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LETTER OF TRANSMITTAL

UNITED STATES SENATE, COMMITTEE ON FOREIGN RELATIONS, Washington, DC, October 5, 2011.

DEAR COLLEAGUES:

I directed my senior Senate Foreign Relations Committee staffer for Latin America and the Carribean, Carl Meacham, to assess the U.S. Department of State's efforts to promote and strengthen democracy in Latin America through the increased use of social media and technology.

In 2011, social media usage is booming and will likely continue to do so in the coming years. Earlier this month, it was reported that Facebook now has more than 800 million active users worldwide. Likewise, Twitter reports that it has 100 million active users, which marks an 82% increase in activity from 2010. With more than 50% of the world's population under 30 years of age, the social media and technology resources that are so popular within this demographic will continue to revolutionize communications in the future. These technologies can affect political change, improve government efficiency, and contribute to economic growth.

Through the wave of demonstrations occurring in the Arab world that began in December 2010, known as the Arab Spring, the world witnessed how regular citizens can use social media and information platforms like Facebook, Twitter, and Google to mobilize against repressive governments.

Despite Latin America's broad social and economic progress, many countries in the region still face challenges to democracy similar to those recently seen in the Middle East. In the extreme cases, countries like Venezuela, Cuba, and Nicaragua are led by authoritarian leaders who curtail civil and political freedoms. But, in general, the region's governments still have much work to do to ensure the rule of law, to maintain the security of their citizens, and to address a myriad of other social challenges.

Though many Latin American governments still face these problems, Latin America does have the advantage of more mobile phone subscriptions, Internet users, broadband access, and secure Internet servers than the Middle East.

Opportunities abound in the region to make government more effective in the provision of services to regular citizens through social media and information platforms. The United States, in particular, has a vested interest in Latin America's development for many reasons. These include Latin America's status as one of the United States' fastest growing export markets. Additionally, stronger, more stable democracies and economies in Latin America generally reduce illegal immigration to the United States. Unfortunately, Latin American governments have been slow to adopt social media and technology. While the Government of Chile is one of the few governments in Latin America to provide services online, only Colombia has an established budget for increasing technological connectivity and social media use. Social media and technology initiatives in Latin America based on political, economic, and social realities will be crucial to the suc-cess of associated U.S. government efforts in the region. Mr. Meacham's report provides significant insight and important rec-ommendations for the U.S. Department of State's efforts to promote the effective use of social media, to strengthen democracy where it has taken root, and to promote democracy in countries where it is eroding or does not exist. I hope that you find the report helpful. Look forward to working with you on these issues and welcome I look forward to working with you on these issues and welcome any comments you may have. Sincerely,

RICHARD G. LUGAR, Ranking Member.

LATIN AMERICAN GOVERNMENTS NEED TO "FRIEND" SOCIAL MEDIA AND TECHNOLOGY

The social networking phenomenon and the expansion of lightning fast information technology shrink the world in wonderfully transformative ways that we have not yet fully comprehended.—SENATOR RICHARD G. LUGAR, *Commencement Address at Franklin & Marshall College, May* 14, 2011

At the request of Senator Richard Lugar, the committee ranking member, Senate Foreign Relations Committee minority senior staff member for Latin America and the Carribean, Carl Meacham, met with U.S. Department of State staff, senior foreign diplomats, and industry officials over the course of several months to research how social media and technology could be used to promote and strengthen democracy in Latin America (*see* Appendix I for complete list of meetings).

WHAT IS SOCIAL MEDIA?

Social media are Internet-based media used for social interaction in a variety of forms including social networking, content sharing, and blogging. Major advances were made in the development of so-cial media in the early 2000s. While social media have existed since the late 1990s, early sites did not amass large groups of users be-cause most people did not have large extended online networks of friends at that time and many users found the functionality of these sites limited. More specifically, these media took off with the rapid growth of MySpace, whose popularity largely went unchallenged until the creation of a Harvard College-based social network site called Facebook by Mark Zuckerberg in 2004. As of September 2011, Facebook had over 800 million users worldwide.¹ Other examples of popular social media sites include YouTube and Twitter. YouTube filled a vacuum by letting users easily upload videos to share worldwide, and in November 2006, Google purchased YouTube for \$1.65 billion, and now offers it as a Google product.² Similarly, Twitter, a micro-blogging site founded in July 2006, has approximately 200 million users today who share 350 million tweets, or messages of 140 characters or less, per day in addition to photos and additional web links.³

¹Adam Ostrow, "Facebook now has 800 million users," *Mashable*, 22 September 2011, http://mashable.com/2011/09/22/facebook-800-million-users/.

²Ben Charny, "Google to acquire YouTube for \$1.65 billion in stock," *Market Watch*, 9 October 2006, http://www.marketwatch.com/story/google-to-acquire-youtube-for-165-billion-in-stock. ³ Charlie White, "Reaching 200 Million Accounts: Twitter's Explosive Growth," *Mashable*, 16

³ Charlie White, "Reaching 200 Million Accounts: Twitter's Explosive Growth," *Mashable*, 16 July 2011, http://mashable.com/2011/07/16/twitter-accounts-200-million/.

Why Should the U.S. Government Care About Access to the Internet and the Growth of Social Media in Latin America?

