NEW MEDIA AND INTERNATIONAL MEDIA DEVELOPMENT

A RESOURCE GUIDE FOR EUROPE AND EURASIA

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CONTENTS

EXECUTIVE SUMMARY AND RECOMMENDATIONS

The purpose of this paper is to provide an assessment and analysis of new media technologies for the media development community. Media assistance is already being directed toward new media as donors pursue projects that make use of the internet to broadcast news, employ social media tools, and utilize the widespread use of mobile phones in developing countries. New media technologies and trends are changing so rapidly that many media assistance professionals—even those with years of experience— have a limited understanding of these new developments or their possible utility and import. This paper offers a "taking stock" evaluation of current trends and identifies key issues and additional resources for media assistance projects.

USAID supports independent media development in Europe and Eurasia to encourage the development and long-term viability of democracy in the region. An independent media can ensure that citizens have access to a variety of important sources of news and that information is not controlled exclusively by the state or political-economic interests.

Digital technologies are fundamentally altering the way individuals access news. Increasing levels of internet penetration in developing countries, the growing use of mobile devices for news and information messaging, and the proliferation of blogs and social networking sites have all created new ways to get and share information. Collectively, these technologies refer to emerging "new media"—a term used here to refer to digital technologies that are both collaborative and dynamic, allowing users to access and direct information to others over the internet or through mobile devices.

This paper begins by analyzing the trends and technologies comprising new media. Social networking sites, new mobile phone technologies, and online broadcasting sites like YouTube are assessed to show how they can be incorporated in media assistance projects. The second section continues to examine these changes by providing a resource base of new media tools and suggestions for developing competitive, sustainable media businesses. With a goal of establishing sustainable media businesses, development professionals should understand how quality web design principles, professionalism, and innovative approaches to measuring success all affect the long-term viability of projects.

Third, this paper assesses and explains how freedom of expression, security, and privacy are affected by new media and the current legal and policy frameworks concerning new media. Widespread state-sponsored internet filtering is not common in Europe and Eurasia, though there are other forms of surveillance and instances of targeted blocking have been observed. This section also provides additional resources on governance issues covering media law and freedom of information for more in-depth reading. As media assistance projects constantly struggle to analyze impact, the fourth section provides audience and demographic information on new media technologies. Audiences using new media tend to consist of younger groups and those who are likely to drive public policy debates. Further, these resources provide useful guidance regarding new media use in Europe and Eurasia.

Finally, this paper contains several reference points, including three case studies of new media technologies in Europe and Eurasia, a listing of resource-rich websites, and a glossary of new media terminology.

In light of the research conducted in preparation for this paper and the resources presented here, the following recommendations should be considered guideposts for new media development projects:

1. Pursue **multi-platform approaches** to spread resources and success. New media projects should utilize and contribute to the resources of existing media outlets and be fully integrated components of those projects. This will help to promote new media as one of many channels for communication.

2. Consider **target audiences**. Since new media projects tend to include some component of user interactivity, understanding the target audience's concerns and interests will aid the media to successfully compete with an array of other attractive sources. For example, in many countries internet use is most common at community access points like internet cafes or telecenters, rather than in private homes. These users may have to pay based on time and therefore will be less inclined to simply "surf" the internet for interesting content.

3. Approach new media projects with a **realistic perspective**. There remain serous infrastructure and cultural barriers to widespread ICT adoption throughout much of the world. Media development professionals need to consider access issues as well as such challenges as censorship and the availability of local-language online content when designing new media projects.

4. Develop **innovative** ways to **measure success**. It may be difficult to fully appreciate the impact of new media projects based solely on the number of unique visitors to a web site or downloaded podcasts. Development partners will need to stay abreast of new technologies that measure site access, length of visit, and shared content. But they will also need to look to other, less quantitative measures of success like name recognition, incoming links, and demographic information. Internet content that is viewed by targeted groups like professionals and youth may have a greater impact on public debate and drive policy discussion than other forms of media.

5. Rely on the **expertise of media development NGOs**. The experiences and best practices accumulated over the years by media development organizations will provide essential information how to fund, plan, accomplish, and access development projects.

6. Ensure that **project complexity is not limited** to the lowest common denominator of understanding. While many of these technologies may be new and penetration rates more limited than traditional media, development organizations should seek to experiment to discover what does and does not work and engage with private sector experts on leading trends and developments.

NEW TRENDS AND CUTTING EDGE MEDIA TECHNOLOGIES

The advent of Web 2.0 technologies that incorporate user-generated content and streamlined web design has fundamentally changed the way consumers access news and information. These technologies also represent a new way of thinking about the Internet. Rather than using the Internet as a passive tool for viewing content, new media technologies incorporate the idea that users will take an active and collaborative role in communication and information exchange. These digital tools are also becoming common workplace applications. The United States Department of State has recently begun using a "wiki" called Diplopedia as a repository of diplomatic knowledge. State Department employees are free to add and edit articles, further evidence of how collaborative technologies are valued tools for even large institutions. On the technical side, the convergence of media onto internet devices like computers and mobile phones means that many people—particularly younger demographics—are already consuming and interacting with the news, broadcast, and entertainment media in different ways. Understanding these changes involves much more than simply thinking about "new media" in terms of blogs or internet messaging boards because it involves a confluence of technology with media. When youth use a social networking platform like Facebook to send or share news articles, they are not simply reading information with a new technology; they are accessing, interacting, and often promoting the news through that technology.

