they strategically innovate specific practices to both leverage platforms and reclaim or maintain independence from them.

Article	Reference	Aim	Period of Study	Article's RQs	General RQs it answers
1	Chua & Westlund (2019). Audience-centric engagement, collaboration culture and platform counterbalancing: A longitudinal study of ongoing sensemaking of emerging technologies. *Media and Communication*, *7*(1), 153–165.	To investigate the publisher's activities in appropriating emerging technologies in its editorially oriented practices, including platforms, and understand the reflexivity of the publisher's staff towards their activities.	2015–2018	RQ1: How did the newsworkers say emerging technology was appropriated and enacted in their convergent journalism practices over time? RQ2: How did the newsworkers make sense of key emerging technologies over time?	RQ1 and RQ3
2	Chua & Duffy (2019). Friend, foe or 'frenemy'? Traditional journalism actors' changing attitudes towards peripheral players and their innovations. *Media and Communication*, *7*(4), 112–122.	To identify the key actors in the publisher's innovation of editorially oriented practices, and examine the interrelationship between journalists' reflexivity towards peripheral actors and the innovation of publishers' editorially oriented practices.	2015–2019	RQ1: How did newsworkers' attitudes towards peripheral players' and their innovations change between 2015–2016 and 2018–2019? RQ2: How is innovation driven by peripheral players appropriated in the legacy news organisation?	RQ2 and RQ3
3	Chua & Westlund (2022). Platform configuration: A longitudinal study and conceptualization of a legacy news publisher's platform-related innovation practices. *Online Media and*	To study publishers' innovation of editorially oriented practices in relation to platforms.	2015–2021	RQ1: Between 2015 and 2021, how did the publisher configure its activities and with which platforms (materiality)? RQ2: Over time, how did the publisher's staff make meaning (reflexivity) about the activities and	RQ1 and RQ3

	Global Communication, *1*(1), 60–89			materiality associated with platform configuration?	
4	Chua (accepted). Platform configuration and digital materiality: How news publishers innovate their practices amid entanglements with the evolving technological infrastructure of platforms. *Journalism Studies*.	To examine how publishers configure the innovation of editorially oriented practices in relation to the evolving digital materiality of platforms.	2015–2021	RQ: How and why did the publisher practise platform configuration in relation to the evolving digital materiality of Facebook and Instagram over time?	RQ1 and RQ3

Table 1: *Overview of Articles Developed Over Time*

7. CONCLUDING DISCUSSION

This concluding section is divided into four parts. The first part focuses on answering the overarching research questions of the dissertation. By highlighting the empirical findings from the articles, I demonstrate how they directly address the main aim and research questions of this thesis. In the second part, I delve into the four overarching conclusions that have been derived from this case study. The third and final part encompasses my reflections on the societal and practical implications of this dissertation.

The Innovation of Editorially Oriented Practices

In this dissertation, my primary aim is to examine how and why a Singaporean publisher appropriated innovation of its editorially oriented practices in relation to platforms over time (period studied 2015–2021). I draw on practice theory and the three elements of a practice – activities, digital materiality and reflexivity (Ahva, 2017, 2019) – and pose three fundamental research questions that guide my evaluation of the empirical data in understanding the publisher's innovation of its practices. In the following, I discuss how the findings in the articles address each research question, also drawing attention (in italics) to how they relate to the three elements of a practice.

Innovating Activities by Adding, Removing and Modifying

The first research question (RQ1) focuses on the publisher's *activities* and *digital materiality* of platforms and asks how the publisher innovated its activities with respect to the digital materiality of platforms over time. This research question is concerned with identifying the specific activities (what) the publisher had innovated and understanding how they relate to key shifts in the digital materiality of certain platforms.

In terms of identifying *activities*, the findings in Articles 1, 3 and 4 shed light on the particular activities that the publisher had innovated. Additionally, Article 3 provides a systematic analysis of the specific activities in relation to six editorially oriented activities (Domingo et al., 2008; Lewis & Westlund, 2015). The findings show that the publisher had engaged in a combination of adding, modifying (increasing or decreasing), and removing specific activities. When I first started studying the publisher in 2015, I found that it was innovating its practices to leverage on platforms, or "build platform presence" (Steensen & Westlund, 2021, p.42). The publisher was focused on adding and modifying (increasing) activities to boost its multi-platform

news production and dissemination, pushing its content across multiple social media platforms, including Facebook, Instagram, YouTube, Twitter, Telegram and WhatsApp. It also engaged in interacting with audiences on these platforms. By contrast, in 2018, the publisher had reoriented towards platform counterbalancing by removing and modifying (decreasing) specific activities, attempting to develop a more "balanced" position toward the use of platforms in its news work (Article 1). As I continued my research into 2021, subtleties in the publisher's innovation of practices emerged (Articles 3 and 4). As regards news production, the publisher added and modified (increased) activities in using platforms to monitor trending topics online, observe competitors' and user-generated content online, source for leads and produce audio-visual content in line with the algorithmic preferences of various platforms. For news distribution, the publisher, on the one hand, had been seeking out and experimenting with new platforms to distribute news, such as Telegram, WhatsApp (until the platform ceased bulk messaging in 2020), Instagram and new podcasting apps and smart speakers. On the other hand, it also gradually decreased the rate at which it distributed news on Facebook and Twitter and became more discerning towards the types of platforms it used to reach certain audiences based on the psycho-demographics of users. In terms of audience engagement, the publisher had added and modified (increased) activities. It had added activities by creating a private Facebook group for interacting with audiences, conducting online surveys via Telegram, Facebook and Instagram to gather feedback on certain topics from readers, and experimented with Clubhouse by hosting live virtual talk shows with its audiences. Yet, the publisher also modified (decreased) activities, such as minimising interactions with audiences on its Facebook and Twitter posts. Notably, the publisher had modified (increased) the use of platform-provided analytics for news production and dissemination, and audience engagement.