At a time when U.S. political influence is waning in the region, it is clear that U.S.-driven technological trends could redefine relationships with many countries in Latin America. Here is why:

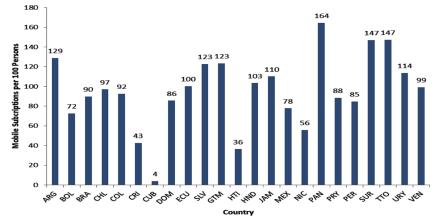
- Promoting Internet freedom is aligned with the U.S. strategic goal of strengthening civil society worldwide. This is consistent with core American beliefs regarding freedom of expression and unencumbered access to information.
- Greater Internet connectivity opens new opportunities for the United States and for countries in Latin America. Latin American countries are among the fastest growing export markets for the United States. The growth of this market provides the opportunity for innovation and commercial gains for United States technological industry and for Latin American entrepreneurs.
- Greater Internet connectivity and the use of social media platforms allow individuals in Latin America to establish links or "connect" with individuals in the United States and individuals in countries around the world in all spheres of life—culture, politics, business, and academia. (This is especially important for the development of rural or agriculturally-based communities in Latin American countries. With increased access to information, contacts, and markets through new technologies, these communities are more likely to get better market price information, boost their income, and improve their standard of living).
- Social media can strengthen civil society and the public sphere in Latin American countries. These technologies can allow for individuals to engage more effectively in the formation and function of their own societies.
- Social media can strengthen the ability of governments to be more responsive to their citizens. Through social media, governments can provide services to their constituents and communicate directly with them. The use of this tool can improve government effectiveness, make for fulfilled citizens in Latin American countries, and help bolster stable democracies in the entire region.

Latin America represents a unique case in today's global environment because it is a region containing diverse countries that share significant untapped potential for social progress driven by improved public dialogue. In particular, the characteristics of Latin American social media use and engagement of connectivity resources delineated below indicate that this area could be primed for substantial positive change in a manner similar in nature, if not in process, to that recently observed in the Middle East.

- Latin America possesses the potential to overstep North America's lead in social media use in part due to the proliferation of Internet accessible mobile devices in the region.
- With regard to social networking, 82% of Latin Americans with Internet access use social networks, making Latin Americans

the second most active social networking population behind North America.

- According to Debbie Frost, Director of International Communications and Public Policy at Facebook, Facebook has over 100 million users in Latin America, and the top five countries in terms of number of users include Brazil, Mexico, Colombia, Argentina, and Venezuela.⁴
- Currently, Brazil's Facebook user base is approaching 25 million users, and in 2010, Brazil's Facebook user base doubled every six months. To reflect Brazil's rapid growth in users, Facebook recently opened an advertising sales office in Sao Paulo, Brazil.⁵ Orkut, a Google social networking site that never gained popularity in the United States, is currently one of the most popular sites in Brazil with an estimated 46 million users.⁶
- With a mobile penetration rate of over 90% and low fixed broadband Internet capacity, Latin America is poised to benefit from cheaper mobile Internet and data packages.⁷ The plot below illustrates a country by country breakdown of Latin American mobile subscriptions.⁸



Mobile Subscriptions by Country

Note: The United States has 97 mobile subscriptions per 100 persons.9

• The low network connectivity requirements in Latin America make social media like Twitter extremely accessible in areas of high mobile penetration. Users can text their tweets using short message service (SMS), which vastly widens the scope of users reached. Hence, sharing news or organizing groups using

⁴Interview with Debbie Frost, Director of International Communications and Public Policy at Facebook, 30 August 2011. ⁵Ibid.

⁶Kenneth Rapoza, "Brazil Keeps Google's Orkut Relevant, Tops Facebook," *Forbes,* 6 April 2011,

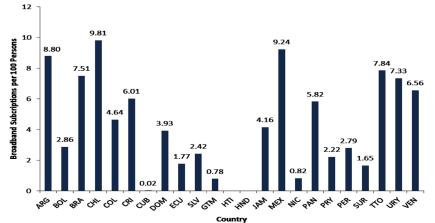
http://www.forbes.com/sites/kenrapoza/2011/04/06/brazil-keeps-googles-orkut-relevant-topsfacebook/. 7"World Development Indicators Databank," World Bank Data Catalog, The World Bank

[&]quot;World Development Indicators Databank," World Bank Data Catalog, The World Bank 2010, http://data.worldbank.org/data-catalog/world-development-indicators. 8 Ibid.

⁹ Ibid.

Twitter becomes relatively easy if one has access to a phone with SMS capabilities.

