

# The Adoption of E-Business by Organizations in China: An Institutional Perspective

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## **Abstract:**

The Chinese e-business industry has a number of unusual features. Institutional factors such as strong nationalism, the state's entrenchment in the economy, political cognitive and political normative factors, regulative uncertainty, the role of professional associations, and the importance of business and social networks are deeply reflected in China's e-business development pattern. We argue that by approaching the Chinese e-business industry from the standpoint of institutional theory, we can capture these complex factors facilitating and hindering China's rapidly growing e-business industry. We thus employ an institutional perspective to explain the Chinese e-business landscape. In addition to advancing research on e-business in China, this paper also highlights several directions for future inquiry and implications for managers and policymakers.

**Keywords:** China; e-business; institutions; legitimacy; guanxi; isomorphism

## **Article:**

### ***INTRODUCTION***

As the combination of an empire and a modern nation, today's China is 'unusual' (Terrill 2005). The Chinese e-business industry probably has more idiosyncratic features than most sectors of the Chinese economy. The effects of institutional factors, such as strong nationalism, the state's entrenchment in the economy, political cognitive and political normative factors, regulative uncertainty, the role of professional associations, and the importance of business and social networks, are deeply reflected in China's e-business development pattern.

The scale of e-business development in China is large enough to be noticed at the global level. China's online transactions are expected to reach US\$125 billion in 2006 (*Asia Pulse* 2006). A deeper and richer understanding of factors driving the Chinese e-business development pattern would help managers devise strategies to compete in the Chinese market. More to the point, such an understanding is also useful in identifying the right combination of ingredients in an e-business model that can help to gain legitimacy from the government, consumers and other powerful actors.

Despite a sizable and growing body of research devoted to the Chinese Internet industry, we lack a satisfactory explanation of the development pattern of the Chinese e-business landscape. While Internet control in China has been examined from various angles, it is not clear whether and how the Chinese government's Internet control may influence the e-business industry. The literature also lacks a satisfactory explanation of e-business-related companies' highly government-centric activities. Moreover, the effect of social and business networks on the adoption of e-business by organizations is not examined. These are only a few of the numerous institutional issues facing the Chinese e-business industry.

We argue that by approaching from the standpoint of institutional theory, we can capture complex factors facilitating and hindering the country's rapidly growing e-business industry. It is somewhat surprising that the literatures on institutions and Chinese e-business industry have not been brought together earlier. To fill the research void, this paper aims to provide an institutional framework to examine the adoption of e-business by

organizations in China. In addition to advancing research on e-business in China, this paper also highlights several directions for future inquiry and the implications for managers and policymakers.

Before proceeding, we offer some clarifying definitions. Following Jones *et al.* (2000), we define e-business as 'the carrying out of business activities that lead to an exchange of value, where the parties interact electronically, using network or telecommunications technologies'. E-business adoption is defined as the possession of requisite hardware and software in conducting e-business. Similarly, *guanxi* (see below), which is related to Confucianism, emphasizes group orientation leading to the replacement of formal organizational structure by interpersonal relations Coleman 1993, Putnam 1993, Walder 1986). Likewise, organizations' isomorphic responses are those that are consistent with regulatory, cognitive and normative institutions (Meyer and Rowan 1977, Powell and DiMaggio 1991) and those of other actors (George *et al.* 2006, 353).

In the remainder of the paper, we first briefly review the methodology. Next, we discuss the theoretical foundation. Then, some propositions on institutional processes affecting the Chinese e-business industry are presented. This is followed by a discussion. The final section comprises the conclusion and some implications.

## **METHODOLOGY**

Broadly speaking, the approach employed in this paper can be described as a positivistic epistemology. Given the minute amount of existing research on the adoption of e-business by organizations in developing countries, much initial research in this area needs to be qualitative, concept- and theory-building in character (Eisenhardt 1989). This paper thus takes a conceptual or a theory-building approach. It is not, however, the intention of this paper to come up with a full-blown integrative theory on institutional processes in the Chinese e-business industry. Being mainly based on qualitative information and early evidence related to e-business in China, our research is exploratory in nature. The unit of analysis is the organization.

In a positivist framework, a theory would consist of a set of propositions representing the relevant knowledge (Iles and Yolles 2002). Following the tradition of a positivist approach (Lin 1998), this paper thus seeks to identify details associated with Chinese institutions' impact on the adoption of e-business by organizations with a set of propositions. Implicit in this approach is the assumption that the propositions can be tested in order to improve the understanding of the institution-e-commerce nexus and the ability to make predictions (Huber *et al.* 2004, Iles and Yolles 2002).

It should be noted that propositions capture relationships between variables but do not themselves represent theory (Sutton and Staw 1995). We have provided reasoning and justification for each proposition, and this is the crucial part of the theory-development process (Webster and Watson 2002). Our reasoning and justification are based on how social norms, values and cognitions influence an organization's technology adoption behavior. The conceptual framework is a major building block of the theory-development process.

We have employed three main sources for our reasoning in developing propositions: theoretical explanations for 'whys' and 'hows' of e-business, past empirical findings, and practice or experience (Webster and Watson 2002). Among these, logical reasoning is the most important component of our explanations. It represents 'the theoretical glue that welds the model together' (Whetten 1989: 491).

We have also included past empirical research related to e-business and from related areas. Although evidence from related areas is relatively weak (Gay and Diehl 1992), such evidence provides an important perspective on the social and cultural contexts that affect the development of communications networks, of which the Internet is a subset. Next, the author's experiences in interacting with organizations and individuals, and evidence from literature dealing with e-commerce practitioners have also been used (Webster and Watson 2002).

## **THE INSTITUTION-TECHNOLOGY DIFFUSION NEXUS: THEORETICAL PERSPECTIVE**

Institutional processes appear to have enormous power to explain the Chinese e-business pattern. In this paper, we employ the institutional pillars proposed by Scott (1995, 2001) as an analytic tool. This approach allows us

to analyze the impacts of a wide range of factors on an organization's adoption of e-business as well as the width and depth of the adoption. Scott defines institutions as 'multifaceted systems incorporating symbolic systems - cognitive constructions and normative rules - regulative processes carried out through and shaping social behaviour' (1995: 33). He argues that a proper understanding of an organization requires decoding the social and cultural contexts creating the regulative, normative and cognitive infrastructures that 'constrain and support the operations of individual organizations' (1995: 151). Institutions can be described in terms of three pillars: regulative, normative and cognitive (Scott 1995, 2001).

### *Regulative pillar*

Regulative institutions consist of 'explicit regulative processes: rule setting, monitoring, and sanctioning activities' (Scott 1995: 35). Regulatory bodies (e.g., the Ministry of Information Technology) and existing laws and rules influencing an organization's e-business behavior fall under this pillar. These institutions focus on concerns of pragmatic legitimacy in managing the demands of regulators and governments (Kelman 1987). The state is arguably the most important external institutional actor and a powerful driver of institutional isomorphism, since a violation of law can entail harsh sanctions (Bresser and Millonig 2003).

### *Normative pillar*

Normative components introduce 'a prescriptive, evaluative, and obligatory dimension into social life' (Scott 1995: 37) and help us understand how 'values and normative frameworks structure choice' (38). To be successful, practices should be consistent with the value systems of the national cultures (Schneider 1999). Normative institutions are concerned with procedural legitimacy and require e-commerce providers and online shoppers to embrace socially accepted norms and behaviors (Selznick 1984). Elements of normative institutions also include trade associations or professional associations that can use social obligation to induce certain behavior within the e-business industry.

### *Cognitive pillar*

Scott (1995: 40) suggests that 'cognitive elements constitute the nature of reality and the frames through which meaning is made'. Although all components of institutions are intertwined with culture (Neale 1994: 404), cognitive institutions are arguably the most closely associated with culture (Jepperson 1991). Cognitive legitimacy concerns are based on subconsciously accepted rules and customs as well as some taken-for-granted cultural account of the use of technology (Berger and Luckmann 1967). Compliance in the case of cognitive legitimacy concerns is due to habits (Grewal and Dharwadkar 2002). Internet users and online sellers may not even be aware that they are complying.

