

## 6. The Platformization of Making Media

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**As media makers, companies, and industries are increasingly dependent on digital platforms to publish and promote their work, media content becomes a contingent commodity. This chapter discusses how to research the process of platformization and explores the powerful role platforms have in shaping professional media production, thereby affecting the autonomy of media makers.**

### Introduction

Over the past decade, media makers such as news organizations and game developers have explored a new mode of production, distribution, and monetization. Typically, developers and publishers start the content production cycle by identifying trending social media topics or popular genres, as well as by calculating production costs and advertising revenue potential. After content has been produced, users are ‘aggregated’ via a wide range of social platforms. These social media circulation efforts, in turn, generate relevant data on user engagement and retention, which are subsequently employed to calculate whether it is profitable to further optimize content and invest in paid-for promotion, or halt the engagement-optimization-retention-acquisition cycle (Van Dijck, Poell, & De Waal, 2018).

These emerging practices render cultural production and cultural commodities ‘contingent’. In previous work on digital platforms, contingency is understood in two distinct, but closely interrelated ways (Morris, 2015). First, it is argued that cultural production is progressively ‘contingent on’, that is, dependent on a select group of powerful digital platforms. In the West, these are Google, Apple, Facebook, Amazon, and Microsoft (GAFAM), which allow content developers to systematically track and profile the activities and preferences of billions of users. This increasingly close relation between cultural producers and platforms is a form of platform dependence, affecting all forms of media making. Another way in which media products and services accessible via digital platforms are contingent is that they become contingent commodities: malleable, modular in design, and informed by datafied user feedback, open to constant revision and recirculation.

Platformization can be defined as the penetration of economic, governmental, and infrastructural extensions of digital platforms into the web and app ecosystems, fundamentally affecting the operations of media industries and production practices. Critically exploring these shifts is particularly important because the

'platform' metaphor, as Gillespie (2010) argues, obfuscates as much as it reveals. It obscures how social media and other digital services, labeled as platforms, not just facilitate socioeconomic, cultural, and political interaction, but very much organize and steer this interaction. In other words: platforms are anything but neutral. As cultural production in general and media work in particular is becoming increasingly platform dependent, the autonomy and economic sustainability of particular forms of production is increasingly compromised.

In this chapter, we discuss how business studies, political economy, and software studies have contributed to the study of the platformization, which blind spots characterize each perspective, and then proceed to bring the three theoretical perspectives traditionally associated with platform research into dialogue. Explicating our approach, we specifically draw from examples in the news and games industries, as these appear to follow distinctly different trajectories of platformization.

Starting with the latter, digital games, arguably more so than many other types of cultural commodities, have been platform dependent from their inception. Because games are component-based software, their malleability and modularity allows for easy upgrading, extension, and recirculation, all of which play into the contingent nature of the cultural commodity (Nieborg, 2015). News production, by contrast, has historically been platform independent. It is only with the growing importance of online publishing that news production is progressively dependent on the tools, advertising revenue, and data and governance standards of the GAFAM platforms, resulting in content becoming increasingly contingent as well.

In our analysis, we primarily focus on Facebook and Apple, which occupy a central role in the news and games sectors. By contrasting these two cultural commodity types, we show that each instance of media making, while both drawn into the economies and material infrastructures of platforms, follows a distinct trajectory in how production and circulation processes are reorganized.

## Theorizing platformization

The first important body of research on platformization is generated by a prolific and diverse collective of business scholars, who primarily focus on for-profit companies operating as intermediaries in platform markets. Business scholars understand platforms as 'matchmakers' (Evans & Schmalensee, 2016) or 'platform-mediated networks' (McIntyre and Srinivasan, 2017), who interface among different sides. This can mean various kinds of institutional actors (or 'complementors'), as well as 'end-users' (i.e. consumers), thereby constituting multisided markets, whereby digital platforms insert themselves as new cultural intermediaries (Negus, 2002) between media makers and media users, at times bypassing or replacing existing businesses

such as film and music publishers, record labels, and broadcast organizations. For the study of the platformization of cultural production, the business literature is particularly relevant, because it provides insight in the economic mechanisms and managerial strategies underlying platform markets. These mechanisms and strategies help to explain the increasingly dominant position of platform companies, which, by virtue of their roles as aggregators and mediators, are able to exert significant control over the institutional relationships with end-users and complementors.