As millions of Latin Americans access the Internet via mobile • phones, Latin America will become an even larger consumer of data and a more substantial participant in social networking communities. According to industry experts interviewed for this report, approximately 215 million Latin Americans, or 36% of the regional population, are able to access Internet by any means.¹⁰ The plot below illustrates a country by country breakdown of Latin American broadband subscriptions.¹¹



Broadband Subscriptions by Country

Note: The United States has 28 broadband subscriptions per 100 persons.¹²

- Broadband Internet access penetration amongst Latin Amer-• ican countries could exceed 30% by 2014.
- A major component of the success of social media in Latin America lies in the existence of connectivity resources (i.e. SMS, smartphone), and the primary issue with technological connectivity in Latin America is a dearth of adequate infrastructure. The plot below illustrates a country-by-country breakdown of Latin American Internet bandwidth.¹³

¹⁰ These figures represent approximated numbers for 2011 provided by industry experts

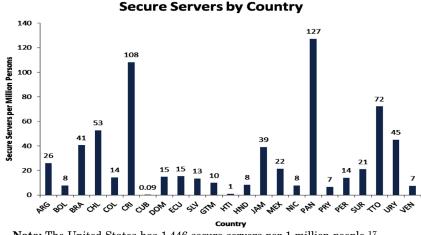
¹¹ World Development Indicators Databank," World Bank Data Catalog, The World Bank 2010, http://data.worldbank.org/data-catalog/world-development-indicators. No data was available for Haiti or Honduras ¹² Ibid.

¹³ Ibid. No data was available for Guatemala, Haiti, Nicaragua, Panama, Peru, Uruguay, Venezuela, or Argentina.

Latin American Bandwidth by Country 7,916 10000 4,333 2,940 2,108 1.387 Internet Bandwidth (Bits per Person) 741 1000 662 484 385 312 225 100 10 1 NIC MEX SUR ß GTM R ARG BOL BRA Я б ß ß DOM SLV 토 MAN PRY PER Ê URY VEN

Note: No bandwidth information for the United States was available.¹⁴

 Global data indicate that as access to information and communications technology increases, the user base generally increases as well. Yet at this time, access to secure Internet servers and fixed broadband connections in Latin America is lacking.¹⁵ The plot below illustrates a country-by-country breakdown of Latin American secure servers.¹⁶ It is thus distinctly possible that even moderately improving Latin American connectivity infrastructure could significantly increase the regional user base.



Note: The United States has 1,446 secure servers per 1 million people.¹⁷

^{14 &}quot;World Development Indicators Databank," World Bank Data Catalog, The World Bank 2010, http://data.worldbank.org/data-catalog/world-development-indicators.

¹⁶ Ibid. 17 Ibid.

LATIN AMERICA MARKET OBSERVATIONS

The data presented above, which was obtained from the World Bank for the years 2008–2009, indicates a number of interesting realities and trends.¹⁸ First, note that the mobile subscription per 100 persons metric is over 100 for a large proportion of these countries including Panama, Argentina, Honduras, and Uruguay, which means that there is on average more than one mobile subscription per person. Such data would seem to imply that mobile or SMSbased connectivity initiatives could have particularly large effects in the Latin American region and in these countries in particular.

Interestingly, the broadband subscription numbers shown above are relatively low compared to the mobile subscription metrics, indicating that mobile initiatives may be particularly important in this region. The broadband data presented here would also imply that initiatives aimed at broadband Internet users should primarily be targeted at countries such as Mexico, Chile, and Argentina, which enjoy relatively high levels of broadband usage.

Moreover, while it is clear that countries such as Costa Rica, Colombia, Brazil, and Trinidad enjoy particularly high levels of per capita bandwidth in contrast to Mexico and Salvador, for example, the most important feature of this graph is the large number of countries for which data was unavailable. In order to make substantial policy decisions about how to engage particular countries with effective connectivity-based programs, more data on bandwidth in countries such as those on this graph that lack data (Argentina, Chile, Guatemala, Haiti, Honduras, Nicaragua, Panama, Peru, Uruguay, and Venezuela) will be critically important.

Finally, it is important to note that the absolute number of secure servers is a useful metric, but the real measurement of how good connectivity is on average is how many servers currently provide Internet to groups of a given size. Clearly, countries like Haiti, Honduras, and Nicaragua, which do not have a great deal of servers, would appear to be prime targets for infrastructure improvement and utilization initiatives. Countries like Panama, Costa Rica, Chile, Uruguay, and Brazil, on the other hand, appear to be doing significantly better than the rest of their region in this area and would thus be able to engage connectivity initiatives with higher resource requirements.

In the end, the data shows that social media and connectivity initiatives should be catered to the particular circumstances of a particular country. Mexico, for instance, appears to have high broadband subscription numbers but relatively low bandwidth. In such a case, a package of programs that include the utilization lowrequirement online resources as well as the improvement of existing bandwidth levels would seem to be ideal. In Panama, however, the extraordinary number of mobile phone subscriptions would make connectivity initiatives based off improving mobile broadband infrastructure and providing SMS-based services more effective. It will be imperative for such data to be fully considered as the Department of State decides where and how to implement connectivity and social media programs in this region.

¹⁸ "World Development Indicators Databank," World Bank Data Catalog, The World Bank 2010, http://data.worldbank.org/data-catalog/world-development-indicators.

COUNTRY CASE STUDY OBSERVATIONS

Given the growing importance of social media with regard to strengthening the ability of governments to more effectively communicate with and serve their constituents as well as with respect to enabling citizens to express political opinions, to share information, and to mobilize demonstrations, it becomes essential that Latin American governments have a clear presence in these areas.

