

# Reconstructing the Communication Logic and Innovating the Paths of Television News under the Perspective of Media Convergence: A Practice-Based Study of the BBC and CNN

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**Abstract:** Against the backdrop of media convergence and platform-based ecosystem restructuring, traditional television news is losing audiences and discursive influence, and thus urgently needs to reconfigure its communication logic. Drawing on comparative case studies and qualitative text analysis, this paper examines the BBC's User-Generated Content Hub (UGC Hub), CNN's "Magic Wall," and the two organisations' mobile news practices. The study finds that, in a converged media environment, the transformation of television news is mainly reflected in three aspects: first, building a user-centred information aggregation space that integrates professional content with user-generated content; second, enhancing the intelligibility and sense of immersion of complex information through multimodal data integration and innovative interactive visualisations; and third, constructing a scenario-based communication system around fixed, mobile and consumption contexts, pushing television news from "mass communication" towards "scenario-based services." These three perspectives provide new ways to understand how the communication logic of television news is being reshaped in the converged media environment, and offer practical guidance for television news organisations in workflow design, programme innovation and multi-platform distribution strategies.

**Keywords:** Converged media; Television news; User-centred; Multimodal presentation; Scenario-based communication

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## 1 Introduction

Rapid advances in internet technology, especially mobile internet, have deeply reshaped the structure and order of information dissemination. "Connection" is gradually replacing "transmission" as the core logic, weakening the channel advantages and exclusive broadcasting mechanisms on which traditional television has long depended. In a multi-screen environment, audiences have much greater power to choose information and to participate. They are no longer satisfied with one-way, linear and fixed-schedule news services, but instead prefer personalised, interactive and on-demand news experiences.

In this context, television news that still remains within programme-boundaries and channel-centred linear production and distribution models finds it difficult to compete with platform-based digital media. How to reconstruct the communication logic of television news while upholding its public service role and professional standards has become a central challenge for the television industry. This paper focuses on this reconstruction of communication logic rather than on the simple introduction of individual technologies. Using the BBC and CNN as representative cases, it analyses their practices in user aggregation, multimodal presentation and scenario-based dissemination, and summarises three key innovation paths for television news in the converged media era, providing both theoretical support and practical references for related work.

## 2 Building a User-Centred Aggregated Information Space

In the context of converged media, the shift from "audience" to "user" is not just a change in terminology, but also a reconfiguration of roles and power relations. Users remain the main consumers of news content, but at the same time, through social media, mobile devices and various platform tools, they have become important producers and re-distributors of information. Professional-generated content (PGC) and user-generated content (UGC) now coexist in the same space, together forming a multi-layered communication environment.

The explosive growth of information resources and the increasing fragmentation of dissemination have broadened access to news, but have also intensified information overload and fatigue. As a result, users increasingly expect information services that are aggregated, systematic and, at the same time, personalised. Research on short-video knowledge production shows that "aggregated interpretation" of multi-source information—through collecting, filtering and re-explaining content—can both promote cultural understanding and guide users to connect different information flows, thus building a highly sticky "arena for exchanging viewpoints." Within traditional television news models, broadcasters occupy the centre of one-way dissemination. Newsgathering relies mainly on in-house reporters and a small number of informants, and audiences are positioned as passive receivers. Under such a framework, it is difficult to form an aggregated information space that responds to individual needs.

The Guardian's "Open News" initiative offers an important example for understanding how such an aggregated information space can be built. By opening up parts of its news materials and story leads, the project invites users to participate in topic selection and content supplementation. In this way, the news production process moves from closed to open, and control shifts from a single organisation to joint collaboration between the organisation and its users.

Extending this idea from newspaper to television, the BBC’s “User-Generated Content Hub” (UGC Hub) is a typical example of how editorial systems have been restructured in the converged media era. During major breaking events, such as terrorist attacks in London or political movements in the Middle East, ordinary users on the scene often become the earliest recorders. Through the UGC Hub, the BBC actively gathers images, videos and text leads from around the world, bringing streams of information scattered across social platforms into institutionalised editorial workflows. Unlike traditional television news, which sees user-generated material mainly as a supplement, the UGC Hub treats users as indispensable partners in the production chain, integrating user resources from the very source of information.