Social Media

One of the hallmarks of new media is the way in which the technologies interactively engage their users. The tagline of this approach to digital media is that it functions as a "process, not a product" where users participate in content creation rather than merely consuming it. Not only do new media audiences expect to find their news and information over the internet and on mobile phones, but they expect to comment on news stories, rate the quality of that news, and share it with friends online. They may also participate directly in news generation by posting analysis or reporting on local issues on blogs or even sending SMS text messages about a house fire or traffic accident to traditional news outlets. This type of "user-generated content" signals a more dynamic, malleable form of media or "social media" that is driven by links to other websites. The following examples help to explain several of these kinds of social media:

- **Social Bookmarking**: These sites allow users to rate, organize, and share news content and information with others. Websites such as Digg, Newsvine, and Reddit have become news portals where user ratings determine which stories are featured. In this way users and news consumers are learning ways to drive news coverage and influence traditional media. Major news organizations (including The New York Times and The Wall Street Journal) are adapting their websites to include applications to allow readers to share and rate their stories.
- **Social Networking Sites** (see below)
- **Wikis**: Wikipedia, the online encyclopedia from which they derive their name, defines Wikis as, "a collection of web pages designed to enable anyone who accesses it to contribute or modify content." Furthermore, they "are often used to create collaborative websites and to power community websites." The most important thing to remember is that they provide terms generated by and for specific communities sharing interests. These applications are part of a broader technological trend. The sites allow users to manipulate and change content on the page—adding, editing, or even deleting entries and text. The "product" here is never quite finished, because it is always in the process of being changed to include new information.
- **Blogs**: These web publishing formats allow users to easily generate content for online viewing. Blogs (or web*blogs*) have dramatically reduced the resources needed to reach a large audience. In so doing, they have simultaneously created networks or "blogospheres" of individual publishers covering nearly every topic conceivable. These sites often function as a back-and-forth conversation—writers incorporating content from mainstream media and other blog sources, while readers can post comments and writers can respond. There are several web sites dedicated to the searching of blogs, such as Technorati, IceRocket and Google Blogsearch. Many blog search engines will measure trends in blog content, which can be useful for tracking the efficacy of other programs, including those emphasizing outreach.
- **Twitter** is a microblogging platform and social networking site that allows users to post updates via SMS text message. Users can network with others so that they also receive the updates of their friends via text message. The application itself has come to signal the way technologies are converging around mobile phones—"Twitter" is not only the best known microblogging service, but also a commonly used verb to describe the process of microblogging via SMS.
- **BlogTalkRadio**: This website represents the experimentation and convergence taking place around social media. The site allows users to broadcast call-in talk radio shows with an internet connection and a phone. By using a social networking platform in which users have individual profiles and can call in to the host, these sites create a new type of spoken interactivity where the radio host converses with users from around the world over the internet.
- **MMORPG** (Massively Multiplayer Online Role-Playing Games): These online games create virtual social spaces where users can interact with others using a virtual identity or "avatar." The "games" have implications for development because they can easily create a venue or location for

social interaction or education. USAID is currently experimenting with gaming to teach youth life skills and encourage positive interaction with others.

New Media and Advocacy

Leveraging new media technologies for advocacy is also proving successful. Since the infrastructure of mobile technology already reaches half the planet, it makes sense for development organizations to utilize these common devices. According to Mobile Active, an international network of people promoting the use of mobile phones for social change and development, mobile phones are being used in innovative ways to aid in election monitoring, voter registration campaigns, as well as developing advocacy campaigns to address issues ranging from healthcare to environmental issues.

Social Networking

In Russia today, as throughout most of Eurasia, two of the top five rated internet sites are social networking sites. According to Alexa, a web traffic-rating organization that provides estimates of internet usage, the highest ranked Russian website today is VKontakte—a social-networking clone site of the internationally popular Facebook, while Odnoklassniki, a similar social site is ranked fourth (Alexa).[1] For the sake of comparison, the website of Russian newspaper Komsomolskaya Pravda ranks sixty-first, while the Moscow daily Moskovsky Komsomolets does not even make the top 100—making the impact of social networking sites clear. Given the kind of web presence that social networking sites already have throughout the world, it makes sense for media and development professionals to understand how they work.

The use of social networking sites has, of course, centered on American youth culture. This is because the first sites to be developed like Friendster, Orkut, and Hi5 were largely aimed at teenagers and other intensive internet users. Sites like MySpace, founded in 2003, were initially created so that music groups could easily post their work online and connect with their potential fan bases. As of 2008, MySpace has a global reach of over 7 percent of internet users and is regularly ranked as one of the top global sites being accessed, according to Alexa. A Pew Internet and American Life Project study in 2007 found that 55 percent of teens have online profiles with social networking sites and access the sites frequently to keep in touch with friends as well as share and create online content.[2] While no similar data is available for Europe and Eurasia, the internet rankings of social networking sites throughout the region suggest similar trends.

A Sampling of top-rated websites in the Europe and Eurasia region with social networking sites highlighted:

	Russia	Armenia	Kazakhstan	Belarus
1	VKontakte.ru	Odnoklassniki.ru	Mail.ru	Mail.ru
2	Mail.ru	Google.com	VKontakte.ru	VKontakte.ru
3	Yandex.ru	Yahoo.com	Google.kz	Tut.by

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[1] Like other web-traffic ranking sites (Comscore, Google Trends, and Compete, Alexa provides estimates based on data from users who download their toolbar, the estimates are then weighted using focus groups, surveys, and other data. Needless to say, this approach is far from perfect and remains a chronic problem of publicly available internet usage data. The rankings are used here to provide some useful insight into important trends in internet usage.

[2] *Teens and Social Media*, Pew Internet & American Life Project, December 17, 2007.

| 4 | Odnoklassniki.ru | Mail.ru | Odnoklassniki.ru | Google.com.by |
| 5 | Google.com | Google.am | Yandex.ru | Odnoklassniki.ru |

(Source: Alexa internet site rankings; accessed July 1, 2008.)

