bution. Although YouTube was blocked for some days during that time as well as some news sites, the government decided that the best way to counter the information war online was by supporting bloggers sympathetic to the newly elected president, Serge Sargsyan.

As a result, international organizations and donors are now looking to promote blogs as part of their existing media development programs. Moreover, the U.S. Embassy in Armenia last year announced a $4 million program to be implemented over the next 4 years to support alternative resources in the media. The project aims to strengthen the regional media, particularly through individuals who serve as content producers using high and low technology solutions. The program also includes resources for the production of alternative video. Its success will be determined by the Internet as a delivery system, and as a result, its speed and cost to end-users.

About the Author:
Onnik Krikorian is a freelance photojournalist and writer based in Yerevan. He is also the Caucasus region editor for Global Voices Online and writes from Armenia for the Frontline Club. His blog is available at: http://blog.oneworld.am/

The Internet in Azerbaijan

By Alexey Sidorenko, Moscow/Warsaw and Arzu Geybullayeva, Baku

Abstract

Azerbaijan boasts the greatest Internet penetration rates of the three South Caucasus countries thanks to government support. The government, political parties, and civil society organizations are developing their on-line presences, including the use of social media. Especially for some progressive youth, the Internet has become a window to the outside world – an opportunity to learn, share, promote and discuss. In particular, blogs and video blogging have become increasingly popular tools for civil society activism in Azerbaijan.

Internet Leader in the South Caucasus

The third president of Azerbaijan Geidar Aliev considered information technology one of the foundations of the country's future industrialization. His son Ilham approved a strategy for information development when he first came to power in 2003 and the government hopes to turn the country into an information communications technology hub for the Caucasus region. The results of the strategy were more or less successful, though it is not clear whether it was the activities of the government or the needs of business, particularly the oil industry, that drove this progress.

From the quantitative point of view, Azerbaijan has the most extensive Internet development among the three countries of the South Caucasus. According to official statistics, 28 percent of the population used the Internet in 2008, though most likely this number was closer to 20 percent if one takes into account the main trends of the preceding years. In Georgia, the corresponding figure was 16.6 percent and in Armenia 6.2 percent. Overall, the Azeri Internet population is young, urban, and mostly male.

However, the South Caucasus Internet penetration rate is less than the global average of 26 percent. In the technological sense, the entire Caucasus is in the "digital periphery." Turkey and Iran both have higher Internet penetration rates than Azerbaijan (approximately 31 percent in both cases). In 2007, Azerbaijan occupied 83rd place in the world for Internet penetration.

Ninety percent of Internet users in Azerbaijan access the Internet through a dial-up connection. On one hand, a dial-up connection is convenient because it is accessible to everyone who has a telephone line. But it is important to remember that only 14.8 percent of Azerbaijanis have a home phone. The situation is significantly better with mobile telephones since more than half of Azerbaijanis have them (53.7% in 2007) and there is coverage nearly throughout the country. Most experts think that mobile communications will make it possible for Azerbaijanis to overcome the problems of the digital divide, in which large parts of the population are still not able to have access to the Internet. On the other hand, dial-up and the mobile Internet offer only slow connections, which are not sufficient to support con-

temporary online technologies, in particular the Internet services of Web 2.0, such as Facebook and Youtube, where the user, rather than the provider, generates most of the site content.

In 2006 Azerbaijanis gained the opportunity to connect to ADSL broadband service. More than 95 percent of Internet traffic goes through the satellite Internet service provider AzerSat. Many users face the problem of too much traffic in the cables, which reduces content delivery speeds. According to the Trend Capital Agency, at the end of 2007 the cost for a line with a speed of 1 megabyte/second amounted to between $900 and $1,600 a month. Accordingly, they were 30–50 times more expensive than in Warsaw, Moscow or other European cities at that time.

At the beginning of 2009, several providers reduced their fees, but prices are still 12–20 times higher than in Europe. Currently, a typical resident of Baku will pay $50–60 a month for Internet services with pre-paid usage fees, a large amount given that the average salary in Azerbaijan amounts to about $370. Increasingly, however, there are cheap ADSL providers that cost as little as 9 manat ($11) per month.

Internet cafes provide access for users who do not have their own computers or broadband connection. Approximately one-fifth of users access the Internet through such cafes, according to the OpenNet Initiative.

Government Websites

The main country portal, Azerbaijan.az, is funded by the Geidar Aliev Foundation, which makes promotion of information communications technology one of its key initiatives. Almost every Azeribaijani government office has its own website, but as in most countries of the world the current quality of the material presented could be optimized to better serve citizens' interests. Both the content and the design reflect the lack of quality. The design of most government websites is table-based (HTML 4.0) as was common practice in the early 2000s. However, more than a third (15 out 40) of government websites present information in more than in one language, typically English and Russian. Unfortunately, the English and Russian language options often do not work or do not include full translations of the Azerbaijani version or are not updated as frequently.

