Research on the News Industry in the Age of Big Data

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Abstract. In the digital age, the competition focus of the news industry has shifted to the monopoly and competition for news resources, big data, and user groups. Traditional media monopolizes news resources based on the accumulated historical resources and credibility, while building content brands based on existing news resources. New media fully utilizes big data and algorithms to actively compete for news resources and user groups by accurately targeting user groups, using super traffic and opinion leaders to gain credibility. Content innovation is also a way for new media to establish brands. Media convergence gives new media greater advantages in monopolizing user groups. In the future, how new media and traditional media will develop in the monopoly and competition for news resources, big data, and user groups is worth further exploration and observation.

Keywords: new media, traditional media, digital age, monopoly, competition

1 Intoduction

In the dynamic digital age, traditional and new media fiercely compete for news resources. Traditional media, with its established workflows and global reach, historically monopolized news collection, production, and distribution. However, new media's agility, real-time updates, and interactivity have challenged this dominance. Strategies like real-time reporting, user-generated content, and big data analysis bolster new media's position. Media convergence further intensifies this rivalry, urging collaboration and innovation. Both sides adapt, with traditional media embracing online platforms and new media harnessing AI and VR. Amidst this, ethical considerations guide responsible practices. The equilibrium between the two forms shifts, influenced by technology, user preferences, and ethical norms, framing the battle for news resources as a narrative of adaptation and innovation.

2 Monopoly and Competition for News Resources

With the development and popularization of the Internet, the rise of new media has brought unprecedented challenges and opportunities to the news industry. In this pro-

cess, the monopoly and seizure of news resources have become the core focus of competition between new media and traditional media.

2.1   Monopoly of news resources by traditional media

Traditional media has long held a dominant position in the collection, production, and distribution of news resources. They have a well-established news production process and editorial team that can produce high-quality, in-depth news reports[1]. Traditional media's news collection network covers the world and can quickly obtain first-hand news information, giving them a monopoly position in news content production. In addition, traditional media has always been the dominant force in news distribution, and people are accustomed to obtaining news through newspapers or television, giving traditional media a monopoly advantage in distribution channels[2]. The brand reputation and credibility of traditional media are also important factors in their monopoly of news resources. People generally consider traditional media to be more trustworthy and authoritative and are willing to accept news reported by them[3]. However, with the development of the Internet and the rise of new media, the monopoly position of traditional media has been challenged. New media is not limited by geographical location, updates quickly, and has strong interactivity, attracting more and more people to turn to new media for news, which has also led to the competition and seizure of news resources by new media[4].

2.2   Competition for news resources by new media

New media has adopted various strategies in the competition for news resources by leveraging its advantages in the race for news resources. Firstly, new media can publish news in real time at the first time, satisfying users' demand for real-time information, which makes many users choose new media as their main news source. Secondly, new media expands the sources of news resources through social networks and user-generated content, obtaining a large amount of news content and perspectives from user sharing and comments, making news coverage more diverse and comprehensive[5]. Furthermore, new media utilizes algorithms and big data technology for precise content recommendations, providing news content that meets the needs of users based on user behavior analysis and personalized recommendations, enhancing its attractiveness among user groups. However, new media also faces many challenges in the process of competing for news resources, such as ensuring content quality, preventing fake news, and dealing with copyright issues, requiring continuous search for solutions[6].

3   Monopoly and Seizure of Big Data

In the digital age, big data has become an important resource for competition in new media, and the trend of new media monopolizing and seizing big data is becoming more apparent. Big data provides new media with a deep understanding of user be-

havior, interests, and consumption habits, serving as a powerful tool for content innovation and personalized recommendations.