### *Nature of and relationship between the three pillars*

It is worth noting that an institutional pillar both reflects and determines the nature of the other pillars (Hayek 1979). There are thus often difficulties in isolating them in the real world. North (1996: 344) defines institutions as 'formal constraints (rules, laws, constitutions), informal constraints (norms of behaviour, conventions, and self-imposed codes of conduct), and their enforcement characteristics', and observes that informal rules provide legitimacy to formal rules (North 1994). Likewise, Axelrod (1997: 61) comments on the relationship between regulative and normative institutions:

Social norms and laws are often mutually supporting. This is true because social norms can become formalized into laws and because laws provide external validation of norms.

Of these three pillars, normative and cognitive components are more likely to explain inter-organizational differences, as regulative influences are likely to apply uniformly in a given industry (Miller 1996: 287). For instance, the government's Internet control and regulative uncertainty affect all organizations more or less equally.

E-business organizations, however, differ on normative and cognitive institutions. For instance, organizations may have different approaches to ethical decision-making in their interactions with other businesses and the

government (Whitcomb *et al.* 1998). For instance, while Yahoo complied with the Internet Society of China's (ISC) code of conduct on self-censorship, Google and Altavista did not. Likewise, organizations differ in terms of their attitude to guanxi networks and the necessity to enhance Chineseness in their e-business models.

## INSTITUTIONAL PROCESSES AND CHINESE E-BUSINESS INDUSTRY: SOME HYPOTHESES

In Table 1, we present various constructs used in this paper and mechanisms associated with their impact on the adoption by organizations of e-business.

**Table 1. Constructs used in the hypotheses and their impacts on organizations' e-business patterns**

Construct	Mechanisms	Remarks
Government control	<ul style="list-style-type: none"> <li>○Hinders effective use of the Internet, leads to higher cost, and acts as a barrier to consumers' Internet adoption</li> </ul>	
Regulative uncertainty	<ul style="list-style-type: none"> <li>○Difficulties associated with enforcing contracts lead to consumers and businesses being unwilling to engage in e-business activities</li> </ul>	
Chinese professional associations	<ul style="list-style-type: none"> <li>○Influences e-business companies to serve government's interest more than consumers'</li> </ul>	
Social networks	<ul style="list-style-type: none"> <li>○Importance of social dimension in business reduces a company's propensity to adopt e-commerce</li> <li>○A strong guanxi compensates for risks associated with legal uncertainty</li> </ul>	
Chineseness in e-commerce products and technology	<ul style="list-style-type: none"> <li>○High degree of nationalism and distrust of 'out-groups' results in Chinese consumers' bias for products and technologies characterized by Chineseness</li> </ul>	Preference for Chinese language, and domestic companies, technologies, and technology standards
Political cognitive and political normative factors	<ul style="list-style-type: none"> <li>○Political elite's negative cognitive assessment of foreign technologies, principle of self-reliance, and desire to represent Chineseness in ICTs may lead to preference for Chinese technologies and technological standards in the Chinese e-business industry</li> </ul>	

### *Government control*

China's state strategies with regard to information and communications technologies (ICTs) have been to balance economic modernization and political control (Kalathil 2003). The Internet, 'the greatest democratizer' (Pitroda 1993), has posed a severe threat to authoritarian regimes. According to Reporters without Borders, 'China was one of the first countries to realize it couldn't do without the Internet and so it had to be brought under control' (McLaughlin 2005). Arguably, Beijing focused its attention on the Internet before other developing countries to maintain control (Press *et al.* 1999, Yang 2001, Zhang 2001).

Although the government actively monitors and controls politically objectionable contents on the Internet (McLaughlin 2005), it has a more relaxed approach to culturally sensitive materials. Popular portals, for instance, feature topics ranging from pollution to homosexuality (Kalathil 2003). As noted above, although the state policy has been to encourage ICT use in economic modernization (Press *et al.* 1999, Yang 2001, Zhang 2001), some government officials have expressed negative views on even economic uses of the Internet. For example, an official of the Zhejiang provincial government commented that Internet advertisements contain 'distorted, misleading and even illegal information' and have 'greatly endangered customers' interests' (Chinese Education and Research Network 2001).

Although the government's role in shaping Internet usage in China is admittedly simplistic, and previous studies have extended our understanding of this phenomenon, what is not clear is how such controls influence the e-business industry. Here is why government control affects organizations' e-business adoption. First, portals and search engines have to undergo self-censorship, and some are banned. A Web portal attracts visitors and satisfies their information needs, in the process presenting advertising banners to them (Adar and Huberman [2000](#)). If a portal does not have contents useful to consumers, it will have limited ability to attract visitors and those visiting the portal will spend less time. Organizations' ability to use the Internet in advertising is thus hampered by the government's control.

Second, there are reports that the government targets individual websites. According to the Berkeley China Internet Project, the government hides websites containing words or phrases such as 'freedom', 'democracy', 'China-liberal', and 'falun' (Foushee [2006](#)). Similarly, the Chinese government reportedly sends a virus to attack banned sites (Guillén and Suárez [2005](#)). These actions hinder the adoption of e-business by targeted organizations.

Third, government control increases e-business-related costs. For instance, private websites are required to hire censors such as 'cleaning ladies' or 'big mamas' to filter and quickly remove offensive material from bulletin boards and chat rooms (Kalathil [2003](#)). Chinese Internet cafes are required to install software that prevents access to up to 500,000 banned sites (BBC News [2002](#)). In addition to monetary costs, there are psychological and time costs. For instance, a new rule announced in mid-2005 requires all websites to be registered (Magnier and Menn [2005](#)).

Fourth, some government measures influence organizations' adoption of e-business indirectly by acting as barriers to consumers' Internet use. For instance, the government closed 150,000 unlicensed Internet cafes in 2002 (BBC News [2002](#)). A large proportion of Chinese access the Internet from such cafes. A slow Internet adoption rate among Chinese consumers results in less e-business adoption by organizations. From this discussion, the following proposition is presented:

*H<sub>1</sub>: Government control is negatively related to the adoption of e-business by Chinese organizations.*

### ***Regulative uncertainty***

An even stronger barrier to organizations' adoption of e-business in China is perhaps the lack of clear policies (Asia Pulse [2006](#)). Pointing out problems faced by organizations because of the lack of specificity, a business group asked the Chinese government to issue clearer regulations (Kalathil [2003](#)).

Indeed, in China, 'the law is marginalized and the legal system relegated to a lowly position in a spectrum of meditative mechanisms, while at the same time available for manipulation by powerful sectors within the state and the society at large' (Myers [1996](#): 188). This is even more so for e-business-related laws. As of 1999, there was no national legislation addressing the topic of online contracts (Aldrich [1999](#)). Authoritarian regimes, in general, are slow to enact laws to recognize digital and electronic signatures (DES). Encryption software, which is an essential component of DES, allows messages to be sent confidentially, making it difficult, or even impossible, for governments to detect politically and culturally objectionable contents transmitted on the Internet (Kshetri and Dholakia [2001](#)).

