

Mainstream Mobile Live Streaming: New Operations in Media Convergence Postprint

Authors: Liang Chujing, Lin Shu

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Abstract

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Mainstream Mobile Live Streaming: A New Approach to Media Convergence

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Mobile live streaming has experienced explosive growth, emerging as a new frontier in media convergence development. Unlike conventional live streaming platforms on mobile internet, traditional media organizations leverage their institutional advantages by selecting premium reporting subjects, deploying professional production teams, and utilizing high-definition signals transmitted through new media technologies such as mobile 4G backpacks to create sophisticated live streaming content products. Grounded in long-established journalistic credibility, these media outlets push their streams to mainstream live streaming platforms, a productization practice that has garnered widespread recognition from party committees, governments, and audiences alike.

On May 13, 2018, the 2018 Foshan Green Cycling Event attracted cycling enthusiasts from Foshan's five districts as well as from Guangzhou, Zhaoqing, Shenzhen, and Zhongshan to celebrate Foshan's ecological civilization achievements. Foshan Pearl River Media Big Data Technology Co., Ltd.—a converged media

platform invested in by Foshan Media Group—conducted comprehensive outdoor live broadcasting through its “Foshan Plus” platform. The 100-kilometer outdoor cycling event was captured using high-definition video live streaming technology, with the broadcast simultaneously pushed to dozens of major domestic live streaming channels, reaching 10 million online viewers.

1. Seamless Integration of Studio Systems and 4G Backpacks for High-Definition Live Streaming

The 2018 Foshan Green Cycling Event presented unique challenges as an outdoor activity spanning 100 kilometers, characterized by high speeds, long distances, and repetitive visual content. To ensure broadcast fluidity and viewability, the production team employed a NewTek studio system integrated with LiveU 4G backpack information collection systems, transmitting signals through a dedicated fixed IP line. In the broadcast studio, He Tao, director of the Foshan Plus platform, explained that this approach combined NewTek’s studio system with LiveU 4G backpacks, using NDI protocol for seamless live streaming integration—a technique first implemented domestically during the 2017 Foshan Green Cycling Event on August 12, 2017, where a 25-person team successfully delivered safe, high-definition, and smooth broadcast coverage.

For the 2018 event, this advanced live streaming method was continued to present captivating moments from the cycling route. Zhao Huiduan, technical coordinator for Foshan Plus, noted that the production established a remote studio with fixed IP lines, utilizing LiveU backpacks combined with fixed IP line transmission. The studio invited experienced cyclists, cycling coaches, professional athletes, and volunteers to provide professional commentary synchronized with live footage, achieving perfect audio-visual coordination. At the cycling site, four camera crews were deployed with four camera operators carrying LiveU backpacks and two accompanying journalists using LiveU mobile devices, transmitting six signal feeds back to the studio. Notably, LiveU represents the most stable broadcast-grade real-time video transmission system currently available on the market, requiring only a camera and SIM card binding for real-time video transmission without the need for broadcast vans, thus overcoming spatial and temporal limitations. The fixed IP line transmission further ensured broadcast stability and fluidity, maintaining high-definition visuals and stable playback throughout the three-hour live stream.

2. One-Time Collection, Multi-Format Production, and Multi-Channel Distribution

Content diffusion velocity largely depends on distribution channels, where channel breadth and authority directly impact communication efficiency. With increasingly numerous media distribution channels, content must be tailored to each platform’s positioning to establish discourse power. Beyond live streaming on Foshan Daily’s and Pearl River Times’ full media platforms, the event was simultaneously pushed to Xinhua News Agency’s Cloud Platform, NetEase Live,

and other online platforms, further expanding its influence. These platforms could confidently select content from the live streaming team precisely because the stream provider was a mainstream local media organization broadcasting positive-energy events.

The dispatch center within the live streaming team performed essential functions including centralized command, efficient coordination, editorial scheduling, and information communication, working in concert with outdoor live streaming personnel and the editorial reporting team. During the broadcast, video stream addresses were generated for one-click publishing to various new media platforms, enabling multi-platform distribution. Simultaneously, captured video information stored in cloud databases could be further processed for secondary publication, achieving one-time collection, multi-format production, and multi-channel distribution to maximize content utilization.

Platforms including People's Daily's "People's Live" platform, Toutiao, Tian Tian Kuai Bao, Nanhai News Network, Foshan Daily's high-definition video platform, Foshan Daily APP, and Foshan Daily's Weibo account conducted full video and graphic live coverage, attracting 3 million viewers. Guo Quanzhong, a senior economist at the National Academy of Governance's Social and Cultural Research Department, observed that "in the era of converged media, traditional media must leverage the advantages of various media forms to optimize communication effects." Despite successive regulatory policies on the live streaming industry, some anchors and platforms still resort to vulgar content to attract traffic. The lack of original, high-quality content remains a critical issue in the industry. Traditional media, with their excellent hosts, journalists, and behind-the-scenes teams producing large volumes of professionally crafted, high-quality video content daily, help address this content deficit. Concurrently, live streaming promotes innovative integration in traditional media, enhancing their influence and market service capabilities.

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

Source: ChinaXiv — Machine translation. Verify with original.