The mechanics of social networking sites are really quite straightforward. Users begin by creating a "profile" page which includes some amount of personal information the individual wants to make available to friends or the general public. Individual profiles are then linked to contacts or friends. This, in turn, creates a series of networks and allows connections to be made quite easily. In the past few years, social networking sites have become increasingly comprehensive web portals in their own right. Users can now create advocacy or interest groups, post videos and pictures and share news stories, videos from YouTube, and a host other content from the web. Increasingly, social networking sites themselves are also becoming platforms for add-on applications that increase their networking potential. Advocacy organizations can create applications that will send regularly updated content to users who sign up to receive the information. Individuals are likewise able to use these functions to network with, find others who are interested in similar topics, and share content through networks. This social "sharing" and networking is especially important for media professionals to understand because it signals a new way of accessing and exchanging information. It works in much the same way as a traditional newspaper may have been passed around between family, co-workers and friends, lending credibility and increased distribution to particular sources.

A word of caution: we have yet to see the full impact of social networking sites and the way they shape how users interact with others and with media. Serious privacy and security concerns also exist as personal information can sometimes be mined by advertising companies and some—particularly younger—users have not realized the implications of making private information publicly available. These technologies are not yet fully developed. While the trend toward increased use is clear, the ramifications are not.

For further resources on social networking sites, see the following:
- Your Guide to Social Networking Online, produced by MediaShift (a PBS blog), provides a history of social networking use and some of the main issues regarding the technology.
- "Social Network Sites: Definition, History, and Scholarship," a paper by Danah Boyd, a well-known researcher and academic who has written extensively on social networking sites, particularly with reference to youth culture. Her academic articles can be accessed from her personal web site Zephoria.

Mobile Media

Development professionals are familiar with the concept of "leapfrogging" in which a country skips past an entire stage in technological or economic development to something more advanced. The mobile phone market is currently a prime example of this. There are many countries in which there were relatively low levels of landline phone access up through the 1990s, but have seen an explosion of mobile phone use over the past decade. In Kazakhstan, for example, just 12 percent of the population had landline telephone access in 2000. By 2006, the number of mobile users registered at over 50 percent of the population while landline use has increased to only 19 percent.[3] Compared with internet penetration rates in Kazakhstan which register at less than 10 percent, it becomes clear why mobile phones may be the next digital frontier for media organizations.

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[3] World Bank ICT Statistics, 2006.

Aside from these ownership numbers, it is important to understand that mobile phones themselves are becoming more powerful tools for producing and sharing information. Not only are handsets becoming cheaper, but they are becoming all-in-one personal digital devices. The 2007 release of the Apple iPhone has shown how cell phones may become the device-of-choice for technological convergence. Newer smartphones like the iPhone and LG Dare are multi-featured wireless internet devices with high-resolution cameras, fast processors, and the ability to create and edit documents—all in addition to their functionality as mobile phones. Increased network bandwidth will mean that these devices may be able to complete all the tasks that can be performed on a laptop. Handset developers are also moving toward an "open source" model for mobile phones. Eliminating proprietary software that currently runs most mobile phones in lieu of an open source platform will encourage competition and spur developers to build innovative programs to access information and share content. Coupled with higher rates of mobile phone ownership, these technologies may help to drive digital access to information and news in developing countries.

Mobile Phone Subscription Rates in Select Europe and Eurasia Countries
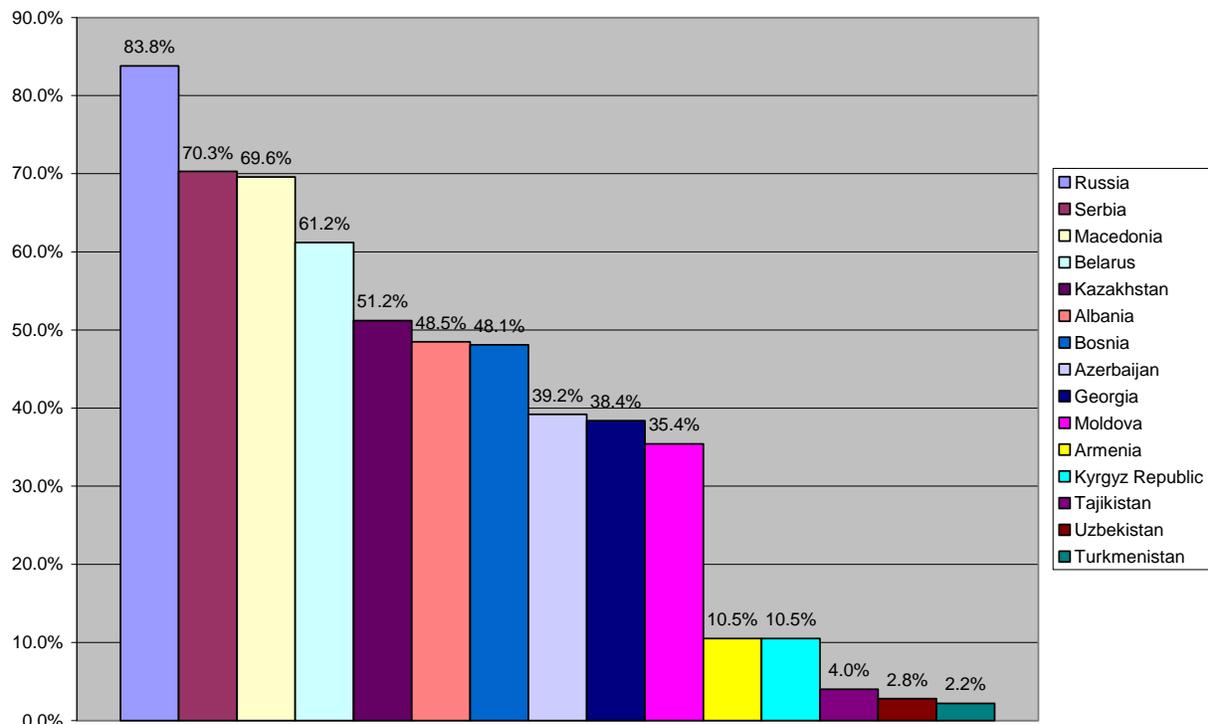
(Source: World Bank ICT Statistics, 2006)

