

# A Critical Research of Spotify's Business Model—The Case of Discover Weekly

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**Abstract.** Over the past few decades, the Internet and digital technologies have radically transformed the way in which music is distributed, sold, licensed, and consumed. Against this context, one of the most prominent industry players, Spotify, has received increasing attention from scholars. Despite its multifaceted role as a cultural intermediary and a gatekeeper, this study primarily frames Spotify as a DSP (Digital Service Provider). The purpose is to explore the dynamics of its business model innovation from a value perspective. Building on a systematic literature review, therefore, it argues that Spotify constructs its value streams mainly around the personalized curation of users' listening experiences. Specific attention is paid to its freemium subscription model and its algorithmically filtered playlist called "*Discover Weekly*." Finally, the findings demonstrate that Spotify's business model innovation is an iterative, cumulative and incremental process through which its focus on the personalization strategies could be conceived as a core competency.

**Keywords:** Business model innovation, Streaming music industry, Recommendation system

## 1. Introduction

In response to the illegal file-sharing and plummeting music sales in the mid-90s, the rise of online streaming platforms in the early 2010s has radically reconfigured the economic organization of the music industry, as music is now stored, distributed, and consumed as data instead of physical commodities. Notably, streaming services made up over half of the revenues generated in the music industry in 2022, reaching a total of 16.9 billion dollars. From 2019 to 2024, the music streaming market value is expected to have a compound annual rate of 15.4% [1]. However, although there is great consensus among scholars that streaming services boost the industry's revenue growth by offering listeners low or no-cost access to extensive music catalogues, the specific ways in which these DSPs (digital service providers) conduct their business remain vaguely understood. In the case of the streaming music market, the four most prominent industry players, Spotify, Apple Music, Amazon Music, and YouTube, are still under fierce competition. Although these on-demand streaming services adopt different business models, they must continually innovate their business models to succeed. Therefore, this paper examines the competitive advantage of the mainstream streaming music service Spotify, which is the most popular streamed music DSP in terms of subscribers. In doing this, this section firstly offers an overview of the scope of the company's products and services. Then, by looking at the strategic choices made within its personalization strategies, especially its music recommendation feature called "*Discover Weekly*," the following parts address the questions of what makes Spotify the most prominent player within the music business today and how it shapes the consumption of music in a platform era.

Crucially, one of the most distinctive features of Spotify is the corporate's intensive growth strategy, which is reflected in its rapidly expanding user base. Founded by Daniel Ek and Martin Lorentzon in Stockholm in 2006, Spotify is an audio streaming platform that offers on-demand streaming, limited download, and permanent download services for its listeners. Rated as the most downloaded music app in the Apple App Store, it is available on over 2000 devices from over 200 brands, including Windows, OS X, and Linux, as well as iPhone, iPad, Android, Blackberry, and Windows Phone. Initially launched in Europe in 2008 and expanded across 64 countries over the following years, Spotify has accumulated up to 180 million paid subscribers [2]. As examined below, this is mainly due to its vast library of music tracks and podcasts and accurate music recommendation

systems. Unlike Apple Music, Amazon Music, Pandora, and YouTube, which differentiate themselves through exclusive content or low subscription fees, Spotify converts free subscribers to paid premium users mainly through non-price means. With annual licensing deals with three major labels (Universal Music Group, Sony Music Entertainment, and Warner Music Group), Spotify holds approximately "70 million songs in its library, with 60,000 added every day" [3]. Moreover, its algorithmically filtered recommendation playlists take exceptionally personalized forms on the demand side. Although prediction accuracy differs across paid premium and ad-based free tiers, both versions keep a record of users' listening behaviors and enable them to curate their personalized listening experiences.