With respect to how the changes in activities relate to key shifts in the *digital materiality* of platforms, Article 4 highlights three salient examples of how the publisher's innovation of practices entailed both embracing and resisting the algorithmic changes Meta introduced to Facebook and Instagram. First, the publisher progressively added and modified (increased) activities to enhance its video production and distribution on both platforms, in line with the algorithms' preference for audio-visual content. Second, the publisher gradually decreased (modified) the use of Facebook for news distribution and audience engagement to counterbalance the platform's prioritisation of stories shared by friends and family on users' News Feeds over those produced by publishers (and brands). Third, the publisher had resisted Facebook's gradual introduction of stricter rules governing Instant Articles by progressively decreasing and eventually discontinuing (removed) its use to distribute news and earn revenue.

Overall, the analysis in the articles indicate that the publisher innovated specific activities by engaging in both "building platform presence" and platform counterbalancing on specific platforms. In instances when the publisher aimed to strengthen its platform presence, the publisher added or modified activities with an increase. Conversely, when the publisher sought to counterbalance its activities on platforms, it removed or modified/decreased certain activities.
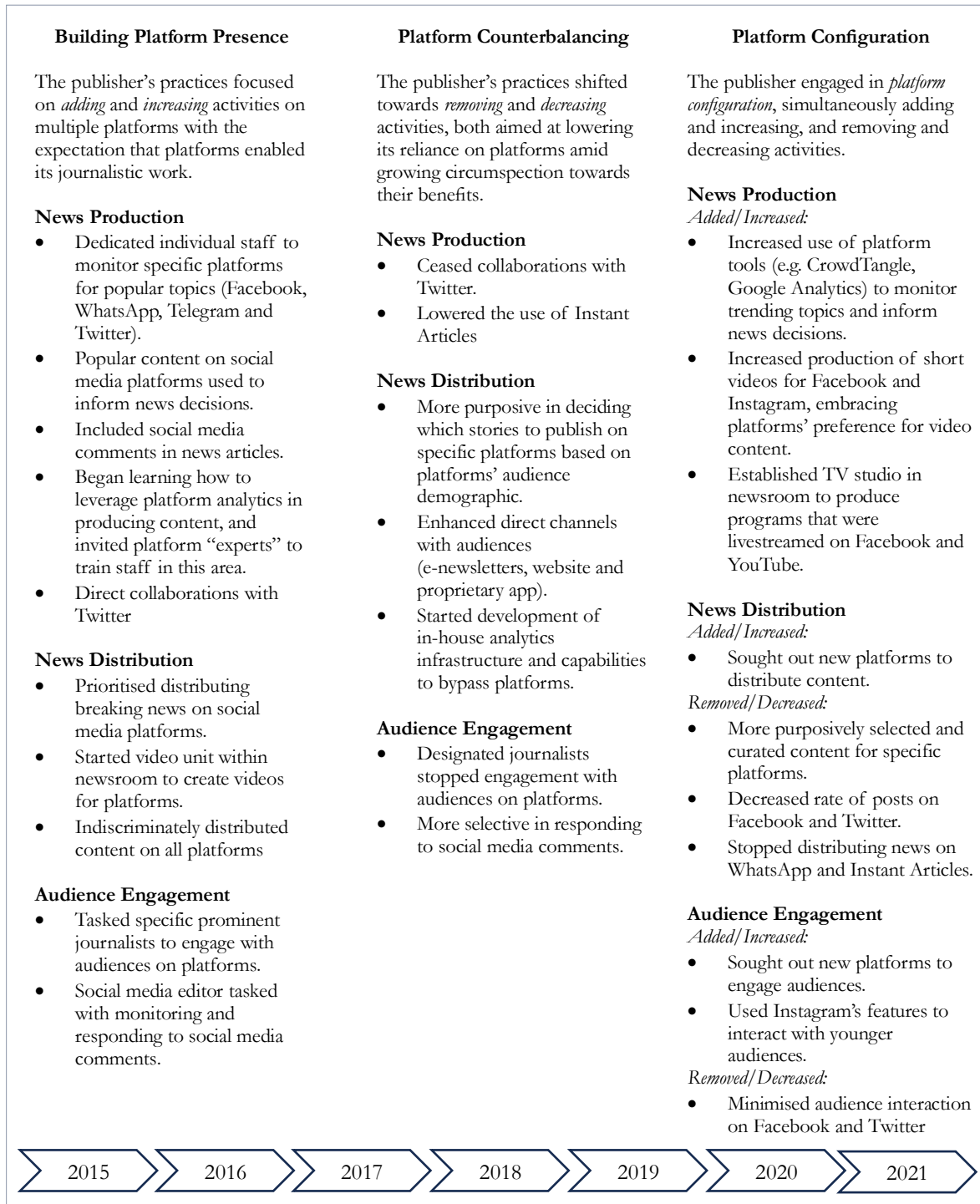
Building Platform Presence

The publisher's practices focused on *adding* and *increasing* activities on multiple platforms with the expectation that platforms enabled its journalistic work.