A study indicated that the lack of legal protection of consumers and sellers for faulty products and negligent payments, respectively, has hindered use of the Internet by business and consumers as a transaction medium in China (Gibbs *et al.* [2003](#)). Another study showed that 'transactional and institutional [dis]trust' resulting from weak rule of law was a major impediment to e-commerce in China (Efendioglu and Yip [2004](#)). Therefore, it is proposed:

*H<sub>2</sub>: Regulative uncertainty is negatively related to the adoption of e-business by Chinese organizations.*



### *Chinese professional associations*

Savan (1989) defines 'the professions' as groups that apply 'special knowledge in the service of a client' (179). A profession is also self-regulated by a code of ethics (Claypool *et al.* 1990, Cohen and Pant 1991) and is characterized by its role as a moral community (Camenisch 1983). The codes require members to maintain higher standards of conduct than required by law (Backoff and Martin 1991), help make professional norms visible (Frankel 1989), and act as a vehicle to assure the public and clients that members are competent, have integrity, and maintain and enforce high standards (Ward *et al.* 1993). Apart from convincing external parties of the integrity of the profession, codes play an important role in forcing members to question their values (Meyer 1987).

Chinese professional associations affecting e-business are more government-centric and less consumer-centric than in the West. Among the many examples of professional associations that illustrate such activities, one is particularly telling: the government-backed Internet Society of China (ISC). The ISC was formed in May 2001 with more than 130 members and is sponsored by network access carriers, ISPs, facility manufacturers and research institutes.<sup>1</sup> The ISC asked Internet companies to sign a voluntary pledge on 'self-discipline for China's Internet industry' that commits them to investigate and block websites that have politically and culturally sensitive contents. In March 2002, the ISC distributed the pledge signed by owners of over 120 Internet portals (Stout 2002). The pledge commits signatories not to disseminate information 'that might threaten state security or social stability' (*The Economist* 2002). On a more prosaic plane, consider the following recent statement from Hu Qiheng, chair of the ISC: 'It may not be popular everywhere to say this, but I think it is important for the government to monitor and police the Internet' (Crampton 2006).

At a conference in Hangzhou, executives of China's search engines and Web portals argued that they need to monitor contents and remove those objectionable to the government (McLaughlin 2005). Among foreign affiliates, this aspect is especially evident in Yahoo's Chinese website, which chooses major headlines from government-owned newspapers, since most foreign sources of news about China are banned (Yee 2001). A search on Yahoo! in simplified Chinese for Falun Gong, for instance, found only one website, and that was the site of an anti-Falun Gong group, together with more than 180 news items from the official media (*The Economist* 2002). In 2005, Yahoo reportedly provided private e-mail information to the government, leading to the imprisonment of a Chinese journalist (McLaughlin 2005). Yahoo chief Jerry Yang said that he had to comply in order to do business in China (McLaughlin 2005). This and other cases suggest that, as a measure of 'strategic isomorphism' (Deephouse 1996), many foreign companies are undertaking government-centric activities.

Portals and search engines not following the pledge, such as Google and Altavista, were blocked in China in 2002 (Singer 2002). Subsequently, however, Chinese authorities have won agreements from technology companies, including Google and Microsoft, to filter and screen out sensitive words (French 2006). For instance, in China, Microsoft blocks bloggers from posting politically objectionable words, and Google shuts down when a user looks for sensitive words (McLaughlin 2005).

The above discussion makes it clear that the ISC's activities differ drastically from e-business-related professional associations in the West. For instance, the UK Mobile Marketing Association issued a code of conduct in December 2003, specifying the time of day mobile marketers can target consumers (Precision Marketing 2003). Likewise, in the USA, in early 2001, technology industry lobbyists and consumer and civil liberties activists, including the American Civil Library Association, Electronic Privacy Information Centre, and Consumer Federation of America, circulated a letter to members of Congress and the president calling for stronger privacy rules (Benson and Simpson 2001). While these activities are designed to protect consumer privacy, the ISC's actions have promoted the government's interest. For instance, Hu Qiheng, chair of the ISC, included among Internet crime 'acts counter to the interests of the Chinese government' (Crampton 2006).

At least three factors contribute to professional associations' engagement in government-centric activities. First, the state's deep entrenchment in the economy means that the government plays a critical role (Pei 2006). For

instance, according to UBS, the state accounts for at least 70% of the Chinese economy, compared to less than 7% in India (Pei [2006](#)). As of 2001, in 70% of large- and medium-sized 'corporatized' enterprises, communist party members were on the board of directors (Pei [2006](#)). The country's ISPs are controlled by state-run companies (McLaughlin [2005](#)).

Second, to succeed in China, e-business organizations need to accommodate civil servants and high-ranking government officials (Einhorn et al. [2000](#), Sikorski and Menkhoff 1999). It is important to note that most Internet regulations are guidelines only and do not represent formal laws (Shie [2004](#)). The regulatory vacuum thus makes it important to have good relationships with government officials. For organizations involved in e-business, it is thus important to consider the government's interests.

Third, in China, the concepts of customer service and privacy, which are the focus of most Western e-business-related professional associations, are not well developed. Terrill ([2005](#)) goes even further, arguing that '[b]ecause China remains an authoritarian state, we cannot know what the Chinese people want'. Organizations involved in e-business in China thus face little or no pressure related to customer services and privacy. In line with these arguments, the following proposition is presented:

*H<sub>3</sub>: Compared to the West, professional associations related to e-commerce in China are relatively more likely to serve the government's interests than the consumers'.*

### ***Social and business networks***

As researchers such as Myers ([1996](#)) and McIllwain ([1999](#)) make clear, there are fundamental differences in how Westerners and Chinese view relational ties and social networks. Perhaps the most notable feature of social networks in China is the concept of social capital in the form of guanxi, which is related to generalized reciprocity or 'mutual trust and commitment among interrelated actors that are independent of any specific transaction' (Sandefur and Laumann [1998](#): 491). In Confucianism, business relationships are not simply economic but also have social dimensions (Hofstede and Bond [1988](#), Putnam [2000](#), Romar [2004](#)). This is different from the West, where people form 'transactional bonds to obtain transactional benefits' (Myers [1996](#)).

Since most e-commerce transactions 'attempt to substitute for social information' (Steinfeld [2002](#): 8) and threaten to undermine the established interpersonal networks (Gibbs *et al.* [2003](#)), the importance of the social aspect in trading (Driedonks *et al.* [2005](#)), precedence of established relationships such as guanxi (McKinsey [2001](#)), and preference for face-to-face communications tend to hinder organizations' adoption of e-business (Moodley and Morris [2004](#)). A study found that for countries with lower uncertainty avoidance, collectivism is negatively related to Internet shopping (Lim *et al.* [2004](#)). Moreover, people rely on direct sources of information in collectivist societies, and information flow through the Internet tends to weaken the traditional forms of relationships (Dunfee and Warren [2001](#)). The above leads to the following proposition:

*H<sub>4</sub>: The social dimension in business relationships reduces organizations' propensity to adopt e-business in China.*

At the organizational level, however, the strength of guanxi is a key determinant of business success. Guanxi arguably provides 'access to resources, which are controlled by powerful elites, who can arbitrarily allocate them' (Myers [1996](#): 185). The regulative uncertainty further increases the importance of guanxi. In the West, '[t]he subject of an agreement and the content of an obligation are delimited by a state sponsored value system and a breach is enforced by reference to a state maintained mechanism extrinsic to the parties' (Myers [1996](#)). On the contrary, in China, the terms are informal and the subject of agreement is constrained by the parties' intrinsic value system (McIllwain [1999](#)).

How does a strong guanxi help in the Chinese cyber-world? We discussed above how Internet control affects organizations' adoption of e-business. It is well known among regulators and businesses that Internet control rules are not always enforced (Kalathil [2003](#)). To take one example, while other Chinese-based search engines

faced a government crackdown in 2001, Baidu, thanks to its strong guanxi, did not have any problem (Hachigian [2001](#)). In the Chinese digital world, a strong guanxi is thus a critical resource (Peng and Luo [2000](#)) in acquiring legitimacy (Ahlstrom and Bruton [2001](#), Suchman [1995](#)) and minimizing legal uncertainties (Lo and Everett [2001](#)). Organizations involved in e-business have realized the importance of maintaining good relations with civil servants and officials as well as with members of the local power elites (Kalathil [2003](#), Einhorn et al. [2000](#), Sikorski and Menkhoff 1999).