In terms of economic mechanisms, business scholars demonstrate that multisided markets are subject to network effects: the costs of the production and consumption of goods and services that affect third parties. For example, one can speak of positive network effects when more end-users join Facebook, making the platform more valuable for other end-users. This, in turn, increases value for a wide range of complementors, such as cultural content producers, advertisers, and many other third parties.

The business literature also discusses managerial strategies particular to multisided markets. For example, how network effects allow platform holders to set pricing structures where one side of the market, the 'money side', covers the costs of the other side, the 'subsidy side' (Evans & Schmalensee, 2016). For example, end-user access to Facebook is free and subsidized by the money generated by businesses that are charged a fee when end-users click on an ad. To facilitate platform entry, subsidies can be used to offer an accessible computational infrastructure to complementors so they can develop and distribute 'complements', such as apps (Tiwana, 2014). The business literature shows that if a platform holder manages to launch at the right time, adopt an optimal pricing structure, and provide an accessible infrastructure, strong winner-take-all effects can come into play, ultimately allowing a platform to aggregate a disproportionate amount of users, revenue, and/or profit.

A problematic aspect of this literature is that business scholars tend to treat platforms as relatively static objects (Tiwana, 2014). Expediting the contingency of cultural commodities (such as all media products and services), digital platforms themselves are continuously in flux as well (Morris, 2015). Their holding companies constantly adjust platform technologies, business models, and governance structures. Therefore, a more historically informed perspective that accounts for the evolving nature of platforms is warranted.

Moreover, there is a noticeable lack of scholarly analysis of the platform-complementor relationship in its different facets. Consequently, there is little guidance on the nature and composition of complementor communities: what motivates media makers to contribute to platforms, what strategies do they develop, and how do platforms support, ignore, or bar them (McIntyre & Srinivasan, 2017). If one wants to really understand how professional media making is evolving, it

is crucial to address these questions, as platformization fundamentally changes the economic and institutional configuration in which cultural production takes shape as content producers are always in a position of dependency.

This is where the work of political economic researchers comes in, as these scholars are specifically concerned with platform power and politics. Critical political economists have taken a historical, normative, and critical approach towards theorizing the platformization of cultural production (Mosco, 2009). They do so by emphasizing the inherent accumulative tendency of capital and corporate ownership and its subsequent effects on the distribution of power, and the precarious and exploitative nature of cultural and (immaterial) labour of both producers and end-users. User-driven cultural production is clearly thriving, but it is subsumed under a wider economic regime of 'platform capitalism' (Srnicsek, 2016). As the GAFAM platforms represent a centralized, proprietary mode of cultural production, they effectively advance what Benkler (2006) calls 'the project of control' and its two pillars of commercialization and corporate concentration (*Ibid.*, p. 32).

The broader issue of commercialization is theorized in-depth by a group of critical political economists who build on Marx's labour theory of value and Smythe's (1981) notion of the 'audience commodity'. They draw attention to the ongoing commodification of content, the exploitation of cultural labour, and the (immaterial) labour of users (McGuigan & Manzerolle, 2014). Along similar lines, critical scholars have been pointing towards the ongoing trend of corporate concentration (Winseck & Jin, 2011). Political economic research helps us to critically consider how platformization affects media plurality, the independence of cultural producers, access to media, and the influence of owners.

Yet, while political economists are acutely aware of the labour issues that arise from platform-dependent cultural production, less attention is paid to how this translates into the transformation of cultural commodities. Similar to business scholars, political economists rarely take the contingent nature of commodities into consideration. Moreover, scholars in this critical tradition do not systematically engage with one of the roots of the unprecedented concentration of media ownership and control in the hands of a few major platforms: the evolution of multisided markets.

Next to business studies and political economy, the emerging and overlapping fields of software, platform and app studies supplement our understanding of platformization by focusing on the material, computational and infrastructural dimension of platforms (Montfort & Bogost, 2009; Helmond, 2015; Plantin *et al.*, 2016). The starting point for much of this research concerns the end-user/platform relationship and comprises detailed explorations of how the socio-technical features of platforms allow and prompt both cultural producers and end-users particular types of activities, connections, and knowledge, while excluding other things one could possibly do with and on these platforms.