News Production
- Dedicated individual staff to monitor specific platforms for popular topics (Facebook, WhatsApp, Telegram and Twitter).
- Popular content on social media platforms used to inform news decisions.
- Included social media comments in news articles.
- Began learning how to leverage platform analytics in producing content, and invited platform "experts" to train staff in this area.
- Direct collaborations with Twitter

News Distribution
- Prioritised distributing breaking news on social media platforms.
- Started video unit within newsroom to create videos for platforms.
- Indiscriminately distributed content on all platforms

Audience Engagement
- Tasked specific prominent journalists to engage with audiences on platforms.
- Social media editor tasked with monitoring and responding to social media comments.

Platform Counterbalancing

The publisher's practices shifted towards *removing* and *decreasing* activities, both aimed at lowering its reliance on platforms amid growing circumspection towards their benefits.

News Production
- Ceased collaborations with Twitter.
- Lowered the use of Instant Articles

News Distribution
- More purposive in deciding which stories to publish on specific platforms based on platforms' audience demographic.
- Enhanced direct channels with audiences (e-newsletters, website and proprietary app).
- Started development of in-house analytics infrastructure and capabilities to bypass platforms.

Audience Engagement
- Designated journalists stopped engagement with audiences on platforms.
- More selective in responding to social media comments.

Platform Configuration

The publisher engaged in *platform configuration*, simultaneously adding and increasing, and removing and decreasing activities.

News Production
Added/Increased:
- Increased use of platform tools (e.g. CrowdTangle, Google Analytics) to monitor trending topics and inform news decisions.
- Increased production of short videos for Facebook and Instagram, embracing platforms' preference for video content.
- Established TV studio in newsroom to produce programs that were livestreamed on Facebook and YouTube.

News Distribution
Added/Increased:
- Sought out new platforms to distribute content.
Removed/Decreased:
- More purposively selected and curated content for specific platforms.
- Decreased rate of posts on Facebook and Twitter.
- Stopped distributing news on WhatsApp and Instant Articles.

Audience Engagement
Added/Increased:
- Sought out new platforms to engage audiences.
- Used Instagram's features to interact with younger audiences.
Removed/Decreased:
- Minimised audience interaction on Facebook and Twitter

2015 ⟩ 2016 ⟩ 2017 ⟩ 2018 ⟩ 2019 ⟩ 2020 ⟩ 2021

Figure 1: *Publisher's Key Changes in its Editorially Oriented Practices over Time*

Key Actors in Innovation

The second research question (RQ2) is concerned with ascertaining *who* the key actors were in the innovation of the publisher's activities in relation to platforms and what role they played. These are addressed in Article 2.

According to the findings, two groups of staff played an increasingly important role in the publisher's innovation of activities. The first group consisted of digital journalists who possessed both editorial and technological skills, such as digital editors, social media editors and audience engagement editors. The second group comprised IT professionals, such as coders and digital graphic designers. These individuals were actively recruited by the publisher because the both the managers and staff recognised their significance in improving the company's ability to leverage the opportunities that platforms offer for news production, dissemination, audience engagement and monetisation. Their expertise in platforms metrics and the ability to use platform-provided data to inform the commercial decisions, such as subscription and paywall strategies, were highly valued. Furthermore, newspaper journalists within the newsroom gradually came to rely on those staff members who possessed digital and platform competencies. They sought their advice, assistance and knowledge in effectively utilising platforms in their news work.

Overall, the staff's *reflexivity* and the publisher's *activities* indicate that individuals with technical competencies in using platforms were increasingly integral in influencing innovation in the publisher's practices. The importance of their role in this aspect is expected to continue growing in the future.

Staff's Reflexivity

The third research question (RQ3) centres around examining the *reflexivity* conveyed by the publisher's staff regarding the innovation of their activities and the digital materiality of the platforms in their news work. This research question is addressed by Articles 1, 2, 3 and 4.

Overall, the *reflexivity* of the publisher's staff was marked by both enthusiasm and scepticism regarding what the publisher did in relation to platforms. Moreover, it fluctuated over time. In 2015, the staff conveyed enthusiasm about using and collaborating with platforms. They described how platforms enabled their journalistic work in various ways. As reporting tools, the journalists perceived that platforms allowed them to expediently gather and verify information.

As communication tools, platforms (e.g. Google Workspace, Facebook Messenger, Telegram and WhatsApp) were seen as enhancing cross-departmental collaboration. As tools for audience engagement, platforms were regarded as enabling the publisher to reach and interact with a wider base of audiences and convert them into paying subscribers. By 2018, however, the staff had expressed greater caution about the growing influence of platforms over the publisher's news work and income. The staff were disappointed that the benefits that platforms had promised in terms of readership, revenue and data had not materialised, which contributed to the publisher shifting its activities to reduce dependence on platforms for news distribution, communicating with audiences, data, monetisation and collaboration. At the same time, the publisher devoted more effort to innovating its own news products and services (e.g. website, news apps, email newsletters and content recommendation algorithms; see Article 1). Yet, further analysis revealed that the staff had mixed reactions towards platforms (Article 2). While they had expressed scepticism about relying too much on platforms in their news work, they also acknowledged the benefits that platforms could provide. Nonetheless, deeper scrutiny of the staff's perceptions (Articles 3 and 4) uncovered a complex tension between recognising that engaging in certain platform-related activities could enable the publisher to achieve its journalistic and commercial ambitions, and acknowledging the need to innovate other activities that could reduce the publisher's dependence on platforms, particularly in tasks related to news distribution, audience engagement and the use of analytics provided by platforms.