Foreign companies have realized that guanxi building can protect them in 'a gray legal environment' (Lo and Everett [2001](#)). Local or regional business partners and other prominent tycoons (Einhorn et al. [2000](#), Sikorski and Menkhoff 1999) are important components of foreign companies' guanxi in China. It is important to note that Chinese partners are likely to have intimate contacts and connections with critical government officials (Osland and Cavusgil [1996](#)). Moreover, the Chinese, including many government officials, have a tendency to distrust 'out-groups' and are more trusting of Chinese representatives (Fukuyama [1995](#), Osland and Cavusgil [1996](#)). Most successful foreign companies have good guanxi (e.g., AOL's stake in Chinadotcom; CMGI and Intel's collaboration with Pacific Century CyberWorks (ComputerWeekly.com [2001](#), Einhorn and Yang [2000](#)). The discussion in this paragraph may be summarized in the following proposition:

*H<sub>5</sub>: For a given level of e-business adoption in China, an organization's strength of guanxi is positively related to its e-business performance.*

### ***Chineseness in e-business-related products and technology***

Past research has found that Chineseness in e-business-related products and technologies co-varies positively with Chinese consumers' likelihood of doing business with a company. A *McKinsey Quarterly* ([2006](#)) article notes: 'Consumers in China ... have strong national pride, so multinational companies could lose important segments by seeming too foreign.'

Now, consider the digital world. In 2000, 78% of Chinese Internet users viewed Chinese language information and 71% viewed domestic information (CNNIC [2001](#)). A similar study conducted on Indian Internet users indicated that only 41% of online Indians prefer Indian language websites (Barnwal [2006](#)). Another survey found that, in 2001, nine of the 10 most popular sites for Chinese surfers were China-based (Hormats [2001](#)). Chinese-language content on the Internet has been a major factor contributing to a rapid growth of overseas Chinese visiting Chinese language websites (Hormats [2001](#)). Moreover, Chinese customers associate an organization with a .CN (.CN is China's Internet address) address with a higher level of commitment and seriousness to do business in China (Tindal [2003](#)). Moreover, a software-based translation program tends to have a higher error rate for Chinese than other languages (Tindal [2003](#)). Companies outside China are increasingly realizing the importance of having locally built services for success in China (Secured Lender [2004](#)).

Many studies have shown that consumers have some degree of bias for domestic products. Although many factors may affect such dynamics, and Balabanis *et al.* ([2001](#)) point to some of them, mechanisms associated with Chinese consumers' bias for Chinese products in the digital world are mostly left unexamined. An exception is Zhou and Hui's ([2003](#)) study, which found that the 'symbolic benefits' associated with products offered by Chinese companies, rather than improved quality, were the primary motivational forces behind Chinese consumers' shift to local products.

Nationalism and patriotism appear to be important triggers for Chinese consumers' bias for e-commerce products characterized by a high degree of Chineseness. Attachment to one's nation leads to actions 'which are disinterested or self-sacrificing' (Salmon [1995](#): 296), and the effects of patriotism are highly visible among the Chinese. Researchers offer an intriguing argument as to why the Chinese display a very high degree of nationalism. The Communist Party arguably bolsters its legitimacy (Elliott [2006](#)) through 'intensive inculcation of nationalism via the Chinese press and education system' (Kurlantzick [2005](#)), thus invoking a deep sense of 'Chineseness' among citizens (Barme [1999](#), Hansen [1999](#), Ong [1997](#)). Regarding the formative dynamics of



Chineseness, Sautman (2001) has documented how China has adapted a body of complex scholarship to achieve this goal. In a review of literature, Sautman (2001) concludes: 'Nowhere is this more pronounced than in China, where these disciplines [archeology and paleoanthropology<sup>2</sup>] provide the conceptual warp and woof of China's "racial" nationalism.'

The Chinese Communist Party, however, does not have complete control over nationalism. With the emergence of ICTs, popular nationalists in China are increasingly acting independently of the state (Gries 2005). For instance, in September 1999, after the bombing of the Chinese Embassy in Belgrade, and after the collision of a US surveillance plane and a Chinese fighter in 2001, many private websites were flooded with extremely nationalistic posts (Kalathil 2003).

Up to this point, we have concentrated on the roles of nationalism and patriotism in affecting Chinese consumers' bias for products characterized by a high degree of Chineseness. Local brands also enjoy a higher degree of consumer trust than foreign ones (Schuiling and Kapferer 2004), and such a tendency is higher in China than in many other countries. Theorists and empiricists have found evidence that China is a low-trust society characterized by a tendency to distrust 'out-group' people and trust only 'in-group' people (Fukuyama 1995). In the e-business world, such a tendency produces further bias against foreign products. Thus, we propose:

*H<sub>6</sub>: The degree of Chineseness of an organization's e-business technology and products is positively related to the organization's e-business performance.*

## **POLITICAL COGNITIVE AND POLITICAL NORMATIVE FACTORS**

Mental maps of political elites or 'persons who by virtue of their institutional positions have a high potential to influence national policy making' (Moore 1979: 674) determine a nation's technological landscape. Political elites include legislators, governmental officials, political party officials, leaders of various interest groups, military leaders, etc. Chinese leaders suspect that the country is under cyber-attack by the USA. There has been a deep-rooted perception among Chinese policymakers that Microsoft and the US government spy on Chinese computer users through secret 'backdoors' in Microsoft products. Computer hardware and software imported from the USA and its allies are subject to detailed inspection. Chinese technicians either uninstall or closely monitor such spying software if Western experts install it (Adams 2001). Several years ago, Chinese cryptographers reportedly found a 'NSA key' in Microsoft products, 'NSA' being taken to be the US National Security Agency. The key allegedly provided the US government with backdoor access to Microsoft Windows 95, 98, NT4, and 2000. Although Microsoft denied such allegations and even issued a patch to fix the problem, the Chinese government is not convinced.

An article published in *China Economic Times* (12 June 2000) discussed three categories under which Xu Guanhua, then China's vice minister of science and technology, thought high-tech products affect national security - military security, economic security, and cultural security. Regarding military security, Guanhua forcefully argued that developed countries have used many high-tech weapons in actual battles, and he discussed the likelihood of ICT-exporting countries installing software for 'coercing, attacking or sabotage'. Thus, the political elite's negative cognitive assessment of foreign technologies may lead to the preference for domestic hardware and software in the Chinese e-business industry.

Political normative factors, such as the principle of national self-reliance and the desire for the representation of Chineseness in ICTs, also favor the use of Chinese hardware and software in the Chinese e-business industry. One of the major motivations behind technology policies and technological standard-setting for regulatory bodies is to achieve national goals such as the protection of, and the domestic employment and maintenance of, defense capabilities (David and Steinmueller 1990: 29). Governments tend to use technological standards as instruments to promote such objectives even if they are in conflict with securing a Pareto-optimal<sup>3</sup> outcome at the global level (Bar and Borus 1987). In China, foreign technology imports and the outflow of royalties have been a focus of concern (Einhorn 2004). A high level of advocacy for national self-reliance and domestic

development of technology exists among Chinese policymakers, researchers, scientists and military leaders (Simon [2001](#)).

Moreover, in the Chinese policy landscape, there has been a strongly expressed desire for the representation of Chineseness in ICTs. There is the matter of national pride in having domestically developed technological standards and setting standards for the world. China's past attempts to set standards for the world have been unsuccessful. Since the 1980s, China made several attempts to develop a Chinese computer operating system, but failed because of the rapid movement of the global software industry (Goad and Holland [2000](#)).<sup>4</sup> The Chinese are working very hard to create Chinese standards in many e-business ingredients such as computer operating systems, audio-video compression and third-generation (3G) data standards (ZDNet Asia [2003](#)). Thus:

*H<sub>7</sub>: Political cognitive and political normative factors are likely to lead to a preference for domestic technologies in the Chinese e-business industry.*

## DISCUSSION

The foregoing discussion provides a framework for understanding institutional processes affecting the Chinese e-business industry. The findings are broadly consistent with existing theories on the institution-technology diffusion nexus. Nonetheless, this article has revealed unique mechanisms associated with Chinese institutions in shaping the country's e-business landscape.