There are already more than 3.3 billion mobile subscribers throughout the world today. This number will continue to grow as mobile telephony covers more people and the devices become cheaper and more accessible. In Europe and Eurasia, mobile phone subscription rates range from over 80 percent in Russia to under 10 percent in Tajikistan. For media development professionals, these changes present three important prospects:

- **New distribution networks**: Currently, most mobile phone information distribution is limited to SMS messaging services with high bandwidth constraints. SMS messaging is being used to deliver "headline" news by some organizations, but the prospect of faster networks like 3G, which is already available in Europe and East Asia, will only increase opportunities. New phones

will function like handheld computers able to receive streaming video, access full websites, and read and edit documents.

- **Mobile phones and journalism**: As cell phone manufacturers increase bandwidth capacity for access to the mobile web, include high-quality video capture functions, and include word processing capabilities, mobile phones will increasingly become a necessary tool for field-reporting journalism.[4]
- **The prospect of increased citizen journalism**: Just as mobile phones increase the capacity of professional journalists to perform their jobs, they are creating new opportunities for others to create and interact with news content. Many news organizations are experimenting with options to allow readers to send in breaking stories or photos via SMS messaging. Newer, more advanced cell phones will only increase these trends. For more on news reporting and distribution via SMS, see the following:

    o [Lojoconnect](): a project of graduate students at Northwestern University to understand the intersection of location-based technology like GPS-enabled phones with journalism.
    o [TXTmob](): a project by Tad Hirsch of the MIT Media Lab to distribute information via SMS networks.
    o [FrontlineSMS](): a free application that provides an easy platform for SMS network distribution and reception.
    o [Mobileactive](): a NGO that seeks to leverage SMS technology for social change throughout the world.
    o [160characters](): an online forum for professionals interested in mobile messaging, including industry news, membership lists, and resources on mobile messaging.
    o Open Source Software: Handset producers have started to give up exclusive control over the software which controls cell phones. This move could lead to the development of an open source mobile phone platform, allowing increased competition from software developers who could then begin building applications for mobile phones. The [Open Handset Alliance](), a partnership of Google and several mobile handset producers and carriers, and the [Symbian Foundation]() represent two efforts to further develop an open source mobile phone platform.

YouTube

The reach of [YouTube]() has extended beyond merely distributing political gaffes and music videos in North America. YouTube truly is a global phenomenon, with a global internet traffic rank regularly among the top five ([Alexa]()). YouTube has become a means to circumvent state-controlled media throughout the world by giving ordinary citizens the chance to not only view interesting videos, but to create and post relevant news and entertainment content. Authoritarian regimes have realized the potential of YouTube and begun cracking down and blocking access to the site. In 2008, following the contested elections in Armenia, the government unilaterally blocked access to the site as citizens were using it to post videos and share scenes from the demonstrations (see "YouTube Reporting in Armenia," below).

In the Europe and Eurasia region, the development and use of YouTube has been uneven. In some countries with technologically-savvy independent media outlets, YouTube provides another avenue to distribute their materials. The well-known independent Serbian media outlet B92 maintains a [YouTube channel]() that posts news videos on a daily basis, which are regularly viewed several thousand times. As mentioned above, Armenia also hosts a burgeoning YouTube production community with channels like

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[4] See Clyde Bentley, "[Forget the backpack, 'pocket journalism' is coming,]()" USC Annenberg Online Journalism Review, 20 December 2006.

A1 Plus News and Armenian Observer. However, in Azerbaijan, the YouTube community is much less developed with most of the content consisting of Eurovision music videos and folk culture.

Several other sites are seeking to build on the success of YouTube by specifically collecting news video content from ordinary citizens:

- IReport, a site now owned by CNN broadcasts news-related videos submitted by individuals. Going a step further, IReport also *crowdsources* assignments to users, asking them to submit video content on a relevant topic which may be published on CNN's online news site.
- MediaScrape aggregates news video content from online news outlets and allows users to search for particular types of videos or view certain thematic content.
- The Hub is an interesting example of niche news communities. Focused on thematic online video related to human rights, the site collects user-submitted videos and rebroadcasts the videos through their website.

The impact of social video sites to create videos that *go viral* by reproduction across the internet through email and blogs to become cultural phenomena should not be underestimated, even in countries with low rates of internet penetration. The recent Russian viral video of neo-Nazi skinheads killing an immigrant named Shamil U. Odamanov is a case-in-point. Despite a relatively low internet penetration rate, the video spawned a public debate about xenophobia in Russia and attitudes toward ethnic minorities.[5] The power of YouTube and video-sharing websites will only continue to grow as more people gain access to the internet and the tools to create, edit, and publish online video.

YouTube site ranking among selected Europe and Eurasia countries:

	Russia	Armenia	Kazakhstan	Belarus
YouTube Ranking	7	11	16	20

(Source: Alexa internet site rankings; accessed July 1, 2008.)

Technical Trends: Broadband Access and Telecom Expansion

Broadband internet access is increasingly viewed by development experts as a basic utility like water or electricity. With internet access, citizens can access news and information that affects their daily lives, learn about and utilize government services through e-government portals, and complete day-to-day tasks like banking. As communication and information exchange increasingly occurs over digital networks, access to the internet has become vital. Broadband internet connections provide access to larger volumes of content. As more information has been placed online, broadband access has become necessary to access these types of basic services.

