Innovation of Media Business Models in the Digital Economy Era

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Abstract: This research delves into the evolution of media business models in the digital economy period, with a specific emphasis on examining the key aspects of technology-centered and customer-focused. The research defined how essential components like value proposition, customer segments, and revenue streams are uniquely implemented in the media sector's business model. It has considered real contributions in big data, artificial intelligence, and blockchain that augment efficiency with respect to content creation, user experience, and equality with concern to revenue sharing in the media industry. The current piece of research at the same time emphasizes analyzing users' behavior and gauging users' involvement to enhance their level of engagement and satisfaction ratio. After this, it plunges deep into two details of new critical media platforms in TikTok and Facebook, describing successful business models detailing user growth trends, sources of revenue for firms, user distribution, and other dataset details. The findings recommend how, in this era, where the digital economy is growing tremendously, media companies should keep working persistently to innovate business models through an amalgamation of technology-driven with customer-oriented methods to make it sterling in such a stiff market. This study offers theoretical backing and practical guidance for the development of new media business models, with significant practical implications.

1. Introduction

1.1. Research Background and Importance

The media industry is witnessing an unprecedented change and challenge in the era of the digital economy. In the media field, new technologies such as the Internet, artificial intelligence, big data, and blockchain, in their appearance and rapid development, are drastically changing the traditional business model. This change concerns not only the mode of content generation and dissemination but also the experience of the user and the form of a media company-to-customer interaction[1]. For example, digital transformation empowered media enterprises with increasingly better insight into user behavior and, hence, better predictions enabled by data analytics to foster content relevance and therefore user satisfaction[2]. Besides, applying digital platforms in as wide a range as possible has allowed media companies to find new sources of revenue, such as subscription models, advertising models, and blockchain-based micropayment systems[3].

It is not just the question of innovativeness regarding media business models that relates to the survival and development of media companies—it is deeply related to the development of information dissemination and cultural industries in society [4]. In a highly competitive market environment, media companies must constantly adjust and optimize their business models to maintain competitive advantages and meet changing user needs [5]. In particular, the rise of new media platforms, such as TikTok and Facebook, has demonstrated how technology-driven and user-oriented business models can achieve huge success in a short period of time and have a disruptive impact on the traditional media landscape[6].

1.2. Research Objectives

This paper seeks to explore the new avenue of media business models in the era of the digital economy, mainly reflecting upon the application and effect of technology-driven and user-oriented business models. The analysis of theoretical foundations and a case-specific approach should reveal the research goal: new technologies should enhance operational efficiency and user experience for media companies through big data, artificial intelligence, and blockchain. In this way, using user behavior analysis and interactive mechanisms, better user stickiness and satisfaction with media platforms are further put in place to provide theoretical support and practical guidance for media companies in a digital economy environment as they continue to innovate their business models.

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2. Literature review

2.1. Overview of Digital Economy

A digital economy is a new form whose driving force is founded on digital technology and data. The widespread application of technologies such as the Internet, big data, artificial intelligence, and blockchain in economic activities characterizes the Digital Economy. The development of the digital economy has not only boosted the transformation and upgrading of traditional industries but also brought a lot of new-emerging industries and business models into existence [7]. For example, digital platform economies leverage the Internet to better connect demand with supply and, therefore, improve efficiency within the market, along with its capabilities in resource allocation[8]. It has been shown that the fast development of the digital economy has become an essential way for countries to improve the quality of economic growth and significantly enhance productivity and innovation capabilities[9]. Of even more importance, continuous improvement of the digital infrastructure will enhance development within the sphere of the digital economy, including popularizing high-speed internet and cloud computing platforms [10]. In other words, the digital economy does not merely change the traditional economic model but generates worldwide sustainable economic development [11].

2.2. Current status of media industry development

The driving force has been the digital economy, leading to spectacular changes and breakthroughs in the media industry. Traditional media, including newspapers, television, and radio, are also becoming digitized by and by while emerging media such as social media, streaming media, and online news have recently forayed into modern media and taken space by storm in very little time [12]. Prominent, the time trend showed a change in people's global consumption of media over a decade, where people vastly prefer digital devices for availing information or entertainment content [13]. This development has driven media firms to the quickest possible adoption of new efficiencies of creating and delivering content by adopting new technologies. For example, many traditional media companies have developed mobile applications and online platforms in a move to increase digital users and grow digital advertisement revenue. Thirdly, through big data and AI technology, media companies can analyze user behavior with the necessary precision and offer further personalization of content services to improve user experience and satisfaction.