To cope with the problem of distinguishing truth from falsehood in aggregated information spaces, the UGC Hub does not stop at simple collection. Instead, it has developed a relatively mature workflow of verification, screening and integration. Professional journalists use technical tools to cross-check the time, place and source of user-submitted materials, and compare them with leads from other channels. In this process, user-collected on-site information and professional institutional gatekeeping complement each other: the former extends the reach of newsgathering, while the latter ensures the credibility and authority of the content. The resulting aggregated information space increases the timeliness and sense of presence of news reports, while reducing the impact of misinformation on public discussion.

From the perspective of communication logic, the BBC’s practice shows that, under media convergence, television news is no longer just a one-way content provider. By systematically aggregating and reprocessing user resources, it increasingly acts as an organiser and coordinator of social information. A user-centred aggregated information space thus becomes a key hub that links institutional authority with user participation, and connects fragmented information with public agendas.

### 3 Innovating News Presentation with Multimodal Integrated Data

The presentation of television news is essentially a process of mediating and aesthetically shaping factual information. By combining images, sound, subtitles, graphics and studio environments, it turns abstract information into experiences that can be seen, heard and remembered. In many traditional television organisations, however, news programmes still show a high degree of homogeneity: delivery styles are monotonous, narrative structures are rigid, and visual choices are limited. Audiences remain in a passive viewing position, which weakens programme appeal and audience loyalty.

Digital technologies have brought not only high-definition images, AR/VR and data visualisation, but have also changed how information is organised and how users perceive it<sup>[2]</sup>. Text, images, audio and video can now be treated as basic data elements, flexibly combined, labelled, searched and reused on the same digital platform. This creates favourable conditions for multimodal news expression. Consequently, television news needs to move from presentation dominated by a single mode to narratives based on multimodal coordination, so that “watching news” gradually becomes “experiencing news” in a multi-dimensional information space.

CNN’s “Magic Wall” in its election coverage is a representative example of this multimodal integration. Supported by a large back-end database, the Magic Wall can display real-time voting data for each state—and even more fine-grained units—through interactive maps and dynamic charts in the studio. Compared with the traditional linear model, in which anchors simply read out results and then explain them verbally, this form of visualisation turns complex, abstract numbers into intuitive and operable graphical interfaces, shifting news from “cold data” to “engaging narratives.” With this system, anchors can call up historical data, compare regional trends or simulate future scenarios in real time through tapping, zooming and selecting on the screen. The data interface and spoken commentary work closely together, breaking complex issues down into a chain of visual questions and answers, and giving viewers a stronger sense of participation and control when following election processes and results.

More importantly, multimodal systems like the Magic Wall reshape the relationship between anchors and information. Anchors are no longer just script readers, but interpreters who combine data analysis with interaction guidance. When body language, visualised data and spoken explanation are overlaid, the news becomes easier to understand and more immersive. In other types of coverage, some studios have introduced virtual sets and augmented reality technologies, bringing news scenes from distant locations into the studio as three-dimensional models or dynamic simulations. Presenters can “stand inside” these virtual scenes and interact with them on screen, helping audiences grasp the spatial structure and development of events.

These explorations show that multimodal integration is not just a technical upgrade, but also a reconfiguration of the cognitive framework through which news is understood. Audiences connect with news content through multiple channels—vision, hearing and bodily perception—thereby forming deeper emotional engagement and value judgements. In this process, television news moves from single-camera narratives to integrated storytelling that combines data, images and interaction, and thus maintains a distinct advantage in an increasingly competitive media environment.

### 4 Building a Scenario-Centred Communication System

The concept of “scenario” first comes from discussions of spatial setting and contextual construction in theatre and film, and was later taken up in sociology and communication studies to describe how technology, media, behaviour and meaning are arranged together in specific time–space settings. With the spread of mobile devices, sensors and positioning systems, scenarios are no longer limited to physical places. They are becoming networks of contexts built through data connections and real-time sensing.<sup>[3]</sup> Some scholars have proposed a “five-force model of scenarios” made up of mobile terminals, social media, big data, sensors and positioning systems, arguing that the coupling of these elements drives the formation of a scenario-based media ecology.