To properly assess social media initiatives currently implemented in Latin American countries, staff contacted the embassies of Brazil, Colombia, and Mexico to gather more information about their initiatives. These countries were chosen due to the fact that they have the highest Internet connectivity, the likelihood of their governments to use social media to engage with citizens, and the defining role these countries play in influencing the political attitudes of the region.

After analyzing data on Internet and mobile phone subscriptions per 100 people, total Internet and mobile phone usage data, population statistics, information and communication technology development indices, and social media proliferation metrics, staff determined that Brazil, Colombia, and Mexico represent leading technological markets in Latin America. However, with the exception of Colombia, attempts by their governments to expand Internet connectivity remain modest.

From discussions with these embassies, staff identified two general points:

- 1. The interviewed governments understand the power of the Internet and social media for communication and public dialogue, and they are—to varying degrees—engaging citizens through these media. Although these countries have announced limited initiatives to promote computer literacy, none has implemented specific financial commitments to educate citizens about services provided by the government through social media.
- 2. Only one of the officials interviewed for this report, Colombia, mentioned state policies to expand connectivity in these specific countries.

BRAZIL

With approximately 76 million Internet users, Brazil has one of the highest numbers of Internet users in the region, and approximately 40% of all Brazilians have regular Internet access.¹⁹ Given the large quantity of Brazilian Internet users, staff believes that Brazil should prioritize its social media policy. Indeed, the Brazilian President, Ministry of Foreign Relations, Defense Ministry, Health Ministry, and other federal institutions have Twitter accounts where information regarding services, press releases, speeches, and public engagements can be found. Yet, having a social media account is not the same as maximizing one's online influence. Like the other countries in this study, Brazil needs funded computer literacy and social media programs, improved broadband

¹⁹ "World Development Indicators Databank," World Bank Data Catalog, The World Bank 2010, http://data.worldbank.org/data-catalog/world-development-indicators.

and mobile Internet access, and more forums for the public to express opinions and provide feedback on government services through the Internet. Brazilian officials were unable to provide social media and technology budget figures when requested by staff.

COLOMBIA

Colombia has recently experienced rapid growth in Internet access, reaching a penetration level of 47 percent.²⁰ Indeed, over the last five years, access grew 354.3% in Colombia.²¹ Unlike the other countries consulted in this study, Colombia offers digital literacy programs including national and regional modules that explain how to use social media and technology. Staff believes that these programs are important because they educate the public on how to use these platforms, which amplifies the effects of the government's social media outreach. According to Alfonso Cuellar, Senior Advisor to the Colombian Ambassador in Washington, Colombia's Vive Digital program, designed to promote Internet use in Colombia, has a 2011 budget of \$800 million (USD) divided between operational costs and investment.²² The \$532 million (USD) dedicated to investment aims to bolster infrastructure and to provide information technology literacy programs to the public, especially low income citizens.²³ The government of Colombia has demonstrated its dedication to providing more Internet access to its citizens and equipping them with the skills necessary to participate in online forums.

This technology is also used by all three branches of Colombia's government and civil society. The first significant example of social media's growing political role in Latin America occurred in February 2008 when a Facebook group called "One Million Voices Against FARC" organized the National March against FARC. Approximately ten million people marched in protest against the Revolutionary Armed Forces of Colombia (FARC) in hundreds of Colombian cities.²⁴ The Facebook group was created by a Colombian citizen named Oscar Morales to express his anger toward FARC's tyranny. Morales described how "Facebook was our headquarters. It was the newspaper. It was the central command. It was the laboratory—everything. Facebook was all that, right up until the last day."²⁵

MEXICO

Mexico boasts the position as the first country to have a president and full cabinet with official Twitter accounts. Mexican officials characterize interactive dialogue with politicians as limited at this time, but most officials, including the president, respond to questions and criticism from citizens on their Twitter accounts. Citing Mexico's National Statistics Institute (INEGI), Ricardo Alday, Communications Director and Spokesman for the Embassy of Mexico, described how 30% of Mexicans had permanent access to the Internet as of December 2010, and, as a result of the rapidly ex-

²⁰ "Latin America Advisor," Inter-American Dialogue, 22 September 2011.
²¹ Ibid.

²² Interview with Alfonso Cuellar, Senior Advisor to the Colombian Ambassador in Washington, 28 July 2011.
²³ Ibid.

²⁴ David Kirkpatrick, *The Facebook Effect*, (New York: Simon and Schuster, 2010): 1-8.

²⁵ Ibid., 5.

panding Global System for Mobile Communications (GSM) market, that the Mexican mobile industry has an annual growth rate of 22% with approximately 43% mobile penetration.²⁶ Mobile growth rates illustrate the growing number of individuals that have the ability to access the Internet through a mobile device. Alday agreed that "as the number of users of social media increase and as the novelty becomes the norm, the possibilities to influence political discourse and policy in the future are there." It is therefore likely that social media and technology will play an increasing role in this country's political conversations in the coming years.

However, no specific, funded initiatives to educate citizens about the government's services through social media currently exist, though the government and private sector have been discussing the development of future programs. Mexico recognizes the growing importance of using social media both to increase government transparency and accountability as well as to allow citizens to communicate directly with the government to share ideas or criticisms.

