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CCTP - 640
May 05, 2012

Same Wine, Different Bottles: Policies of Internet Governance in China, Argentina and Lebanon

INTRODUCTION

The world's two billion Internet users constitute the largest information co-creation platform in human history, contributing more data every two days than were created until 2003.¹ Despite its global relevance, the Internet assumes a different branding in every country as each government establishes policies that affect the way its citizens engage with the Internet and that yield massive implications for the country as a whole. This paper explores the geopolitical, economic, cultural, and international implications of Internet policy in China, Argentina, and Lebanon. Before doing so, it is important to define key terms and outline the structure of this comparative analysis.

Defining the Internet and Internet policy

The Internet as a modern communication technology comes in many flavors. Analog, satellite, digital subscriber line (DSL), and cable connections comprise just a fraction of the multidimensional landscape surrounding the Internet, warranting a brief discussion on the definition of the term. To this end, this study adopts a broad understanding of the Internet that echoes a 2010 World Bank broadband strategies report, whose authors extend the term *broadband* to encompass its “networks, the services that the networks carry, the applications they deliver, and users.”² Similarly, the Internet as a whole should be acknowledged as a conglomeration of networks, users, hardware, service delivery mechanisms, applications, and other technologies.

¹ Siegler MG, “Erich Schmidt: Every 2 Days We Create As Much Information As We Did Up To 2003,” *Tech Crunch*, August 4 2010, accessed April 27 2012, <http://techcrunch.com/2010/08/04/schmidt-data/>.

² Yongsoo Kim, Tim Kelly, and Siddhartha Raja, *Building broadband: Strategies and policies for the developing world*, The World Bank, January 2010, accessed April 27 2012, <http://www.infodev.org/en/Publication.756.html>.

Using this liberal definition of the Internet introduces the opportunity to broadly evaluate the multitude of players that govern it. This can be done in a variety of contexts; for example, a technical perspective would explore how particular technologies such as fiberoptic cables are affecting certain uses of the Internet. While these various perspectives together constitute a study that far exceeds the scope of this paper, this report will evaluate the governance of the Internet from a political perspective—namely, based on domestic Internet policy. This includes legislation, judicial decisions, litigation, decrees, resolutions, policies, and other relevant decisions passed or supported by authorized governmental bodies. This broad perspective does *not* include unofficial policies, such as declarations made by civil society organizations, which—while important and certainly influential—do not fall under the purview of Internet policy for the purposes of this study. Additionally, it is critical to draw a distinction between Internet *policy* and Internet *governance*, the latter of which is widely recognized as a process (Kurbalija),³ while the former is a tangible product or outcome. For example, a decision about spectrum allocation made by a communications authority is a policy (as indeed is the creation of such an authority), which in turn becomes one element in the broader governance ecosystem.

Significance, relevance, and originality

Why is it important to evaluate Internet policy, and where should such a review begin? Internet policies regulate when, where, how, and why citizens engage with the global knowledge economy. As such, any discussion about Internet policy holds broader implications for the economic, cultural, and political development of a particular country. The case studies supporting this argument are numerous, dating back to a 1984 report guided by Sir Donald Meitland and the International Telecommunication Union (ITU) which firmly associates access to information and communication technologies (ICTs) with economic growth.⁴ Growth in innovation (Quiggin 2007⁵), civic engagement (Jennings and Zeitner 2003),⁶ and other areas has also been associated with access to Internet and, by association, with the policies that regulate such access. Understanding Internet policy—particularly in the context of a comparative study as discussed below—enables the global community to clarify best practices of Internet regulation and identify patterns of policy to support a country's growth in the areas mentioned above.

³ Jovan Kurbalija, *An Introduction to Internet Governance*, 4th ed. (Malta: DiploFoundation, 2010), accessed February 3 2012, <http://www.diplomacy.edu/poolbin.asp?IDPool=1060>

⁴ Maitland Donald et. al., *The Missing Link* (Geneva: ITU, 1984), accessed March 2011, <http://www.itu.int/osg/spu/sfo/missinglink/index.html>

⁵ John Quiggin, *Internet and Innovation* in Brian Fitzgerald, Jessica Coates, and Suzanne Lewis (eds), *Open Content Licensing: Cultivating the Creative Commons*, 2007, accessed March 2012 http://courseweb.lis.illinois.edu/~katewill/spring2011-502/502%20and%20other%20readings/quiggin_2007_InternetInnovation.pdf

⁶ Kent Jennings and Vicki Zeitner, "Internet Use and Civic Engagement: A Longitudinal Analysis," *Journal of Applied Gerontology* (2008), accessed February 2012, <http://poq.oxfordjournals.org/content/67/3/311.short>

This paper suggests that one lens through which to seek this better understanding is through a comparative analysis of three countries, carefully selected to provide a robust cross-section of today's networked world. These are China, Argentina, and Lebanon. Each country holds a dynamic, evolving, and at times controversial relationship with the Internet (as will be explored in depth in the sections that follow), warranting an investigation into their respective Internet policies. Speaking in broader terms, the countries selected here represent three distinct regions around which the discourse of ICTs in development is centered: Asia, Latin America, and the Middle East⁷. Additionally, the authors collectively enjoy proficiency with the native languages spoken in each country, opening a wider array of primary sources (such as original legislation, news articles, videos) to the portfolio of supporting materials referenced in this study. To the authors' knowledge, this comparative study is among the first to explore Internet policies at such a level of intimacy across three diverse states.

Structure and methodology

Having identified China, Argentina, and Lebanon as the areas of focus, the final step involves developing a targeted approach to normalize the discussion across these three regions. To do this, the paper features four areas in which to evaluate Internet policy in each country, identifying the *geopolitical, economic, cultural, and international* implications of Internet regulation in each respective country.⁸ Each framework is supported by a broad research methodology that leans on, among other techniques, case studies, empirical data, textual analysis of policies, interviews, and anecdotes. After briefly reviewing Internet policy and general history in each country, this paper will designate one section to each of the four frameworks. The study concludes by identifying patterns and dissimilarities between each country in an attempt to inform a more comprehensive conversation about Internet policy throughout the world.

BACKGROUND

A robust comparative analysis of Internet policy must be positioned in the context of a country's historical legacy regarding such regulations and the various forces that create and enforce Internet policies. This section seeks to lay that foundation in China, Argentina, and Lebanon, as well as to provide a snapshot of current Internet activity in each country (see Table 1).

CHINA

China is the third largest country in the world by area. With a diverse landscape and a population of over 1.3 billion, the regulatory system in China is convoluted and

⁷ Africa is, admittedly, a notable absence in this list.

⁸ These 4 areas are selected out of recognition of their relevance to all three countries (and indeed the entire global community). The authors recognize that other frameworks could also be used and encourage further study in those areas.

complicated. According to the Chinese Constitution, the National People's Congress is the highest organ of state power, with the Standing Committee serving as its permanent body.⁹ At the same time, the State Council (consisting of the people's congress and standing committee of each province, special municipality, and autonomous zone) is granted the authority to make administrative laws, local regulations and autonomous rules. In addition, the amended Local Organization Law allows the capital city of each province and autonomous zone to make local legislation, and other major municipalities can obtain legislative power with authorization of the State.¹⁰

Internet governance in China follows the principal of government guidance; overall planning, unifying standards, regulations and laws are intertwined with content monitoring and security supervision. There are 29 ministries and commissions under the State Council, among which the Ministry of Information Industry plays a major role in making regulations on the Internet industry in China. The Internet information service providers (IISP) in China are obligated to record transmission information and to assist governmental agencies with investigating any offence occurring in the system. To date there is no uniform telecommunications law in China. The Measures for the Administration of Internet Information Services (adopted in 2000), Telecommunications Regulations (adopted in 2000), and the Electronic Signature Law (adopted in 2004) set out the regulatory requirements for the Internet interconnecting entities, Internet access providers, Internet content providers, and electronic signature certification service providers.¹¹

According to the China Internet Network Information Center (CNNIC), by end-December 2011, the population of Internet users has reached 513 million—an increase of approximately 10% from 2010 and the number of websites has reached 2.3 million¹² — an increase of approximately 20% from 2010.¹³

ARGENTINA

Among the countries explored in this paper, Argentina features the highest level of Internet penetration at 36% as of 2010—an amount that grows by 13 points every two

⁹ “Statistical Data,” National Bureau of Statistics of China, accessed March 20, 2012, <http://www.stats.gov.cn/english/statisticaldata/>

¹⁰ “Constitution,” The National People's Congress of the People's Republic of China, accessed March 15, 2012, http://www.npc.gov.cn/englishnpc/Constitution/node_2824.htm,

¹¹ Xue Hong, *Cyber Law in China* (The Netherlands: Kluwaer Law International, 2010), 23-26

¹² “The 29th Statistical Report on Internet Development,” CNNIC, accessed April 2, 2012, <http://www.cnnic.cn/research/bgxz/tjbg/201201/P020120118512855484817.pdf>

¹³ The CNNIC also provides some significant figures in other areas: The Internet population is forecast to reach 500 million by end-2011—an increase of approximately 10% from 2010; The micro-blogging (*weibo*) population increased by more than 200% to 195 million from 63.1 million, with roughly one-third of users accessing micro blogs by mobile phone—prompting a U.S. fast-food brand, Pizza Hut, to become the first major brand to advertise on a micro blog site; The social networking population shrank to 230 million at end-June 2011, from 235 million six months earlier. The top local sites are: weibo.com, Renren Inc., kaixin001.com, douban.com and pengyou.com. The group-buying user base increased by 125% to 42.2 million at end-June 2011, compared with just 18.8 million by December 2010.

years.¹⁴ Although the number of Internet users varies according to the source, a recent survey by consulting firm Prince and Cook reported that fully 66% of the population uses the Internet through public or private access points and on various devices¹⁵.

These impressive statistics are the result of a conscious effort on the part of the Argentine government to promote Internet access throughout the country. Decrees 554/97 and 1279/97, declared in 1997 when the World Wide Web was still in its nascent stages, demonstrate a proactive realization among Argentine political leaders that the Internet would be a tool worth protecting and supporting for years to come. The first, passed in June of that year, affirmed the Internet as “a clear paradigm for the best promises of global society” and officially declared it to be in the country’s national interest to encourage access to the Internet by citizens.¹⁶ The decree also heralded the Internet’s potential uses in education, culture, health services, and democracy. The second policy note, Decree 1279/97, extended constitutional provisions and legal precedents of freedom of expression to the domain of the Internet, identifying the then-new medium as a space for liberal thinking and open discourse¹⁷.

By this time, Argentina’s telecommunications industry was rigidly dominated by two corporations, Telefónica and Telecom, who had emerged following the split-up of the formerly state-owned company Entel as mandated by Decree 731/89, which sought to begin the process of privatizing the telecoms market.¹⁸ As a result of this and other legislation in the early 1990s,¹⁹ the two companies were each granted a geographical domain, with Telefónica responsible for all areas north of Buenos Aires and Telecom charged with delivering service in the south.²⁰ This north-south division of telecommunication services is not unique to Argentina; indeed, a similar landscape in Lebanon will be discussed later.