3.1   Monopoly trend of big data by new media

New media platforms usually have a large amount of user data, which is the source of their core competitiveness. Platforms such as social media, search engines, and e-commerce platforms collect a large amount of user data through users' search history, shopping behavior, browsing habits, social networks, etc. These data provide new media with rich information to understand user needs and behaviors, and to provide more personalized services to users. New media uses data mining and machine learning to predict user behavior and interests, providing more accurate recommendations and advertisements. This is particularly evident in the field of news, where new media can push news content that users are interested in based on their reading habits, improving user stickiness. However, the monopolization of big data by new media also brings some issues such as data privacy and information security. New media needs to protect user privacy and data security while using big data[7].

3.2   Strategies of new media to seize big data

New media has adopted various strategies to seize big data. Firstly, new media platforms actively collect user data and analyze and mine the data generated during user registration and usage. Secondly, new media attracts more users to use its platform by providing personalized services and optimizing user experience, thus obtaining more data. Furthermore, new media also acquires data from other companies or platforms through cooperation and acquisitions. Through these strategies, new media continuously expands its data resources to improve its competitiveness in the market. However, this also poses challenges to traditional media, which needs to find new ways to acquire and utilize data to adapt to this trend.

4   Monopoly and Seizure of News Categories

In terms of the monopoly and seizure of news categories, new media and traditional media have their unique advantages and strategies. News categories include various types of news, such as politics, economy, technology, entertainment, etc., and each news category has its specific target audience.

4.1   Monopoly of news categories by new media

New media has unique advantages and has formed a monopoly situation in certain news categories. For example, in popular fields such as technology news and entertainment news, new media often attracts more young users than traditional media due to its faster updates and diverse forms of reporting. However, this does not mean that new media can dominate in all news categories. For news that requires in-depth reporting,

professional knowledge, and independent investigations, such as in-depth reports and investigative journalism, traditional media still maintains a strong influence due to its professionalism and authority.

4.2   Actions by traditional media to seize news categories

Facing the challenges of new media, traditional media is also taking action to seize news categories. Traditional media is actively undergoing digital transformation, such as launching online sections, introducing mobile applications, etc., to match the speed of updates and reporting formats of new media. In addition, traditional media also leverages its professional advantages in news production, such as in-depth reporting and investigative journalism, to seize high-end user groups. Overall, the monopoly and seizure of news categories are ongoing competition between new media and traditional media. In this process, users can benefit from obtaining richer and more diverse news content.

5   Monopoly and Seizure of Content Brands

Media brands are one of the most important assets of media companies, so the monopoly and seizure of content brands are important competitions in the news industry.

5.1   Traditional media builds content brands based on news resources

Traditional media has built its own content brands based on its accumulated news resources over the years. These content brands usually have their own characteristics and advantages. For example, certain newspapers are famous for their in-depth reporting, while certain TV news programs focus on fast and accurate news reporting. These content brands, based on the rich news resources and professional news production capabilities of traditional media, can provide high-quality news content and gain the trust and support of a wide range of users.

5.2   New media builds brands through content innovation

Compared to traditional media, new media tends to focus more on content innovation to build its own brands. New media can flexibly use various forms, such as short videos, live streaming, images, audio, etc., to create creative news content that meets the diverse needs of users. In addition, new media can utilize algorithms and big data to provide personalized news recommendations, enhancing user experience and increasing the attractiveness of their brands.

5.3 How new media and traditional media build content brands using their news DNA

Both traditional media and new media need to build content brands based on their respective news DNA. The news DNA includes media's news values, reporting styles, target audiences, etc., which are the core elements of media brands. Traditional media can rely on its rich news resources and authority to strengthen the professionalism and credibility of its content brands. In general, both traditional media and new media need to constantly innovate and improve to adapt to the rapidly changing news market and user demands, and to establish their unique content brands.

6   Monopoly and Seizure of Credibility

The monopoly and seizure of credibility have significant implications for society and democratic systems. The credibility of the media is a fundamental cornerstone for maintaining public access to information, freedom of speech, and public interests. When credibility is monopolized or abused, it weakens public trust in news and information, leading to increased information asymmetry, biases, and distortions. This can undermine people's judgment and decision-making abilities, thereby negatively affecting social stability and the democratic process.