THE ROLE THE U.S. PLAYS IN THE EXPANSION OF SOCIAL MEDIA IN LATIN AMERICA

The U.S. Department of State's core policy towards connectivity resources in Latin America underscores how the U.S. should work through a variety of channels, such as industry partnerships and non-governmental organization (NGO) engagement, to improve access to Internet and telecommunications infrastructure in the region. It is hoped that the advent of such increased connectivity would strengthen the basis of democratic institutions and civil society in Latin America by allowing individuals to more effectively engage in the formation and function of their own societies. Current U.S. Department of State initiatives focus mainly on explaining U.S. foreign policy to Latin American citizens, engaging them in relevant discussions, strengthening communities through improved communication and public dialogue, and improving existing social bases for democratic institutions such as freedom of the press and gender equity. Staff requested budget figures for social media in the region, but none were provided.

Some of the challenges the U.S. Department of State's policy faces in Latin American countries pertain to inadequate levels of infrastructure and capability such as appropriate online resources, lack of indigenous technical skills, and little consideration of critical risks. These crucial areas could benefit from greater emphasis in current U.S. Department of State policy and action planning.

The U.S. Department of State's official position on the use of connectivity resources and social media in Latin America is that its "digital platforms [should] explain U.S. foreign policy, society, and values and seek to develop partnerships with citizens in achieving shared goals: citizen security, strong democratic institutions, inclusive economic prosperity, and clean and secure energy."²⁷ While these goals are certainly wide-reaching, there are a number of spe-

²⁶Interview with Ricardo Alday, Communications Director and Spokesman for the Embassy of Mexico, 26 July 2011.

²⁷ Questions for the Record for Roberta Jacobson, Acting Assistant Secretary of State for Western Hemisphere Affairs, submitted by Richard G. Lugar, Ranking Member, Committee on Foreign Relations for hearing entitled "The State of Democracy in the Americas" on June 30, 2011.

cific areas that are being targeted by U.S. Department of State efforts.

FOREIGN ENGAGEMENT OF U.S. FOREIGN POLICY

In line with its stated policy, the U.S. Department of State's most visible activities in the realm of social media engagement explain U.S. foreign policy to citizens of foreign countries and hopefully engage these populations in dialogue about the effects and intention of these policies. According to Acting Assistant Secretary of State Roberta Jacobson, the resources that have been devoted to this cause include two full-time social media positions at the Bureau of Western Hemisphere Affairs (WHA), in addition to some portion of the 72 Foreign Service officers and 114 locally employed staff currently engaging local populations through social media worldwide. To put these numbers in perspective, it is estimated that the time spent on global social media engagement by Foreign Service officers and locally employed staff is equivalent to the work of 33 full-time employees.²⁸

In Latin America specifically, U.S. Department of State programs generally include informational and interactive communication initiatives such as alerting Latin American citizens to visits by U.S. officials, making online policy news available in Spanish and Portuguese, conducting web-chats to address social issues such as violence against journalists, and exposing Latin American citizens to democratic social ideals. One particularly successful policy program appears to be the Mexico City Embassy's Mission Blog, which posts Spanish language U.S. policy news both from the Embassy itself and from other news outlets. Over 300,000 interested visitors access the page each month.

STRENGTHENING SOCIETY BY STRENGTHENING COMMUNITIES

The U.S. Department of State has focused a great deal of effort on utilizing existing connectivity and social media resources to strengthen communities and the basis of civil society in Latin America. These programs have for the most part attempted to foster dialogue on important issues, such as entrepreneurship, green energy solutions, women's rights, and multiculturalism.

One Facebook page targeted at entrepreneurially-minded citizens in Latin America, for instance, has drawn several thousand followers from among the teenage populations of Argentina, Mexico, and Venezuela.²⁹ It is the U.S. Department of State's hope that enabling conversations about Latin American entrepreneurship within this population could ultimately spark significant economic activity drawn from the creativity of young Latin Americans.

Another community-building initiative came in the form of a program wherein a partnership with NGOs, telecommunication companies, and the Government of Mexico facilitated the development and installation of a system that allows any phone to be used to

²⁸ Questions for the Record for Roberta Jacobson, Acting Assistant Secretary of State for Western Hemisphere Affairs, submitted by Richard G. Lugar, Ranking Member, Committee on Foreign Relations for hearing entitled "The State of Democracy in the Americas" on June 30, 2011. ²⁹ Ibid. To visit this site, see http://www.facebook.com/iniciativa.emprende.

give anonymous tips on illicit cartel activity.³⁰ Such capability will hopefully empower individuals to take responsibility for putting a stop to illicit activities in their home areas as well as encourage groups of people to collectively work towards the creation of a safe, secure, and productive community environment. While not a traditional form of social media, the idea of using common public communications infrastructure to facilitate communal action is certainly an innovative attempt to employ social media concepts to address a crucial issue in Mexico and other parts of Latin America.

These specific programs are a few examples of a number of U.S. Department of State programs in Latin America that utilize social media concepts and resources to spread democratic principles and strengthen civil society by providing forums for public discussion of important issues, education about basic social problems, and avenues by which individual citizens can work to maintain the security and transparency of the society in which they live.

