



# The Dilemma of Digital Media Platforms: New Challenge to International Cultural Trade

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## Abstract

Digital media platforms (DMPs) significantly influence international cultural trade (ICT), presenting both opportunities and challenges. This paper explores their Janus-faced role, monopolistic characteristics, and impacts on ICT. DMPs promote cultural exchange and trade efficiency through digitization yet risk cultural homogenization, data monopoly, and regulatory conflicts. Their monopolistic features manifested in technology-driven cultural hegemony, intellectual property capitalization, and audience commodification. The analysis highlights the need for effective governance to balance innovation with fair competition and cultural diversity protection in the digital economy era.

**Keywords:** Digital media platforms (DMPs); International cultural trade (ICT); Monopolistic characteristics; Cultural homogenization; Data monopoly

**Abbreviations:** Amazon Web Services (AWS); Content Delivery Network (CDN); Data-driven recommendation algorithm (DRA); Digital media platforms (DMPs); European Union (EU); General Agreement on Tariffs and Trade (GATT); Global Value Chain (GVC); Intellectual Property (IP); International cultural trade (ICT); Japan Fair Trade Commission (JFTC); Organization for Economic Co-operation and Development (OECD); United States International Trade Commission (USITC); User-Generated Content (UGC); World Trade Organization (WTO)

## Introduction

Digital media platforms (DMPs) present a dualistic impact on international cultural trade (ICT). As reported by the World Bank (2023), the global video streaming market is projected to reach US\$674 billion by 2024. Netflix is one of the world's leading entertainment services and is available in over 190 countries. TikTok has just over 1.58 billion monthly active users, making it the fifth most popular social media platform in the world. The technological infrastructure of major DMPs-including Netflix, Disney+, and Spotify-leverages big data analytics, AI algorithms, and mobile

internet architectures to enable cost-efficient global dissemination of cultural products through scale economies. "Netflix is engaged in a hybrid form of media imperialism and platform imperialism through a variety of industrial practices" [1]. Conversely, market concentration in DMPs ecosystems coupled with persistent digital divides create structural barriers to equitable cultural exchange. On the other hand, the monopolistic power from the large-scale development of DMPs and the digital divide act as key barriers to cultural trade. In recent years, companies like Amazon, Google and Apple have been involved in antitrust lawsuits.

## DMPs are Increasingly Monopolized

Global ICT governance frameworks have undergone three distinct evolutionary phases since 1948:

- (i) GATT Period (1948–1994): Initial establishment and improvement.
- (ii) WTO Period (1995–2013): Deepening and expansion.
- (iii) Digital Trade Era (2014–Present): Diversification. Following the USITC's (2013)

Conceptualization of digital trade, international institutions including OECD (2017), WTO (2019), and IMF (2019) have developed divergent definitions [2,3]. As a form of 'aesthetic consumption,' cultural commodities and services have emerged as a vital component of the digital trade. For instance, Spotify's streaming music, Netflix's feature films, Disney+'s original series, TikTok's short videos, and more. These diverse contexts are being exchanged and consumed globally through digital platforms. "Digital ordering and delivery exacerbate some of the known measurement challenges involved in recording international transactions" [4].

The concurrent emergence of Chinese AI system Deepseek and animated feature *Ne Zha 2* in early 2025 constituted dual cultural phenomena that dominated global mediascapes and public discourse. As of March 23, 2025, *Ne Zha 2* had grossed RNB¥15.288 billion (US\$2.1 billion), securing its position among the global top five box office performers and marking the first Asian non-Hollywood production to attain this status. However, the film's North American distribution was limited to approximately 900 theaters, a drop in the ocean compared to the tens of thousands that screen Hollywood blockbusters. Notably absent were scheduled screenings in major Western European markets including the UK and France. Hollywood cinemas and platforms like Netflix and Spotify have become typical media monopolies.

The rapid evolution and market penetration of digital platforms have outpaced antitrust regulatory frameworks, resulting in escalating competitive practices. While the cultural industry long adhered to Bill Gates' (1996) assertion that "Content is king," Digital platforms are fundamentally challenging this paradigm. Digitalization has fundamentally transformed creation mechanisms and production modes in performing arts ecosystems [5]. Cultural producers now prioritize internet traffic and trending topics alongside creative elements (textual content, artistic innovation, narrative construction), resulting in substantive content alienation. Digital platforms leverage four key advantages-technological infrastructure, data aggregation capabilities, algorithmic economies, and capital resources-to exert substantial influence over ICT development trajectories and market structures.

## The Monopolistic Characteristics of DMPs

DMPs have emerged as principal economic agents and paradigmatic organizational structures within the digital economy. Their operational efficacy stems from advanced data analytics capabilities, enabling personalized content recommendations

and shaping cultural consumption patterns through algorithmic curation. These platforms achieve vertical integration in content production through differentiated strategies: Netflix pioneers original programming while Disney+ capitalizes on established intellectual property (IP) portfolios. These platforms are consolidating the value chains of cultural production and consumption and are becoming preeminent status in global cultural trade. The emergence of platform monopolies through three key dimensions analysis.