Infrastructure problems and limitations remain a serious hurdle throughout many countries. In Russia, less than three percent of the population subscribed to broadband service in 2006; many other countries in Europe and Eurasia have similarly low or non-existent rates of broadband access.[6] These low rates of access signal a huge opportunity for market growth as companies and governments seek to increase capacity. Advocates of increased broadband access point to the infrastructure problem of connecting households and individuals in the *last mile*—the areas located beyond the reach of the existing

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[5] Michael Schwirtz, "Video Draws Attention to Growing Violence Against Minorities in Russia," *New York Times*, 12 June 2008.
[6] World Bank ICT Statistics. 2006.

telecommunications grid. As the telecommunications industry searches for new markets and citizens and governments push for expanded access, connecting these people will be a priority. The technologies highlighted below are being explored to expand access to all citizens, but especially those not currently covered.

- **Expansion of Mobile Units**: Over 3.3 billion people today have mobile phones. Mobile phone companies and service providers are motivated to expand their business to include those who currently cannot afford their services. They are increasingly searching for ways to lower the cost for consumers. Investing in inexpensive, durable handsets will become a necessary business initiative. Mobile phone technology is also expanding so that units have the processor speed and memory that make them highly portable computers. Phones that can browse the internet in real time may seem like gadgets, but they will become increasingly common as cameras, voice recorders, internet browsers and phones are converged onto a single device.
- **Wireless Broadband Technology**: Wireless broadband refers to internet access that is most often aimed at fixed location users. Wifi (for Wireless fidelity) is a low-range system that provides a connection over unregistered frequencies. This can be useful for providing easy access to the internet throughout a home or business, but is not adequate for "last mile" infrastructure where the goal is to increase access over a large area without the need for a fixed access point. WiMax technology allows wireless internet over a large area (up to 50 Km with Line of Sight, 15 Km without Line of Sight), typically using a portion of registered broadcast frequency.[7]
- **Wireless Mobile Technology**: Since mobile phone penetration rates typically far exceed internet access throughout much of the world, higher-speed mobile phone networks may provide the best means of broadband access. Newer digital networks for mobile phones like 3G allow data transfer speeds that approach those of broadband service.

NEW MEDIA BUSINESS DEVELOPMENT

By opening up entirely new platforms and increasing competition, new media technologies have challenged traditional media business models. Viewers expect the news to have cutting-edge currency, engage with multi-media technologies, and be available on-demand. Accustomed to reading articles and viewing videos online, they also have high expectations that all this content will be available at no cost. Media professionals understandably chafe at this sense of entitlement, but seem caught in a "catch-22." Without new media technologies, news organizations will find themselves at a competitive disadvantage. News aggregators and social bookmarking sites could take the place of editors and regular citizens with camera phones and laptops may replace professional journalists. The task of figuring out how to utilize these technologies may seem overwhelming.

For media development professionals and organizations, the challenge is similar: how to engage Web 2.0 technologies in a way that will enable the development of successful independent media projects? The following issues should be read more as a collection of tools—explanations, guides, and resources, that taken collectively, explain how new media technologies can successfully be incorporated into existing media development projects.

Measuring new media usage

News outlets generating new media content have run into a number of difficulties in measuring the distribution of that content. Quantifying usage is further complicated by new media sites that redistribute,

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[7] Guy Cayla, Stephane Cohen and Didier Guigon, *WiMax: An Efficient Tool to Bridge the Digital Divide*, WiMax Forum, November 2005.

or "share" news elsewhere as well as RSS feed aggregators, so that the content is viewed or listened to on another site. Below are several "web analytics" tools that work especially well for media development projects attempting to include new media technologies within a multi-platform approach.

- Alexa is a useful tool for measuring the reach of major internet sites. Since the rankings only cover the largest sites, this tool is somewhat less useful for small or startup media outlets.
- Google Analytics is a free tool for website managers to use to track how many people are accessing their site. The tool also measures how long users remain on the site as well as the geographic location from which they access the site.
- Clicky Analytics is another web analytics tool that offers similar tools to Google Analytics, though it also includes tools that track downloads as well as users coming from or leaving to social media and networking sites. This feature can help web managers gauge how much of their content might be "shared" through social media sites.
- Quantcast is a web ranking tool similar to Alexa, though it also allows developers to embed code into their sites. Quantcast will then track usage and provide other demographic market research data.
- FeedBurner allows site managers to quantify the number of people reading the site through RSS feeds (for news, blogs, or podcasts) by counting the number of subscribers.

Professional Standards and Ethics

As new digital technologies have lowered the threshold for individuals seeking to report on and distribute news content the following two issues have been affected:

Ethics: As more media outlets pursue news distribution via new media technologies, the ethical standards of traditional journalism should be applied to new media as well. At this time, development professionals should consult the following resources for establishing professional standards in new media projects:

- The Center for Citizen Media, an initiative of the Walter Cronkite School of Journalism & Mass Communication and the Berkman Center for Internet & Society. The initiative has developed a resource base of guiding principles for citizen journalists.
- The *Handbook for bloggers and cyberdissidents* published by Reporters Without Borders should be consulted. The handbook includes a chapter titled "What ethics should bloggers have," but the principles can be applied to other forms of new media as well.

Journalists Training: The internet has created new opportunities for journalism and media training through distance learning. Whereas professional training once required time and money for travel, much of it can now be accomplished through online courses:

- IJNET, a project of the International Center for Journalists (ICFJ) has compiled a series of media training materials covering subjects ranging from advertising and marketing to newsroom management. They also host two "tip sheets" for online journalism, including "Designing Web pages for news sites" and "10 steps to citizen journalism online."
- News University, a project of Poynter Institute for Media Studies, offers free online journalism courses on topics ranging from editing to graphics and design to online news distribution.