Together, the Telefónica and Telecom were granted by the government “a monopoly over international inbound and outbound data” through a joint subsidiary named Telintar, which wasted no time utilizing its monopolistic advantage—reportedly charging \$32,000²¹ per month for a 64kbps international link.²² The market liberalized significantly in 2000 following the passage of Decree 764/2000, which “fully opened the telecommunications market to competition” and provided a four-pronged regulatory

¹⁴ “Internet users per 100 people,” The World Bank, accessed February 20, 2012, <http://data.worldbank.org/indicator/IT.NET.USER.P2/countries?display=map>.

¹⁵ “Argentina, el país más conectado de América Latina,” *Ámbito.com*, accessed February 20, 2012 <http://www.ambito.com/noticia.asp?id=582842>.

¹⁶ “Decreto 554/97,” Ministerio de Economía, accessed March 20, 2012, <http://mepriv.mecon.gov.ar/Normas/554-97.htm>.

¹⁷ *Ibid.*, <http://mepriv.mecon.gov.ar/Normas/554-97.htm>.

¹⁸ *Ibid.*, <http://mepriv.mecon.gov.ar/Normas/554-97.htm>.

¹⁹ Decree 731/89 catalyzed several other decrees that facilitated the Entel split-up, including Decree 59/90, 60/90, 61/90, 62/90, and 2332/90.

²⁰ “Internet Argentina, Historia y Evolucion,” accessed February 12, 2012, <http://blog.internet-argentina.net/>.

²¹ To ensure consistency, all financial indicators are expressed in USD.

²² Thierry Chaumeil, “The Internet in Argentina: Study and Analysis of Government Policy,” Internet Society, accessed February 14, 2012, <http://www.isoc.org/oti/articles/0599/chaumeil.html>.

framework involving interconnectivity rates, licenses, spectrum, and service.²³ Despite the opportunities provided by this new and competitive market, the devastating economic crisis in the following year ensured that few ISPs enjoyed financial success. The legacy of this downturn remains in place today, manifested by the return of Telefónica and Telecom as the two leading ISPs.

From a regulation perspective, several organizations are granted authority over Internet-related matters, including telecommunications protocols and spectrum allocation. These include the *Secretaría de Comunicaciones* (Secretary of Communications, or SECOM), which is regarded as the central telecommunications regulator of the country delegated with power similar to CNNIC in China. SECOM's decision-making power over Internet concerns was established in Decree 554/97, mentioned earlier, although it also participates in general activities promoting the adoption of the Internet, including advising *Argentina Conectada* (the national broadband rollout plan, discussed later) and coordinating events with relevant think-tanks and government agencies. Another key player is the *Comisión Nacional de Comunicación* (National Communication Commission, or CNC), which plays an important regulatory role in the domestic Internet ecosystem. Together with the federal government, these organizations (and other more periphery bodies such as the *Autoridad Federal de Servicios de Comunicación Audiovisual*) have over the past fifteen years established a robust corpus of Internet policy and regulations, many of which will be discussed in the pages following.

LEBANON

For a brief historical overview of Internet policy in Lebanon, it is necessary to examine Telecommunication Law 431 (TL431), which laid the foundation for subsequent Internet policy laws and regulations in Lebanon. Passed in 2002, TL431 strives to “encourage competition and *transparency* in the digital electronic media field and... provides a foundation for drafting Internet policies and regulations.”²⁴ Upon closer inspection, TL431 fails, however, to address electronic media content such as user privacy and Internet infrastructure. For that reason, TL431 neither discloses user privacy as *transparent* nor touches on religious content online as a sensitive topic on the national security level. Rather, TL431 infers a *transparency* between ISPs and state officials, exclusively. In response to a lack of regulation on Internet content and user privacy, four university students were arrested and detained for besmirching the reputation of a female student colleague on the social media network site Facebook in 2008.²⁵ The Open Net Initiative, a non-partisan Internet surveillance think tank that will be referenced later, pointed out that the peculiar Facebook arrests convey a lack of both

²³ “Argentina: Broadband Fixed Wireless Access,” Office of Technology and Electronic Commerce, accessed March 20, 2012, <http://web.ita.doc.gov/ITI/itiHome.nsf/9b2cb14bda00318585256cc40068ca69/40boao28648dbb6685256d95006dad2a?OpenDocument>.

²⁴ The Lebanese Ministry of Telecommunications, Telecommunications Law NO. 431, Beirut, 2002, 6.

²⁵ In Lebanon, Facebook can land you in jail,” Menassat, January 21, 2008, accessed April 02, 2012, <http://www.menassat.com/?q=en/newsarticles/2750-lebanon-facebook-can-landyou-jail>.

legislation and regulation regarding electronic media in Lebanon, irrespective of the new media and Internet policy laws that were crafted after TL431.²⁶ This lack of Internet regulation may trigger perilous externalities on the constitution level. For example, more arrests that infringe on civil rights that stem from lack of Internet regulation may emanate in the future Lebanese information society. Furthermore, another issue, privacy, may arise from lack of regulation. Regarding corruption, according to the 2011 Corruption Perceptions Index, Lebanon scored 2.5 out of 10.00 and ranked 134 out of 183 countries,²⁷ making it the lowest-ranking country among the three studied here. To reinforce the issue, the Chief Information Officer (CIO) at Georgetown University's Qatar campus argued that piracy in Lebanon is about 70 to 80 percent.²⁸ This fact further impedes Internet governance in Lebanon.

The Telecommunications Regulatory Authority (TRA) was established in 2009 in accordance with TL431.²⁹ According to its website, TRA is an “independent government owned agency [mandated by the state] that liberalizes, regulates, telecommunications—such as Internet, mobile and landline—in Lebanon.”³⁰ On the micro level, however, instead of regulating and passing laws to protect Internet user privacy, the TRA has since its formation been acting as a state watchdog. For example, the technology that Canadian mobile manufacturer RIM embeds in their BlackBerry smart phones enables users to bypass their Internet data plan carrier by automatically sending encrypted Internet data content to computer servers outside the country.³¹ Consequently, the TRA used its legal mandate to implement the Lawful Interception Law (LIL) by coercing RIM to comply with Lebanese law.³² As a result, the LIL stipulated that TRA officials open lines of communication with RIM in order to comply with the “concerned Lebanese authorities.”³³ Such consternation by Lebanese authorities stems from a geopolitical context; that is, Israel's animosity with Lebanon over several decades had led the former to coercively infiltrate Lebanese intelligence by way of technological superiority. Such geopolitical tensions, as well as cultural, economic, and international factors, continue to define Internet governance, regulations and policies in Lebanon.

On Internet data protection, e-commerce and e-transactions, the Parliament of Lebanon has crafted a draft policy law in early 2008 entitled the Proposal of Information Technology Law (ITL).³⁴ The proposal regulates encryption certificates used for building e-commerce website; the proposal regulates the operation of service providers such as

²⁶ Open Net Initiative In Lebanon, “Internet Filtering in Lebanon” The Citizen Lab at the Munk School of Global Affairs (2009): 1.

²⁷ The Global Coalition Against Corruption, “Corruption Perception Index, The Perceived Levels of Public-Sector Corruption in 183 Countries/Territories Around The World” *Transparency International*, (2011).

²⁸ See Chapman

²⁹ Open Net Initiatives In Lebanon, 3.

³⁰ *Ibid.*, 3.

³¹ Ben Thompson, “Two Gulf States to Ban Some Blackberry Functions,” *British Broadcasting Corporation*, August 01, 2010, accessed March 27, 2012. <http://www.bbc.co.uk/news/world-middle-east-10830485>

³² Republic of Lebanon Telecommunication Regulatory Authority, *Annual Report*. Beirut, 2008, 14.

³³ *Ibid.*, 14.

³⁴ Quoted in “Stop the New Internet Law in Lebanon,” Social Media Exchange, accessed March 28 2012, <http://www.smex.org/2010/06/stop-the-new-internet-law-in-lebanon/>

Digital Certificate issuers; the proposal protects user and e-consumer private information.

Table 1:
Country Snapshots³⁵

	Population (millions)	Size (km ²)	Internet users (%)
China	1,338	9,598,086	34.4
Argentina	40	2,780,403	36.0
Lebanon	4	10,452	31.0

GEOPOLITICAL IMPLICATIONS

Internet policies shape geopolitical tensions and respond to geographical conditions. This section explores the geopolitical implications of Internet regulations—the first of four frameworks featured in this paper.

CHINA

ONE COUNTRY, TWO SYSTEMS

To explore how the Internet is governed in China, one should first take into account geopolitical factors. Hong Kong became a Special Administrative Region of the People's Republic of China and adopted the “one country, two system” policy on 1 July 1997. The principle of this paradigm is that upon reunification—despite the practice of socialism in mainland China—Hong Kong would retain its established system under a high degree of autonomy for at least fifty years after reunification. Hong Kong would have its own capitalist economy, political structure (including commercial and cultural agreements with foreign countries), legal processes, and financial system, and it would enjoy certain rights in foreign affairs.³⁶

Under this formula, Hong Kong and mainland China have taken different paths when it comes to regulation of the Internet. In January 2000, the Hong Kong legislature passed the Electronic Transactions Ordinance, which recognized the validity of contracts formed online.³⁷ Hong Kong's Electronic Transactions Ordinance is based on similar

³⁵ World Bank Development Indicators, 2010, accessed May 4 2012, <http://databank.worldbank.org/Data/Views/Reports/TableView.aspx?IsShared=true&IsPopular=country>.

³⁶ “One Country, Two Systems,” China.org.cn, accessed April 10, 2012, <http://www.china.org.cn/english/features/china/203730.htm>

³⁷ “Legal Framework and Internet Governance,” Office of the Government Chief Information Officer, accessed April 10, 2012, <http://www.ogcio.gov.hk/en/regulation/eto/>.

legislation in Singapore which is based on the English legal tradition and emphasizes such principles as freedom of contract and economic liberty. The Chinese, on the other hand, have been slow to adapt Internet laws and has more restrictions on Internet governance.

Given the borderless nature of cyberspace, however, it is likely that online activity between businesses in Hong Kong and mainland China has legal implications in both jurisdictions. Resolving conflicts of laws in cyberspace is not easy. An e-mail sent from someone in mainland China to a recipient in Hong Kong arguably has multi-jurisdictional ramifications, and in many instances it is still unclear whose law prevails. Nevertheless, efforts to harmonize regulatory standards between Hong Kong and mainland China will also cause problems. Assuming the Hong Kong approach might be seen by the Chinese leadership as endangering its national security; conversely, taking the Chinese stand could stifle the economic freedom that Hong Kong has long enjoyed.³⁸

GEOGRAPHIC DIFFERENCES

There exists an obvious digital divide between China's urban and rural areas (see Table 2). According to a survey published in September 2007, the number of Internet users in China rural areas approached 37 million, which accounts for only 5.1% of all 737 million rural residents. As a result, many rural users do not use the Internet for online purchasing, banking, or stock trading.³⁹ Many factors, including a lack of infrastructure and funds, contribute to this problem; indeed, official statistics showed that in rural area, vast numbers do not have access to internet. Additionally, owing to low education levels and the lack of sufficient knowledge exchange networks, words like "Internet" and "surfing" are still foreign to many rural residents.

