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Implementation of three network convergence in China: A new institutional analysis

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A R T I C L E   I N F O

A B S T R A C T

Three network convergence, namely, the integration of telecommunications, broadcasting and Internet networks, is a state policy of China for promoting network convergence. Past studies undertaken on the development of Chinese information and communications technology industry adopt different approaches like bargaining, and input–output perspectives. This paper, instead, analyses the implementation of the convergence project from a new institutional perspective. It argues that that the two ministries for the telecommunications and broadcasting sectors, namely, the Ministry of Industry and Information Technology (MIIT) and State Administration of Radio, Films and Television (SARFT) had inertia to attain mutual penetration of networks. It also argues that the ideological disparities of MIIT and SARFT cause them to respond differently to the convergence project. In order to attain the policy goal, the Central Government had to impose a reform schedule from the top and take initiatives at local level to accelerate the policy implementation. It also argues that SARFT and MIIT had developed different patterns of collaboration at local level due to institutional and competitive pressures as well as political pressure from the Central Government.

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1. Introduction

The Chinese Government first adopted the policy of three network convergence, or tri-network integration, or triple play, namely, the integration of telecommunications, broadcasting and Internet networks, in its 10th Five-Year Plan that came out in 2001. This policy served diverse state goals, including the fulfillment of national strategic plan, advancement of communication industries, as well as developing new operational business models and modern consumer services (Triple Play Policy Report, 2011). The government was also desirous of reducing ministerial conflicts, enhancing collaboration and competition among different communications operators, promoting market restructuring and facilitating state transition to information economy (China Daily, 2011). However, the country made little progress in mutual penetration of the networks in the first decade of policy adoption (Guo, 2011, p. 39). It is not surprising because many top-down reforms in China ended up in formalism at the local level against bureaucracy from the top (Ke, 2008, p. 182).[1]

In January 2010, the country leaders resolved to speed up the progress and made three network convergence a priority policy (New China Net, 2010). In June 2010, China launched a pilot scheme of network integration in twelve selected test-cities. In early 2011, the State Council promulgated the decisions on speeding up the Nurturing and Development of New

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[1] Though this observation is based on a study on the implementation of curriculum policy in the Mainland, it is equally applicable to other reforms in China. The present sentence was a quotation made by a local educator.

Table 1
National networks that cover the whole country.
Source: Compiled by the authors.

Networks	Operators	Supervised by
1. Cable TV	Local/provincial TV stations	Local government (indirectly under SARFT)
2. Fixed telephone line	China Telecom and China Unicom	MIIT
3. Mobile telephone line	China Mobile and China Unicom	MIIT
4. Internet	Fixed and mobile telephone operators	MIIT

Industries with National Strategic Significance, which included three network convergence as one of seven industries with national strategic significance that the country would nurture in the next five years (Zhang, 2011). In 2012, China expanded the pilot scheme of network convergence into additional forty-two second-tier cities, signaling the growing scale of policy implementation (State Council, 2011). China is now aiming at full integration of the three networks by 2015. The ultimate goal of network integration is the provision of full interactive services (including multimedia, Internet and digital TV services) in all networks and the attainment of interconnection, mutual penetration and competition between different networks (State Council, 2010).

In China, three network convergence does not only involve upgrading and combining different networks. The country has to deal with inter-departmental conflicts between different stakeholders as well as rapid changes in the communications sectors (Kshetri, Palvia, & Dai, 2011; Fu & Mou, 2010). Structurally speaking, the telecommunications and Internet sectors are supervised by the Ministry of Industry and Information Technology (MIIT) while the broadcasting sector is regulated by the State Administration of Radio, Film and Television (SARFT). The convergence project covers three communications sectors, namely, telecommunications, broadcasting and Internet sectors. It also covers different national networks, namely, the cable, the fixed and mobile telephone line networks and Internet networks that provide television, telephony and Internet services, respectively (Table 1).

This article adopts new institutionalism (DiMaggio & Powell, 1991; Meyer & Rowan, 1991) as the theoretical framework to investigate two questions in the implementation of three network convergence. First, how has the role and relationship of the Central Government and the two ministries, namely, SARFT and MIIT, evolved at the national level? Second, how has the relationship between SARFT and MIIT evolved at the local level? This article argues that at the national level, the Central Government has to speed up network integration in designated test-cities because of the inertia of the two ministries to implement full network convergence. At the local level, different patterns of collaborations have developed between the two systems in different localities due to competitive and institutional pressures, including political pressure from the Central Government.

This article bases its analysis on industrial data, official documents and newspaper interviews of industry players. It is organized as follows. Section 2 provides a literature review, which sets out the theoretical background and highlights the gap in existing literature that this study attempt to bridge. Section 3 sets out the analytical framework for this research. Section 4 is the main part of this article, which analyses the policy implementation at national and local levels from a new institutional perspective. Section 5 evaluates the benchmark for assessing the achievements of the convergence project. The final Section 6 ends with conclusions and discussions.

2. Literature review

The past decade has witnessed a growth of studies on the development of the information and communication technology (ICT) sectors in China. In the early 2000s, academics researched on reform of the Chinese telecommunications sector before and after the Chinese accession to WTO (Zhang, 2001; Loo, 2004; Yu, Berg, & Guo, 2004). In recent years, the works of other scholars have contributed to our understanding of the ICT sector in China through different approaches and perspectives. For example, Xing, Hu, and Wu (2009) used a stakeholder analysis to examine the impact of the policies of SARFT on the countrys transition to digital TV, while Fu and Mou (2010) evaluated the 2008 restructuring from a bargaining perspective. Wan, Xuan, and Lv (2011) measured the convergence of the ICT industry by an input–out quantitative analysis, while Gao and Liu (2012) analysed the adoption of the TD-SCDMA standard through a co-evolution process. In contrast, Kshetri et al. (2011) examined the support of government to the development of domestic 3G standard from an institutional perspective. Likewise, Liu & Jayakar, 2012 compared the policy-making process in the telecommunications sector of China and India from an institutional perspective. Finally, Xia (2011, 2012) studied the institutional design for the Village Informatization Program, and the institutional environment for the emerging mobile 3G/4G industry, respectively.

As Lowndes (2010) pointed out, new institutionalism emphasizes rules, informal and dynamic conceptions of institutions; and treats institutions as embedded in their macro environments. It therefore provides a theoretical explanation different from the traditional institutional approach in its emphasis on the interaction between different organizations (Lowndes, 2010). What is more, new institutionalism was adopted by scholars to analyze the Peoples Commune, educational sector and economic re-organization in China (Liu, 2011; Ke, 2008; Ping, 2002). While institutional analysis in the abovementioned works on the ICT sector in China can also be regarded as belonging to new institutionalism,