Web Design Principles

A well-developed internet presence is integral to the success of media development projects seeking to take advantage of new media. Moreover, with new applications that make creating websites intuitive and easy to publish, the process has been greatly simplified. Media development organizations, however, still need to seriously consider the goals, audience, and intended role of an online presence. Poor design, misunderstanding audience concerns, or clearly outdated content can all quickly turn off potential viewers. On the other hand, a site that invests in quality design, even without significant funding or advertising, which understands and caters to its designated audience, can quickly see the dividends of that investment pay off. The following principles are useful guides to creating media websites that work well:

- **Clean, intuitive layout**: Pages should not be cluttered with obtrusive ads or unnecessary text. Readers should be easily able to navigate and find what they want.
- **Low bandwidth requirements**: Connection speeds may be lower in many of the countries where USAID works. This means that web pages should not excessively use high-resolution images or pages with content that cannot possibly load quickly for the average user. Attention should also be paid to the hardware being used by potential viewers.
- **Audience-relevant**: This simple recommendation can go a long way to ensuring that readers find the site useful and return regularly. The issues covered should be attractive and interesting to the target audience.
- **Interactive**: Youth and intensive internet users see the Internet as a place of interactive information exchange. The most successful news sites are able to tap into this trend by making their content interactive. Comment boards accompanying news articles accomplish this, along with well-produced videos that communicate stories using a different medium. Contests that capitalize on user knowledge are also a useful way to promote interactivity. Social tagging (Facebook, Digg, Del.icio.us, Reddit) should be used so that users share the website's content with others and increase the audience.
- **Update, update, update**: Few things will turn off visitors more than out-of-date content—it diminishes incentive to return and wastes readers' time. If the content is fresh and relevant, it will provide impetus for visitors to stay, return, and even recommend the site.
- **Links**: By selectively linking to other sites, web developers can ground their project within a particular neighborhood or community on the web. This helps identify the site to potential visitors and helps locate the website with a pre-existing community which is the key to expanding the audience. A word of caution: indiscriminate linking may drive up traffic in the short term, but it is not a sound web development practice. Doing so undermines the site's location within a particular community and makes readers question its' content.

Media on Media

Tracking media trends can be a useful way for in-country journalists and organizations to monitor media developments. These types of projects can hold the media sector accountable to claims of objectivity and openness as well as provide direction for new media outlets to understand what is missing. In Ukraine, the online media outlet Telekritika has been following media-sector development since 2001. By providing a space for open analysis of the media sector, organizations like Telekritika allow local journalists to encourage public debate about their country's media. They also serve as a location to call for media transparency, democratic media laws, and access to information for citizens. The following sites track the media sector in the Europe and Eurasia region. Most include information in English, but some additional sites exist only in regional languages.

- [Media.ge](#) tracks developments in George's media; includes resources on news, journalist training, legislation, and media organizations.
- [The International Press Institute](#) is an international group of journalists and media professionals. The project aims to protect press freedom and includes annual country profiles of press freedom.
- [The Eurasia Media Forum](#) seeks to support journalists and media professionals by providing analyses of current Eurasian media environments. The project supports annual conferences to discuss Eurasian media trends and propose new directions.
- [Telekritika](#) tracks media developments with the aim of encouraging an open, independent and professional media in Ukraine.
- [The South East European Network for Professionalization of Media](#) works to advance the quality and professionalism of media in South Eastern Europe. In addition, the organizations' online presence provides resources for regional journalists concerning current issues, journalistic standards, and the direction of the professional field.

Additional Resources on New Media Development

Web Development for Media
- [The Knight Citizen News Network](#) (KCNN) has developed a host of learning modules for non-traditional journalists to use digital technologies. The topics covered range from how to create internet TV to limiting legal liability.
- [DIY Communications](#) provides an online "citizen journalism toolkit." These tools are meant to provide start-up non-traditional news sites with the knowledge needed to communicate their ideas, but the principles are applicable for web communication in general. The site hosts an extremely useful set of resources for media development professionals seeking to create an intuitive website and addresses issues of audience, presentation structure, hosting, and explanations of the web development process. Additional topics explain the best ways to use audio, video, and graphics on media sites.
- [The International Journalists' Network](#) (IJNET) has several resources pertaining to website development including "10 Steps to Citizen Journalism Online," and a short article entitled "[Designing Web pages for news sites](#)."

General New Media and Journalism
- [*Journalism 2.0: How to Survive and Thrive: A digital literacy guide for the information age*](#) by Mark Briggs. The report covers a diverse range of topics, from digital audio production to the nuances of reporting news in the web environment. This downloadable PDF is a great resource for media development professionals who want to understand how new media technologies are changing the media landscape for news outlets and how to engage digital technologies.
- [NGO in a Box](#) provides information on a set of internet and communication tools useful to NGOs. Resources include encryption email, Voice Over Internet (VOI) services, and browsing through proxy servers to avoid monitoring and filtering.
- [The Center for Social Media at American University](#) has several resources related to business development. These include audience engagement, distribution, and funding.
- [Ethan Zuckerman](#), one of the founders of [GlobalVoicesOnline](#) has also written a short summary addressing business models and funding mechanisms suggested for funding journalism.

INTERNET FREEDOM

In many ways, new digital technologies have worked to intensify existing legal and human rights questions of free expression, access, and security. The internet, once conceived as an inherently open, democratic realm of free expression and exchange, is now understood more soberly. Technological advances throughout the world have allowed many individuals to share ideas and debate topics with ease. Yet that same technology has also been enlisted by repressive governments seeking to limit access and restrict expression. Personal information has been used by for fraudulent purposes by cyber-criminals and governments seeking to prosecute individuals for political reasons. In the Europe and Eurasia region, online censorship, also known as *filtering* is used by some states to check internet use and stifle independent media, while other states use more benign techniques of surveillance. Freedom of expression, access, security, and internet governance represent the policy frameworks, norms, and priority issues that media development organizations need to consider when pursing new media projects.