Meanwhile, the digital gap between western China and other parts of the country is also considerable. Mainly due to a lack of purchasing power and low population densities in these areas, there is currently a lack of incentive for telecommunication providers to invest in broadening their western networks. Because of the little promise of short-term profits, the Internet and telecommunication companies are reluctant to operating business in the western areas.⁴⁰

The Chinese government, to its credit, has made plans to address this vast divide. For example, the "Go West" project of the 10th Five-Year Plan (2001-2005) focused on the improvement of infrastructure in western regions. It mainly aims at improving transportation infrastructure but in addition approximately one million kilometers of new fiber optic cables were laid alongside the installation of satellite

³⁸ Shirley S. Chan, "China and Hong Kong: Two Systems, One Internet." E-Commerce Times 05/26/00, accessed April 1, 2012, <http://www.ecommercetimes.com/story/3416.html>

³⁹ China Internet Network Information Center, "Survey Report on the Internet Usage in Chinese Rural Area," Accessed March 20, 2012, http://www.cnnic.cn/download/2007/2007_Survey_Report_on_Internet_Development_in_Rural_China2007.pdf

⁴⁰ Karsten Giese, *Internet Growth and the Digital Divide: China and the Internet*, (London: Routledge, 2003), 46.

telecommunications facilities between the years 2001 and 2005.⁴¹ Additionally, Ministry of Science and Technology has already contributed \$24.2 million in 12 western provinces and autonomous regions to narrow the digital domestic digital gap in China.⁴²

ARGENTINA

URBAN-RURAL GEOGRAPHIC CONSIDERATIONS:

The regulation, rollout, and governance of the Internet in Argentina are closely related to geographical factors. At the heart of these influences is the stark difference between urban and rural areas, magnified by the increasing urbanization of the Argentine population; roughly half of the country's 40 million residents live in the ten largest cities.⁴³ It comes of no surprise, then, to learn that access to broadband Internet continues to be concentrated primarily in these urban areas, where supply and demand are easier to address than in rural regions. Buenos Aires, a city whose population surpasses 3 million, provides a clear example of the imbalance of Internet access between urban and rural areas. The city attained nearly 1.2 million residential broadband connections in 2010, equating to roughly 41 percent of the city's population.⁴⁴ In contrast Santa Cruz, the country's least-populated province with 272,524 citizens, had roughly 27,000 residential broadband connections in 2010⁴⁵—a connectivity rate of less than ten percent. In the face of these realities, government of Argentina has embraced new policies and initiatives that offer geographical implications that should improve Internet accessibility for rural citizens.

These efforts are best embodied by the *Argentina Conectada* National Telecommunications Plan, which guides the nation's broadband and digital inclusion strategies until 2015. Announced by the president in October 2010 with an \$8bn investment, the project "seeks to expand broadband to the entire country and provide 10 million homes with some type of connection or access by 2015."⁴⁶ The plan relies on a state-owned telecommunications company, AR-SAT, to lay fiber and build knowledge access centers" and "digital access points" in conjunction with local municipalities. 2011 According to a 2012 discussion paper produced by the International Telecommunications Union, the project is designed specifically to address "the large regional disparities in broadband penetration" highlighted above between rural and

⁴¹ The National People's Congress, *The 10th Five-Year Plan (2001-2005)*, March 15, 2001

⁴² "News Letter," Ministry of Science and Technology of the People's Republic of China accessed March 25, 2012, <http://www.most.gov.cn/eng/newsletters/index.htm>

⁴³ "South America: Argentina," Central Intelligence Agency, accessed April 14, 2012, <https://www.cia.gov/library/publications/the-world-factbook/fields/2212.html?countryName=Argentina&countryCode=ar®ionCode=sa&-ar>

⁴⁴ "Accesos a Internet: Cuarto trimestre 2010," Insituto Nacional de Estadística y Cencos, March 15 2011, accessed April 2012, http://www.indec.mecon.ar/nuevaweb/cuadros/14/internet_03_11.pdf.

⁴⁵ Ibid., http://www.indec.mecon.ar/nuevaweb/cuadros/14/internet_03_11.pdf.

⁴⁶ "Plan Nacional de Telecomunicación Argentina Conectada," Argentina.ar, October 18 2010, accessed April 25, 2012, <http://www.argentina.ar/es/pais/C5121-plan-nacional-de-telecomunicacion-argentina-conectada.php>.

urban citizens.⁴⁷ In this context, *Argentina Conectada* provides a strong indicator that the government of Argentina has recently embraced the value of balanced and equal access to broadband Internet across its disparate regions.⁴⁸

GEOPOLITICAL TENSIONS IN TIERRA DEL FUEGO

Another geographical element of Argentina's Internet and technology landscape is the emerging "new Silicon Valley" in Tierra del Fuego, the country's most remote region located at the southern tip of the continent. On this desolate island—whose industry until now has depended largely on tourism—dozens of high-tech manufacturing plants are being developed, ranging from multinational corporations like REM, HP, and Motorola to domestic technology firms.⁴⁹ Two major national laws have facilitated this most unlikely of Silicon Valleys. The first is Law 19640,⁵⁰ which in 1972 grants foreign companies operating in Tierra del Fuego a significant tax exemption and customs flexibility for imports and exports.⁵¹ Law 26539, passed in 2009, provides major tax benefits for manufacturers of laptop PCs, mobile phones, and various other "apparatuses" that build their goods with Argentine territory on Tierra del Fuego⁵². Such regulations closely resemble the special economic zones found in China, in which certain regions are favored by the government for technological development.

These new regulations have already facilitated a boom in domestic technology production; laptop production quadrupled between 2010 and 2011 thanks to tax incentives and government support for manufacturers located in Tierra del Fuego⁵³. Although these policies do not directly address Internet access, many of the new devices produced in this remote region operate in coordination with the Internet as enabling technologies. There can be little doubt, then, that an increase in the availability and decrease in costs of enabling technology such as laptops produced in Tierra del Fuego will lead to the facilitation, adoption, and use of Internet access among Argentines.

⁴⁷ Bob Horton, "Setting National Broadband Policies, Strategies, and Plans," ITU - GSR 2011 Discussion Paper, September 22 2011, accessed April 2012, <http://www.itu.int/ITU-D/treg/broadband/MinicasestudyBBArgentina.pdf>.

⁴⁸ Despite this strong initiative, the World Economic Forum ranks Argentina at 96th place for "Networked Readiness"

⁴⁹ Serrano, Rodrigo Lara, "Industria casi antártica," *América Economía*, September 12 2011, accessed April 14, 2012, <http://www.worldcrunch.com/tierra-del-fuego-tech-new-silicon-valley-south-americas-southern-tip/3764>.

⁵⁰ "Ley 19.640," Consejo.org.ar, May 16 1972, accessed March 12, 2012, http://www.consejo.org.ar/Bib_elect/BD_Oct/documentos/ley19640.htm.

⁵¹ Tavieres, Ricardo D., "Doing business in Argentina," HSBC, accessed April 2012, http://www.hsbc.com/1/content/assets/business_banking/110214_hsbc_doing_business_in_argentina.pdf.

⁵² "Ley 26.539," Ministerio de Economía, November 4 2009, accessed March 18, 2012, <http://www.infoleg.gov.ar/infolegInternet/anexos/160000-164999/160514/norma.htm>.

⁵³ Lara R. Serrano, "TIERRA DEL FUEGO TECH: A NEW SILICON VALLEY ON SOUTH AMERICA'S SOUTHERN TIP," World Crunch, accessed April 02, 2012, <http://www.worldcrunch.com/tierra-del-fuego-tech-new-silicon-valley-south-americas-southern-tip/3764>.

As suggested by the presence of Argentina's President and Minister of Industry at the inauguration of four new factories in late-2011, there lies a strong political incentive to the government's involvement in Tierra del Fuego. The western half of the island is controlled by Chile, with whom Argentine authorities have long disputed over sovereignty regarding nearby islands in the Beagle Channel. Tierra del Fuego is also a major geopolitical stepping stone for Argentina's claims to Las Malvinas (the Falkland Islands) and parts of Antarctica. By extension, one can understand how certain "soft" Internet-related policies, namely those discussed above that facilitate high-tech manufacturing in Tierra del Fuego, continue to shape the country's geopolitical structure.

LEBANON

In contrast to China and Argentina, Lebanon not only suffers its share from geographic divide, but rather, a political divide that stems from a polarized, sectarian and confessional political system. Recently, such divide has spilled over negatively on Internet development. For example, on Internet governance, Joan Antockol argued that as of October 2008, the proposal of Information Technology Law was not yet passed nor implemented.⁵⁴ For the reason that, the Lebanese Parliament, whose parliamentarians are responsible for legislating and passing policies and laws, had closed its doors for an extensive period of time, because of geopolitical tensions amongst the disparate Lebanese political ruling groups in the Parliament.⁵⁵

In terms of Internet privacy, however, the context differs. For example, the director of the Lebanese department of General Security (DGS), the government body responsible for censoring international media, pointed out, "with the Internet censorship may appear to be ridiculous, but we ban works damaging to religion because it is such a sensitive topic."⁵⁶ Such religious trepidation on the state level stems from the fact that a small nation like Lebanon suffered a staggering 15 years of civil war in its recent history. The religious and ethnic cleansing that spurred across its borders left 170,000 dead and 500,000 displaced.⁵⁷ In parallel, Internet privacy in Lebanon, as opposed to most developing nations and China in particular, may be dictated by a cultural and socio-historical fact such as its civil war. For that reason, and after examining DSG director's statement (in which he coyly neither concurred nor denied Internet censorship), one could extrapolate that Internet privacy in Lebanon is at best only *seemingly* transparent.

To better understand the implications of Internet policy on geopolitics in Lebanon, a brief, retrospective, and historical-political overview is requisite. While there is no difference in terms of legislation between the south and the north, state governance varies between the far south and the northern part of the country because armed militias are still present in the southern region. It is not difficult to conclude that this

⁵⁴ Joan Antockol, comp., "Internet Privacy Laws," *Bakers & Daniels LLP* (Oct, 2008), 18.

⁵⁵ This observation stems from a personal anecdote upon living in Lebanon for an extensive period of time.

⁵⁶ Open net Initiative in Lebanon, 6.