Considering how digital platforms work, in the words of Gillespie (2014), we can see an emerging knowledge logic, which ‘depends on the proceduralized choices of a machine, designed by human operators to automate some proxy of human judgment or unearth patterns across collected social traces’ (*Ibid.*, p. 192). This emerging platform logic can be contrasted with the traditional ‘editorial logic’, which more explicitly relies on the ‘choices of experts’ for the sake of a professional ideal. Alternatively, media production tends to be governed by a market logic, as the products of services of media industries tend to survive solely if these succeed in attracting the attention of (paying) audiences (Deuze, 2007, p. 98). Professional media making tends to be increasingly influenced, if not governed by a platform logic, acting as a necessary precondition for market and editorial logics to function. As a result, media makers are progressively orienting their production and circulation strategies towards the recommendation, ranking, and other kinds of end-user facing algorithms of major platforms.

To more fully understand this platform logic, software studies offers explorations of the computational back-end of platforms. As digital platforms become central actors in all realms of cultural production, it becomes a crucial question under what conditions platforms allow complementors access to the means of production and circulation. Infrastructural access to Application Programming Interfaces (APIs) and Software Development Kits (SDKs) is among the primary ways in which platforms control the professionals and businesses that seek to reach audiences through their sites, applications and interfaces. Similarly, it should be observed that data infrastructures, such as APIs, not only preformat, process, and articulate end-user activities (Kitchin, 2014), they also push media makers to align and subsequently integrate their own data infrastructures and strategies with those of the platforms. Consequently, content developers have to align their own business models and production and circulation philosophies with those of leading platforms (Nieborg, 2015).

While software studies scholars devote ample attention to the intricate connections between platform business models and technologies, less attention is paid to how the economic strategies of platforms and complementors become entangled and what the political economic implications of these relationships are. Lastly, work in software studies acknowledges both platform integration and dependency, as well as the evolving nature of platform design, but is less concerned with questions pertaining to cultural production, let alone cultural commodities. As the discussion of the three scholarly approaches suggests, to understand how the platformization of media work unfolds we need to untangle the mutual articulation of changing market arrangements, governance frameworks, and infrastructures of content production, distribution, and commercial imperatives.

## Shifting markets

The global market for media products and services entails two major shifts amplified and accelerated by the rise of platforms: a shift from one- or two-sided markets to intricate multisided platform configurations, and strong winner-take-all effects affecting all sides in platform markets. Vital to observe is that before digital platforms became ubiquitous, media industries operated as prototypical two-sided markets. Consider, for example, the print segment of the news industry and the console segment in the games industry. News organizations and media publishers were matchmakers between readers or viewers and advertisers, and game consoles brought together game publishers and players. These two-sided configurations allowed content developers not only to exert control over the means of production and distribution, in the news industry large media publishers occupied a top position in the advertising food chain because of their ability to attract and retain large audiences (Turow, 2011).

In the emerging platform ecosystem, a small number of transnational corporations is able to aggregate unprecedented numbers of end-users (and thus attention), and then, by ways of indirect network effects, advertisers. Next to these two sides, digital platforms have been proactive in adding other sides to their businesses, most notably advertising intermediaries, societal institutions, and cultural content producers. Facebook, for example, has become a dominant data-intermediary, sporting millions of connections with companies, institutions, and content developers, each of which operate in different regions and have different histories, incentives, and business models. In Facebook's ecosystem, content producers are on the subsidy side and occupy a precarious position.

What distinguishes multisided platform markets from past market configurations is that for platform holders, content developers can become dispensable. For Facebook, content developers are not a crucial part of the chicken-and-egg equation. That is, when it came to launching the platform and kick starting positive direct and indirect network effects, the most critical sides for the platform were users and advertisers. Content developers are just another side, and individual games, magazines, and newspapers are increasingly interchangeable and abundantly available cultural commodities. Compare this to the aforementioned two-sided nature of print news, in which the news publisher controlled the relationship between readers and advertisers (around a scarce commodity: quality news). Or, compare this to the two-sided game console configuration, where game publishers are the money side and revenue is generated via the sale of premium-priced software, thus incentivizing more sustainable platform-complementor relationships. Conversely, social media and mobile media are general-purpose platforms. Even though news and game offerings do hold value for users, and thus for platform holders, they are

not the primary money side for Facebook or Apple and thus less important when platform managers consider pricing, governance, and platform data strategies.