As explored below, the personalized, curated playlists are, thus, a core component of Spotify's value proposition. The platform's extensive data collection and algorithms ensure the match between recommended music content and personal listening preferences. As a result, each account is restricted to only one individual. Consisting of a social turn in 2011, a curatorial turn in 2012, and a contextual turn in 2015 [4], Spotify's music recommendation system has expanded to account for a diverse range of listening needs. Aside from providing tools for sharing and networking, the curated playlists are categorized by different music genres, moods, periods, and scenarios. This curation strategy brings out significant financial success for Spotify in the streaming music market. By attracting and satisfying users through this interactive interface design, Spotify will have generated up to \$28 billion in revenue by September 2022.

Moreover, in terms of customer segments, it is noticeable that 80% of its subscribers are Generation Z members. Accordingly, this essay proposes that customized listening experiences could form a significant draw for younger audiences. A particularly relevant example is "*Discover Weekly*." As claimed by its chief executives, this feature is regarded as one of the most successful products of Spotify, as it focuses on offering songs that users haven't heard before but don't yet know they want. Developed from the "Discover" feature and officially launched in 2015, the "*Discover Weekly*" playlist built above listeners' Taste Profile consists of 30 tracks and refreshes every Monday. Thus, through creating listeners' taste profiles, tracking listening histories, and capturing details in music items, Spotify generates playlists that help listeners discover smaller and niche artists and "connect 40 million listeners with 50 billion new songs in less than a year" [3]. Most of these songs are selected from undiscovered artists with far fewer monthly listeners than established singers signed by major labels.

As such, in what follows, this essay focuses on exploring why the "*Discover Weekly*" function is the most critical feature that enables Spotify's business model innovation. To answer this question, the first part of the paper offers a systematic literature review of the previous studies conducted on business models, which includes the theoretical context in which the term "business model" is used, different types of business models in the music streaming business, and music recommendations. Then, drawing on the past interviews and ethnographies with Spotify's chief executives and the corporate's annual reviews, the second part identifies the firm's shifting approaches to data and how it gains control over the way music is consumed. Finally, by analyzing the architectural features of "*Discover Weekly*," the paper concludes that Spotify's data-driven personalization strategies are at the core of its business model innovation. However, considering the built-in complexities within Web 2.0 ventures' business model that abstract models may overlook, it argues that more empirical studies of Spotify's business strategies are needed to ensure more sustainable development of the streaming music industry.

## 2. Literature Review

By locating the case study within the business model literature, this section aims to demonstrate why it is central to discuss Spotify's performance drivers from a value perspective. Despite the ubiquity of the term 'business model' present in the research over the last decade, the concept is still loosely defined without a single unifying approach. Thus, the first part briefly delineates the business

model's definitions as a narrative in progress, through which essential themes in relation to the streaming music industry are identified. Since Spotify's innovation pathway is distinct from its competitors, it then narrows the focus to the critical debates within music recommendation system literature and the strategic context in which Spotify's personalization strategies emerged. Through this, it argues that the DSPs in the music industry have undergone a radical and disruptive innovation process catalyzed by the pandemic. Therefore, Spotify's value proposition, customer relationships, channels, key partners, and revenue streams are conceived of high research validity.

Far from having a single united definition, the business model is a rather multifaceted construct. Retraced back to the late 1990s, the business model was initially articulated from a narrative perspective, by which it is described as "how enterprises work" or "a way of telling a story" [5]. With an increase in the narrative approaches to innovation practices, there was a broad consensus among scholars that storytelling elements constitute a critical dimension in understanding the business model. During the 2000s, however, there has been a steep rise in articles framing business models regarding value creation and organizational structures [6]. Fielt, for instance, proposed that a business model could be best conceptualized as "a representation of the value logic of an organization in terms of how it creates and captures customer value" [7]. Similarly, Osterwalder et al have pinpointed the nature of business models to express "the business logic of a specific firm". Building on these views, Gasparin et al have further investigated the effects of value distribution and retainment on a firm's financial performance, arguing that added value propositions play a central role in the effectiveness of business models [8].