**First, Technology-driven cultural hegemony:** DMPs' algorithms that have fundamentally reshaped contemporary digital capitalism. For instance, Netflix's collaborative filtering algorithm recommends content based on user similarity, with 80% of viewership through similarity-based recommendations. This leads to a "Matthew effect" where top-ranked content gets exponential traffic. Such technological power is essentially authority for redefines cultural values. Art critics argue that "algorithms are killing the diversity of film culture and art." Also, digital platforms are vigorously consolidating their infrastructure, achieving economies of scale. Amazon Web Services (AWS) offers Netflix a global content delivery network (CDN). Disney+, leveraging Industrial Light-Magic's cloud computing power under Disney, has built a transmission system handling 2.5 petabytes (PB) per second of data. This infrastructure control forces small-and medium-sized cultural producers to depend on the platform ecosystem, creating a structural dependency at the technical level.

**Second, Intellectual property capitalization:** DMPs are accelerating integration with cultural industry at an unprecedented speed and depth. They aim to create a closed-loop cycle for IP-related businesses, leveraging market dominance and technological thresholds to deter new competitors. For example, Disney's "movie+ streaming+ theme park+ merchandise" cross-media IP development model turned the movie *Frozen* into a global industry chain worth US\$10.3 billion. This industrial phenomenon has evolved into a global cultural-content arms race, Netflix's US\$17 billion content investment in 2023 surpasses France's annual film industry output by a factor of eight. The survival difficulties of small and medium-sized players in this capital-intensive competition are evident.

**Third, the data-driven paradigm and audience commodification mechanism:** DMPs employ big data and AI to analyze user behavior, such as browsing and watching, to offer precise content recommendations and personalized experiences. For example, Spotify's free users' engagement durations 1.7 times longer than paying ones on average. The platform uses auto play features and algorithmically generated to keep users engaged longer. Within the media-capital symbiosis, the real commodity of media production is the audience itself. When audiences consume media content, they're actually doing "labor", a typical case of commodification [6].

## The Impact of DMPs on ICT

DMPs impact cultural products' and services' global value

chain (GVC) trade. This impact manifest multi-dimensional and complex. It promotes cultural products' global dissemination and trade growth, yet intensifies structural issues like cultural homogenization, data oligopoly, and regulatory conflicts.

**First, technology-driven are fundamentally reshaping global cultural trade structures:** DMPs significantly enhance the digitization and operational efficiency of ICT. This technological transition enables the metamorphosis of cultural products from tangible formats (e.g., printed books, vinyl records, live performances) to digital service models (e.g., streaming platforms, web novels, short-form video content), thereby expanding global trade scope while optimizing transactional efficiency. South Korea's cultural export evolution over the past two decades provides a compelling case study. The 2012 viral phenomenon of PSY's "Gangnam Style", which amassed over 1 billion YouTube views, marked a pivotal turning point in K-culture's global proliferation. Streaming data shows that global K-pop streaming consumption surged by 362% between 2018-2023, with regional increases of 182% in the United States and 423% across Southeast Asian markets [7]. In the digital age, K-pop has leveraged social media and digital platforms for global reach. Via YouTube, Twitter, Spotify, etc., K-pop idols directly interact with global fans, sharing music, videos, and updates, forming strong transnational fan communities.

**Second, the paradoxical coexistence of content diversification and homogenization:** This paradox stems from the inherent tension between algorithmic logic and cultural authenticity in digital ecosystems. Data-driven recommendation algorithms (DRAs), through their reliance on user engagement metrics, systematically amplify homogeneous content to optimize platform retention. This algorithmic bias establishes a self-reinforcing "content hegemony" that marginalizes non-mainstream cultural productions. Concurrently, many UGC creators, seeking quick traffic and revenue, copy successful models, leading to severe content homogenization. This process facilitates cultural industrialization through the rhetoric of hyper-localization. A representative case is Netflix's establishment of 22 regional production hubs in India. yet shows like *Squid Game*, ostensibly integrating local linguistic elements, still follow a global narrative template, reducing local culture to replicable symbols.

**Third, data monopoly and regulatory conflicts:** Between 2017 and September 2021, there were 149 monopoly-related cases involving Google, Apple, Facebook, and Amazon. These digital platform operators have faced concurrent antitrust investigations across multiple jurisdictions. "The market can't self-correct these digital-platform-related issues; we need to improve current regulations" [8]. Governments globally have recognized the necessity of enhancing antitrust oversight for digital platform enterprises. Representative regulatory initiatives include the EU's 2020 published draft Digital Services and Markets Acts, aiming to restrict specific market behaviors of US tech giants and regulate the EU's digital market. Similarly, in 2021, Japan's JFTC reached a partial settlement with Apple and implemented the Act to Enhance Transparency and Fairness in Specific Digital Platforms.

## Conclusion

The rapid proliferation of DMPs has fundamentally reconfigured operational frameworks within ICT sector. This integration of artistic creation and technological innovation opens an epistemological lens for us to know the world and ourselves [9]. Leading platforms (e.g., Netflix, Disney+, TikTok) have significantly democratized cultural access, enabling transnational content dissemination at unprecedented velocity and scale. This digital transformation has optimized cultural trade efficiency, evidenced by the global ascendance of K-pop and successful localization strategies such as Netflix's hyper-localization model. However, emerging platform monopolies-fueled by algorithmic dominance, intellectual property concentration, and data commodification-present substantial risks to cultural diversity, market competition, and regulatory sovereignty. The oligopolistic dominance of major tech corporations exacerbates structural asymmetries, marginalizing independent content creators and fostering cultural homogenization in global markets. As the digital economy reconfigures cultural trade architectures and impacts content diversification, effective governance is crucial to balance innovation with fair competition and cultural diversity protection. Future research should focus on regulatory approaches to maximize the benefits of DMPs while mitigating their negative impacts.

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## Conflict of Interest

No conflict of interest  
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