Freedom of Expression

Just as digital technologies have increased the possibilities for individual expression and freedom of speech, they are increasingly being targeted by authoritarian states. A recent report by the World Information Access Project (WIAP) shows how states have increased their focus on these technologies as the number of individuals arrested for blogging activities has increased.[8] While this increase is certainly due to an increase in the number of individuals who write blogs, it also speaks to the fact that states are aware of these technological developments and calibrating their efforts appropriately. One of the significant challenges for media development organizations is to track where undemocratic legislation is being considered and act to stop it before it is enacted.

A useful tool for tracking these developments is the "Internet Freedom Alert" an email alert subscription offered through Freedomhouse's Global Internet Program. Users can subscribe to the service through the subscription page Internet Freedom Alert. Robert Guerra, Senior Program Officer for Internet Freedom at Freedomhouse, also runs an updated newsfeed tracking international laws and regulations that could affect freedom of expression through Del.icio.us called InternetFreedom.

Security

Individual security and privacy needs to be ensured for the internet to remain a viable mode of free expression and independent media. Technical filtering, surveillance, and data mining by private companies and states all work against the possibilities of the internet as a space for the growth of independent media. As internet companies like Google and Yahoo! are increasingly global in reach, the policies governing internet security will likewise be global in scope. Western internet companies operating in countries that restrict internet access have and will continue to confront these problems. In 2005, Shi Tao, a Chinese journalist was imprisoned after the American internet corporation Yahoo! handed over private email communication records to the Chinese state police. The well-known search engine Google has agreed to not list certain web sites from its search results in China. These examples underscore the way in which issues of internet security remains underdeveloped at the international level.[9]

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[8] Howard, Philip N, and World Information Access Project. World Information Access Report - 2008. 3. Seattle: University of Washington, 2008.

[9] Tom Zeller Jr., "To Go Global, Do You Ignore Censorship?" New York Times, 24 October 2005; Elinor Mills, "Google to censor China Web searches," CnetNews.com, 24 January 2006.

Internet Blocking: How it Works

Authoritarian states can use a variety of techniques to restrict independent media from using the internet to encourage open and democratic debate and to limit access to information for ordinary citizens. When free and open access to information over the internet is viewed as a threat to authoritarian rule or the status quo, states can use a series of technical tools to restrict public access. The OpenNet Initiative, a collaborative research initiative of several leading universities which tracks internet filtering around the world outlines four different approaches states use to block internet access:

1. **Technical Blocking**. This kind of blocking occurs when access to specific internet IP addresses are blocked. Access to certain content "regions" of the internet can also be blocked through more advanced methods that blocks URLs or search keywords.
2. *Search Results Removals*: This type of filtering occurs when search engine companies agree to exclude certain websites from search results in conjunction with a government.
3. **Take-down**: This occurs when governments use jurisdictional authority to require that certain websites are removed. It can also occur if governments control domain name servers, in which case they are able to de-register a website's domain name, rendering the content inaccessible to viewers.
4. **Induced Self-censorship**: As with other forms of self-censorship, this type of filtering occurs when internet users consciously limit their own browsing and posting actions to avoid punishment.[10]

Internet information can also be blocked through proactive attacks to disable certain websites. The most common example of this is a **DDoS** (Distributed Denial of Service) attack. This technique is typically employed by unofficial or non-state actors to flood a website with so much traffic that it becomes inaccessible. DDoS attacks usually occur when computer hackers use *malware* (a piece of software designed to cause damage) to infect other computers. The group of infected computers is then maliciously used to simultaneously attack a certain website and make it unavailable for legitimate users. For further information and research, see the advocacy organization Shadowserver Foundation—a group of security professionals actively seeking to track and raise awareness of cybercrime.

Internet Blocking in Europe and Eurasia

Overt and systematic internet filtering in Europe and Eurasia, however, is not widespread. The exceptions are Uzbekistan and Turkmenistan, which reportedly practice systematic blocking of websites and are both listed (2008) as "Internet Enemies" by Reporters Without Borders.[11] The type of access restriction that does occur in the region tends to be *event-based* or *selective* filtering. These limits on access typically occur for a specific amount of time and relate to a particular event or issue. For example, in the run-up to Kyrgyz Republic parliamentary elections in 2005, the government blocked access to opposition websites and independent online news sources. Political sites were also blocked during Tajikistan's election in December 2006 and similar event-based blocking occurred following the Armenian elections in early 2008. Reports have shown that in addition to opposition websites, independent news outlets and YouTube were blocked from inside Armenia. For media and development organizations, this type of filtering is

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[10] *About Filtering*. The OpenNet Initiative, a collaborative partnership of the Citizen Lab at the Munk Centre for International Studies, University of Toronto, Berkman Center for Internet & Society at Harvard Law School, the Advanced Network Research Group at the Cambridge Security Programme, University of Cambridge, and the Oxford Internet Institute, Oxford University.

[11] "Internet Enemies," Reporters Without Borders, 2008.

difficult to confront because it does not represent a systematic policy and is difficult to campaign against.[12]

The following table highlights the various types of internet restrictions in place in several Europe and Eurasia countries for which data is available:

	Evidence of Systematic Blocking	Evidence of Event-Based Filtering	Legal Structures Allow for Internet Surveillance
Armenia		x	
Belarus	x	x	x
Kazakhstan	x	x	x
Kyrgyz Republic		x	
Russia			x
Tajikistan		x	
Turkmenistan	x	x	x
Uzbekistan	x	x	x
Ukraine			x

(Source: Rafal Rohozinski, Vasselina Haralampieva, "Regional Overview: Commonwealth of Independent States," the OpenNet Initiative, 2007; "Internet Enemies," Reporters Without Borders, 2008; James Pickett, "Citizen Journalism in Central Asia: Challenges and Opportunities of the Growing Online Community," *Eurasia21.com.*

Internet Governance

The legal structures and policy norms governing the majority of the new media technologies discussed in this report are not yet fully in place. Nicholas Negropente, one of the founders of the MIT Media Lab and an early commenter on the internet, once suggested that increased internet access would diminish feelings of national identity around the world as nation-state borders became less significant.[13] In recent years, however, the same kinds of new digital technologies have been used by technologically adept authorities to diminish the possibilities of free speech and discourage citizens from using the internet in a free and open manner.