Essentially, the disparity and fluctuations in the *reflexivity* of the publisher's staff influenced the publisher's approach to innovation, contributing to its dynamic and iterative character. The publisher simultaneously strengthened its presence on certain platforms while counterbalancing its reliance on others, and continuously reconfigured the innovation of its activities over the study period (Articles 3 and 4).

Four Overarching Conclusions

This dissertation has examined how a publisher continually appropriated innovation its editorially oriented practices in relation to platforms over time. In this section, I present four overarching conclusions: 1.) platform significance; 2.) platform mutability; 3.) publishers' platform configuration; and 4.) publishers' platform-oriented competencies. These conclusions are based on a synthesis of the key research findings of this dissertation project and the relevant literature presented in the research review. They also serve as an initial iteration of an analytical

framework to spur future scholarship that focuses on the developments in the relationship between publishers and platforms.

Platform Significance

Platform significance refers to the variation in the importance of platforms to publishers, which is contingent upon the extent of penetration and popularity of individual platforms within different countries and across time. In Singapore, platforms such as WhatsApp, Facebook, YouTube, Telegram and Twitter have emerged as the primary platforms through which people consume and share news (Newman et al., 2022). Recognising the significance of these platforms, the publisher in this case study aligned its content production, distribution, audience engagement and monetisation efforts with these platforms. Furthermore, the publisher also used newer platforms that gained traction among users in Singapore, such as the Chinese-owned platform TikTok and audio-based app Clubhouse, recognising the platforms' potential in allowing it to reach a sizable, younger user base (Articles 1, 3 and 4). As highlighted in the research review, the interaction between specific publishers and individual platforms is not consistent for every publisher or for every platform, and fluctuates over time. Studies conducted in Australia, France, Germany, the UK and the US are congruent with findings in this study and echo the power that global platform companies like Meta and Google exert over publishers (e.g. Meese & Hurcombe, 2020; Myllylahti, 2018, 2021; Nielsen & Cherubini, 2022; Nielsen & Ganter, 2018, 2022). In other countries like China, Japan, Russia and South Korea, other dominant platforms hold sway over publishers (e.g. Dovbysh et al., 2022; Hornyak, 2019; Villi & Hayashi, 2017; Wang et al., 2020; Zhang, 2019).

Additionally, the significance of platforms for publishers is not static, but varies in tandem with the fluctuating fortunes of platforms. The platform landscape is in constant flux, with new platforms emerging, existing ones evolving, and some fading into obscurity. Despite their power, platforms are not invulnerable. Researchers have examined the setbacks faced by widely used platforms like Microsoft, Google, Meta, Snapchat and Twitter, as well as the demise of earlier platforms like Friendster and MySpace (e.g. Cusumano et al. 2019; Nielsen & Ganter, 2022). As shown in this case study, there are significant uncertainties associated with relying too heavily on platforms (Articles 1, 3 and 4). It is crucial for publishers to exercise greater discretion and not become overly dependent on platforms, as they may cease operations or sever ties with the journalism industry. The recent economic and regulatory challenges faced by Meta, leading to

its reduced focus on supporting journalism (Ingram, 2022), further underscore the vulnerabilities publishers face when entangled with platforms.

Ultimately, platform significance acknowledges that different platforms possess distinct characteristics and exert varying degrees of power over publishers in diverse country contexts, thereby offering a more sensitive understanding of the platform landscape. Furthermore, it sheds light on how the booms and busts of individual platforms over time impact their relevance to publishers and promotes the raising of critical questions regarding the risks associated with relying on them for the long-term financial sustainability of journalism (see Olsen et al., 2021; Westlund et al., forthcoming).

Platform Mutability

Platform mutability centres on the evolving nature of platforms, which enables them to wield influence over publishers. As technological infrastructures, platforms are deliberately designed, controlled and consistently modified by their owners, who exert a tangible authority over how they are used. These modifications encompass changes to not only the platforms' algorithms but also their governance standards, which pertain to the guidelines, policies and rules established by platforms. This dissertation has demonstrated how Meta continuously changed Facebook's and Instagram's content algorithms and altered the rules dictating the types of content, advertisements and links that publishers could include on its native publishing platform, Instant Articles. These changes profoundly impacted the publisher, which saw it modify its practices to accommodate the platforms' video-centric algorithmic alterations, while developing new practices and/or discontinuing existing ones to counterbalance against the platforms' downranking of news content and the rules implemented by Instant Articles (Article 4). Scholars have also documented how the often subtle and sudden algorithmic changes significantly shape publishers' practices. Publishers adapt their practices to align with platform preferences because they are driven by the expectation that their efforts will be rewarded by the platforms, or out of fear of losing exposure on the platforms (Messe & Hurcombe, 2020; Myllylahti, 2018, 2021). Similar to the publisher in this case study, other publishers are also prioritising audio-visual content production for Instagram, SnapChat, TikTok, Twitter, Weibo and WeChat to cater to the platforms' algorithmic preferences and maintain platform visibility (Vázquez-Herrero et al., 2019; 2022; Nielsen & Cherubini, 2022; Zhang, 2019).