⁵⁷ Salem, 450.

militia presence impedes state governance. Indeed, in a report the National Indicative Program for Development argued: “the main challenge in Lebanon remains the strengthening of the authority of the State and of the rule of law.”⁵⁸

Located in the Middle East, Lebanon is a republic with an elected president as head of state, and a four-year elected parliamentary system, positioning Lebanon as the sole seemingly democratic republic in the Middle East. In that respect, the government does not restrict freedom of speech.⁵⁹ In particular the government neither bans nor censors any local news media-outlet.⁶⁰ International news media outlets, however, are subject to censorship, but only when necessary.⁶¹

CONTENTIOUS DEMOCRACY

Lebanon’s democracy is seemingly contentious, however, due to political sectarianism, *confessionalism* and polarized geopolitical ideologies. Lebanon’s political contention has recently exacerbated its political divide—in particular, between a south quasi-controlled by Hezbollah (a Shi’i fundamentalist resistance militia whose aim is to resist against the Israeli occupation of the south) and a government-controlled north—meaning that Lebanon’s sociopolitical and geopolitical framework is too complicated to be compartmentalized. Consequently, Lebanon’s nuanced geopolitics may further impede its potential technological development, specifically in the south. Before examining the technological end of this argument, it is necessary to backtrack and ponder the southern geopolitical frame from a historical lens. In the early 1970s, the bereaved infrastructure of the south and the PLO (Palestinian Liberation Organization) using the southern border as a base to launch attacks on Israel catalyzed the rapid population flow from the south to the north. Decades of Israeli occupation had further triggered this rapid demographic shift, draining the south of its human capital. In addition, and most importantly, a deliberate and unequal distribution of wealth—imbued with a concealed local political agenda—had tipped the balance to the favor of the northern region at the expense of the south. This geopolitical context, however, was changed by the early- and mid-2000s. In the aftermath of their tentative victory against Israel in both 2000 and 2006, Hezbollah became a *de facto* contentious regional power; indeed, Joseph Elia Alagha argues, “Hezbollah has been able to sustain an impressive following in Lebanon or to constitute the only real institutionalized political party in the country.”⁶² In terms of governance and litigation, this “only institutionalized political party” in Alagha’s sense, may surmount a weak government state system eroded by confessional sectarianism. As a result of this disequilibrium, the divide between the controlled Hezbollah south and the remainder of the country is increasingly inevitable.

⁵⁸ EC Development Cooperation for ENPI Countries, *National Indicative Programme 2011-2013 for Lebanon Draft Concept Note*. Brussels, 2011, 3, accessed April 03, 2012, http://www.enpi-programming.eu/wcm/dmdocuments/-NIP-2011-2013-concept-note_Lebanon.pdf

⁵⁹ Open Net initiative in Lebanon, 1.

⁶⁰ *Ibid.*, 6.

⁶¹ *Ibid.*, 6.

⁶² Joseph E. Alagha, “Why Hezbollah is Winning Review Article” *Middle East Journal*, Vol. 61, No. 1 (Winter, 2007): 146.

For example, Hezbollah has recently acted as a state substitute in the south, providing development project and humanitarian aid for the needy while the state lagged behind. Nevertheless, the implications of a Hezbollah-backed government in Lebanon as of late 2011 may have spilled over as negative externality on the pending development of the Internet infrastructure in the South.⁶³ The shift of political discourse when the new Hezbollah-backed government took over—from a government supported by the West to a government supported by Iran and Syria—may impede the process of developing and expanding Internet infrastructure in the south. For that reason, the rapid shift of political discourse may spill over negatively on both the international and the national scene.

Table 2:
Urban (population exceeding 1m) and Rural Populations⁶⁴

	Urban (%)	Rural (%)
China	18	55
Argentina	39	8
Lebanon	46	13

ECONOMIC IMPLICATIONS

Exemplified by e-commerce and mobile money, the Internet's role in economic development is widely acknowledged. This section seeks to understand how specific Internet policies in China, Argentina, and Lebanon have enabled or stifled economic drivers of growth.

CHINA

E-COMMERCE

Due to the large number of Chinese Internet users, e-commerce in China has a good base for development. In fact, a survey conducted by iResearch Consulting Group indicates that the e-commerce industry reached \$720 billion in 2010. Online shopping as a component was \$75 billion, an astonishing four-fold increase in two years.⁶⁵

⁶³ Nada Bakri, "In Lebanon, New Cabinet Is Influenced by Hezbollah" *The New York Times*, June 13, 2011, accessed March 14, 2012, <http://www.nytimes.com/2011/06/14/world/middleeast/14lebanon.html>

⁶⁴ World Bank Development Indicators, 2010, accessed May 4 2012, <http://databank.worldbank.org/Data/Views/Reports/TableView.aspx?IsShared=true&IsPopular=country>.

⁶⁵ "2010 Report of E-commerce of China," iResearch Consulting Group, accessed April 2, 2012 <http://www.iresearch.com.cn/report/>

The Chinese government encourages e-commerce and has been investing in infrastructure to make China competitive in the online marketplace. Since 1999 the Chinese government has made great progress on legislation in the field of e-commerce and the Internet. A series of laws and regulations have been successively adopted such as Regulations on the Internet Billboards Service Management, the Resolution on Safeguarding the Internet, Regulations on Internet Commercial Cipher Codes, Interim Provisions on Inter-Telecom Network, and so forth. These laws and regulations cover various aspects of e-commerce and the Internet, such as the security and coding process of the Internet, its infrastructure construction, financial leasing, online advertising, and licensing for operations on the Internet.⁶⁶ More specific regulations governing online stores have been issued recently. The Interim Measures for Network Behavior of Commodity Trading and Related Services adopted on July 1st 2010 requires online store operators to meet business license requirements and register their real names and addresses with e-commerce agents before launching their businesses.⁶⁷

Even though having so many laws and regulations, today, China still lacks special national plans for the development of e-commerce. Specific e-commerce legalities has been drafted for many years but has not yet been opened throughout the country to promote content. At the same time, the existing administrative rules and regulations of commerce, not yet suited to e-commerce development has not been adequately amended to adapt to the e-commerce environment, making it clear that e-commerce in China is devoid of clear and strong technical and economic policy.

ONLINE ADVERTISING AND ONLINE NEWS

China's online advertising market grew by nearly 60% in 2010, reaching \$5 billion in revenue, according to a report from iResearch Consulting Group. According to a January 2011 report from advertising agency ZenithOptimedia, developing markets will comprise almost 36% of advertising spending in 2013, up from 31.5% in 2011. The firm also said it expects China to surpass Germany as the third largest ad market in the world, after Japan and the U.S.⁶⁸

Even though the online advertising market is booming, it is still under several controls. There are several laws and regulations of advertisement since 1987: Advertisement Law of the People's Republic of China, Measures on the Examination and Approval of Drug Advertisements, Measures on the Examination and Approval of Medical Appliance Advertisements, Regulation on the Control over Advertisements, Standards on the Examination and Approval of Drug Advertisements, Standards on the Examination, and

⁶⁶ "Laws," The Central People's Government of the People's Republic of China, accessed April 10, 2012, <http://www.gov.cn/flfg/fl.htm>

⁶⁷ "Laws and Regulations," The State Administration for Industry and Commerce, accessed April 10, 2012, <http://www.saic.gov.cn/zcfg/xzfggfxwj/>

⁶⁸ Zenith Optimedia, "Advertising Expenditure Forecasts December 2011," accessed April 2, 2012, <http://www.zenithoptimedia.com/zenith/shop/forecasts/advertising-expenditure-forecasts-december-2011/>

Approval of Medical Appliance Advertisement.⁶⁹ Under these laws and regulations, online advertising operators normally are required to obtain an advertising license from the local administration of industry and commerce. In addition, the State Administration for Industry & Commerce (SAIC) and the China Advertising Association (CAA), a self-regulatory entity, are responsible for monitoring advertisements and commercials. Reviews are conducted before a certificate is officially issued, stating that the advertisement abides by the law.⁷⁰

The restrictions for Internet news are stricter. Only specially-approved online media have independent interviewing rights, which allow them to Web-publish their own stories. Central-level online media such as Peoples' Daily and Xinhua News Agency have the most prestigious rights to interview and report. Provincial news websites and commercial websites are allowed to carry news from central-level online media by editing and selecting the news based on readers' interests. Foreign companies are not permitted to operate news websites or commercial websites in China.⁷¹

ARGENTINA

E-COMMERCE

As the region's "e-commerce leader," Argentina continues to build a robust ecosystem of Internet commerce and digital transactions.⁷² According to University of Abu Dhabi professor Stephen Blythe, the country "produces half of the Internet's Spanish-language e-commerce websites and has 11 of the top 15 e-commerce websites in terms of traffic in Latin America and Spain."⁷³ These include *MercadoLibre*, a digital marketplace similar to eBay and Craigslist that has continued to grow at 60% annually to emerge as "a force in Latin America's economy."⁷⁴ Argentina's annual revenue from electronic shopping has skyrocketed 48% in 2010. With one in three Internet users making online purchases that year⁷⁵ that echoed similar successes in China.

The country's booming e-commerce industry is the result of a prolonged and proactive engagement on the part of Argentine policymakers, beginning with the passage of the Digital Signature Law⁷⁶ in 2001. The regulation recognized and established protocols for

⁶⁹ "Laws." The Central People's Government of the People's Republic of China, accessed April 10, 2012, <http://www.gov.cn/flfg/fl.htm>

⁷⁰ "Department and Agencies," The Central People's Government of the People's Republic of China, accessed April 10, 2012 <http://www.gov.cn/wsfw/>

⁷¹ Xue Hong, *Cyber Law in China*, (The Netherlands: Kluwaer Law International, 2010), 28.

⁷² Mitra Sramana, "Latin America's E-Commerce Leader," *Forbes*, March 21 2008, accessed April 2012, http://www.forbes.com/2008/03/21/mitra-entrepreneur-argentina-tech-ebiz-cx_sm_0321mitra.html.

⁷³ Stephen E. Blythe, "A Critique of Argentine E-Commerce Law and Recommendations for Improvement," *Annual Survey of International and Comparative Law*, 17:1 (2011), 78, accessed April 20, 2012, <http://digitalcommons.law.ggu.edu/cgi/viewcontent.cgi?article=1148&context=annlsurvey>.

⁷⁴ Mitra Sramana, "Latin America's E-Commerce Leader."

⁷⁵ "Argentina e-commerce revenue jumps 48% in 2010," *Telecompaper*, April 2 2011, accessed April 06, 2012, <http://www.telecompaper.com/news/argentina-e-commerce-revenue-jumps-48-in-2010>.

⁷⁶ "Ley 25.506," Ministerio de Economía, November 14 2001, accessed April 2012, <http://infoleg.mecon.gov.ar/infolegInternet/anexos/70000-74999/70749/norma.htm>.

digital signatures, which continue to pave the legal foundation for all online transactions, although it only sponsor the specific digital signature format and not the countless other electronic signature formats that have since emerged. Nevertheless, Argentina deserves credit as one of the world's few countries to embrace what Blythe calls a "first-generation statute" in the then-emerging field of electronic commerce.⁷⁷

Since then, however, many other countries—including Hong Kong and Singapore, as discussed earlier—have adopted policies of "technological open-mindedness" that permit online merchants to use different, more modern, and universal forms of electronic signatures to facilitate international interoperability during transactions.⁷⁸ Argentina's current Digital Signature Law, once a stand-out role model, now "compel[s] the e-commerce participant to use only the digital signature" at the expense of other more modern and internationalized systems.⁷⁹ Some experts suggest that the time has arrived for a renewed policy that embraces these new technologies while providing consumer protections and universal services such as electronic identification cards.⁸⁰ Doing so could offer positive implications to the country's already-blossoming e-commerce industry.

FOREIGN BUSINESSES

After enduring a bitter financial collapse and devaluation in 2002, Argentina's economy has steadily grown for a decade, enjoying an annual GDP growth rate of about 8-9%⁸¹. Despite this stability, the cost of living in Argentina remains relatively low.⁸² According to a 2011 survey by research firm Mercer, Buenos Aires' cost of living ranks 161st among cities worldwide, placing it far behind Beirut (80th) and Beijing (16th).⁸³ This makes the country an attractive opportunity for thousands of foreign businesses seeking to lower operating costs by conducting their activities online.⁸⁴ Small business and merchants—specifically those offering virtual goods such as web and graphic design services—find that moving headquarters to Argentina's low-cost environment increase profits while streamlining the business process.⁸⁵ Indeed Export.gov, a digital resource managed by

⁷⁷ Blythe, "A Critique of Argentine E-Commerce Law and Recommendations for Improvement," 86.