COMMUNICATIONS AND TECHNOLOGICAL SKILLS ENHANCEMENT

A natural complement to community-strengthening initiatives to which the U.S. Department of State has given much attention are programs that work to increase the ability of Latin American populations to use their own indigenous technical, organizational, and social capabilities to affect positive change in their communities.

The U.S. Department of State has trained journalists in several countries to increase their ability to quickly disseminate accurate information about important events and issues. A great deal of effort has been expended on Cuba, the only country at present that actively censors U.S. policy content. In Cuba, the U.S. Interest Section has offered thousands of Internet sessions, blogging technology training, basic computer skills classes, weekly on-site English classes, and library support to the Cuban public.³¹ These programs aim to bolster citizens' abilities to utilize existing resources, and also create social resources of their own that will increase government transparency and strengthen civil institutions. While Cuba is certainly a singular case in the great scheme of U.S. foreign policy, staff noticed the heightened interest by U.S. Department of State officials in increasing the basic computer and literacy skills of the Cuban public as a means of empowering Cubans to affect positive change in their own society.

INFRASTRUCTURE CAPABILITY AND UTILIZATION IMPROVEMENT

Though it has been clearly stated that "at this time the U.S. Department of State does not allocate money for any infrastructure projects," ³² another consideration of the Department's policy towards social media use in Latin America has focused on improving existing infrastructure that is often inadequate for basic communication, effective online browsing, or utilization of social media resources.

³⁰ Questions for the Record for Roberta Jacobson, Acting Assistant Secretary of State for Western Hemisphere Affairs, submitted by Richard G. Lugar, Ranking Member, Committee on Foreign Relations for hearing entitled "The State of Democracy in the Americas" on June 30, 2011.

³² Ibid.

A wide variety of U.S. government-initiated or sanctioned programs have recently been enacted to encourage change in the status quo in several Latin American countries. These include a World Bank initiative to improve Nicaraguan connectivity infrastructure, the U.S. government's engagement in aiding telecommunications companies' quest for expanded licensure to provide undersea cables and satellite services to Cuba, and the U.S. Interest Section's provision of free Internet access to Cubans.³³ While these programs are not always directly funded by the U.S. government, it is clear that the administration is working on the infrastructure problem in this region, particularly in areas where democratic institutions are not especially well developed.

The U.S. Department of State's efforts have resulted in ad hoc funding for bandwidth increases for simultaneous translation of certain online events and for isolated natural disaster mitigation. Some administration partnerships with NGOs working to increase broadband access in developing areas that are particularly difficult to access currently exist, such as a recent USAID effort to expand Haitian broadband access in rural regions, but there has been relatively little emphasis placed on improving the end user's ability to connect to both online resources and to other individuals using the combination of infrastructure and software to which he or she has access.³⁴

CRITICAL RISK MINIMIZATION

A final issue that requires more effort from the U.S. Department of State is minimizing critical risks of increased connectivity. As recent events in the United Kingdom, the United States, and other industrialized countries have shown, increased connectivity and access to social media resources has the potential to create opportunities for negative social outcomes such as flash robberies and recruitment of individuals to civically counterproductive causes.

The U.S. Department of State has initiated programs to address these issues in certain contexts, such as helping to institute an SMS-based system to counter FARC recruitment in Colombia and working to implement a secure tip line system in Mexico to fight the widespread perception of inadequate personal security.

While these programs represent significant progress towards mitigating potential negative effects of increased connectivity in Latin America, a great deal of work is still necessary to ameliorate these issues, particularly in online social media environments. For example, collaborators of President Hugo Chavez in Venezuela recently hacked the Twitter accounts of opposition activists. Staff strongly believes that this example indicates how policy needs to take into consideration the extent repressive governments will take to silence democratic voices using this technology.³⁵

³³ Questions for the Record for Roberta Jacobson, Acting Assistant Secretary of State for Western Hemisphere Affairs, submitted by Richard G. Lugar, Ranking Member, Committee on Foreign Relations for hearing entitled "The State of Democracy in the Americas" on June 30, 2011. ³⁴ Ibid.

³⁵ "Ciberpiratas infiltran las cuentas de Twitter de los opositores a Hugo Chavez," Associated Press, 28 September, 2011,

http://www.noticias24.com/actualidad/noticia/327022/ap-ciberpiratas-infiltran-las-cuentas-de-twitter-de-los-opositores-a-hugo-chavez.

There are also a number of broader areas in which there is still a good deal of progress to be made. Specifically, improving the recipient base of basic computer skills training, deepening the technical content of skills transfer programs, increasing the number of critical online resources in relevant foreign languages, matching online resource requirements to existing infrastructure capabilities, and combating critical civic risks from online social media actors are areas that staff believes could represent productive future foci of U.S. Department of State policy and efforts in the region. Moreover, improving current data collection capabilities to monitor the present state of such initiatives and to determine the countries in which they would have the greatest impact will be crucial to ensuring outcomes that are both important and long-lasting.

RECOMMENDATIONS: HOW THE U.S. CAN FURTHER EXPAND SOCIAL MEDIA IN LATIN AMERICA

Upon analyzing information provided by the U.S. Department of State, governments of several Latin American countries, and industry insiders, staff strongly encourages the U.S. government to implement the following recommendations to address shortcomings in the technological connectivity and literacy of Latin American countries. These recommendations aim to enhance citizens' abilities to connect via social media and technology and to allow democratic governments and other organizations interested in the proliferation of basic freedoms to reach larger audiences with information and services.