While Azerbaijan has certainly made immense progress in terms of putting up government sites, not all ministerial websites function properly. Most of them use a common model of content-filling – copying-and-pasting from various news sources that have some connection with the topic of the ministry. Little information

is presented about government programs. Many agencies do not keep their sites current. The Ministry of Customs site, for example, has not been updated since 2007 (http://www.az-customs.net/), the Baku city administration – since 2008 (http://www.bakucity.az/) and the website of the Constitutional Court has been closed (http://www.constitutional-court-az.org/) and replaced with a SEO-parking site instead.

The situation is much worse at the municipal level. The Qazah district website, for example, displays a PHP-error and a series of Aliev portraits (http://www.qazax-ih.gov.az/). The Zaqatala district website is infected with malware (http://www.zaqatala.az/). The Imishli district site has not been updated since 2007 (http://www.imishli.com/home/), while the Merdekan, Ganja, and Kepez websites are unavailable. In addition, some information provided lacks consistency. Comprehensive statistics can, for example, be found at the site of the Azeri statistical committee (http://www.azstat.org/), but there are no region-based statistics on elections at the Central Election Commission website (http://cec.gov.az/).

Recently the Azeri government has begun to express an interest in acquiring e-gov capabilities, which it does not currently offer to its citizens. The governmental portal e-government.az (http://e-government.az/ru/) regularly publishes news on developments in this field. The first e-government conference is scheduled for April 2010. Despite this progress, government websites in Azerbaijan are in need of improvement if they want to become a means of communication between the public and the administration.

NGOs and Political Parties on the Internet

Almost all non-governmental organizations (NGOs) use the Internet to facilitate their activities. Until 2009 many NGOs used this space in unrestricted ways, while facing information barriers in the official press. As long as "prohibited information" was not attributed to a particular person, it had no legal consequences. Anonymity provided a cover for publishing sensitive information.

However, as a result of "black outs" several sites became inaccessible, ostensibly for technical reasons. In countries like China or Iran such black outs lead to limits on freedom of speech in the Internet. Turkey, for example, has banned Youtube. Another technique in the battle against free thinking is to create clone sites of existing NGOs that duplicate some of the information, but provide misleading data as well.

In Azerbaijan pro-Western political parties rely on a network of bloggers and information websites. Since the

primary audience of these groups is international, the typical language of such websites is English. The defining feature of the Azeri online pro-Western political camp is its network structure: It is essentially a network of interconnected bloggers. However, there are conventional websites as well. Among them, the most influential are: Azerbaijan Network Television (antv.ws), Dalgha Youth Monument (http://dalga.azeriblog.com/) and Azeri Report (http://azerireport.com/). Like their government counterparts these websites are far from perfect from the design point of view. Their distinctive features are more personalized information, possibilities for commenting, and rich video content which is almost always missing from the government sites.

The Islamist movements in Azerbaijan have almost no online presence since their main activities take place offline and are aimed at social groups less prone to use the Internet.

Azerbaijan's Blogosphere

The blogosphere of Azerbaijan's Internet, or as it is usually called AzNet, is not a united whole. Rather it is divided among the various languages spoken in the country – Russian, Azeri, and English. Azerbaijan is not a big enough country to form its own blogosphere on the basis of a national language. As the Azerbaijani blogger Vladimir Zimin pointed out, "there is too great an influence from the Russian and Turkish parts of the Internet." Azerbaijan lacks its own popular blogging platform (such as Russia's livejournal) or a social networking site, such as odnoklassniki.ru, although some sites are seeking to fill this void, such as eylence.az and blog.bakililar.az. Effectively, the information sphere is divided into language-based zones of influence and the use of Russian in the virtual world is greater than in actual society.

It is more suitable for bloggers in Azerbaijan to use big and established online blog platforms to promote their ideas. Therefore, most of the English-language blogs are either on the Wordpress or Blogger platforms while the Russian-speaking political movements hosts their blogs at Livejournal. Using these international blogging sites is not only cheaper and quicker, it makes it also easier to post information anonymously. It is important to note that the .az domain names are not popular among bloggers critical of the government, although such semi-independent newspapers as zerkalo.az or forums like mediaforum.az use it.

Azerbaijan's blogosphere is almost entirely based in Baku – more than 92 percent of all blogs are located in the capital. By comparison, only about 55 percent of Russian blogs are based in Moscow and the number is even lower in European countries.

It is hard to say when the blogosphere in Azerbaijan really came about, because there were, and are, many blogs covering a range of issues, such as art and photography, culture and fashion, music, politics, and religion in all three languages. According to Emin Huseynzade, regional program manager at Transitions Online, there are "different groups of bloggers" but most active are those bloggers who tend to write about politics. Currently there are a number of important blogs in English that describe what they perceive as the declining political and social reality of Azerbaijan (see the blogs by Nigar Fatali, Ilkin Gambar, Arzu Geybulla, Ali Novruzov). The approximate number of bloggers (both active and inactive) in Azerbaijan today is around 30,000, which is not a lot, but "the figure is increasing," according to Huseynzade.

