

Lian Jinbo: Constructing Modernized Data Centers to Promote Deep Media Convergence in the Post-Print Era

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Abstract

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Full Text

Preamble

Media Convergence Watch • Special Feature

Lian Jinbo: Building Modern Data Centers to Drive Deep Media Convergence

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We are living in an era of profound change, with billions of people accessing information through mobile devices and potentially hundreds of billions of intelligent connected devices on the horizon. From an IT perspective, the focus is shifting from traditional IT transformation—merely leveraging technology to reduce costs and improve efficiency—to true business transformation. This evolution requires addressing both immediate challenges and future needs. Currently, media organizations including newspapers, magazines, television stations, and radio broadcasters are employing modern technologies to transform their traditional IT architectures. Yet more importantly, they must prepare for the future by fundamentally transforming their business models, especially through digital transformation.

The first step is IT transformation: modernizing traditional IT through modern data centers, automated services, and transformed IT operations. Whereas IT staff previously played supportive maintenance roles, IT is becoming a primary driver of business innovation. The IT industry has undergone significant changes—for instance, the WeChat platform functions simultaneously as a social platform, media distribution channel, and transaction platform. Compared with traditional IT, the new landscape requires modern data infrastructure improvements, automated service delivery, and operational transformation.

Modern data center architectures currently follow five key technology trends: flash storage, cloud computing, scale-out architectures, software-defined infrastructure, and trust/security. In building converged media infrastructure, media organizations face numerous challenges. The construction of converged media cannot be technology-driven for its own sake. Under the broader trend of traditional media transforming toward converged media, how can IT effectively support both legacy systems and new internet media? How can technology evolve from virtualization, SOA/ESB, and EMB (Enterprise Media Bus) toward IaaS+PaaS+microservices cloud applications to accommodate industry-wide IT transformation? How can isolated systems be avoided? How should organizations select among numerous cloud services and technology offerings?

To address these challenges, EMC has established a cloud consulting team to help users map their entire business systems and build cloud architectures that support business development and innovation. In infrastructure construction, traditional approaches requiring separate purchases of network, server, storage, and software components proved complex and time-consuming. Consequently, hyper-converged and converged architectures have emerged, utilizing general-purpose hardware and software to offer greater convenience, particularly for virtualization and cloud deployment.

EMC's hyper-converged architecture features VxRail, a VMware-specific solution integrating EMC and VMware's hyper-converged products across storage, software, and computing. Developed in partnership with VMware, VxRail is built on mature hardware and software platforms with proven compatibility advantages. Standard configurations encompass cloud integration, data protection and disaster recovery, extended management, operations and maintenance, and virtualization management. As VMware's only certified hyper-converged partner product, VxRail offers continuous virtual machine data protection and disaster recovery, unified hardware and software upgrades, unified services, refined storage policy management, and QoS capabilities to meet diverse user requirements.

Additionally, EMC provides hybrid cloud solutions: an IaaS platform for transforming traditional IT infrastructure, and a Native Hybrid Cloud PaaS platform delivered directly to users. EMC's enterprise hybrid cloud product integrates hardware, software, and services for rapid delivery. Users can also customize their own systems using pre-defined scripts and templates that EMC has developed to enable rapid system deployment.

Looking ahead, EMC aims to help media organizations effectively address IT infrastructure challenges during the transformation from traditional to converged media. The vision is to build a unified infrastructure cloud serving all business levels while avoiding “cloud islands,” ultimately constructing the most robust cloud architecture for the media industry and beyond—namely, IaaS+PaaS, private cloud+public cloud, and commercial+open-source hybrid models.

(This content was edited and compiled by our journalist Chen Xuquan based on the keynote speech delivered by the guest at the China Federation of Journalism Technology Workers.)

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

Source: ChinaXiv — Machine translation. Verify with original.