⁷⁸ *Ibid.*, 88.

⁷⁹ *Ibid.*, 88.

⁸⁰ *Ibid.*, 88.

⁸¹ "GPD (current US\$)," The World Bank, accessed April 2012, <http://data.worldbank.org/indicator/NY.GDP.MKTP.CD/countries/AR?display=graph>.

⁸² Although Argentina's purchasing price power, or GDP per capita, is higher than Lebanon's and China's, its PPP remains lower than that in fifty countries, ranging from the Estonia to the United States, according to the International Monetary Fund.

⁸³ "Worldwide Cost of Living Survey 2011 – City Rankings," Mercer Solutions, July 12 2011, accessed April 12, 2012, <http://www.mercer.com/press-releases/1311145>.

⁸⁴ Two-thirds of the biggest companies in Argentina are foreign. See "176 empresas argentinas vs 324 extranjerias," *Bahianoticias.com*, January 16, 2011, accessed April 2012, <http://bahianoticias.com/las-empresas-extranjeras-mandan-en-la-argentina/36343/>.

⁸⁵ The authors cite a meeting with an American expat in Buenos Aires in October 2009. This 30-year-old entrepreneur runs a graphic design company online, catering to a consumer base located primarily in the United States. He benefits from cheap rent, food, and driving costs while charging customers for services that are cheap by U.S. standards but expensive by Argentine standards. Access to reliable Internet

the International Trade Administration in coordination with various federal U.S. agencies, suggests that the Internet is “enabling” an increasing diversity of firms and sectors, ranging from “household consumer goods, electronic devices, merchandising, books and CDs, computer hardware, tourism services, and even cars” through online portals.⁸⁶ While the benefits of working and selling online in Argentina are evident, the government in 2011 passed a new law that threatens this opportunity, imposing a 20% VAT on all sales of widely-defined goods via “virtual portals” hosted on domestic ISPs via Resolution 2955.⁸⁷ While not placing a direct cost on small and medium enterprises, the added tax holds the potential to repel potential customers who would otherwise benefit from cheaper products facilitated by merchants’ lower production and administration costs. It remains to be seen whether this Internet regulation affects an otherwise booming foreign business ecosystem.

LEBANON

Regarding Internet governance, social economists argue that the ongoing imbalanced growth in the Middle East—affected by disproportionate wealth distribution—stifles the potential emergence of an information network economy.⁸⁸ Such an impediment spills over to Internet development and network expansion, placing the Middle East as “one of the lower and slower rates of Internet growth in the world.”⁸⁹

According to the *Economist*, by 1992 the country’s civil war had “left the country with \$35 billion to pay off and the second-highest debt-to-GDP ratio in the world.”⁹⁰ 20 years later, that \$35 billion increased exponentially and reached a staggering \$53.7 billion by 2012.⁹¹ Following the same line of reasoning, what are the implications of a struggling economy on Internet expansion and governance in Lebanon? Examining the figures above, one could infer that Internet development in Lebanon may adopt the flow of its current economic difficulties. However, the government has taken measures to remedy the struggling economy on the Internet expansion level. First, it is important to examine

is a prerequisite for the success of his business and those of the broader expat community seeking to take advantage of low costs of living.

⁸⁶ “Argentina Country Commercial Guide: Selling U.S. Products and Services,” U.S. Department of Commerce, March 29, 2012, accessed April 14, 2012, <http://export.gov/argentina/doingbusinessinargentina/argentinacountrycommercialguide/sellingusproductsandservices/index.asp>.

⁸⁷ “General Resolution 2955,” Global Legal Information Network,” April 11, 2010, accessed April 2012, [http://www.glin.gov/view.action?searchDetails.searchAll=true&search=&searchDetails.queryString=subterm%3Aequals\(%22en+Information+services%22\)&searchDetails.sortOrder=reverseChron&searchDetails.queryType=BOOLEAN&searchDetails.showSummary=true&glinID=240406&summaryLang=en&fromSearch=true](http://www.glin.gov/view.action?searchDetails.searchAll=true&search=&searchDetails.queryString=subterm%3Aequals(%22en+Information+services%22)&searchDetails.sortOrder=reverseChron&searchDetails.queryType=BOOLEAN&searchDetails.showSummary=true&glinID=240406&summaryLang=en&fromSearch=true).

⁸⁸ Jon W. Anderson, “Producers and Middle East Internet Technology: Getting Beyond “Impacts,” *Middle East Journal*, Vol. 54, No. 3 (Summer 2000): 420.

⁸⁹ *Ibid.*, 420.

⁹⁰ “Lebanon’s Economy: Debt and Destruction,” *The Economist*, August 31, 2006, accessed December 19, 2011, http://www.economist.com/node/7855615?story_id=E1_SRVVGTV

⁹¹ Ibrahim Saif, “Lebanon Needs a Public Debt Strategy,” *The Daily Star*, February 01, 2012, accessed March 12, 2012, <http://www.dailystar.com.lb/Business/Lebanon/2012/Feb-01/161764-lebanon-needs-a-public-debt-strategy.ashx - axzz1rPRa3t2J>

the distribution of Internet types in Lebanon and investigate how the state has approached expanding the Internet in an attempt to improve its struggling economy. According to the Arab Net Online Digital forum, the ways to “legally” connect to the Internet in Lebanon are threefold: fixed line DSL, wireless DSL and 3G through GSM mobile phone networks.”⁹² 3G wireless through GSM carriers is provided by two state-owned phone carriers, Alpha and MTC.⁹³ Wireless DSL is currently provided by four major ISPs: MOBI, WIGO, PESCO and IFLY.⁹⁴ Lastly, fixed DSL is provided by 10 independently owned ISPs; however, they receive spectrum bandwidth from the state owned Ogero, a telecommunications provider owned by the state.⁹⁵ Surprisingly, it seems that the struggling economy has not deterred Internet expansion and infrastructure development in Lebanon. For example, according to the International Telecommunications Union (ITU), the number of Internet users in Lebanon expanded from 30,000 in 2000 to 950,000 in 2008.⁹⁶ This 650,000-user increase in a span of eight years certainly does not reflect a debilitated economy, however. One reason for this could be that the government, irrespective of its stifling economic debts, passed a price-cap law in August 2011 that stipulated a decrease of Internet tariffs and an increase in bandwidth speed.⁹⁷ For that reason, it is apparent that the government in Lebanon through legislation has forced ISPs to decrease their prices and increase their bandwidth speed. According to the Minister of Telecommunication, consumers who used to get 20% of what they pay for now will get 80%—an increase of 8 times.⁹⁸ This effective government plan—a coercive regulation of ISPs—could spill over effectively on the economy, in that e-commerce could now be ripe with economic benefits or at least remedial to stifling debts. Cultural implications, however, may impede this exponential growth of Internet in Lebanon, and this will be discussed in all three countries in the following section.

CULTURAL IMPLICATIONS

Access to the global knowledge economy continues to drive cultural shifts. Patents, trademarks, and other indicators of a culture of innovation are examined in this section in each country, along with a discussion of government efforts to stifle or define cultural values through censorship.

CHINA

⁹² Fouad Berjaoui, “Lebanon’s Internet Connectivity Improvements: what should Startups Expect?,” *Arabnet*, August 09, 2011, accessed May 03, 2012, <http://arabnet.me/what-should-startups-expect/>

⁹³ Ibid.

⁹⁴ Ibid.

⁹⁵ Ibid.

⁹⁶ quoted in “Internet in the Middle East,” Internet World Stats, accessed March 01, 2011, <http://www.internetworldstats.com/me/lb.htm>

⁹⁷ Ibid.

⁹⁸ Nicolas Sehnaoui, quoted in “[AUDIO RECORDINGS] MEETING WITH TELECOM MINISTER – MR NICOLAS SEHNAOUI,” *Ontor Net... the@yblog*, July 26, 2010, accessed April 23, 2011, <http://blog.ontor.net/?p=232>

INTELLECTUAL PROPERTY RIGHTS

Intellectual property (IP) rights have been acknowledged and protected in the People's Republic of China since 1979. The legal framework for protecting intellectual property in the PRC is built on three national laws passed by the National People's Congress: the Patent Law, the Trademark Law and the Copyright Law.⁹⁹ According to the Intellectual Property Rights Protection Conference held in Warsaw in June 2001, IP rights online can be classified into the following three categories: copyrights and their related rights; industrial property rights online, such as programs, software and computer-aided creative designs and so forth; and rights on domain names, which are the English names and addresses registered by enterprises on the Internet and are regarded as permanent trademarks registered online by enterprises in order to promote the sales of their products or services.¹⁰⁰

Compared with traditional IP protection offline, IP protection is particularly difficult in the People's Republic of China. Without adequate education about IP, there is little awareness that infringement is a crime. For example, although the first intellectual property law was drafted in 1982, the first IP rights training center was not established until 1996. Local protectionism made the protection of IP harder. For example, local governments often do not want to genuinely support the work of anti-piracy supervisors. This may create obstacles during investigations into IP violations and assist local counterfeiters by letting them hide their production lines in safer places. When counterfeiters have good connections with local governmental or law enforcement officials, they may find an umbrella for their counterfeiting activity.

Meanwhile, IP awareness remains low in China. A survey conducted by the Media Research Lab of Tsinghua University shows that, while Beijing and Guangdong residents have a reasonably high awareness of the issues surrounding IP rights, the majority of their fellow countrymen know little about the question. The general index for Chinese people's public awareness of IP rights is 42.1 (a comparatively low figure), but results vary from region to region, with Beijing and Guangdong scoring 46.9 and 51 respectively.¹⁰¹ The results reflect China's progress in the field of IP protection and the disparities between regions. Region, ethnic group, gender, age, income and education are all factors that affect people's awareness of IP rights.

PRIVACY AND CENSORSHIP

The Measure for the Administration of Internet Information Services, adopted on 25 September 2000, establishes the legal basis of administration of Internet content providers. The government sets up special filters to block users in China from seeing sites run by inappropriate or illegal groups. The system uses a variety of technical methods to block relevant contents from being routed through. Under the Regulations

⁹⁹ "Laws," The Central People's Government of the People's Republic of China, accessed April 10, 2012, <http://www.gov.cn/flfg/fl.htm>

¹⁰⁰ "Conferences, Meetings and Seminars," World Intellectual Property Organization, accessed March 20, 2012, http://www.wipo.int/meetings/en/details.jsp?meeting_id=4312

¹⁰¹ "Media Lab," Tsinghua University, accessed April 02, 2012, <http://media.cs.tsinghua.edu.cn/en>

of News and Information Services on the Internet law, Internet content providers and Internet access providers must retain records for at least sixty days and make available for inspection by the authorities the content, time of release, Internet address, account numbers, Internet protocol address, and so forth.¹⁰²

Strict online censorship has forced Chinese Internet users to create a rich vocabulary of colloquialisms to evade automatic filters. Two common examples of internet slang include the acronym ZF for zhèngfǔ, or government, and wǔ máo dǎng or the 50 cent party (in which commenters allegedly paid 50 cents per post uploaded praising the government).