2.3. Impact of the digital economy on the media

In the media sector, the impact of the digital economy has been both broad and deep. First and foremost, digital technology has supported the productivity and the speed at which media content can be distributed. Using big data and artificial intelligence technology applied in user analysis and content recommendation, media companies will perform a more accurate user analysis and recommendation to enhance content relevancy and user satisfaction further. Secondly, blockchain technology will provide new means of copyright protection and revenue distribution for content creators, which will improve the income security of content creators. There will be a change in the business model with the digital economy upbringing in the media. Traditional media can only rely on advertising and subscription revenues, which are very far from the digital economy, in which media companies make profits through diversified revenue channels, including digital advertising, paid subscriptions, content e-commerce, and brand cooperation. A diversified revenue model can boost the profitability of media companies; at the same time, it increases the ability to resist the risk of market fluctuation. The digital economy has also been at the forefront of boosting media globalization. Through the Internet platform, media content can be quickly spread around the world, expanding the audience and influence of the media.

3. Innovation path of media business model

3.1. Theoretical Basis of Business Model

The concept of business model originates from the actual operational needs of enterprises. It consists of transaction structures and operational processes created by businesses to achieve their value propositions. In particular, the business model includes components like value proposition, customer segments, distribution channels, customer relationships, revenue streams, key resources, key activities, key partners, and cost structure. These components form a complete system and dictate how businesses generate, provide, and retain value.

In the media industry, the theoretical basis of business model is also applicable, but with its own uniqueness. Media companies offer value through creating and sharing both traditional and digital content, as well as engaging with audiences. The customer base has grown to include not only traditional audiences, but also content creators, platform users, and advertisers. The source of income has also expanded from a single advertising income and subscription fees to multiple forms including content payment, data realization and value-added services.

3.2. Technology-driven innovation

Media companies can use big data analysis to track users' reading and viewing habits in real time, leading to enhanced content distribution and marketing techniques that can increase user satisfaction and conversion rates for advertisements.

AI technology is commonly utilized in the media industry as well. Artificial intelligence can enhance efficiency and quality in content production through editing and distribution processes. One such example is the use of automated news writing, intelligent video

editing, and personalized recommendation systems by media companies. These technologies have become crucial for enhancing content production and distribution accuracy.

3.3. User-oriented innovation

In the innovation of media business models, user orientation is a key principle. In the digital economy era, user needs and behaviors are constantly changing. Media companies must always pay attention to user needs and iterate products and services based on user feedback.

Analyzing user behavior is fundamental for driving innovation that is focused on the needs of the user. By utilizing data mining and analysis, media companies can gain a thorough comprehension of users' habits in consuming content, their preferences in interests, and how they use certain products. This allows for the development of content strategies and product designs that cater more effectively to user preferences. Media companies can improve users' content discovery experience by developing personalized recommendation algorithms using user behavior analysis.

Creating services that add value for users is a key focus for innovating in media business models. Media companies can generate additional revenue and improve user experience by offering personalized and unique value-added services. For instance, some streaming platforms offer ad-free subscription services and paid access to premium content as creative service models tailored to user preferences, resulting in enhanced user satisfaction and platform earnings.

4. Case analysis of new media platform business models

4.1. Case analysis of short video platforms

Short video platforms have risen rapidly in recent years, and their unique business models have attracted a large number of users and advertisers. Take TikTok as an example. The platform has successfully attracted hundreds of millions of users worldwide through a powerful algorithm recommendation system and user-generated content (UGC) model (see figure1).

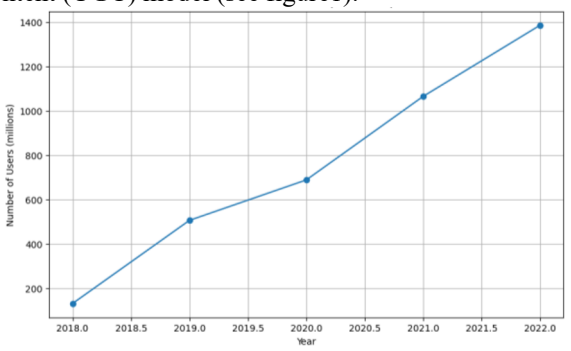

Figure 1: TikTok user growth trend

Figure 1 shows the growth trend of TikTok users from 2018 to 2022. The data shows that the number of TikTok users has achieved exponential growth in just a few years, from 133 million in 2018 to 1.385 billion in 2022. This trend reflects the huge appeal of short video content and the rapid expansion of the platform around the world. These data come from public market research reports and statistics from third-party analysis companies Statista and Sensor Tower.