Especially, the regulative pillar's influence on other two pillars is more salient in China than in many other countries. According to a report from Reporters without Borders, Internet control in China is done through 'a clever mix of investment, technology and diplomacy' (McLaughlin [2005](#)). The government-backed ISC is an example of such a diplomacy game. Moreover, the regulative uncertainty has increased the importance of guanxi as well as the importance of complying with codes of conduct issued by the ISC. The bottom-line message is that the regulative uncertainty has a strong influence on degrees of legitimacy associated with other institutional components.

The evidence provided in this article indicates that the practices of organizations sometimes are non-isomorphic with respect to institutions. For instance, the actions of Google and AltaVista before 2002 were non-isomorphic with respect to Chinese normative institutions. Similarly, the practices of Google, Microsoft, Yahoo and many foreign affiliates in China are non-isomorphic with respect to institutions in their home countries. Early works of institutionalists indicated that organizational structure and practices tend to be isomorphic, that is, consistent with regulatory, cognitive, and normative institutions (Meyer and Rowan [1977](#), Powell and DiMaggio [1991](#)) and those of other actors (George *et al.* [2006](#): 353). Subsequent theoretical and empirical evidence suggested that organizations do not always engage in predictable and isomorphic actions (George *et al.* [2006](#), Hoffman [1999](#)). They often face pressures for non-isomorphic responses that 'involve departure from established structures, practices, and utterances of other actors in the environment' (George *et al.* [2006](#): 353).

Here is why organizations sometimes respond non-isomorphically. Like other organizational fields, e-business activities can be viewed as 'arenas of power relations' (Brint and Karabel [1991](#): 355) in which various players engage in institutional war (Hoffman [1999](#), White 1992). Although organizational isomorphism is positively related to legitimacy (Deephouse [1996](#)), when an organization is seeking to acquire legitimacy from multiple sources with conflicting demands, its responses are likely to be non-isomorphic with respect to some of the sources. The degree of isomorphism or non-isomorphism of a response is a function of organizational perception of gain or loss of control and/or resources associated with the response (George *et al.* [2006](#)). To gain access to the \$125 billion Chinese e-commerce market, Western organizations are willing to take actions that are non-isomorphic with respect to their home country institutions.

Various components of institutions, despite their connotation of persistence (Parto [2005](#)), durability (Hodgson [2003](#)), and stability (Scott [2001](#): 48), are subject to change in evolutionary time (Parto [2005](#)). Zucker ([1988](#): 26)

draws an analogy from physics to describe institutional change mechanisms. He argues that institutions continuously undergo change due to entropy, the tendency toward disorder or disorganization (26). An implication of the entropy-like characteristics is that people can modify and reproduce (Scott [2001](#)) institutions. Some signs of institutional changes likely to affect the Chinese e-business industry have begun to appear.

One important institutional change is the decreasing importance of guanxi. Some analysts argue that modernization of institutions is likely to make guanxi less important (Ahlstrom *et al.* [2005](#), Guthrie [1998](#), Herrmann-Pillath [2006](#)). Recall that regulative uncertainty increased the importance of guanxi in China. Some organizations engage in guanxi because resources are controlled by powerful actors who can 'arbitrarily allocate them' (Myers [1996](#): 185). In recent years, however, China has devoted more resources and has taken other measures to strengthen the country's rule of law (Weidenbaum [2006](#)). Currently there are an estimated 120,000 certified lawyers and over 300 law schools in China, compared to fewer than 2,000 lawyers and two law schools in 1979 (Weidenbaum [2006](#)). Consequently, doing business in China is becoming more and more predictable (Carney [1999](#)). This trend is making guanxi less significant.

The diffusion of Western-style business practices among Chinese organizations is also weakening the significance of guanxi. For instance, Chinese organizations are rapidly adopting practices such as performance-based pay and results-oriented reporting (Weidenbaum [2006](#)). This means that one would expect the importance of personal relationships in workplaces to decrease. Indeed, in recent years, an ever-increasing proportion of employees in Chinese companies are changing jobs (Dunfee and Warren [2001](#), *The Economist* 2005, Knight Ridder [2005](#), Tsang [1998](#)). Organizations' and individuals' increasing dependence on formal institutions, on the other hand, is likely to further strengthen such institutions. More to the point, with the decreasing significance of guanxi, regulative institutions are likely to play more important roles in shaping the Chinese e-business landscape.

Changes can also be expected in other institutional components. For instance, China's commitment to free markets, globalization of its companies, and increasing integration in the global economy may erode the perceived legitimacy of Internet control. Likewise, the Chinese government may face pressure to address issues related to regulative uncertainty.

## **IMPLICATIONS AND CONCLUSION**

Clearly, there is much to be learned about the Chinese e-business industry. An important area of future research will be in-depth case studies of the e-business journeys of selected companies in the Chinese market from the standpoint of institutions. Such studies provide important insights into the mechanisms employed by these companies to acquire regulative, cognitive and normative legitimacy.

The analysis presented in this paper indicates a salient influence of the regulative pillar on other two pillars in the Chinese e-business industry. More to the point, regulative uncertainty in the Chinese e-business industry might have led to e-business companies' compliance with codes of conduct set by the ISC and involvement in building and maintaining their guanxi network. In this regard, another fruitful avenue would be to employ survey research to assess the role of regulative uncertainty in organizations' decisions regarding compliance/non-compliance with codes related to self-censorship and engagement in guanxi activities.

In future, scholars also need to conduct research on the importance of Chineseness in the Chinese digital world. Surveys can be administered to understand the emphasis placed by Chinese consumers on Chineseness in e-commerce-related technologies and products.

We also encourage researchers to compare Chinese consumers with those from other countries in terms of the institutional processes discussed above. For instance, how do Chinese and Indians differ in their respective orientation toward Chineseness and Indianness in the digital world?

Another area of exploration is to investigate factors that influence Chinese consumers' perception of Chineseness in a foreign company's e-business model. Surveys can be used to identify and rank factors such as Chinese domain names, Chinese language websites, joint ventures with Chinese partners, and strength of guanxi.

In addition to these research implications for further extending e-business theory in the Chinese context, our theory also contains some practical implications. First, a company's success in the Chinese e-business market is a function of its ability to integrate Chineseness in e-business technologies and products. Some ingredients that can be used to enhance Chineseness in an e-business model designed for the Chinese market include Chinese domain names, Chinese language websites, and forming joint venture with Chinese companies.

Second, the discussion above indicates that the strength of guanxi networks is positively related to a company's e-business performance. For foreign companies to succeed in China, it is thus important to form guanxi networks, especially given the uncertain Chinese regulatory environment.

Third, as noted above, while actions taken by foreign companies to gain legitimacy in China are isomorphic with respect to some Chinese institutions, they are non-isomorphic with respect to other powerful institutions and constituencies, especially in their home countries. For instance, Amnesty International has accused USA-based Internet companies such as Google, Microsoft and Yahoo of violating the Universal Declaration of Human Rights in their agreement with the Chinese government to censor Internet use in China (US Fed News Service [2006](#)). Thus, the government-centric activities of Western technology companies in China may lead to a possible consumer backlash against these companies and even legal sanctions in their home country. As noted earlier, the appropriate level of isomorphism/non-isomorphism with respect to a given institution is a function of the resources associated with, and the importance of maintaining control over, the institution.

Finally, since Chinese technology companies are rapidly expanding their businesses in other developing countries (McLaughlin [2005](#)), the Chinese e-business industry is also likely to play an important role in shaping the rapidly growing e-business industry of the developing world. A clearer understanding of institutional processes in the Chinese e-business industry is thus important to devise strategies to compete in other developing countries' e-business markets.