Aside from word play, Chinese Internet users manipulate the text itself to remain under the radar. Chinese blogs are normally written left to right and horizontally, similar to English text. During 2008's Guizhou riots bloggers used text reformatting to evade censors. Bloggers are able to flip their text to the traditional right to left, top to bottom format using a simple text reformatting tool. The directionality of the text makes it difficult for automatic detectors to catch banned words and phrases.¹⁰³

ARGENTINA

PATENTS, CONSUMER PROTECTION, AND INTELLECTUAL PROPERTY

Argentina enjoys a recently renovated patent ecosystem that was overhauled in 2004 in Law 24481¹⁰⁴ (amended in 2005 and 2006) following the country's membership into the TRIPS (Trade-Related Aspects of Intellectual Property Rights) framework through the WTO. The law conforms to many international standards, with at least two notable exceptions in the context of the Internet; games and computer programs—unlike in the United States—are *not* protected by Argentina's patent law. This clearly paves the way for potential disputes regarding online games, online software such as Java or Flash, and other programs. Also in contrast to U.S. law, the new system imposes a firm 20-year limit on all patents, potentially paving the way for iterative innovations of a product within a single person's generation.

At first glance, these policies appear to have positive ramifications in civil society. According to the World Intellectual Property Organization's WIP Indicators 2011 report, Argentina remains one of the developing world's most active patent and trademark application countries. The country saw a 17.1% increase in trademark applications over 2010, and more than 4,700 patent applications were filed in 2010—behind only Malaysia and South Africa among upper middle-income countries, and seventh

¹⁰² Xue Hong, *Cyber Law in China*, (The Netherlands: Kluwer Law International, 2010), 29.

¹⁰³ "Case Studies," Movements.org, accessed March 20, 2012, <http://www.movements.org/case-study/entry/using-language-to-evade-online-censorship-in-china>

¹⁰⁴ "Ley de patentes de invención y modelos de utilidad," Universidad Nacional del Nordeste, March 22 1996, accessed April 2012, <http://www.miranda-argentina.com/pau.htm>.

worldwide as a function of business sector R&D expenditure.¹⁰⁵ Such success, however, would appear to be despite, rather than because of, Argentina's policy. From an international perspective, Argentina's intellectual property framework demonstrates a distinct "lack of compliance" with international norms, according to a European Commission report.¹⁰⁶ For example, its long patent backlog violates the limits established by the TRIPS framework to which the country's leadership subscribes.

Consumer protection did not formally emerge in Argentina's legislative portfolio until 1993 with the passage of the Consumer Protection Law.¹⁰⁷ The regulation provided certain basic consumer rights, such as the right to clear and accurate information, and defined legal avenues through which consumer grievances could be directed. Although the law was a step in the right direction from a consumer advocacy perspective, even a cursory reading of its language reveals how lightly merchants and corporations were regulated in this context. For example, the law did not clarify that honest and precise information about a product needed to be provided by suppliers free of charge, leading some online retailers to provide such information only after a transaction was made. To address this and other persistent issues, the 1993 law was amended in 2008 via Law 26.631, which sought to "reduce the supremacy of the supplier" and provide more protections to consumers.¹⁰⁸ This iterative process (in which abuses of innovation are addressed by retroactive policymaking) is echoed throughout the Internet innovation ecosystem.¹⁰⁹

PRIVACY AND CENSORSHIP

The seminal contemporary legal text regarding privacy rests in the Personal Data Protection Law of 2000,¹¹⁰ which provides "the comprehensive protection of personal information" recorded in a variety of mediums including "databanks or other technical means of data treatment." Most notably the law bears no mention of relevant words such as "Internet," "networks," or "digital," suggesting that the privacy law was not established with modern communication technologies such as the Web in mind.

¹⁰⁵ Interestingly, 3,600 of these patents were filed by non-residents, lending credence to the argument presented earlier that Argentina remains a fertile ground for foreign business operations. Gurry Francis, "2011 World Intellectual Property Indicators," World Intellectual Property Organization, November 14 2011, 45, accessed April 2012, http://www.wipo.int/export/sites/www/freepublications/en/intproperty/941/wipo_pub_941_2011.pdf.

¹⁰⁶ European Commission, *Evaluation of the Intellectual Property Rights Enforcement Strategy in Third Countries*. November 2010, accessed April 2012, http://trade.ec.europa.eu/doclib/docs/2010/november/tradoc_147053.pdf.

¹⁰⁷ "Ley 24.240," Ministerio de Economía, September 22 1993, accessed April 2012, http://www.taringa.net/posts/info/12955239/Defensa-del-Consumidor---Ley-24_240_-Argentina.html.

¹⁰⁸ Paula G. Fernandez Pfizenmaier, "Argentina: Recent Amendments on the Consumer Protection Law in Argentina," *Mondaq*, December 4 2008, accessed March 04, 2012, <http://www.mondaq.com/article.asp?articleid=69356>.

¹⁰⁹ Lecture notes, February 2012, Pablo Molina, Georgetown University Communications, Culture, and Technology M.A. Program.

¹¹⁰ "Ley 25326: Personal Data Protection Act," Protección de Datos, October 4 2000, accessed April 05 2012, <http://www.protecciondedatos.com.ar/law25326.htm>.

Nevertheless, privacy awareness appears to be tantamount in the minds of Argentine Internet users as they increasingly demonstrate behavior reflecting digital caution. A 2012 poll by MSN Argentina revealed “increased knowledge about security and privacy tools on social networks” as the percentage of respondents who did not their social network privacy settings decreased 6 points to 8%.¹¹¹ Government-sponsored efforts or policy initiatives to support consumers’ privacy awareness are few and far between; indeed, a 2011 European Commission report acknowledges that the country has made “little progress...in raising awareness of these issues.”¹¹² Instead, international organizations and private corporations have taken the lead on such initiatives. *NavegaProtegido.org*, for example, is a high-profile joint project of UNICEF and Microsoft whose mission is to provide advice for parents and concerned citizens about their privacy settings and risks.

The Argentina government’s most perplexing yet consistent policy on censorship has involved blocking certain search results for a long list of prominent names. As Google reports in its Transparency Report, Argentina courts in 2010 sought “the removal of every search result” mentioning a particular person’s name¹¹³, which was appealed by Google and Yahoo. The *New York Times* explored this further and reported that Argentina had since 2006 been requesting content removal for searches regarding certain high-profile names such as Diego Maradona.¹¹⁴ This “dubious blocking,” as it has been called by the Open Net Initiative—an alliance of organizations including Google and Harvard University partly created as a response to these requests—continues to be challenged in the Argentine judicial system.¹¹⁵

LEBANON

According to a study done by the TRA, 31% of households surveyed in Lebanon have a personal computer, and 16% out of those computer-households are connected to the Internet.¹¹⁶ According to the Central Intelligence Agency (CIA) website, 1 million out of a population of 4,143,101 are Internet users—meaning roughly one person in four use the

¹¹¹ Carlos , H, Mendoza. “[Argentina] Crecieron en 2012 los ciudadanos para preservar la privacidad y seguridad en Internet,” *Technet*, April 2, 2012, accessed April 08, 2012, <http://blogs.technet.com/b/microsoftlatam/archive/2012/04/02/argentina-crecieron-en-2012-los-ciudadanos-para-preservar-la-privacidad-y-seguridad-en-internet.aspx>.

¹¹² “European Commission, *Evaluation of the Intellectual Property Rights Enforcement Strategy in Third Countries*, (Ardenne, 2010): 40, accessed April 04, 2012, http://trade.ec.europa.eu/doclib/docs/2010/november/tradoc_147053.pdf

¹¹³ “Transparency Report,” Google, 2012, accessed April 2012, <http://www.google.com/transparencyreport/governmentrequests/>.

¹¹⁴ Vinod Sreeharsha, “Google and Yahoo Win Appeal in Argentine Case,” *The New York Times*, August 19 2010, accessed April 2012 <http://www.nytimes.com/2010/08/20/technology/internet/2ogoogle.html>.

¹¹⁵ Firuzeh Shokooh Valle, and Christopher Soghoian, “Adiós Diego: Argentine judges cleanse the Internet,” Open Net Initiative, November 11 2008, accessed April 2012, <http://opennet.net/blog/2008/11/adi%C3%B3s-diego-argentine-judges-cleanse-internet>

¹¹⁶ Republic of Lebanon Telecommunication Regulatory Authority, *Telecommunication Usage Patterns and Satisfaction*, Beirut, (2008): 4.

Internet frequently or at least have access to it.¹¹⁷ That one person in four, however, seems to be located in one distinctive part of the country—such as Beirut and other cities. To explain this further, Lebanon seems to experience a cultural divide that spills over to e-skills, e-access, and e-service levels. For example, according to the Association for Information Systems (AIS):

“The e-skills divide is largely explained by income, educational, gender, geographic, religious, and age inequalities. Most importantly however, geographic inequalities most influence the e-skills divide.... Geographic disparities represent the nexus of unequal wealth distribution, politics and religion in Lebanon.”¹¹⁸

While the findings above only relates to Internet e-skills, Internet access, however, is inextricably linked with the former. Additionally, the largest concentration of wealth is found in Beirut, a predominantly Christian Mount Lebanon and the big cities.¹¹⁹ Conversely, since many Muslims live in the rural areas, there is a religious dimension to the Internet access divide.¹²⁰ According to the AIS, such cultural divide reflects an infrastructure [divide] that promotes computers and the Internet.¹²¹

Regarding e-services, according to Antoine Harfouche, the Lebanese government envisioned an e-service system that would alleviate cultural disparities and spread equalities amongst the Lebanese citizens.¹²² *El-wastah*, meaning “connection” in the Lebanese Arabic dialect, has become a pejorative word implying that only influential individuals can bypass the queue at the Ministry of Telecommunication, or the *central* landline posts to pay the phone bill. By providing e-services, the government hoped to bridge this gap between the influential and the poor by allowing equal opportunities to access government services. For that reason, the government proceeded to establish an e-service for individuals to remit their bills online. Harfouche argues, conversely, that e-services actually further the digital divide.¹²³ According to Harfouche, there is inequality in the benefit between those who have e-skills such as, the cities and the Christians areas and those who have not, such as the Muslim South region.¹²⁴

On the micro-cultural level, the diverse and fragile cultural mosaic in Lebanon spills over on Internet privacy. According to Stoakes, one weighty factor that furthered the inevitability of the civil war was a deliberate unequal distribution of wealth to

¹¹⁷ “The World Factbook,” Central Intelligence Agency, accessed April 01, 2012, <https://www.cia.gov/library/publications/the-world-factbook/geos/le.html>

¹¹⁸ Antoine Harfouche, and Robbin Alice, "115 ANTECEDENTS OF THE DIGITAL DIVIDE IN LEBANON" MCIS 2010 Proceedings, Paper 40, (2010): 11.

¹¹⁹ Ibid., 11.

¹²⁰ Ibid., 11.

¹²¹ Ibid., 11.