IMPLEMENT TECHNOLOGY TRAINING PROGRAMS

Nearly every country in the world welcomes the opportunity to increase the legitimacy of its technology industry. In particular, software engineering is often a low-cost, high-return endeavor due to the lack of overhead costs involved and the massive potential market for software products. For this reason, U.S. efforts to cooperatively establish frameworks wherein U.S. entities (public or private) would contribute to training programs in advanced software engineering in foreign countries could be well-received. Senior government officials interviewed for this study agree that these efforts are going to be driven by commercial interests.

Besides the economic benefits such programs could have, which would reflect favorably on the U.S., they would allow for the dissemination of software expertise into the general populace, making it more difficult for governments to censor online material or otherwise use connectivity resources to curtail the bases of democratic institutions. In the United States, for instance, it is difficult to effectively censor online content due to the existence of significant private software expertise, and efforts to bring such expertise into Latin American countries could pay similar dividends in the longrun.

More specifically, establishing a well-trained, independent, and private software engineering sector effectively deprives the government of the advantage of being able to hire and control the best software engineers. In addition to being in alignment with existing foreign aid goals, then, such technology training programs could be useful in ensuring the maintenance of freedom of speech in other segments of the world. Specific implementation avenues could include the encouragement of relevant cross-country university partnership and monetary support of formal training programs in less developed areas, among others. While some training programs have occurred, they have not had the magnitude or level of success necessary to impact openness without foreign assistance in both the intermediate and long term.

ESTABLISH BASIC INFORMATION TECHNOLOGY LITERACY OUTREACH

Adequate connectivity for significant Internet use does not guarantee that online resources will be effectively utilized by the general population. Rather, for widespread Internet use to become a reality in previously unconnected countries, it is imperative that the general populace be exposed to fundamental, consistent, and protracted information technology literacy tutorials. If goals such as real-time detection of election fraud, social media utilization as an avenue for political action, and online distribution of information about government services are to be accomplished, a country's general population must be able to effectively leverage their existing technological resources.

Programs aimed at bringing information technology literacy to underserved populations, who are often most vulnerable to the types of problems social media and technology use could hopefully resolve, would significantly promote the spread of just, transparent democracy in Latin America. Specific implementation strategies could mirror current industry best practices by leveraging recent advances in online computer service and live chat (both voice and written) methods. The United States has organized some information technology literacy programs in Cuba, but outside of its Cuba outreach, little has been done except blogging sessions. More programs are needed, and these information technology literacy outreach programs should be targeted at citizens, not just journalists.

Furthermore, establishing more partnerships with nongovernmental organizations and municipal institutions and leveraging ex-isting Fulbright Commissions and American public diplomacy spaces such as American Corners and American Centers would help expand information technology literacy outreach. With proper resources, linkages between the Department of Education and partner Ministries in the region could allow future generations to drive the educational process through direct school-to-school contact.

PROVIDE SUPPORT FOR LOCAL TECHNOLOGY DEVELOPERS TO CREATE LANGUAGE RESOURCES

A distinct disadvantage for Latin American Internet users is that only 12% of the world's online resources are in Spanish or Portuguese.³⁶ It is therefore likely that important online resources traditionally composed in English or Chinese (which together make up a full 50% of the world's web sites) are not readily available to many Latin American Internet users.

³⁶ "Internet World Users by Language," *Internet World Stats*, March 2011, http://www.internetworldstats.com/stats7.htm.

To remedy this shortfall, the Department of State should support local efforts to develop translating technology resources such as information technology literacy websites, technical tutorials, and the like into languages such as Spanish and Portuguese so that inhabitants of Latin American countries might have fuller access to the critical political, technical, and social capabilities of the modern Internet developed in their own countries. The creation of this auxiliary online content would continuously and permanently increase the efficacy of any connectivity that the region currently has or will gain in the future. Additionally, social media could be used to disseminate translated resources.

GENERATE LOW-REQUIREMENT INFRASTRUCTURE

The widespread increase in connectivity that Latin America has experienced in recent years is in some ways deceiving. While Internet coverage and penetration has certainly increased, the level of online services that individuals in these countries experience is not on par with those found in countries with more developed infrastructure. Thus, it is unlikely that these populations would be able to leverage Internet connectivity as effectively as possible given that their bandwidth levels may not be consistently sufficient to support some of the most useful online resources. Even on wellequipped mobile devices in the United States, certain websites will take extremely long periods of time to fully load and sometimes will not be compatible with a mobile format.

Given that it is significantly easier to bring new connectivity to an area with mobile rather than hardwired connections, it is imperative that relevant online content be created that could be effectively utilized on slow connections. As opposed to creating content with large graphics files, for instance, sites containing information should be structured to minimize the information that users must download. In the context of social media, this would imply creating a social media infrastructure that emphasizes basic functionality at the expense of aesthetically pleasing, but ultimately superfluous, graphic material.