The scholastic discourse on the mutability of platforms emphasises the growing "platformisation" of cultural producers, including publishers. This signifies the increasing control platforms exert on publishers and the inherent reliance of publishers on platforms (Helmond, 2015; Nieborg et al., 2019; Poell et al., 2022a). Platformisation also highlights the inherent vulnerability of publishers to platforms' rapid infrastructural shifts. Even as I finalise this dissertation, the recent plans announced by Google and Meta to introduce changes to their platforms will have a profound impact on publishers. In February 2023, Google revealed plans to introduce generative artificial intelligence-powered modifications to its search engine (Benton, 2023). This raises further concerns for publishers, including the decrease in traffic that Google Search directs to publishers' websites and the impact it would have on their affiliate revenue derived from the platform's product recommendations (see Felix, 2022). In April 2023, Meta discontinued Instant Articles as part of its shift in focus away from news (Newman, 2023). For publishers who have been reliant on Instant Articles, its cessation could potentially mean a decline in reach and loss of monetisation. Moreover, the efforts and investments made by publishers to optimise their content for Meta's native publishing platform would now become futile.

In sum, platform mutability underscores how the constant changes in the platforms' technological infrastructures and governance standards allow them to exert their authority over publishers. This invariably leads to an increasing dependence on platforms by publishers, as their adherence to those changes is crucial for maintaining access to platform audiences and resources. This dependency, in turn, prompts questions regarding the autonomy of publishers when creating and publishing news.

Publishers' Platform Configuration

Publishers' platform configuration sets the focus on how news organisations strategically approach different platforms by configuring a diverse range of platform-related practices. This dissertation (Articles 3 and 4) has captured and classified the critical nuances across a range of the publisher's editorially oriented practices, showing how the publisher selectively and simultaneously embraced certain platform-related practices that supported its editorial and commercial priorities, and pursued other practices that allowed it to resist the influence of platforms to establish a degree of autonomy from them. The way in which the publisher configured its practices on particular platforms aligns with research that showcases the multifaceted relationship that publishers have with platforms, where publishers simultaneously

engage in "building platform presence" and platform counterbalancing, and moderate these practices over time (see also Steensen & Westlund, 2021).

Moreover, the findings of this study also make salient the agency of publishers to shape and evolve their practices, despite being circumscribed by the overwhelming influence of platforms. This harmonises with researchers who argue that news organisations are not merely passive actors (Westlund et al., 2021), but whose agency affects their responses towards platforms (e.g. Sehl et al., 2021; Walters, 2021). For example, publishers have been changing their interactions with Facebook. To reduce their dependence on the platform for distributing content, publishers are instead using Facebook to strategically target specific groups and market subscriptions (Jenkins, 2020). Alongside this shift, publishers are also bypassing platforms to cultivate direct relationships with news consumers, turning towards a business model centred around paid readership (Lindén, 2020). Appositely, paying attention to publishers' agency also avoids one-sided interpretations of platform dominance and opens a vista to examine and understand the continuous negotiation of positions taking place between both actors (see Poell et al., 2022b).

Essentially, platform configuration provides a more precise understanding of how individual publishers organise their practices to leverage the opportunities provided by specific platforms or counterbalance against their influence. In doing so, it also offers a conceptualisation for understanding how publishers reconcile their platform practices with their journalistic and commercial objectives. Furthermore, it also illuminates the agency of publishers in relation to platforms, which in turn sheds light on the manoeuvrings of both publishers and platforms.

Publishers' Platform-oriented Competencies

Publishers' platform-oriented competencies underscore the growing importance of workers with platform-related knowledge, skills and expertise within news organisations. Publishers are increasingly hiring and turning towards workers with platform-related competencies within their news organisations to curate, produce and optimise content specifically for platforms (Ferrucci & Perreault, 2021). In this dissertation, the publisher not only expanded its social media team over time, but also placed increasing value on those staff members with platform-related technical skills. Empowered by the prominence given to them, these individuals played a central role in influencing innovation in publishers' practices (Articles 2 and 3). These findings are supported by studies that highlight the growing importance of

platform-oriented roles within newsrooms (e.g. Ferrer-Conill & Tandoc, 2018; Lischka, 2018). These roles often carry titles such as social media editors, audience engagement editors and digital editors, designating them as senior editors and "experts" in their area of expertise.

The growing emphasis on staff with platform-related competencies within news organisations raises important considerations regarding their influence on the internal dynamics of publishers and the corresponding impact of platform on their practices. While the designation of these staff as platform or social media "experts" acknowledges their seniority and the value placed on their perspectives, it also potentially inclines publishers to rely heavily on their advice, leading to several potential complications. These include disagreements among staff members with varying perceptions and levels of platform-related knowledge and skills, conflicts between journalists and management who may have different motivations for using platforms, and the risk of neglecting other vital areas of innovation such as developing in-house platforms and data capabilities, and direct communication channels with audiences. Furthermore, the emphasis on platform competencies may overshadow the importance of other journalistic skills that are essential for producing accurate, balanced and impactful news.

All in all, bringing attention to the increasing significance of workers with platform-related competencies highlights how these staff are progressively influential in shaping the internal dynamics within newsrooms. This has crucial implications, especially when examining how they function as professional intermediaries between platforms and publishers, influencing not only which practices are innovated, but how they are innovated.

Societal and Practical Implications

Understanding how publishers are innovating their practices in relation to platforms carries several important implications. In the following discussion, I will highlight three key implications derived from this study: the first two focus on social significance, while the third engages with practical implications. These points shed light on the societal impact and the practical considerations that arise from publishers' interactions with platforms.