Despite the extensive research that has been carried out on the business model, a general issue is that abstract models may overlook some inherent complexities in digital platforms [9]. Consequently, few writers have been able to draw on any systematic research into empirical studies, especially for businesses conducted in the digital sphere. However, this is not to deny the usefulness of the concept. After all, when framing it within the music streaming context, the term's usability is highlighted because "the business model fundamentally defines how the music streaming company operates" [10]. Moreover, it has been suggested by Urbinati et al that the features of distinct business models also accelerate the innovation processes in digital conglomerates [11]. In other words, the definition of business model depends on specific industrial and sociocultural contexts. Focusing on exploring how technology is commercialized in the music streaming industry, therefore, this essay specifically approaches business model from a value perspective, for which the emphasis is put on how Spotify leverages different resources to create its competitive advantages.

Having defined what is meant by business model, it will move on to discuss the emergent tensions and consequences of the "digital turn" in the recorded music industry. A major contribution to this field is Prey's mixed-method study of contemporary music streaming services, in which he identified music and listener data as the underpinning value of DSPs' business models [12]. Usually embedded within a two-sided market through which the revenue sources only include advertising and subscription fees, DSPs experiment with new ways to operationalize data to maximize profits over all its activities. According to this business logic, an illuminating perspective when examining the business model would be to looking at the DSPs' operation of streaming data, as user generated data is the ultimate most valuable resource for music business in the platform era. Meanwhile, this shift in focus in DSPs from arts to data marked the beginning of a new research direction on music recommendations [13]. As examined below, in contrast to the business models in the traditional music industry, the oversupply and hyper-offering of music and artists has led to a high increase of users' reliance on the platforms' navigation tools, and the area that causes most controversy is around recommendation services.

A large volume of published studies has identified that recommendation system is central to DSPs' value offering, as its purpose is to further maximize advert sales and convert more free users to subscribers [14]. DSPs differentiate themselves in the music streaming market, as identified by Morris and Powers, by following three stages [15]. While the first stage of competition over platform business models is over access, the second stage is the differentiation of products, the third stage has

changed its focus to engage users in the production of contents. Interestingly, this sequence is indicative of the changing functionalities that are incorporated to the streaming services, and scholars have proposed a variety of perspectives to explain this strategic change. Followed by the unlimited-access phase and social-streaming phases from 2008 to 2014 [16], personalized playlists and more customized navigation features have become the new focus for streaming platforms' competition. A well-known experiment conducted by Silber, for example, while agreeing with the high level of intimacy associated with music recommendation, has highlighted the potential issues of “inaccuracy, subjectivity and homogeneity” associated with sponsored playlists [17]. Moreover, Hracs and Webster in their mixed-method study have further elucidated the role of music recommendations as personalizing user experiences and enhancing customer loyalty [18]. In this way, DSPs are paying more attention to acquiring algorithmic filtering technologies as their central resources, and the specific practices they perform these curations become the dominant form of competition in the music streaming marketplace.

### 3. Methodology

The main aim of this research is to investigate Spotify's competitive advantage from a value perspective. To evaluate the effectiveness of DSPs' business model, the most suitable approach is a qualitative one. Thus, drawing on the past interviews, trade papers, and ethnographies, this paper utilizes the empirical studies conducted by the digital humanities scholars over the past decade as the basis of the later discussion. Moreover, the analysis is grounded in Rayna and Striukova's 360 business model innovation framework [19]. Often used as a form of modelling by arts organizations, this approach is selected for that all its five components of business model are value focused.

Specifically, the five dimensions including value creation, value proposition, value delivery, value capture, and value communication are used as five key units of analysis through which Spotify's music recommendation function “*Discover Weekly*” is discussed. While value creation mostly concerns a firm's core competencies, complementary assets, and value networks, value proposition refers to its product offering and pricing strategies. Besides, the definitions of value delivery, value capture, and value communication vary across different corporate contexts. Most importantly, value capture remains a critical “vector of business model innovation”, which consists both of the enterprise's cost structure and its revenue model. As such, with each aspect addressing one part of Spotify's business model, this essay aims to use it to provide a holistic picture of how Spotify constructs and exploits its business model to generate profits.