Encouragement should be given to private sector companies as well as relevant public sector entities to foster the maintenance of low bandwidth social media resources so that less connected populations can begin to realize the advantages of modern connectivity and the associated potential for both social and political action that such connectivity brings. As a starting point, since the small-scale SMS programs started by the Administration have been relatively successful, such projects could perhaps be extended to the online domain. Thus, while the U.S. Department of State does not necessarily fund new infrastructure at present, the initiatives described here could certainly augment the success of its existing programs in a similar fashion.

While low-requirement infrastructure represents a short-term solution to increasing technological connectivity, improving and providing more bandwidth should be a long-term goal in the region. Staff notes that traditionally, the people who have built media infrastructure for the United States government have been the engineers at International Broadcasting Bureau (IBB). Staff concludes that the IBB would be the best fit for contracting digital infrastructure projects.

ASSESS CRITICAL RISKS

Whenever new technology is introduced into a given area, the positive consequences of the action must ultimately be weighed against the possibility of unintended negative repercussions.

On the one hand, although increased connectivity does have a number of positive consequences, including spurring the utilization of social media for increased political transparency and improving the dissemination of useful information, such connectivity can also be misused in ways that distinctly threaten political freedoms and even lives. As the recent situation in Egypt has shown, well-organized (often radical) groups such as the Muslim Brotherhood tend to benefit most from sudden liberalization. In Egypt, the organizational disparity was so great that elections are believed to have been delayed partially due to fears that the well-organized Muslim Brotherhood would win an inordinately large number of governmental seats.

On the other hand, staff raised the issue of privacy with industry insiders as a potential problem in the future. These insiders agreed that privacy concerns need to be addressed, but at the same time, they worried that too much government interference and regulation could limit the proliferation of information and access to it.

Mitigating factors such as confidence in law enforcement authority, the organizational level of violent criminals, and the relative utilization capabilities of different political entities should therefore be deeply considered when deciding whether or not to implement the types of programs described here. Since almost no data have been collected on critical risks at this time, improved data collection and analysis could aid with these assessments in the future.

CONCLUSION

Social media tools are by no means a panacea for democracy promotion. Since social media are most effective when the political environment of a country is ripe for change, limitations exist with respect to a population's ability to use social media to effect change. Social media facilitate communications and the dissemination of information, but these tools cannot determine the course of events alone. Instead, technology accelerates underlying grassroots movements that would likely occur regardless of the influence of technology.

Despite the palpable role that social media and technology can play, staff found that industry insiders are less keen to associate themselves with the political uses of these tools. For example:

1. The largest social media companies still view themselves as startups. This viewpoint proves problematic because these social media companies do, in fact, have an international reach similar to that of large multinational companies. For example, while Facebook has expanded its global presence, many social media companies have yet to adopt an aggressive international presence. Generally speaking, while the social media industry has a large presence in terms of users, they do not have individuals to manage their relationships with foreign governments and civil society.

- 2. The perspective of "neutrality to politics" by industry insiders is complicated further by the nuanced relationship that exists between the technology industry and the U.S. government. On the one hand, the U.S. Department of State recognizes the potential and values the use of social media and technology because these tools can help advance U.S. foreign policy interests. On the other hand, these social media companies are businesses that do not want to be viewed as another arm of the U.S. government because they want to attract international business, and in some countries close relations with the United States is cause for distrust and suspicion.
- 3. This relationship is complicated further by the dominant attitude regarding government that generally exists within the technology industry. One industry insider that was interviewed for this report stated, "We view government as a necessary evil, the way that people look at traffic cops. If you get stopped for speeding, you pay your ticket."

These observations give insight into the industry's perspective of itself and also help explain their aversion to government relations. As interactions with governments increase, they will understand the need to have specialized staff to cultivate these relationships. With strong executive branch systems of government in Latin America and throughout much of the world, relationships with these governments cannot be avoided. In fact, good relations with these governments could prove useful to advance business interests.

Just as the tension between industry and governments will probably not subside in the future, this technology is not going to go away. Staff strongly believes that the prospect of full access to this technology everywhere outweighs any disadvantages in a number of current foreign policy situations. Increasing popular use of technological resources presents a variety of important opportunities for making governments more responsive to the needs of the people they serve, for allowing citizens to connect and share opinions freely, and for promoting U.S. commerce.

In order to better serve their citizens, it is crucial that Latin American governments promote this technological domain. Likewise, if the industry is going to reach its full potential regarding connecting individuals globally, it is important that industry be present physically with offices in the region both to make the necessary relationships and to better understand the region it serves and its idiosyncrasies. The industry cannot afford to exist solely online.

The United States has consistently led the world in both technological innovation and pioneering new communications media. American technological entrepreneurs, moreover, have and should continue to exchange ideas and share expertise with interested Latin Americans to discuss ways to use social media to accomplish specific goals. Thus, in the age of digital activism, the United States should continue to generate and promote innovative new technology and ideas so that people all over the world can connect with information, strengthen democracy, increase commerce, demand their freedoms, and use social networking to impact their world in the 21st century.

Appendix I

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Roberta Jacobson, Acting Assistant Secretary of State for Bureau of Western Hemisphere Affairs, Department of State, answers to Questions for the Record submitted by Richard G. Lugar, Ranking Member, Committee on Foreign Relations for hearing entitled "The State of Democracy in the Americas" on June 30, 2011

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