Traditional television once held a central position in fixed scenarios such as the living room. Supported by a large screen and the habit of family co-viewing, it enjoyed strong control over this viewing environment. However, with the popularisation of mobile internet, fragmented attention and multi-screen use have become the norm, and the uniqueness and authority of the television set have been greatly weakened. To

maintain their influence in this new ecosystem, television news organisations must shift from channel logic and time-slot logic to scenario logic, and build multi-level mechanisms to reach users according to their needs and behavioural patterns in different contexts.

In fixed scenarios, the spread of smart TVs and internet-connected TVs provides a technical foundation for cross-screen collaboration. By synchronously pushing supplementary information, interactive polls or links to extended reading, live broadcasts on the large screen can be combined with personalised information flows on mobile devices. The main screen focuses on the core narrative and overall atmosphere, while the small screen carries detailed data, background information and user comments. This arrangement increases participation and immersion during viewing, and helps prevent viewers from completely switching to other platforms while watching television.

In mobile scenarios, time is highly fragmented and space is fluid. Users often browse short news items on their phones while commuting, queuing or waiting for brief periods. CNN's The Update on platforms such as Snapchat is an attempt to reshape content for such mobile contexts. The programme breaks complex news events into short, vertical video segments, each focusing on a single key point and organised in a card-style sequence. This structure fits users' attention rhythms and operating habits, and thus aligns closely with mobile use scenarios.

The BBC's mobile strategy goes further by emphasising sensing and responding to scenarios. The "My News" function in the BBC News app uses location-based services (LBS) and users' reading histories to generate a dynamic, personalised news feed<sup>[1]</sup>. When a user is in a particular city or region, the app gives priority to breaking news, transport updates or weather information related to that location, tightly linking news services with the user's immediate surroundings. At the same time, in consumption-related scenarios, some international news organisations are experimenting with tools for parameter comparison, extended reading and even external service entry points built into mobile interfaces. These functions can naturally extend users' information-seeking behaviour into decision-making and action, forming a relatively complete chain from information to decision around specific user needs.

Overall, building a scenario-centred communication system requires television news organisations to make systematic adjustments in organisational structures, technical architectures and content planning. On the one hand, they need to strengthen their ability to analyse user behaviour data; on the other, they must maintain the bottom line of public value and professional standards in their editorial choices. Practices by the BBC and CNN on mobile and app-based platforms show that scenario-based communication is not just a technical or operational issue<sup>[1]</sup>. Rather, it is a process of embedding news services deeply into users' everyday life flows, and is a key step in the shift of television news from mass communication to scenario-based services.

## 5 Conclusion

The transformation of television news in the converged media era is not simply a matter of adding new technologies to old frameworks. It is a comprehensive restructuring of production logic, presentation forms and communication systems. The practices of the BBC, CNN and others show that, first, mechanisms such as the UGC Hub, which bring user-generated content into professional editorial workflows, can improve the efficiency of news resource allocation and strengthen public agenda-setting while still upholding editorial responsibility. Second, multimodal data integration and visual storytelling tools like CNN's Magic Wall can help television news move beyond programme homogeneity and single, linear narratives, making complex issues easier to understand and enhancing audience participation and immersion. Third, by rebuilding communication networks around user scenarios, and by adopting differentiated strategies for fixed, mobile and consumption-related contexts, television news can move from mass communication towards scenario-based services, especially when combined with LBS and algorithmic recommendation for dynamic adaptation.

For other television news organisations, this implies that, in terms of content, they should promote open collaboration and cross-sector co-creation; in terms of form, they should actively adopt data visualisation, artificial intelligence and immersive technologies; and in terms of dissemination, they should integrate resources across multiple platforms, devices and channels to build flexible and resilient communication networks. Only in this way can they preserve public value and professional authority in an environment shaped by algorithms and traffic competition, and achieve a transition towards "new mainstream media."

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