¹²² Antoine Harfouche, “The same wine but in new bottles: Public E-Services Divide and Low Citizen Satisfaction: An Example from Lebanon,” *International Journal of Electronic Government Research*, Vol. 6, No.3 (July – Sept, 2010): 77.

¹²³ Ibid., 78,

¹²⁴ Ibid., 78,

marginalize the already disenfranchised Muslim Shi'i culture of the extreme south.¹²⁵ To elaborate, prior to the start of the civil war, Christians and Sunnis regarded the Shi'is who occupied the south as unsophisticated second-class citizens. For that reason, southern Lebanon was excluded from the economic boom of the 1950s and 1960s. The repercussions of such marginalization have forged an inevitable crack in the country's cultural mosaic. Decades later in today's information society, the concealed political plan that triggered the civil war had turned from a contentious political agenda imbued with sectarianism to an egalitarian one. For example, in a policy paper conceived by the Minister of Telecommunication, Gebran Bassil, entitled *The Vision of One People-Centric Information Society*, the Minister argues:

...of a society fully connected and of a society favoring the coexistence and partnership between the Lebanese communities... everyone everywhere should have the opportunity to develop and no one should be excluded from the benefits the information society can offer.¹²⁶

From the content of the Minister's policy paper one can infer that through an equally developed Internet infrastructure (in contrast to the pre-civil war era where such equality would not be achievable), today there is an attempt to create a horizontal social network. The repercussions of a horizontal social network trigger a social interaction whereby citizens communicate equally with one another and forge together the nation's wealth and resources. This is opposed, for example, to a vertical network wherein only an exclusive ethnic group reaped the benefits of the nation's resources, as was the case during the economic boom of the 1950s and 1960s. For that reason, through the information society in Lebanon, a gap may be bridged between the polarized ethnic cultures with social and economic benefits. Perhaps such allusion for cultural equality stems from an attempt to alleviate the struggling economy.

Regarding patent and intellectual rights in the international context, Lebanon is not a member of the Patent Corporation Treaty (PCT). This fact may exacerbate the negative externalities of the political shift.¹²⁷ For example in Lebanon, overt violations of IP rights transpire on the daily level. According to Patent Express, such violations remain a serious problem in Lebanon, especially in the areas of unauthorized copying of computer software.¹²⁸ For the reason that, the government does a poor job of enforcing the law, and protection must be sought in the courts. This is most important in areas over which the state has no governance, such as the Shi'i controlled south of Lebanon

¹²⁵ Frank Stoakes, "The Civil War in Lebanon," *The World Today* Vol. 32, No. 1 (1976): 9.

¹²⁶ Quoted in Slideshare, Gebran Bassil, Lebanese Republic Ministry of Telecommunication: The Minister, "*Lebanon at Horizon*" *A people centered information society*, Beirut, 2009, 5, accessed April 01, 2012, <http://www.slideshare.net/cedarcomnews/policy-paper-general-rules-for-the-regulation-of-telecommunications-services-in-lebanon-including-a-changereformrepair-plan-of-action>

¹²⁷ "Filing Patterns and Trademarks in Lebanon," Patent Express, accessed may 01, 2012, http://www.patentexpress.com/patents/international_country.aspx?cn=lebanon

¹²⁸ Ibid.

INTERNATIONAL IMPLICATIONS

The Internet Governance Forum (IGF) best embodies the efforts by many stakeholders worldwide to engage in multilateral and multidimensional discourse about Internet policy. This section, the final of the paper's four frameworks, explores the international implications of domestic Internet policy in China, Argentina, and Lebanon.

CHINA

China generally encourages foreign investment in the development of telecommunications technologies, as opposed to the development of services. The Guideline Catalogue for Foreign Investment Industries issued by Ministry of Commerce of People's Republic of China lists micro-electronic technology and information and communications systems network technology as two of the newly emerging industries in which foreign investments are encouraged.¹²⁹ In the 1990s, China began to plan and construct the Golden Gate Project, which supports information systems engineering with computer network technology and related areas of international trade, standardization, scientific, network management. The goal of project is to build system contains engineering applications such as quota license management, electronic customs clearance, import and export statistics, export tax rebates, export volume, and import verification to achieve international e-commerce and facilitate cross-border trade.¹³⁰

Nevertheless, China maintains a tight hold on the structure of Internet connections. Foreign investment in e-commerce is prohibited in China, and since China classifies both ISPs and Internet content providers (ICPs) as value-added telecommunications services, foreign investment is not allowed in the operation of any Internet Access Providers (IAPs) in China. Additionally, there are only a number of approved backbone network operators that serve as portals to international networks. Any Chinese IAP plan to make international connections should meet the requirements provide in the Internet Provisional Regulations and submit a feasible report to relevant ministry. Foreign companies must partner with Chinese domestic IAPs by providing technology so as to enter China's Internet market.¹³¹

Since becoming a member of World Trade Organization (WTO), the Chinese Internet market is subject to a gradual opening to foreign investors. For example, foreigners were subsequently allowed 30% ownership in joint ventures in value-added services,

¹²⁹ "Regulations," Ministry of Commerce of People's Republic of China, accessed April 10, 2012, <http://www.mofcom.gov.cn/b/b.html>

¹³⁰ Mengchaw Wang, Ministry of Commerce, *China International E-Commerce Center*, Beijing, accessed March 29, 2012, http://www.unescap.org/tid/projects/tforum11_c1_ciecc.pdf

¹³¹ State Council of People's Republic of China, *Measures for the Administration of Internet Information Services*, September 25, 2000, accessed April 24, 2012, <http://www.lehmanlaw.com/resource-centre/laws-and-regulations/information-technology/measures-for-managing-internet-information-services-2000.html>

including paging, ISPs and ICPs in Beijing, Shanghai and Guangzhou. Foreign ownership was allowed to rise to a maximum 49% at end-2002, with the geographic area expanding to 14 other cities. The cap on foreign ownership rose to 50% at end-2003, and all geographic limitations were scrapped. The WTO agreement indirectly gives foreigners access to the Chinese e-commerce market because of the opening up of the wholesaling and retailing sectors.¹³² Therefore, it could be argued that membership to the WTO opens doors to direct foreign investment in the Internet in China.

ARGENTINA

Argentina's domestic policies regarding patents and Internet innovation (discussed further below) have been shaped to some extent by the country's international agenda. Participation in the TRIPS agreement, for example, renewed a much-needed conversation about patent reform that will in turn define how the country engages with the international community. For example, as the recent Megaupload case demonstrated (in which a New Zealand resident was arrested at the behest of an United States enforcement agency), international cooperation will be necessary for future pursuits of illegal intellectual property actions. To this point, Argentina appears to be emulating U.S. enforcement systems (albeit with less tenacity and urgency), making such cooperation a feasible result of any international pursuit of IP evil-doers.

Argentina's policies and participation in regional communities continue to define how the country and its international neighbors perceive and address intellectual property over the Internet. As a member of MERCOSUR, the South American trade community similar to its northern counterpart NAFTA (North American Free Trade Agreement), Argentina has engaged with the World Intellectual Property Organization to define its role in protecting IP. For example, in 2001 MERCOSUR member countries met in Brazil to discuss the management of intellectual property in universities and enterprises. The outcomes of those meetings, however, are unclear, and there has been little engagement in the ten years following.

Around the same time, MERCOSUR began developing Intersur,¹³³ a three-year project supported by the World Bank's *infoDev* entrepreneurship and innovation division that promised, among other goals, a minimum 2 Mbps connection in all member countries (an admirable goal during this project's inception in 1999). Traces of the Intersur project are few and far between, indicating that the initiative perhaps never grew to fruition, but it represents a commendable, early, and active engagement on the part of Argentina via international mechanisms to develop an Internet infrastructure. Other multilateral institutions appear to be picking up where *infoDev* left off; the ITU

¹³² "E-Commerce opportunities in Modern Business China," Mindrelief, accessed April 02, 2012, http://www.mindrelief.net/e-commerce_opportunities.html

¹³³ "Proyecto Intersur," Reunión Especializada de Ciencia y Tecnología del Mercosur, accessed April 2012, <http://www.recyt.mincyt.gov.ar/files/Recyt/XVIIReuniao/Anexo8.pdf>.

continues to invest and actively participate in the rollout of the *Argentina Conectada* broadband plan discussed earlier.

Another international institution holds the potential to guide more contemporary Internet policy in Argentina. The Organization of American States (OAS), a multilateral institution representing governments of 35 North and South American states including Argentina, resolved in 2011 to “recognize the valuable contribution of information and communication technologies... to exercise the right to freedom of expression... and to the prevention of human rights abuses.”¹³⁴ While a positive gesture indeed, it is mildly distressing that such a resolution does little more than echo Argentina’s Decree 554/97, passed fourteen years previous to this resolution with an almost identical purpose. Also in 2011, the OAS met in Washington DC with representatives from other multilateral coalitions including the United Nations to affirm a Joint Declaration Concerning the Internet.¹³⁵ The 2011 directive, issued by the Office of the Special Rapporteur for Freedom of Expression, maintains that all members would “promote universal Internet access” that would not be purposefully interrupted “even for public safety or national security reasons”—an excuse used by governments worldwide to freeze telecommunications. Despite these lofty goals, explains OAS e-Government Senior Expert Miguel Porrúa in a discussion with the authors, the Special Rapporteur holds no concrete influence over the member states, meaning this Directive remains largely toothless in the context of policy-shaping.¹³⁶

LEBANON

The acting CEO of the TRA argued that Lebanon “will need to invest at least \$200 million very soon in broadband Internet infrastructure to meet corporate and consumer demand.”¹³⁷ The development of Lebanon’s infrastructure, however, interlocks with international political implications in that both are inextricably linked. For that reason, a historical retrospective example is important. The 1983 bombing of the U.S. Marine headquarters in Beirut triggered animosities between the U.S. government and Hezbollah, in which the U.S. blamed Hezbollah for masterminding the attack.¹³⁸ Those animosities further escalated as the decades rolled by, including the labeling by the U.S. government of the Shi’i resistance as a terrorist group. In that context, what are the implications of the recent shift of political discourse on information technology (IT) infrastructure and development in the south and in Lebanon? Cisco, an American network equipment company that contributes to the technical backbone of Internet

¹³⁴ “Declarations and Resolutions,” Organization of American States, 2012, accessed April 2012, <http://www.oas.org/consejo/GENERAL%20ASSEMBLY/Resoluciones-Declaraciones.asp>.

¹³⁵ “Freedom of Expression Rapporteurs Issue Joint Declaration Concerning the Internet,” Organization of American States, June 1 2011, accessed March 2012, <http://www.cidh.oas.org/relatoria/showarticle.asp?artID=848&lID=1>.