#### Notes:

1. At present, there are more than 150 members, most of which are organizations (<http://www.isc.org.cn/English/>).
2. Archeology is the study of ancient societies and cultures. Paleoanthropology is the study of the human fossil record.
3. A feasible allocation is said to be Pareto optimal if there exists no other feasible allocations that make at least one person better off without making any individual worse off.
4. China's attempt in the mid-1990s to introduce its CD standard, Super Video CD, to the world also faced foreign market resistance as well as a lack of strong consumer support within the country.

#### References

1. Adams, J. (2001) Virtual Defense. *Foreign Affairs* 80:(3) , pp. 98-112.
2. Adar, E. and Huberman, B. A. (2000) The Economics of Surfing. *Quarterly Journal of Electronic Commerce* 1:(2) , pp. 203-214.
3. Ahlstrom, D. and Bruton, G. D. (2001) Learning from Successful Local Private Firms in China: Establishing Legitimacy. *Academy of Management Executive* 15:(4) , pp. 72-83.
4. Ahlstrom, D. , Foley, S. , Young, M. N. and Chan, E. S. (2005) Human Resource Strategies in Post-WTO China. *Thunderbird International Business Review* 47:(3) , pp. 263-285.
5. Aldrich M. 1999. E-com Legal Guide: China, Baker & McKenzie, Hong Kong. online at: <http://www.bakerinfo.com/apec/chinaapec.htm> [accessed 11 December 2006]
6. Asia Pulse (2006) China's Online Transactions Seen to Reach US\$125 bln in 2006. — 19 July



7. Axelrod, R. (1997) *The Complexity of Cooperation* Princeton University Press , Princeton, NJ
8. Backoff, J. F. and Martin, Jr. (1991) Historical Perspectives: Development of the Codes of Ethics in the Legal, Medical and Accounting Professions. *Journal of Business Ethics* 10 , pp. 99-110
9. Balabanis, G. , Diamantopoulos, A. , Mueller, R. D. and Melewar, T. C. (2001) The Impact of Nationalism, Patriotism and Internationalism on Consumer Ethnocentric Tendencies. *Journal of International Business Studies* 32:(1) , pp. 157-175.
10. Bar, F. and Borrus, M. (1987) From Public Access to Private Connections: Network Policy and National Advantage. — BRIE Working Paper No. 28, presented at the 5th International Telecommunications Policy Research Conference
11. Barme, G. (1999) *In the Red: On Contemporary Chinese Culture* Columbia University Press , New York
12. Barnwal R. 2006. '41% Online Indians Prefer Indian Language Website' 6 July, online at: <http://alootechie.com/News/1192.asp> [accessed 11 December 2006]
13. BBC News. 2002. 'Behind China's Internet Red Firewall' [bbc.com](http://news.bbc.co.uk/2/hi/technology/2234154.stm), 3 September, online at: <http://news.bbc.co.uk/2/hi/technology/2234154.stm> [accessed 11 December 2006]
14. Benson, M. and Simpson, G. R. (2001) Privacy Measure for U.S. Is Backed by Trade Group. *Wall Street Journal* — 18 January, B.6
15. Berger, P. L. and Luckmann, T. (1967) *The Social Construction of Reality: A Treatise in the Sociology of Knowledge* Doubleday , New York
16. Bresser, R. and Milloning, K. (2003) 'Institutional Capital: Competitive Advantage in Light of the New Institutionalism in Organization Theory', *Schmalenbach Business Review* 55: 220-41
17. Brint, S. and Karabel, J. Powell, W. and DiMaggio, P. (eds) (1991) Institutional Origins and Transformations: The Case of American Community Colleges. *The New Institutionalism in Organizational Analysis* University of Chicago Press , Chicago
18. Camenisch, P. E. (1983) *Grounding Professional Ethics in a Pluralistic Society* Haven Publications , New York
19. Carney, C. P. (1999) The (Not So) Long March? China's Pace of Change. *Asian Affairs, an American Review* 25:(4) , pp. 236-248.
20. *China Economic Times*. 2000. 'High Technology Affects National Security' 12 June, online at: <http://www.china.org.cn/english/GS-e/668.htm> [accessed 11 December 2006]
21. Chinese Education and Research Network. 2001. 'Zhejiang to Regulate Internet' online at: <http://www.edu.cn/20010101/22583.shtml> [accessed 11 December 2006]
22. Claypool, G. A. , Fetyko, D. F. and Pearson, M. A. (1990) Reactions to Ethical Dilemmas: A Study Pertaining to Certified Public Accountants. *Journal of Business Ethics* 9 , pp. 699-706.
23. CNNIC. 2001. Semi-annual Survey Report on the Development of China's Internet. China Internet Network Information Centre, online at: <http://www.cnnic.gov.cn/develst/e-cnnic200101.shtml> [accessed 26 May 2001]
24. Coleman, J. S. (1993) The Rational Reconstruction of a Society. *American Sociological Review* 58 , pp. 1-15.
25. ComputerWeekly.com. 2001. 'AOL in Internet Project with China's Legend' [computerweekly.com](http://www.computerweekly.com/Articles/2001/06/11/180787/aol-in-internet-project-with-chinas-legend.htm), 11 June, online at: <http://www.computerweekly.com/Articles/2001/06/11/180787/aol-in-internet-project-with-chinas-legend.htm> [accessed 11 December 2006]
26. Crampton, T. (2006) Innovation May Lower Net Users' Privacy; Embraced by China, New Standard Helps to Trace People Online. *International Herald-Tribune* 20 March , p. 1.
27. David, P. and Steinmueller, W. E. (1994) Economics of compatibility standards and competition in telecommunication networks. *Information Economics and Policy* 6 , pp. 217-241.
28. Deephouse, D. L. (1996) Does Isomorphism Legitimate?. *Academy of Management Journal* 39 , pp. 1024-1039.
29. Driedonks, C. , Gregor, S. , Wassenaar, A. and Van Heck, E. (2005) Economic and Social Analysis of the Adoption of B2B Electronic Marketplaces: A Case Study in the Australian Beef Industry. *International Journal of Electronic Commerce* 9:(3) , pp. 49-72.
30. Dunfee, T. W. and Warren, D. E. (2001) Is Guanxi Ethical? A Normative Analysis of Doing Business in China. *Journal of Business Ethics* 32:(3) , pp. 191-204. [ [crossref](#) ]
31. The Economist (2002) Asia: Stop Your Searching; the Internet in China. 7 September , p. 68.