6.1 How traditional media monopolizes credibility through its historical advantages

Traditional media such as television, radio, and newspapers have played important roles in terms of credibility due to their long history and advantages. Their credibility comes from several factors. Firstly, brand influence. Traditional media has established extensive awareness and trust among the public through many years, and people consider them reliable sources of news. Secondly, professional news gathering. Traditional media often have experienced news teams responsible for collecting and screening news from around the world. They possess professional knowledge and skills for in-depth investigations and reporting, making their news more authoritative and credible. Furthermore, traditional media have editorial planning and review processes. They strictly edit and review the content before publishing to ensure accuracy and fairness. This editorial process enhances the reliability of their reporting and strengthens their credibility.

6.2 How new media seizes credibility through super traffic

New media seizes credibility by leveraging super traffic, referring to the massive number of users and interactions on their platforms. New media platforms actively analyze user behaviors, preferences, and patterns through data analysis. Based on this data, they can provide customized content that caters to specific user interests, making users more reliant on and trusting of these platforms. By meeting personalized needs,

new media can attract the attention of specific user groups and establish a monopoly position within that group.

6.3   How new media acquires credibility through opinion leaders

New media acquires credibility by leveraging opinion leaders or influencers who often have a large number of fans or followers and wield significant influence. Their endorsements and recommendations can significantly enhance the credibility of new media. Some opinion leaders have specialized knowledge and backgrounds in specific areas, and their professional opinions can enhance the authority and credibility of new media. Additionally, opinion leaders often share their lives and experiences, which adds authenticity to their recommendations and increases users' trust in them. Opinion leaders often create high-quality and unique content, and their innovative content and perspectives can spark lively discussions among the public, further attracting attention and enhancing credibility for new media.

7   Media Convergence and the Future

Media convergence refers to the integration and interaction of different media platforms and formats, blurring the boundaries between traditional media and new media. Media convergence gives new media greater advantages in monopolizing user groups and news resources. With the development of technology and the Internet, media convergence will continue to evolve in the future, and it will have a profound impact on how new media and traditional media compete for news resources, big data, and user groups.

7.1   Collaborative strategies between new media and traditional media

Traditional media can embrace media convergence by leveraging the advantages of new media. This includes establishing online platforms, developing mobile applications, and integrating social media into their news distribution channels. By adopting collaborative strategies, traditional media can expand their reach and engage with younger audiences who are more inclined towards new media.

7.2   Innovation and adaptation by new media

New media needs to continue innovating and adapting to changing user preferences and behaviors. It should actively explore emerging technologies, such as artificial intelligence, virtual reality, and augmented reality, to enhance user experience and engagement. New media should also prioritize the ethical use of big data and algorithms, ensuring user privacy and data security while providing personalized news content.

7.3   Ethical considerations and regulations

As new media continues to evolve, it is crucial to address ethical considerations and establish regulations to maintain the integrity of news reporting and protect users' interests. This includes combating the spread of fake news, promoting transparency in data collection and usage, and safeguarding user privacy. Collaborative efforts between media organizations, governments, and technology companies can help establish guidelines and frameworks to ensure responsible and trustworthy media practices.

8   Concluding remarks

In conclusion, the digital age has reshaped the competition landscape of the news industry. The monopoly and competition for news resources, big data, user groups, content brands, and credibility are ongoing battles between new media and traditional media. Each form of media has its advantages and strategies. New media leverages real-time updates, big data, algorithms, and content innovation to seize news resources, user groups, and credibility. Traditional media relies on accumulated historical resources, professionalism, and brand reputation to maintain its monopoly position. Media convergence further blurs the boundaries between new and traditional media. In the future, the development of new media and traditional media in the competition for news resources, big data, and user groups will require continuous exploration, innovation, and ethical considerations.

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