Integration and Development of Traditional and New Media in the Big Data Environment: Post-print

Authors: Liu Shuo

Date: 2023-10-08T00:00:00+00:00

Abstract

With the advent of the big data era, the development of new media has exerted certain impacts on traditional media, necessitating that traditional media respond to the challenges posed by new media. In the present context of diversified information development, the convergence of traditional and new media has become an unstoppable trend. It is precisely within this context that this paper focuses on the big data backdrop to investigate the convergence and development of traditional and new media, thereby offering valuable recommendations for their convergence and development.

Full Text

Integration and Development of Traditional and New Media in the Big Data Environment

Abstract: With the advent of the big data era, the rise of new media has posed significant challenges to traditional media, compelling the latter to respond effectively. In today's context of diversified information development, the integration of traditional and new media has become an irreversible trend. Against this backdrop, this paper examines the integration and development of traditional and new media from a big data perspective, offering constructive recommendations for their convergence.

Keywords: big data; traditional media; new media; integration and development
Classification Code: G206
Document Code: A
Article ID: 1671-0134(2018)06-031-02
DOI: 10.19483/j.cnki.11-4653/n.2018.06.003

The big data era has brought unprecedented challenges and opportunities to the development of both traditional and new media, while gradually exposing contradictions between them. Reconciling these contradictions to advance the media industry requires serious deliberation.

1.1 Concept of Big Data

The term "big data" was first introduced by Viktor Mayer-Schönberger and Kenneth Cukier in 2008 and has since gained widespread application. Big data refers to massive, high-growth, and diverse information assets that require new processing methods to achieve enhanced decision-making, insight discovery, and optimization when conventional software tools cannot collect, manage, and process data sets under existing conditions.

The emergence of big data has facilitated information acquisition and processing for people, freeing them from temporal and geographical constraints and ushering in an era of ubiquitous computing. Notably, although big data provides vast amounts of information, this data is not chaotic. Understanding and leveraging the correlations within data is essential to maximizing its economic and social benefits.

1.2 Main Characteristics of Big Data

Broadly speaking, big data is characterized by large information volumes and complex query analysis. From a micro perspective, it features four key attributes: volume, variety, velocity, and variability, which we will explain in detail below.

Volume. The scale of big data continues to expand, with predictions indicating that global data will increase nearly fifty-fold by 2020, accompanied by unexpected new data sources.

Variety. Data diversity stems from extensive sources, including networks, social media, the internet, mobile phone records, sensor networks, and a series of other sources.

Velocity. The high velocity of big data refers to the rapid creation and movement of data. Against the backdrop of rapidly developing network information technology, increasing emphasis is placed on optimizing high-speed processors and server software performance to facilitate real-time data generation. This requires enterprises not only to understand how to accelerate data creation but also to know how to process data promptly and provide feedback to users to meet their needs.

Variability. The multi-layered structural characteristics of big data determine that it manifests in various forms and types across different contexts. This irregular variability complicates analysis using traditional application software. Although traditional business data has evolved over time, enterprises must still extract valuable insights from multi-layered, complex data.

2.1 Impact of Big Data on Media Development

Media serves as an intermediary and bridge for information dissemination, through which people primarily obtain information. With economic and technological development, new media represented by computers, digital television, and mobile phones has gradually entered people's lives and been rapidly embraced. In contrast, traditional media such as television, radio, and newspapers has gradually faded from public view, directly weakening the guiding function of conventional media. In the big data context, information acquisition methods have become increasingly diversified, with stronger timeliness and authenticity. This presents both unprecedented opportunities and challenges for media development.

2.2 Characteristics of New Media Development in the Big Data Era

First, new media is a dynamic concept that constantly evolves, carrying different connotations across various historical periods. In the contemporary era, new media is defined relative to old media, with computers and networks as typical representatives.

Second, new media exhibits inherent innovativeness. Influenced by the complex, multi-structured nature of big data, new media has achieved innovation in form, theory, and practice, embodying distinct historical and regional characteristics.

Third, interactivity represents the most prominent feature of new media. In the big data context, new media enables direct information exchange and interaction between information senders and receivers. Compared with traditional media, new media grants both parties dual identities. As information receivers, users gain certain control rights during communication and interaction, effectively eliminating the distinction between senders and receivers that existed in traditional media.