The Blogosphere and Politics

An arrest in the summer of 2009 triggered an increase in political blogging and other new social media tools in Azerbaijan. Emin Milli (30) and Adnan Hajizada (26), youth activists who founded the OL and AN networks, were charged with hooliganism and inflicting bodily injury following an incident at a restaurant in Baku.

Shortly after they were detained and throughout the course of the trial, Azerbaijani youth activists turned to Facebook, personal blogs and Twitter to provide information about what was happening to their colleagues. As one Azerbaijani blogger recalls, "during the four months that Emin and Adnan spent in confinement before and during their trial, their friends turned Facebook into a modern telegraph; their status updates were news dispatches, rather than answers to what-are-you-doing questions […] countless text messages, phone calls, Facebook status updates, instant messages, e-mails, tweets, and blogposts were flying around."

According to Media Helping Media, a not-for-profit organization assisting journalists and activists, "it took the traditional news wires at least 24 hours to catch up with the coverage of the arrest of the two youth movement leaders in Azerbaijan. By that time, dozens of blogs had been updated and probably thousands of tweets sent."

Onnik Krikorian, the Caucasus editor for Global Voices Online, a blogger himself and a journalist, thinks the Azerbaijani blogosphere, which he has been following through OL's blog and via other local blogs, is something "totally unprecedented for the region and also exemplary for other countries, such as Armenia and Georgia."

Outlook

Azerbaijan boasts the greatest Internet penetration rates of the three South Caucasus countries thanks to government support. The government, political parties and civil society organizations have extensive on-line presences. As a result the Internet will continue to develop as an alternative source of information, especially as the use of new social media becomes more popular and user friendly. With that the internet has also become a source of empowerment in the hands of civil society, which employs technical innovation as a way of integrating into global debates and news flows.

About the authors:
Alexey Sidorenko is working toward a Master's degree at the Institute for Eastern Europe at Warsaw University, where he studies the Internet in the South Caucasus. At the same time, he is completing a Ph.D. dissertation on the Internet in Russian cities at Moscow State University. His Russian-language blog (altzgamer.ru/) discusses the Internet, Russian politics and his travels.
Arzu Geybullayeva writes the Flying Carpets and Broken Pipelines blog (http://flyingcarpetsandbrokenpipelines.blogspot.com/) and serves as a correspondent for an Italian-based research and electronic media centre on Azerbaijan. She holds an MSc degree in Global Politics from the London School of Economics and is also currently involved in a number of cross-country (Armenia and Azerbaijan) dialogue-building projects based on the use of new social media tools.

Internet, Society and Democracy in Georgia

By Alexey Sidorenko, Moscow/Warsaw

Abstract

Georgian Internet penetration reached 16.5 percent in 2008 and has been growing rapidly in recent years. Georgian users typically access odnoklassniki.ru as their preferred social networking site, but relatively few are bloggers. For most, the Internet is a source of entertainment rather than a tool for political debate or mobilization. While the government promotes a liberal media policy, encouraging Internet use, it maintains the ability to censor the web, a capacity it used during the 2008 Russian-Georgian war.

Internet Penetration and Usage in Georgia

In 2008 Georgia reached the Internet-penetration rate of 16.5 percent, becoming the second most wired country in the South Caucasus after Azerbaijan. The official Internet-penetration figure cited by the International Telecommunications Union is 23.8 percent but this figure looks doubtful. After several years with a steady annual growth rate of 1–1.5 percent, the country's Internet-penetration rate leaped from 7.8 percent to 23.8 percent. Such a large difference means that there were in theory almost 700,000 new Internet-users in 2007–2008, which is unlikely given the state of communications infrastructure in this country. Taking into account the long-term Internet development trend in Georgia, it makes sense to apply a correction coefficient equal to 0.7 (Figure 1). Even with the correction, the rise of Internet use in recent years is overwhelming. It is evident that in 2006–2008 Georgia experienced the first wave of its Internet boom.

As with many countries experiencing a "late" Internet explosion, usage is mainly concentrated in the capital Tbilisi. The penetration rate in Tbilisi is twice as high as the country average – 38 percent in October 2008. More importantly, the growth rate is overwhelming – according to ACT group, the penetration rate in Tbilisi in January 2008 was 20 percent, while in October it grew to 38 percent. In other cities the penetration rate is lower: 31 percent in Kutaisi and 20 percent in Batumi. The situation is much worse in smaller towns (15 percent) and in the countryside (no data). It's important to note that almost half (47 percent) of the Georgian population is rural.

Several factors sparked the rapid growth of Internet use, including: the increasing accessibility of Internet service provider prices, liberal government policies,