Examining publishers' practices vis-à-vis platforms is crucial for understanding the autonomy that publishers have from platforms as cultural producers who create content that shapes our views of the world (Zelizer, 2019). Platforms impact the visibility of news content through the manipulation of their algorithms and even remove content when they do not meet their community principles and platform governance standards. The dominance wielded by a few

powerful platforms over what publishers do, concomitantly with their increasing deployment of generative artificial intelligence by platforms, influences the array of narratives, the creation of information filter bubbles and the consequent polarisation of public discourse (see Whittaker, 2019). If publishers' practices are continuously being circumscribed by a pool of dominant platforms, this raises deep concerns for the diversity of content across the media landscape. The findings of this study highlight the importance for publishers of being aware of these risks associated with being dependent on a few platforms, and of striking a balance between the use of platforms in their news work and maintaining sight of the normative ideals of journalism.

This study also informs policymaking regarding the regulation of platforms in relation to journalism. One key aspect is the undeniable link between audience engagement, metrics and advertising revenues. Although platform monopolies have not single-handedly caused journalism's financial crisis, it is well established that Google (Alphabet) and Meta have dominated the online advertising space, while publishers have experienced drastic declines in their digital advertising revenues. In response to these imbalances, regulators in several markets, such as Australia, Canada and certain countries in the European Union, have compelled platforms to pay publishers for their content. However, it is important that policymakers recognise the inherent risks of solely relying on platforms as a source of funding for sustaining journalism in the long-term, given the volatility of the platforms' own economic situations. Furthermore, by acknowledging that distinct platforms present different benefits and challenges to different types of publishers (e.g. public service media versus for-profit news organisations), regulators will be enabled to develop more nuanced platform policies that support the needs of a spectrum of news organisations.

One key conclusion of this study underscores the agency of publishers to shape their interactions with platforms, despite the latter's dominance. This recognition emphasises the importance of strategic decision-making for publishers at the industry level. Publishers face critical decisions in finding a balance between leveraging the benefits of platforms and mitigating the associated risks. Another crucial decision pertains to defining their core business and income streams, including finding the optimal combination of advertising, reader revenue and other sources of financing. Following this, it is imperative for publishers to identify which platforms are most likely to support their business model. Furthermore, publishers must consistently evaluate the tangible and intangible value of their commitments to specific platforms. This requires avoiding assumptions that any specific platform, or the opportunities it offers, will remain stable and permanent.

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Svensk sammanfattning

Bakgrund

Mitt i de globala plattformsföretagens dominans inom journalistik har nyhetsutgivare ställts inför ett dilemma. Å ena sidan förnyar utgivare sina metoder för att dra nytta av funktionerna och tjänsterna hos plattformar för produktion, spridning och monetarisering av digitala nyheter. Å andra sidan har plattformar fått ett enormt inflytande över förlagens journalistik och verksamhet, så mycket att utgivare numera är på sin vakt med riskerna med att vara alltför beroende av plattformar. Följaktligen fortsätter utgivare att utveckla sina redaktionellt inriktade metoder för att dra nytta av plattformarnas fördelar, samtidigt som de försöker behålla eller återfå kontrollen över sitt nyhetsarbete, data, publik och intäkter.

Forskningens syfte

Mot bakgrund av de föränderliga förvecklingarna mellan utgivare och plattformar är det övergripande syftet med denna avhandling att longitudinellt undersöka *hur* och *varför* en singaporeansk nyhetsutgivare, *The Straits Times* (ST), förnyat sina redaktionellt orienterade metoder i förhållande till plattformar. Att undersöka ST som en fallstudie är viktigt eftersom det erbjuder en ingång genom vilken vi kan förstå det större fenomenet av hur utgivare kontinuerligt omorganiserar sina metoder när de interagerar med plattformar.

Teoretisk hållning och forskningsfrågor

I denna avhandling antar jag ett verklighetsorienterat tillvägagångssätt och konceptualiserar metoder med avseende på tre sammanhängande element - aktiviteter, digital materialitet och reflexivitet. Jag använder denna konceptualisering som ett teoretiskt ramverk för att förhöra mig om den process i vilken ST tillägnat sig innovation i sina redaktionellt orienterade metoder. Jag betraktar innovation som den process där nya saker och/eller förändringar, inklusive avvecklingar, tillägnas i den dagliga verksamheten och definierar redaktionellt orienterade metoder som metoder som främst hänför sig till nyhetsproduktion och distribution, men som också överlappar teknik och journalistik.

Denna avhandling vägleds av tre övergripande forskningsfrågor som behandlar olika aspekter av det övergripande syftet:

1.) Hur har utgivaren förnyat sin verksamhet med avseende på plattformarnas digitala materialitet?

2.) Vilka har de aktörer varit som deltagit i innovationen av dessa plattformsrelaterade aktiviteter?

3.) Hur har förlagets personal formulerat sin reflexivitet mot innovationen i sin verksamhet och plattformarnas digitala materialitet?

Denna fallstudie har gjort det möjligt för mig att publicera fyra vetenskapliga artiklar (som omfattas av denna avhandling), där varje artikel fokuserar på olika aspekter av hur förlaget förnyat sina redaktionellt orienterade metoder i förhållande till plattformar från olika analytiska vinklar.

Fyra viktiga slutsatser

Denna avhandling erbjuder fyra viktiga slutsatser som sammanfattar de viktigaste resultaten från artiklarna med relevant forskningslitteratur på förlag och plattformar. Dessa slutsatser fungerar som en första iteration av ett analytiskt ramverk för att inspirera framtida forskning som fokuserar på utvecklingen i förhållandet mellan utgivare och plattformar.