The impact of platform dependency is particularly clear in the news industry, which over the last two decades has come under increasing economic pressure. In their attempts to adapt to the new economic reality, news organizations have been forced to fundamentally reinvent how they monetize editorial expertise and content. Spurred by digital publishers, such as *BuzzFeed* and the *Huffington Post*, news organizations have developed networked strategies to profit from platform network effects. These organizations optimized news production and circulation for multisided digital platforms to maximize user traffic and advertising revenue. While for some this strategy has been effective in generating significant user traffic, in economic terms it has not necessarily made these organizations more sustainable businesses.

It is crucial to observe that platformization makes publishers increasingly dependent on platforms (Nielsen & Ganter, 2017) and thus subject to the political economy of multisided markets. Publishers pursuing platform-oriented distribution strategies are subject to strong direct network effects, as platform sharing practices and algorithmic curation tend to favour viral content. Moreover, these strategies lead to a shift in control and oversight. The direct relationship news organizations enjoyed with their audiences is increasingly intermediated by platforms, which are known to be reluctant to share valuable data and make constant changes to their algorithms determining how and which users get exposed to content.

Although the games industry has undergone similar effects of platformization, it has been much more successful in developing new revenue streams. The rise of major digital platforms in the mid-2000s, launching social network services, smartphones and tablets, radically transformed the games industry (Kerr, 2017). Game developers gained access to much wider and diverse audiences as these new platforms offered games that were more accessible both to players and developers. As a result, game apps emerged as a vibrant new sub-segment in the wider games industry, which continues to see double-digit revenue growth on a global basis.

Coinciding with the launch of new game platforms has been the widespread adoption of the freemium or 'free-to-play' business model, in which revenue is generated via a mix of optional in-game purchases and advertising (Nieborg, 2015). The freemium development aligns directly with the particular technological and economic affordances of platforms. For game developers looking for sustainable revenues, the low barrier to market entry these platforms offer demands a different strategic approach to content development, which necessitates heavy investments in player acquisition and retention. Similar to the news industry, game developers must adjust their business models to an ecosystem flushed with content.

This new era of abundance favours data-driven game design strategies intensifying the contingent nature of cultural commodities. Game developers leverage the

contingent nature of games as software by continuously altering, extending, and upgrading game content and functionalities, while simultaneously optimizing its monetization model. For example, games in the popular *Candy Crush Saga* franchise leverage the connective affordances of Facebook by suggesting players to directly contact their Facebook Friends to ask for bonuses or to unlock additional game content.

Next to directly integrating platform functionalities in a game's design, developers are increasingly reliant on the platform's data-driven advertising ecosystems (Nieborg, 2017). Expectedly, this techno-economic alignment has profound political economic implications. Mobile multiplayer games such as *Clash Royale* and *Mobile Strike*, each of which generate hundreds of thousands of dollars in global revenue on a daily basis, are subject to strong direct network effects that increase player retention. This makes it difficult for new market entrants to gain market share. While platform owners have a number of curatorial and algorithmic tools at their disposal to (re)direct players or readers away from incumbents and towards novel content, as we will argue below, their current platform politics and governance policies belie such approaches.

## Changing governance

To develop a comprehensive understanding of how platformization shapes cultural production and distribution, we cannot restrict the analysis to shifting market structures, but we also need to account for how digital platforms affect power relations in the media industries and the autonomy of media makers. Transnational platform companies tend to set global, rather than local standards regarding content. The dominance of the US-owned and operated GAFAM platforms effectively entails a globalization of US cultural standards concerning what is and what is not permitted (Jin, 2015). Such standards are operationalized through platform policies, codified in Terms of Service, Terms of Use, and developer guidelines, such as Apple's App Store Review Guidelines. On the basis of such policies, platforms filter and remove content and block users from platforms and app stores. Typically, these regulations prohibit violence, nudity, and discrimination, which can scare away advertisers and end-users or become a source of legal issues. How such rules are interpreted and acted upon is, however, opaque and frequently causes controversy, as platforms intervene deeply in the curation of culture and the organization of public communication.