2.3 Dilemmas in the Integration and Development of Traditional and New Media

The integration of traditional and new media has become increasingly evident and necessary. Major news organizations, government agencies, and social groups have established their own online platforms, with rising public participation. This not only enables public engagement in public affairs but also facilitates deeper media integration. However, the integration process has encountered several dilemmas.

Unclear objectives for integration and development. The rapid development of new media has outpaced industry practitioners' understanding, resulting in research that fails to meet practical needs. This has constrained and impacted the integration of traditional and new media. Moreover, unclear integration objectives have led to ambiguous concepts of convergence, resulting in insufficient integration between traditional media's "professionalism" and

"credibility" with new media's rapid dissemination and broad influence. This has caused traditional media to be overshadowed by new media while new media content lacks authenticity and credibility.

Outdated media management systems. On one hand, traditional media's rigid hierarchical management systems have long prevented coordinated organizational structures and personnel allocation. On the other hand, contradictions exist in the integration process, such as disputes over the timing of information release. These unresolved issues prevent traditional media professionals from effectively serving new media, thereby constraining industry development.

Insufficient professional quality of media practitioners. The level of integration and development is largely constrained by practitioners' professional competence. Currently, traditional media personnel lack mastery and understanding of new media technologies, making them ill-equipped for integration. This primarily stems from professional disparities between new media developers and traditional media practitioners, preventing effective technical-level integration and hindering the formulation of integration and development strategies.

3.1 Establishing People-Centered Goals for Media Integration

During the integration process, protecting public privacy and serving people's needs should guide development, providing crucial direction for media advancement. In the big data era, privacy breaches occur frequently, and protecting audience privacy remains challenging. This demands practical, reality-based solutions. Currently, we should strengthen internal data management and supervision, enhance server security, and establish scientific and comprehensive privacy protection systems. While ensuring privacy, understanding and addressing customer needs can help adjust the integration direction and promote media development to satisfy public demands.

3.2 Establishing Sound Legal Norms and Regulatory Systems

Amid rapid media development, organizations are embracing new concepts and striving for innovation to achieve omnimedia integration. However, network fraud and cyber violence have emerged alongside network technology development. To address these issues, sound legal norms and regulatory systems for media integration must be established. On one hand, legal norms and regulatory systems serve as mandatory measures, providing a favorable network environment and guaranteeing integration. On the other hand, targeted improvements to existing laws can standardize new media forms and content, guide media development, strengthen network supervision, regulate new media operations and services, and enhance defenses against harmful information.

3.3 Enhancing Professional Competence of Media Practitioners

In the big data era, rapid economic development has generated increasingly diverse and demanding public expectations of media. To meet these needs, media

professionals must reflect on product quality. Talent constitutes the foundation of development, and talent competition represents enterprise competition to a certain extent. Therefore, to gain competitive advantages, media professionals' competence must be enhanced to improve overall workforce quality. Today's society demands versatile talent—practitioners must master professional knowledge and skills while emphasizing self-supervision and improvement. Traditional media personnel need to understand new media development characteristics and related technologies, new media developers must grasp traditional media advantages, and both groups must transform their mindsets, overcome limitations, and establish new media concepts. While embracing new perspectives, they should improve their new media software proficiency, enhance editing, design, and communication capabilities, and master relevant equipment operations.

Currently, China's integration of old and new media remains in its early stages, with many urgent issues requiring identification and resolution. Media integration is a gradual process rather than an overnight achievement, yet it represents an essential phase for industry development. In conclusion, we must maintain clear understanding of media integration, enabling traditional and new media to complement each other, coordinate tolerantly, and converge toward common goals to maximize their combined value.

References: [1] Chen Shoufu. Integration Development Strategy of Traditional and New Media under Big Data Background [J]. Jianghuai Tribune, 2016(4). [2] Deng Bei. Big Data Research from Communication Perspective—Analysis Based on Highly Cited Papers in CNKI [J]. Journal of Southwest Minzu University (Humanities and Social Sciences Edition), 2016(5): 164. [3] Zhao Tailin. Integration and Development of Traditional and New Media under Big Data Background [J]. Science and Technology Economic Guide, 2017(7).

(Author's Institution: Changchun Information Center, Jilin Province)

Note: Figure translations are in progress. See original paper for figures.