### 4. Results

Funded by the Swedish Research Council, Fleicher and Snickars' interview with the corporate executives indicate that the commodity that Spotify sells could be broadly conceptualized as personalized listening experiences. By this it implicates that personalized tools for music discovery and consumption serve as the streaming platform's added value of the music contents. The importance of music recommendation system in Spotify's value creation is reflected in the words from Spotify's playlist creator Mishel:

“Spotify's aim with such playlists was to combine the personalized experience of discovering music with ease of browsing.....the algorithm uses combined signals like saves, skips, user taste profiles and most importantly... playlists! It's hard to control the number of skips or the taste profiles of listeners but getting onto popular playlists is something artists can do.”

Furthermore, locating the object of study ‘*Discover Weekly*’ in the wider digital economy, it could be argued that the difference across prediction accuracy between its free and premium version is the firm's main source of value proposition. Similarly, the past trade papers reveal that Spotify's user interface is organized by multiple themes including moods, genre, artists, atmospheres, and space settings. These customized options, thus, allow users to create and curate for themselves their

listening experiences, which serve as the app's essential value delivery mechanism. In terms of value capture, Spotify's financial statements show that there is a rapid increase in its paid user share from 2019 to 2022. This is related to the firm's cost-revenue structure that 80% of the firm's current income is paid to music right holders including record labels and artists, and the income sources are mainly constitutive of subscription and advertisement fees. Notably, Spotify operates in the two-sided streaming market. Thus, *Discover Weekly* performs another important function, the promotion of the newly emergent music artists. In this way, the precise targeting and pairing of songs and audiences possess a double function for both two customer segments. For record labels and independent artists, the platform exists to promote and distribute their works to maximize the profits, while for users the platform offers a more accessible, convenient, and easy way of music listening. Thus, it argues that *Discover Weekly*'s value capture dimension manifests at balancing the interests for two client groups. Finally, regarding value communication, this feature's tagline "music is for everyone" fits well with Spotify's innovative and playful brand image. Accordingly, the outcomes demonstrate that *Discover Weekly* serves as a multifaceted algorithmically filtered playlist that is central to Spotify's business model from a value perspective.

## 5. Discussion

Having outlined the holistic view of how "*Discover Weekly*" reflects Spotify's business model innovation, this section seeks to explore the specific ways in which music recommendation systems influence streaming platforms' business model innovations. As examined below, it argues that Spotify's *Discover Weekly* feature could be conceived as a layered architecture that underpins the company's business model innovation. By bridging and enhancing different sides of customer values, it provides the necessary conditions for Spotify to innovate the business model. In this case, the user values afforded by algorithmic filtering technologies are incorporated as the key resource in the cumulative and iterative development. In other words, the innovation does not occur on the creation of a brand-new business model but on the remaking of existing ones. This is because that DSPs need to leverage different aspects of their business to forge the competitive advantages.

Distinct from the fragmented freemium, Spotify operates on a bundled freemium model by which it means that the company "creates value with a free product and adds substantially more value with one premium up-sells from which it captures value" [20]. In this case, most of the opportunities for business model innovation happen at the new ways of value offering by the company. While the free tier only allows shuffle play, Spotify's paid version supports users to utilize the bundle of premium services including shorting ad-rates, on demand streaming, and offline modes. Tying back to the thesis, the bundled premium model is a suitable way for the firm's value creation and proposition, as most of the premium features are interrelated. Moreover, as mentioned above that the core commodity is music listening experiences, the added value offered by bundled services, thus, exists at audiences' new role as the co-producers of their listening experiences. This, in turn, perfectly corresponds to Spotify's product complexity, and *Discover Weekly* resembles this business model innovation process by offering more agency to the end users.