1.) Plattformens betydelse

Begreppet plattformsbetydelse avser olika plattformars varierande betydelse för utgivare, vilket beror på deras penetration och popularitet i olika länssammanhang och över tid. I Singapore har plattformar som WhatsApp, Facebook, YouTube, Telegram och Twitter blivit primära kanaler för nyhetskonsumtion och delning. I denna fallstudie har ST anpassat sin innehållsproduktion, distribution, publikengagemang och sina insatser för monetarisering med dessa plattformar, liksom nyare plattformar som TikTok och Clubhouse, vilket fått dragkraft bland yngre användare i Singapore (artiklarna 1, 3 och 4). Som framhålls i forskningsöversikten är interaktionen mellan specifika utgivare och enskilda plattformar inte konsekvent för varje utgivare, eller varje plattform, och fluktuerar över tiden. Studier utförda i Australien, Frankrike, Tyskland, Storbritannien och USA överensstämmer med resultaten i denna studie och upprepar den makt som globala plattformsföretag som Meta och Google utövar över utgivare. I andra länder som Kina, Japan, Ryssland och Sydkorea styr andra dominerande plattformar över utgivare. Plattformens betydelse understryker också att plattformar inte är statiska utan varierar med plattformarnas fluktuerande förmögenheter. Trots sin makt är plattformar inte osårbara, vilket setts med de motgångar som allmänt använda plattformar som Microsoft, Google, Meta, Snapchat och Twitter står inför, liksom nedläggningen av tidigare plattformar som Friendster

och MySpace. Denna fallstudie belyser de risker och osäkerheter som är förknippade med att förlita sig för mycket på plattformar, och betonar behovet av att utgivare utövar diskretion och undviker att bli alltför beroende av dem. I slutändan erkänner plattformens betydelse att olika plattformar har distinkta egenskaper och varierande grad av makt över utgivare i olika landskontexter och erbjuder en mer känslig förståelse för plattformslandskapet. Dessutom belyser den också hur enskilda plattformars upp- och nedgångar över tid påverkar deras relevans för utgivare och främjar uppkomsten av kritiska frågor om riskerna med att förlita sig på dem för journalistikens långsiktiga ekonomiska hållbarhet.

2.) Plattformens föränderlighet

Plattformsföränderlighet avser plattformarnas ständigt föränderliga natur. Plattformar är till sin utformning föränderliga tekniska infrastrukturer som centralt utformas, kontrolleras och konsekvent ändras av sina ägare (plattformsföretag) som utövar ett påtagligt inflytande över hur de används. Plattformsföretag ändrar konsekvent sina plattformars algoritmer och styrningsstandarder, som omfattar riktlinjer, policyer och regler. Denna avhandling har visat hur Meta, ägare av Facebook och Instagram, gjort frekventa förändringar i plattformarnas innehållsalgoritmer och regler (artikel 4). Dessa förändringar har påverkat ST djupt, som i sin tur ändrat sina metoder för att tillgodose plattformarnas videocentrerade algoritmiska förändringar, samtidigt som de motsatt sig nedgradering av nyhetsinnehåll och Instant Articles-reglerna (artikel 4). Utgivaren i denna fallstudie har anpassat sina metoder för att tillgodose plattformspreferenser eftersom den drivits av en förväntan om att dess ansträngningar ska belönas av plattformarna eller av rädsla för att förlora exponering på plattformarna. På samma sätt har andra utgivare också visat sig prioritera produktion av audiovisuellt innehåll för Instagram, Snapchat, TikTok, Twitter, Weibo och WeChat för att tillgodose plattformarnas algoritmiska preferenser och upprätthålla plattformens synlighet. Dessutom betonar forskare också den växande kontrollen som plattformar har över utgivare (plattformisering), vilket belyser hur utgivares beroende av plattformar gör dem sårbara för plattformarnas frekventa infrastrukturförändringar. Dessutom väcker de senaste ändringarna som Google meddelat för att införa generativa modifieringar av artificiell intelligens i sin sökmotor ytterligare oro för utgivare, inklusive minskningen av trafiken som Google Search leder till utgivares webbplatser och den inverkan det skulle ha på deras affiliateintäkter som härrör från plattformens produktrekommendationer. I huvudsak belyser plattformsföränderlighet hur de ständiga förändringarna i plattformarnas tekniska infrastrukturer och styrningsstandarder gör det möjligt för dem att utöva sin makt över utgivare. Detta leder

genomgående till att utgivare är beroende av plattformar, eftersom deras efterlevnad av dessa förändringar är avgörande för att upprätthålla tillgången till plattformens målgrupper och resurser. Detta beroende väcker i sin tur frågor om utgivares autonomi när de skapar och publicerar nyheter.