¹³⁶ See Porrúa

¹³⁷ “ICT Development in Lebanon,” National U.S. Arab Chamber of Commerce, accessed March 10, 2012, <http://www.nusacc.org/links/index-cid=9&pid=161.php.html>

¹³⁸ Roger Owen, “The Lebanese Crisis: Fragmentation of reconciliation?,” *Third World Quarterly*, Vol. 6, No 4 (1984): 945.

infrastructure across the world, announced in a 2006 press release on developing nations:

“The Partnership for Lebanon was launched by U.S. business leaders in September 2006 to provide critically needed resources for reconstruction efforts in Lebanon and to help build a better future for the Lebanese people.”¹³⁹

For that reason, Cisco proceeded to establish ten IT centers across the Lebanese southern region.¹⁴⁰ This aid, however, was prior to the political shift of 2011. When the contentious Hezbollah government took over, a handful of high-level government and political figures in the U.S. publically denounced the shift, while “some Congressional leaders [called] for a cut-off in U.S funding for Lebanon.”¹⁴¹ As Mona Yacoubian suggests, this shift in political discourse will forge additional challenges to U.S influence in Lebanon.¹⁴² These externalities may further impede Internet development and stifle a potential equally-developed infrastructure across the south and north because the U.S. government may pressure the private ICT sector not to invest or undertake development projects in Lebanon. If manifested as such, these negative externalities may spill over on the already struggling economy In Lebanon.

CONCLUSION

This paper has examined the geopolitical, economic, cultural, and international implications of Internet policy in China, Argentina, and Lebanon. Despite the unique trajectories each country’s Internet development took, the three states share patterns of similarities and dissimilarities. This section provides some concluding thoughts based on these observations.

First, each country manifests a demographic and digital divide. Geographically, Argentina and Lebanon both share a tangible north-south division (albeit for entirely different reasons) that will continue to be molded by Internet policy. In China as in the other two countries, a digital divide exists between urban and rural areas that could be exacerbated by imbalances in Internet provision and access. Such divides could impede the potential emergence of a networked knowledge economy as well as inhibit the formation of a horizontal social network that—particularly in places of historical conflict such as in Lebanon—could potentially forge social capital (trust, values, norms) among the disparate regions and populations. While Lebanon’s case is most salient for this point, the same must be said of Argentina and China, whose Internet policies must bridge geographical boundaries in order to foment a united and networked society.

¹³⁹ “CSR Report 2008: Partnership for Lebanon” Cisco, accessed April 04, 2012, <http://www.cisco.com/web/about/ac227/csr2008/cisco-and-society/human-needs/partnership-for-lebanon.html>

¹⁴⁰ Ibid.

¹⁴¹ “New Government Announce in Lebanon,” United States Institute of Peace, accessed March 27, 2012. <http://www.usip.org/publications/new-governmentannounced-in-lebanon>

¹⁴² Ibid.

Internet policies' effect on economic affairs in each country is clear, namely in the e-commerce industry. Two of the three states (Argentina and China) clearly benefit from early and proactive Internet policies that welcomed methods of electronic signature and payment, resulting in robust e-commerce ecosystems that continue to lead their respective regions. Such a strong relationship should be recognized by other emerging countries as they seek to harness new technologies for the sale and transfer of goods. Lebanon does not enjoy the same level of e-commerce success, but there is still evidence of a relationship between telecommunications policies (such as enacting tariffs on ISPs) and economic growth or decay. Argentina and China share this characteristic, as demonstrated by their special economic zones mentioned earlier.

The three countries studied here also share similar rates of corruption, which represents an indicator as to the cultural implications of Internet policy (Table 1). According to the Corruption Perceptions Index, each state scored between 2.5 and 3.6, indicating that their policies towards defending (or encouraging) corrupt activities through the Internet have enjoyed some degree of similarity (See Table 1).

Table 3:
Corruption Score Index¹⁴³

	Score	Ranking
China	3.6/10.0	75/183 countries
Argentina	3.0/10.0	100/183 countries
Lebanon	2.5/10.0	134/183 countries

The investigation into international implications of Internet policy, however, presents a unique challenge to the research question across all three countries. In China, Argentina, and Lebanon, international engagement on topics related to the Internet revealed a symbiotic and mutually affective relationship with domestic Internet policy. Participation with foreign and multilateral bodies—the WTO in China's case, OAS in Argentina's, and the United States in Lebanon's example—continue to define domestic Internet regulation as much as the policy itself drives the country's international agenda. This pattern suggests that international influences may increasingly drive domestic Internet policy in key emerging regions of the world.

The dissimilarities of Internet governance patterns among China, Argentina, and Lebanon are also considerable. China has a very powerful central government. Every force that could affect the Internet environment is controlled by the government in some level; laws and regulations are conducted by government, native companies are under the control of government, and even international organizations and foreign companies have to deal with government first to wield influence (Figure 1).

¹⁴³ The Global Coalition Against Corruption.

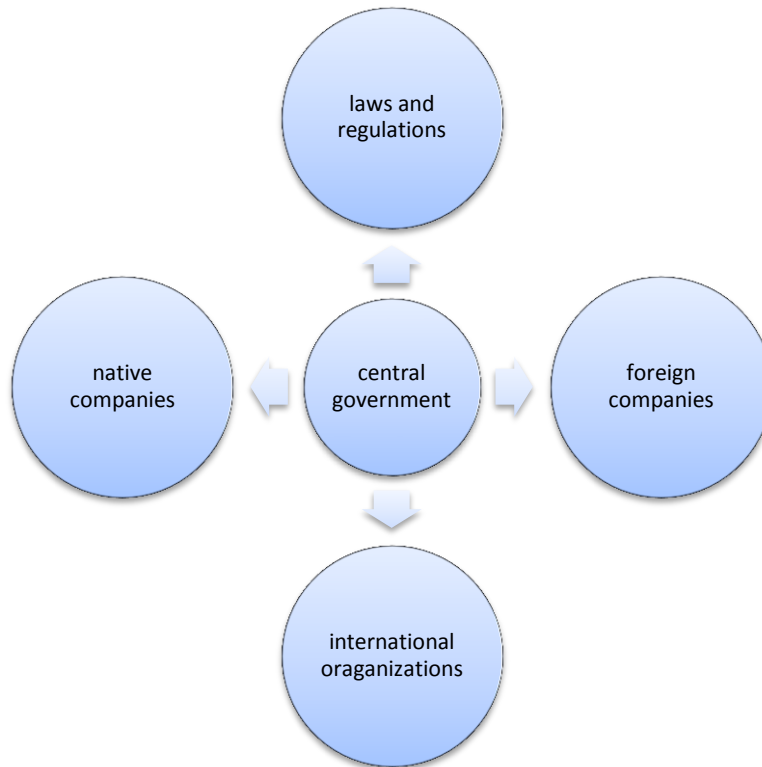


Figure 1

Argentina, however, has a different pattern of regulation. There are multiple forces that play roles in Internet governance. The government conducts policies to stimulate economic development (as was explored in the discussion about Tierra del Fuego), specific commissions are in charge of enacting Internet policies to a reasonable degree of independence from the central government, native and foreign companies alike compete in the same market, and the government is more responsive to international organizations (Figure 2).

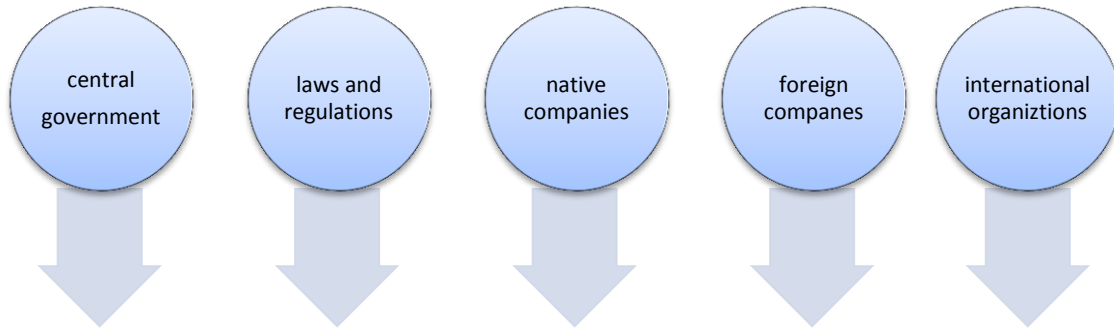


Figure 2

Compared to China and Argentina, Lebanon is a much smaller country. It does not have a powerful central government, but its small size makes the different forces intertwined; native companies may be a part of foreign companies, and governments can influence the progress of lawmaking (Figure 3).

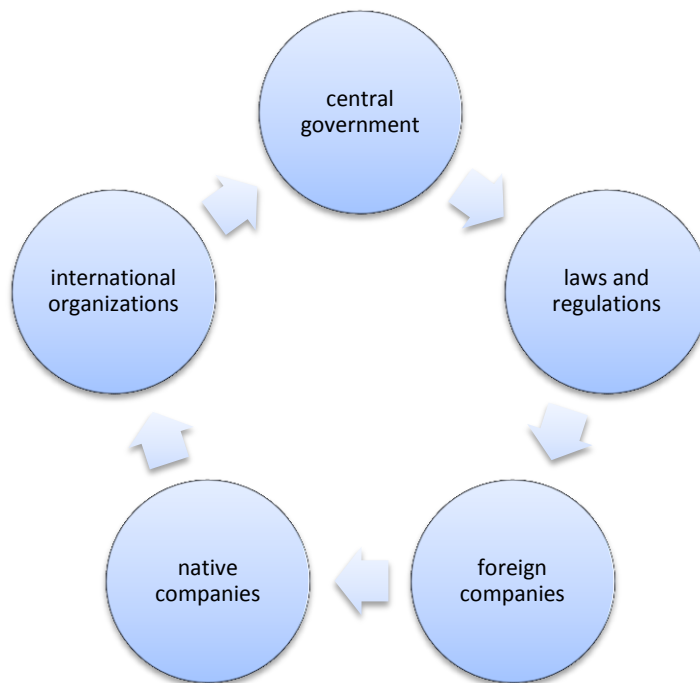


Figure 3

Answering the research question: What are the implications of Internet policy on governance, enforcement, and innovation in China, Argentina, and Lebanon? As this paper has introduced, the reach of Internet policy extends far beyond the domain of the World Wide Web. Internal and external factors alike continue to define, and be defined by, Internet policies and regulatory practices in each country. These policies either directly or indirectly affect geopolitical characteristics of a state, such as when they favor access to digital information in urban areas instead of rural regions. They also have tremendous economic implications, as proactive policies hold the potential to introduce online standards that facilitate, among other features, a burgeoning e-commerce industry. Internet policies also have tremendous effects on innovation and cultural identity in the context of intellectual property and patents. Such regulations are clearly linked to involvement in international organizations, which—at least in the context of this admittedly small sample size of three countries—indicates that, for the moment, international organizations hold the strongest potential to affect domestic Internet policies on a global scale.

What does this conclusion mean for other countries, and what are the next steps? To begin, this preliminary study suggests that patterns of Internet policies might inadvertently exist in other countries in the developing (and perhaps developed) world. As a result, rather than reinventing the wheel, emerging countries seeking guidance on Internet policies should review and consider similarities and differences between specific legislation in other countries. This could also facilitate the development of best practices in the field of Internet policy, particularly as it relates to the four frameworks discussed here. As should be made clear, however, this paper does not promise to develop final conclusions on specific implications; rather, it should be used as a stepping stone upon which to develop a more robust and comprehensive comparative analysis of Internet policies in multiple regions and countries around the world. Only then might definitive conclusions be drawn from the otherwise murky and relatively unexplored discipline of comparative Internet policy.

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