Table 1: TikTok's main sources of income

Revenue Source	Percentage (%)
Advertising	55
In-app Purchases	30
Partnerships	10
Other	5

Table 1 outlines the primary revenue streams of TikTok and the corresponding percentages. 55% of the platform's revenue comes from advertising, making it the primary source of income. Furthermore, virtual gifts make up 30% of revenue, partnerships represent 10%, and other sources contribute 5%. This information is sourced from financial reports of companies and research conducted by market analysis firms like eMarketer. These data show that TikTok has achieved a successful business model through diversified revenue sources.

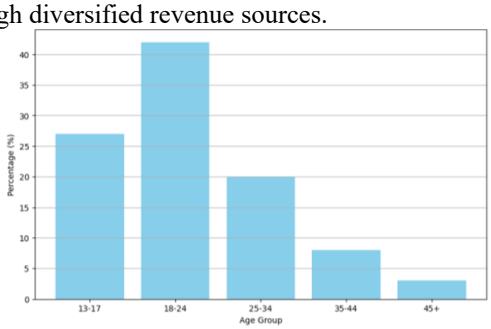

Figure 2: Age distribution of TikTok users

Figure 2 shows the constitution ratio of users' age on TikTok. From the data analysis, there are the highest coefficients of users aged 18-24 years at a rate of 42% of the cases, followed by users aged between 13 and 17 years old, at 27%. Then, from this, it would be observed that the main class applying TickTock is the younger generation; this feature gives an essential reference to the content and advertisement strategies within the platform. These data come from survey reports like the Pew Research Center and GlobalWebIndex.

4.2. Case Analysis of Social Media Platforms

Social media platforms have established a strong business model by building a large user community and diverse interactive functions. For example, Facebook's revenue mainly comes from advertising, but it also makes profits through other channels.

Table 2: Facebook's main sources of income

Revenue Source	Percentage (%)
Advertising	98
Payments & Other Fees	2

The significant sources of revenue for Facebook are presented in Table 2 below. From this, it will be seen that the share of revenue generated through advertising: "pretty much its only source of revenue," which has reached 98 percent of the platform's revenue. This

translates to most streams of income being based on advertisement and, to some extent, has supported sizeable revenues as a function of targeted advertisement and broad coverage of users. These figures come from Facebook's annual financial report; a research source by the third-party market analysis agency Statista has been used in this study.

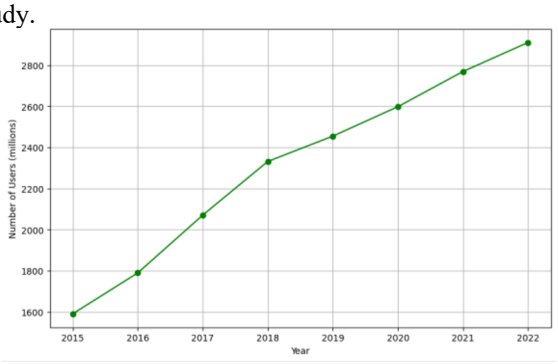

Figure 3: Facebook user growth trend

Figure 3 shows the growth trend of Facebook users from 2015 to 2022. Although the growth rate has gradually slowed down, the number of users continues to increase, from 1.591 billion in 2015 to 2.910 billion in 2022. This data reflects Facebook's enduring appeal and steady expansion of its user base around the world. These data come from Facebook's public financial reports and market analysis agencies such as Pew Research Center and eMarketer.

Through the above case analysis, we can see that short video platforms and social media platforms have different focuses in their business models, but both have achieved success through technology-driven and user-oriented innovation. TikTok has quickly become the world's most popular short video platform through diversified revenue sources and precise user group positioning. Facebook has maintained its leading position in the social media field with its huge user base and precise advertising strategy. These successful cases provide important references and lessons for media business model innovation.

5. Conclusion

This study deeply explores the innovative path of media business model in the digital economy era, focusing on two key areas: technology-driven and user-oriented. In the theoretical analysis of media business model, the unique application of value proposition, customer groups, revenue sources and other factors in the digital media industry is clarified. The study found that the value of media enterprises is not only reflected in content production and dissemination, but also in the interactivity of digital content and the continuous optimization of user experience.

Innovation in the media industry is especially crucial thanks to technology. The extensive use of big data technology allows media companies to effectively examine user behavior, enhancing content push, advertising strategies, and increasing user satisfaction and advertising conversion rate. The use of AI technology in creating and sharing content has increased efficiency and quality, and improved user experience. The introduction of blockchain technology offers a fresh solution to the issues of protecting content copyright and distributing revenue, while encouraging equitable collaboration among content creators, distribution platforms, and users.

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