3.) Utgivares plattformskonfiguration

Utgivarens plattformskonfiguration avser hur utgivare strategiskt närmar sig olika plattformar genom att konfigurera en mängd olika plattformsrelaterade metoder. Denna avhandling (artiklarna 3 och 4) har fångat och klassificerat de kritiska nyanserna inom en rad av förlagets redaktionellt orienterade metoder, med resultaten som pekar på att utgivaren diskretionärt justerat dem över tid för att dra nytta av vissa överkomliga priser på enskilda plattformar. Utgivaren har å andra sidan också gradvis minskat eller upphört med användningen av specifika plattformar när de ansetts vara ofördelaktiga. Det sätt på vilket utgivaren konfigurerat sina metoder på vissa plattformar ligger i linje med forskning som visar det mångfacetterade förhållandet som utgivare har med plattformar, där utgivare samtidigt engagerar sig i "building platform presence" och "platform counterbalancing", och moderera dessa metoder över tid. Trots plattformarnas överväldigande inflytande finner denna avhandling att utgivare har befogenhet att forma och utveckla sina metoder. Detta resultat understryker hur nyhetsorganisationer inte bara är passiva aktörer, utan att deras handlingsförmåga påverkar deras reaktioner på plattformar. Utgivare har förmågan att anpassa sina interaktioner med plattformar, till exempel att minska beroendet av Facebook för innehållsdistribution och istället använda det för riktad marknadsföring och prenumerationer. Utgivare etablerar också direkta relationer med nyhetskonsumenter och betonar betalda läsarmodeller. Att erkänna utgivares handlingsförmåga undviker ensidiga tolkningar av plattformsdominans och möjliggör en djupare förståelse för de pågående förhandlingarna mellan utgivare och plattformar. I slutändan ger plattformskonfigurationen en mer exakt förståelse för hur enskilda utgivare organiserar sina metoder för att utnyttja de möjligheter som specifika plattformar erbjuder eller motverka deras inflytande. På så sätt erbjuder den också en ram för att förstå hur utgivare förenar sina plattformsmetoder med sina journalistiska och kommersiella mål. Det belyser också utgivarnas handlingsförmåga i förhållande till plattformar, vilket i sin tur belyser både utgivare och plattformars beteende.

4.) Förlagens plattformsorienterade kompetenser

Utgivares plattformsorienterade kompetenser understryker den växande betydelsen av arbetstagare med plattformsrelaterad kunskap, färdigheter och expertis inom nyhetsorganisationer. Dessa personer anställs för att kurera, producera och optimera innehåll specifikt för plattformar. I denna avhandling har utgivaren inte bara expanderat sitt sociala medieteam över tid, utan också lagt större värde vid anställda med plattformsrelaterade tekniska färdigheter. Dessa personer har, stärkta av sin framträdande roll, spelat en avgörande roll när det gäller att påverka innovation i utgivarnas metoder (artiklarna 2 och 3). Dessa resultat överensstämmer med forskning som belyser den växande betydelsen av plattformsorienterade roller inom nyhetsrum. Ofta bär dessa nya roller titlar som redaktörer för sociala medier, redaktörer för publikengagemang och digitala redaktörer, vilket betecknar dem som seniora redaktörer och "experter" inom sitt expertområde. Den växande betoningen på personal med plattformsrelaterad kompetens väcker viktiga överväganden om deras inflytande på utgivarnas interna dynamik och plattformens motsvarande inverkan på deras metoder. Medan beteckningen av denna personal som plattforms- eller sociala medie- "experter" erkänner deras senioritet och det värde som fästs vid deras perspektiv, kan det också potentiellt luta utgivare att förlita sig starkt på deras råd, vilket leder till flera potentiella komplikationer. Dessa inkluderar meningsskiljaktigheter bland anställda med olika uppfattningar och nivåer av plattformsrelaterade kunskaper och färdigheter, konflikter med ledningen som har olika motiv för att använda plattformar och risken att försumma andra viktiga innovationsområden som att utveckla interna plattformar och datakapacitet och direkta kommunikationskanaler med publiken. Dessutom kan betoningen på plattformskompetenser överskugga vikten av andra journalistiska färdigheter som är nödvändiga för att producera korrekta, balanserade och effektfulla nyheter. Sammantaget belyser uppmärksamheten på den ökande betydelsen av arbetstagare med plattformsrelaterad kompetens hur denna personal gradvis påverkar utformningen av den interna dynamiken på nyhetsredaktioner. Detta har avgörande konsekvenser, särskilt när man undersöker hur de fungerar som professionella mellanhänder mellan plattformar och utgivare, vilket påverkar inte bara vilka metoder som är innovativa utan hur de är innovativa.

NEWS PUBLISHERS' INNOVATION OF PRACTICES AMID PLATFORM DOMINANCE

To news publishers, digital platform companies (or "platforms") such as Google and Meta present both benefits and risks. Platforms offer publishers certain functionalities and services that may be beneficial, but they have also gained an immense influence over journalism and the business of news, so much so that publishers have become wary of being over-reliant on them. Given this complex dynamic between publishers and platforms, it is critically important to understand how publishers continuously innovate their practices when engaging with platforms. To shed light on this, this dissertation employs a practice-oriented approach and a mix of qualitative methods to longitudinally examine how and why a Singaporean news publisher innovated its editorially oriented practices in relation to platforms. This dissertation covers a six-year period (2015 to 2021) and includes four studies, each focusing on different aspects of the publisher's innovation of practices. This dissertation offers four key conclusions: (1) *platform significance*, which highlights the varying importance of platforms to publishers, the shifting platform landscape and the risks of platform dependency, (2) *platform mutability*, which foregrounds platforms as ever-changing technological infrastructures that exert authority over publishers and foster dependency, (3) *publishers' platform configuration*, which provides a deeper understanding of publishers' agency to strategically and continually configure a range of platform-related practices while attempting to strike a balance between leveraging platform opportunities and maintaining editorial and financial autonomy, and (4) *publishers' platform-oriented competencies*, which underline the growing importance of workers with platform-related knowledge, skills and expertise, and the impact they have on newsroom dynamics. Overall, this work offers insights into the evolving publisher-platform relationship and raises important questions regarding the sustainability of journalism in a platform-dominated digital media landscape.

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