## 6. Conclusion

The main research question that was stated, asked what the dynamics of Spotify's business model innovation could be understood in relation to its *Discover Weekly* function. In answering this, the essay firstly provides an overview of the key services of the company and its place in the global music streaming industry. Through a systematic literature review around business model and recent developments in the music market, it offers the context for this essay's analysis of *Discover Weekly*. Afterwards, Rayna and Striukova's 360 business model innovation framework is applied to discuss the important role that music recommendation systems play in Spotify's bundled freemium model. As such, it concludes that the personalized recommendation systems are at heart of Spotify's iterative

and innovative development of business model. Although it currently has not been profitable due to high free user share, in longer terms the personalized playlists like *Discover Weekly* would serve as an effective value offering mechanism to convert free users to paid subscribers. However, it calls for future research to further explore the relationship between music streaming platforms' curated playlists and their business models, considering the changes that would happen in the industrial landscape over the years.

## References

- [1] MarketLine Industry Profile, Online Music Streaming in United States, Online Music Streaming Industry Profile, United States, 2020.
- [2] J. Porter, Spotify's subscribers rise to 182M despite Joe Rogan controversy, *The Verge*, 2022.
- [3] M. Iqbal, Spotify Revenue and Usage Statistics. *Business of Apps*, 2022.
- [4] Cornell University, Spotify and the Long Tail, Course Database for Economics 2040, 2018.
- [5] J. Magretta, Why Business Models Matter, *Harvard Business Review*, 2002.
- [6] A. Ghaziani, M. J. Ventresca, Keywords and Cultural Change: Frame Analysis of Business Model Public Talk 1975-2000, *Sociological Forum*, 2005.
- [7] E. Fiel, Conceptualising Business Models: Definitions, Frameworks and Classifications, *Journal of Business Model*. 2013.
- [8] G. Marta, G. William, S. Mike, S. Christophe. Business as unusual: A business model for social innovation, *Journal of Business Research*. Elsevier, 2021.
- [9] D. Tilson, Platform Complexity: Lessons from the Music Industry, 46th Hawaii International Conference on System Sciences, 2013.
- [10] C. Brown, Spotify's Business Model, *Generic Strategy & Growth Strategies*. Rancord Society, 2019.
- [11] A. Urbinati, M. Bogers, V. Chiesa, F. Frattini, Creating and capturing value from Big Data: A multiple-case study analysis of provider companies, *Technovation*, 2019.
- [12] R. Prey, Nothing personal: algorithmic individuation on music streaming platforms, *Media, Culture, and Society*, 2017.
- [13] K. Negus, From creator to data: the post-record music industry and the digital conglomerates, *Media, Culture, and Society*, 2019.
- [14] P. Vonderau, The Spotify Effect: Digital Distribution and Financial Growth. *Television and New Media*, 2017.
- [15] J. W. Morris, D. Powers, Control, curation and musical experience in streaming music services, *Creative Industries Journal*, 2015.
- [16] A. Maasø, H. S. Spiler, The Streaming Paradox: Untangling the Hybrid Gatekeeping Mechanisms of Music Streaming, *Popular Music and Society*, 2022.
- [17] M. Sciandra, I. C. Spera, A model-based approach to Spotify data analysis: a Beta GLMM, *National Library of Medicine*, 2022.
- [18] B. Hrac, J. Webster, from selling songs to engineering experiences: exploring the competitive strategies of music streaming platforms, *Journal of Cultural Economy*, 2021.
- [19] T. Rayna, L. Striukova, 360° Business Model Innovation: Toward an Integrated View of Business Model Innovation, *Research Technology Management*, 2016.
- [20] R. T. Sletten, Spotify: Strategic Plan and Analysis, Scholar Works at University of Montana. 2021.