Exploring how platform governance influences particular industries, it is important to consider the histories of specific fields of cultural production. The issue of accountability concerns content moderation, but also algorithmic content



curation, which has a large impact but is much harder to observe, let alone audit. Algorithmic curation affects the visibility of individual content items, but also of entire news outlets. Every major change in Facebook's News Feed algorithms tends to have a dramatic impact on the traffic volumes of particular news outlets (Nielsen & Ganter, 2017). Furthermore, the impact of platform sorting practices is exceptionally strong because many news organizations are incentivized to align their content strategies with platform-defined markers of popularity, rather than traditional quality indicators. By doing so, news organizations are effectively reifying dominant platform governance strategies.

Situated at the opposite end of the spectrum in terms of platform dependence, the impact of platform governance on the games industry has been less controversial than in the news industry. Game developers are accustomed to grapple with the hardware, software, and platform governance frameworks of consoles that are relatively standardized across regions and hardware generations. Nevertheless, the growing importance of online platforms that are not specifically designed for gaming has complicated the governance of game production, circulation, and monetization. Nowhere is this more visible than in the mobile game segment, in which Apple's App Store plays an important role. App developers are faced with a constantly shifting, intricate, and often opaque set of developer guidelines.

Whereas suppressing news content has clear moral and ethical implications, the non-trivial costs of developing an individual game app, only to see it rejected after submission, increases the precarity of this particular mode of game development. Game developers are at a platform's full mercy, which not just affects the economic sustainability of game production, but also its viability as a form of artistic expression. Platform provisions have a clear chilling effect on developers, who want to make artistic or political statements about, gender (in)equality, labour exploitation, organized violence, or repressive governments.

These examples suggest that to understand how platformization shapes cultural expression, it is crucial to carefully examine the seemingly serendipitous and minor changes in platform governance. While these changes affect all cultural industries, we simultaneously should be attentive to the variations between industries. Given different traditions of governance and platform dependency, each industry is characterized by its own set of power relations and questions and concerns regarding the autonomy of cultural producers.

Over the past decade, digital platforms have initiated a range of services, enticing producers to host, distribute and monetize their content via their platforms. By offering ready access to APIs, SDKs, and developer documentation, platforms offer news publishers and game developers a seemingly attractive alternative to physical distribution infrastructures, or self-operated digital properties. Next to hosting content, platforms also provide a variety of integrated services to complementors,

all of which leverage the infrastructural features – ubiquity, accessibility, reliability, invisibility – of platform technologies (Plantin *et al.*, 2016).

In the news industry, platform-integration has led to large-scale content unbundling. Instead of focusing on highly curated content packages (i.e. newspapers), news organizations are increasingly investing in the platformed distribution of individual stories, which are contingent in their structure and content. The ubiquitous use of data analytics enables precise user targeting, the ability to respond to real-time trends, 'A/B' or split testing content such as headlines and formats, as well as the development of long-term strategies on how to continue drawing platform users. Most legacy news media have adopted such strategies, datafying their operations to more adequately respond to evolving interests of platform users. Thus, similar to music and games, news content becomes 'permanently impermanent' as it gets modularized, revised and recirculated, transforming it into a contingent cultural commodity.

## Conclusion

To develop a more comprehensive understanding of the platformization of cultural production, we have staged a dialogue between three disparate bodies of scholarly work: business studies, critical political economy, and software studies. Each research tradition offers a valuable avenue to analyse the multidimensional playing field in which platformization takes place, focusing on related changes in market structures, governance frameworks, and infrastructures. Although there are differences between media industries in trajectories of platformization, this process is decidedly a global phenomenon, affecting all industries and every (professional) media maker one way or another. The potent combination of ballooning market capitalization, ready access to (venture) capital, and positive network effects have resulted in an unprecedented accumulation of economic resources by platform behemoths in a constantly evolving ecosystem that, for those producing content and services in the media industries is fraught with a loss of autonomy, risk, and uncertainty.

### Further reading

- Case: How the rise of mobile and free-to-play games has changed the digital games industry in the past ten years – Kerr (p. 413)
- Context: How the new platforms facilitate and profit from new forms of consumption without creating or producing content – Bilton (p. 99)
- Contrast: How national governments are seeking to assert control over platforms such as Facebook and Google – Flew & Suzor (p. 163)

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