32. Efendioglu, A. M. and Yip, V. F. (2004) Chinese Culture and E-Commerce: An Exploratory Study. *Interacting with Computers* 16:(1) , pp. 45-62. [ [crossref](#) ]
33. Einhorn B. 2004. 'Why Beijing Has 3G on Hold' online at: [http://yahoo.businessweek.com/bwdaily/dnflash/nov2004/nf20041123\\_6420\\_db065.htm](http://yahoo.businessweek.com/bwdaily/dnflash/nov2004/nf20041123_6420_db065.htm) [accessed 11 December 2006]
34. Einhorn, B. , Webb, A. and Engardio, P. (2000) China's Tangled Web. *Business Week* 17 July , pp. 56-58.
35. Einhorn, B. and Yang, C. (2000) Portal Combat. *Business Week* 17 January , pp. 96-97.
36. Eisenhardt, K. M. (1989) Building Theories from Case Study Research. *Academy of Management Review* 14:(4) , pp. 532-550. [ [crossref](#) ]
37. Elliott, M. (2006) India Awakens. *Time Canada* 168:(1) , pp. 22-25.
38. Foushee, H. (2006) Gray Area: The Future of Chinese Internet. *Harvard International Review* 8:(2) , p. 28.
39. Frankel, M. S. (1989) Professional Codes: Why, How and with What Impact?. *Journal of Business Ethics* 8 , pp. 109-115.
40. French, H. W. (2006) Chinese Discuss Plan to Tighten Restrictions on Cyberspace. *New York Times* 4 July , p. A3.
41. Fukuyama, F. (1995) *Trust: Social Virtue and the Creation of Prosperity* Free Press , New York
42. Gay, L. R. and Diehl, P. L. (1992) *Research Methods for Business and Management* Macmillan , New York
43. George, E. , Chattopadhyay, P. , Sitkin, S. B. and Barden, J. (2006) Cognitive Underpinnings of Institutional Persistence and Change: A Framing Perspective. *Academy of Management Review* 31:(2) , pp. 347-385.
44. Gibbs, J. , Kraemer, K. L. and Dedrick, J. (2003) [Environment and Policy Factors Shaping Global E-Commerce Diffusion: A Cross-Country Comparison](#). *Information Society* 19:(1) , pp. 5-18.
45. Goad, G. P. and Holland, L. (2000) China Joins Linux Bandwagon. *Far Eastern Economic Review* pp. 8-12.
46. Grewal, R. and Dharwadkar, R. (2002) The Role of the Institutional Environment in Marketing Channels. *Journal of Marketing* 66:(3) , pp. 82-97.
47. Gries, P. H. (2005) Chinese Nationalism: Challenging the State?. *Current History* 104:(683) , pp. 251-256.
48. Guillén, M. F. and Suárez, S. L. (2005) Explaining the Global Digital Divide: Economic, Political and Sociological Drivers of Cross-National Internet Use. *Social Forces* 84:(2) , pp. 681-708.
49. Guthrie, D. (1998) The Declining Significance of Guatari in China's Economic Transition. *China Quarterly* 154 , pp. 254-282.
50. Hachigian, N. (2001) China's Cyber-Strategy. *Foreign Affairs* 80:(March/April) (2) , pp. 118-133.
51. Hansen, M. (1999) *Lessons in Being Chinese: Minority Education and Ethnic Identity in Southwest China* University of Washington Press , Seattle, WA
52. Hayek, F. A. (1979) *Law, Legislation and Liberty* 3 , University of Chicago Press , Chicago
53. Herrmann-Pillath, C. (2006) Cultural Species and Institutional Change in China. *Journal of Economic Issues* 40:(3) , pp. 539-574.
54. Hodgson, G. M. (2003) The Hidden Persuaders: Institutions and Individuals in Economic Theory. *Cambridge Journal of Economics* 27 , pp. 159-175
55. Hoffman, A. J. (1999) Institutional Evolution and Change: Environmentalism and the U.S. Chemical Industry. *Academy of Management Journal* 42:(4) , pp. 351-371.
56. Hofstede, G. and Bond, M. H. (1988) The Confucius Connection: From Cultural Roots to Economic Growth. *Organizational Dynamics* 16:(Fall) , pp. 4-21.
57. Hormats, R. D. (2001) Asian Connection. *Across the Board* 38:(1) , pp. 47-50.
58. Huber, B. , Sweeney, E. and Smyth, A. (2004) [Purchasing Consortia and Electronic Markets - A Procurement Direction in Integrated Supply Chain Management](#). *Electronic Markets* 14:(4) , pp. 284-294. [informaworld]
59. Iles, P. and Yolles, M. (2002) [Across the Great Divide: HRD, Technology Translation, and Knowledge Migration in Bridging the Knowledge Gap Between SMEs and Universities](#). *Human Resource Development International* 5:(1) , pp. 23-53.
60. Jepperson, R. (1991) 'Institutions, Institutional Effects, and Institutionalism', in W. W. Powell and P. J. DiMaggio (eds) *The New Institutionalism in Organizational Analysis*, Chicago: University of Chicago Press, pp. 143-63

61. Jones, S. , Wilikens, M. , Morris, P. and Masera, M. (2000) Trust Requirements in E-Business. *Communications of the ACM* 43:(12) , pp. 81-87.
62. Kalathil, S. (2003) [China's New Media Sector: Keeping the State In. \*Pacific Review\*](#) 16:(4) , pp. 489-501.
63. Knight Ridder Tribune Business News (2005) — 'India Tops Salary Hike in Asia: Hewitt' (24 November): 1
64. Kshetri, N. and Dholakia, N. (2001) Impact of Cultural and Political Factors on the Adoption of Digital Signatures in Asia. *Proceedings of the Americas' Conference on Information System* — Boston, 3-5 August
65. Kurlantzick, J. (2005) Cultural Revolution. *New Republic* 232:(24) , pp. 16-21.
66. Lim, K. H. , Leung, K. , Sia, C. L. and Lee, M. K. O. (2004) Is eCommerce Boundary-Less? Effects of Individualism-Collectivism and Uncertainty Avoidance on Internet Shopping. *Journal of International Business Studies* 35:(6) , pp. 545-559.
67. Lin, A. C. (1998) Bridging Positivist and Interpretivist Approaches to Qualitative Methods. *Policy Studies Journal* 26:(1) , pp. 162-180.
68. Lo, W. C. W. and Everett, A. M. (2001) Thriving in the Regulatory Environment of E-Commerce in China: A Guanxi Strategy. *SAM Advanced Management Journal* 66:(3) , pp. 17-24.
69. Magnier, M. and Menn, J. (2005) As China Censors the Internet, Money Talks. *Los Angeles Times* p. A1.
70. McIllwain, J. S. (1999) Organized Crime: A Social Network Approach. *Crime, Law and Social Change* 32:(4) , pp. 301-322.
71. McKinsey, K. (2001) Asians Miss the E-biz Mark. *Far Eastern Economic Review* 15 March , p. 42.
72. *McKinsey Quarterly*. 2006. 'Building Brands in China' online at: [http://www.mckinseyquarterly.com/article\\_abstract.aspx?ar = 1795&L2 = 16&L3 = 14](http://www.mckinseyquarterly.com/article_abstract.aspx?ar = 1795&L2 = 16&L3 = 14) [accessed 11 December 2006]
73. McLaughlin, K. E. (2005) China's Model for a Censored Internet. *Christian Science Monitor* 97:(210) , pp. 1-10.
74. Meyer, A. and Rowan, B. (1977) Institutionalized Organizations: Formal Structure as Myth and Ceremony. *American Journal of Sociology* 83 , pp. 340-363.
75. Meyer, P. (1987) *Ethical Journalism* Longman , New York
76. Moodley, S. and Morris, M. (2004) [Does E-Commerce Fulfil Its Promise for Developing Country \(South African\) Garment Export Producers?. \*Oxford Development Studies\*](#) 32:(2) , pp. 155-178.
77. Moore, S. (1979) The Structure of a National Elite Network. *American Sociological Review* 44 , pp. 673-691.
78. Myers, W. H. (1996) The Emerging Threat of Transnational Organized Crime from the East. *Crime, Law and Social Change* 24 , pp. 181-222.
79. Neale, W. C. Hodgson, G. M. , Samuels, W. J. and Tool, M. R. (eds) (1994) *The Elgar Companion to Institutional and Evolutionary Economics* pp. 402-406. Edward Elgar Publishing , Aldershot — 'Institutions'
80. North, D. C. (1994) Economic Performance Through Time. *American Economic Review* 84:(3) , pp. 359-368.
81. North, D. C. Alston, L. J. , Eggertsson, T. and North, D. C. (eds) (1996) Epilogue: Economic Performance Through Time. *Empirical Studies in Institutional Change* pp. 342-355. Cambridge University Press , Cambridge
82. Ong, A. Ong, A. and Nonini, D. (eds) (1997) Chinese Modernities: Narratives of Nation and of Capitalism. *Underground Empires: The Cultural Politics of Modern Chinese Transformation* Routledge , New York
83. Osland, G. E. and Cavusgil, S. T. (1996) Performance Issues in U.S.-China Joint Ventures. *California Management Review* 38:(2) , pp. 106-130.
84. Parto, S. (2005) Economic Activity and Institutions: Taking Stock. *Journal of Economic Issues* 39:(1) , pp. 21-52.
85. Pei, M. (2006) The Dark Side of China's Rise. *Foreign Policy* 153:(March/April) , pp. 32-40.
86. Peng, M. W. and Luo, Y. (2000) Managerial Ties and Firm Performance in a Transition Economy: The Nature of the Micro-Macro Link. *Academy of Management Journal* 43:(2) , pp. 486-501. [ [crossref](#) ]
87. Pitroda, S. (1993) Development, Democracy, and the Village Telephone. *Harvard Business Review* 71:(November/December) , p. 66.
88. Powell, A. and DiMaggio, P. (eds) (1991) *The New Institutionalism in Organizational Analysis* University of Chicago Press , Chicago
89. Precision Marketing (2003) Mobile Industry to Clamp Down on Youth Marketing. 12 December , p. 3.

90. Press, L., Foster, W. A. and Goodman, S. E. (1999) 'The Internet in India and China', paper presented at the INET'99 Conference, 22-25<sup>th</sup> June, San Jose, California
91. Putnam, R. D. (1993) *Making Democracy Work* Princeton University Press , Princeton, NJ
92. Putnam, R. D. (2000) *Bowling Alone: The Collapse and Revival of American Community* Touchstone Books , New York
93. Romar, E. J. (2004) Globalization, Ethics, and Opportunism: A Confucian View of Business Relationships. *Business Ethics Quarterly* 14:(4) , pp. 663-678. [ [csa](#) ]
94. Salmon, P. Breton, A. , Galeotti, G. , Salmon, P. and Wintrobe, R. (eds) (1995) Nations Competing Against Themselves: An Interpretation of European Integration. *Nationalism and Rationality* Cambridge University Press , Cambridge
95. Sandefur, R. L. and Laumann, E. O. (1998) A Paradigm for Social Capital. *Rationality and Society* 10:(4) , pp. 481-510. [ [crossref](#) ]
96. Sautman, B. (2001) Peking Man and the Politics of Paleoanthropological Nationalism in China. *Journal of Asian Studies* 60:(1) , pp. 95-124. [ [crossref](#) ]
97. Savan, B. (1989) Beyond Professional Ethics: Issues and Agendas. *Journal of Business Ethics* 8 , pp. 179-185. [ [crossref](#) ]
98. Schneider, A. (1999) U.S. Neo-conservatism: Cohort and Cross-Cultural Perspective. *International Journal of Sociology and Social Policy* 19:(12) , pp. 56-86.
- 99. Schuiling, I. and Kapferer, J.-N. (2004) Real Differences Between Local and International Brands: Strategic Implications for International Marketers. *Journal of International Marketing* 12:(4) , pp. 97-112. [ [crossref](#) ]
100. Scott, W. R. (1995) *Institutions and Organizations* Sage , Thousand Oaks, CA
101. Scott, W. R. (2001) *Institutions and Organizations, (2nd edn)* Sage , Thousand Oaks, CA
102. Secured Lender (2004) E-commerce News. 60:(5) , pp. 62-64.
103. Selznick, P. (1984) *Leadership in Administration* Peterson , Evanston, IL
104. Shie, T. R. (2004) [The Tangled Web: Does the Internet Offer Promise or Peril for the Chinese Communist Party?.](#) *Journal of Contemporary China* 13:(40) , pp. 523-540. [ [informaworld](#) ]
105. Sikorski, D. and Menkhoff, T. (2000) Internationalization of Asian Business. *Singapore Management Review* 22:(1) , pp. 1-17.
106. Simon, D. (2001) The Microelectronics Industry Crosses a Critical Threshold. *China Business Review* 28:(6) , pp. 8-20.
107. Singer M. 2002. 'Google Blocked in China' Siliconvalley.internet.com, 3 September, online at: <http://siliconvalley.internet.com/news/article.php/1455921> [accessed 11 December 2006]
108. Steinfield C. 2002. Conceptualizing the Role of Collaborative E-Commerce in Geographically Defined Business Clusters. online at: [www.msu.edu/~steinfie/B2Bsocialcapital.pdf](http://www.msu.edu/~steinfie/B2Bsocialcapital.pdf) [accessed 11 December 2006]
109. Stout KL. 2002. 'China Sites Count Cost of Cyber-Control' cnn.com, 4 November, online at: <http://www.cnn.com/2002/TECH/11/03/china.content/> [accessed 11 December 2006]
110. Suchman, M. C. (1995) Managing Legitimacy: Strategic and Institutional Approaches. *Academy of Management Review* 20 , pp. 571-610. [ [crossref](#) ]
111. Sutton, R. I. and Staw, B. M. (1995) What Theory Is Not. *Administrative Science Quarterly* 40 , pp. 371-384. [ [crossref](#) ]
112. Terrill, R. (2005) What Does China Want?. *Wilson Quarterly* 29:(4) , pp. 50-61.
113. Tindal, R. (2003) Building Guanxi on the Web: 10 Tips for Creating an Online Presence in China. *Public Relations Tactics* 10:(7) , p. 6.
114. Tsang, E. W. K. (1998) Can Guanxi Be a Source of Sustained Competitive Advantage for Doing Business in China?. *Academy of Management Executive* 12:(2) , pp. 64-73.
115. US Fed News Service, including US State News (2006) VOA News: Group Accuses Internet Companies in China of Rights Violations. — 20 July
116. Walder, A. G. (1986) *Communist Neo-traditionalism* University of California Press , Berkeley, CA
117. Ward, S. P. , Ward, R. , Deck, D. R. and Alan, B. (1993) Certified Public Accountants: Ethical Perceptions, Skills and Attitudes on Ethics Education. *Journal of Business Ethics* 12 , pp. 601-610. [ [crossref](#) ]

118. Webster, J. and Watson, R. T. (2002) Analyzing the Past to Prepare for the Future: Writing a Literature Review. *MIS Quarterly* 26:(2) , pp. R13-23.
119. Weidenbaum, M. (2006) Doing Business with China. *USA Today* 135:(2738) , pp. 18-20.
120. Whetten, D. A. (1989) What Constitutes a Theoretical Contribution?. *Academy of Management Review* 14:(4) , pp. 490-495. [ [crossref](#) ]
121. Whitcomb, L. L. , Erdener, C. B. and Li, C. (1998) Business Ethical Values in China and the U.S.. *Journal of Business Ethics* 17:(8) , pp. 839-852. [ [crossref](#) ]
122. Yang, D. L. (2001) The Great Net of China. *Harvard International Review* 22:(4) , pp. 64-69.
123. Yee, C. M. (2001) E-Business: In Asia, It's Not a Wide-Open Web: The Big Internet Companies Often Censor Their Sites to Please Local Officials. *Wall Street Journal* p. B1.
124. ZDNet Asia. 2003. 'Can China's Homegrown 3G Measure Up?' 11 September, online at: <http://www.zdnetasia.com/news/business/0,39044229,39150203,00.htm> [accessed 11 December 2006]
125. Zhang J. 2001. 'China's "Government Online" and Attempts to Gain Technical Legitimacy' online at: <http://web.syr.edu/~ztan/Gov2.pdf> [accessed 11 December 2006]
126. Zhou, L. and Hui, M. K. (2003) Symbolic Value of Foreign Products in the People's Republic of China. *Journal of International Marketing* 11:(2) , pp. 36-58. [ [crossref](#) ]
127. Zucker, L. G. Zucker, L. G. (ed) (1988) Where Do Institutional Patterns Come From? Organizations as Actors in Social Systems. *Institutional Patterns and Organizations: Culture and Environment* pp. 23-49. Ballinger , Cambridge, MA