Internet governance refers to the technical structures that guide internet development like the assigning of domain names, but it also refers to the legal and policy frameworks put in place in countries throughout the world to guide internet development. In this sense, internet governance relates to new media development in Europe and Eurasia in two key ways:

1. **Internet Surveillance**: Although there is not a widespread practice of explicit internet filtering in the region, internet access is restricted through event-based filtering and legal structures that allow for surveillance. Surveillance, in turn, fosters an environment of self-censorship among

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[12] Rafal Rohozinski, Vasselina Haralampieva, "Regional Overview: Commonwealth of Independent States," the OpenNet Initiative, 2007; "Internet Enemies," Reporters Without Borders, 2008; Armenian Observer.
[13] Nicholas Negroponte, *Being Digital*, (London: Hodder & Stoughton, 2006), 238.

journalists that is notoriously difficult to quantify. In Russia, the legal stance on internet regulation is reflected in the System for Operational-Investigative Activities (SORM-II) law which gives security police access to Russian Internet Service Providers and allows for broad surveillance of internet activity. Many former Soviet states in Central Asia and Eastern Europe have adopted legal measures similar to Russia's model of internet regulation.[14]

2. **Future Legislation**: It is important for development organizations to keep abreast of policy debates and encourage the development of internet legistlation that enables both information access and free expression. Guiding policy discussion and decision-making will prove much easier than reversing already-enacted laws. Internet governance in this context refers to the implementation of these kinds of regulations, laws, and policy norms

Whereas surveillance laws are difficult to alter once they have been enacted, there is a real opportunity for development organizations to track and lobby for good legislation. Development professionals interested in tracking internet and media legislation should be aware of the following key resources:

- The Representative on Freedom of the Media of OSCE maintains a regularly updated listing of pending and proposed media legislation, including the following:
    - o Report on Libel and Insult Laws
    - o Legal Reviews of pending and enacted media legislation
    - o Reports on Freedom of the Media
- IJNET, a project of The International Center for Journalists (ICFJ) publishes a weekly email newsletter titled "This Week in IJNet" which routinely includes updates regarding media legislation issues from around the world.

For organizations that provide resources in reforming existing or altering proposed legislation, development professionals should consult the following:

- The Global Internet Policy Initiative, a project of Internews Network and the Center for Democracy and Technology, offers best practices on developing legislation and encouraging open and democratic ICT regulations.
- The International Media Lawyers Association is a network of lawyers who share information and strategies to prevent non-democratic media law from being enacted.
- The Moscow Media Law and Policy Institute (MMLPI) has published resources relating to media law in Russia in both English and Russian.
- The Media Know How Resource Center provides information on current European media law as a template for use in the development and reform of media law in Russia.

Guides to Avoid Filtering and Censorship

Several media development professionals and organizations have compiled resources and guides for those wishing to avoid online censorship. The target audience for these resources are "cyber-dissidents"—those living under and wishing to circumvent state-imposed internet restrictions. However, they also serve as useful resources for understanding the technical side of internet filtering and the tools available to evade it.

- Frontline Human Rights Defenders has developed a useful online manual relating to personal internet security for individuals including information on internet filtering and monitoring.

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[14] : Rafal Rohozinski, Vasselina Haralampieva, "Regional Overview: Commonwealth of Independent States," the OpenNet Initiative, 2007.

- *Handbook for bloggers and cyberdissidents* published by Reporters Without Borders. The handbook includes articles written by experts covering internet censorship, ensuring email privacy, personal security, and circumventing filtering as well as how-to guides and ideas for independent bloggers.
- Reporters Without Borders also provides several specific resources for avoiding internet censorship.
- Blog for a Cause handbook addresses how citizens can use blogging technology for campaigns against injustice. Available in English, Spanish, French, and Arabic.
- Anonymous blogging with Wordpress and TOR guide by Ethan Zuckerman.

Additional Resources on Internet Freedom

Access and Filtering
- The OpenNet Initiative catalogues instances of internet filtering throughout the world and provides useful individual country profiles as well as regional overviews.
- The Media Sustainability Index (MSI), produced annually since 2000 by IREX for USAID measures changes in media environments across borders and over time. The report covers issues of censorship along with the legal and social norms to protect freedom of speech.
- Nations in Transit, an annual publication of Freedomhouse tracks the reform process in the formerly communist states of Europe and Eurasia and comments on independent media development and press censorship.
- GlobalVoices, a website that aggregates and translates blog activity from all over the world, has several useful resources relating specifically to internet free speech and blogging:
    - Advocacy Access Denied Map
    - 403 Checker, a tool for activists to check URLs to discover which ones are blocked by the state.
- Democracy and Internet Readings produced by Berkman Center for Internet and Society at Harvard Law School.
- Reporters Without Borders
    - List of states considered "internet enemies"
    - Press freedom index
- The Committee to Protect Journalists publishes annual reports on press freedom, including country profiles.

Internet Legislation and Governance
- The UN ICT (Information and Communications Technology) Task Force has produced several key texts including a report entitled Reforming Internet Governance: Perspectives from the Working Group on Internet Governance (WGIG).
- The Center for Democracy and Technology is a non-profit policy advocacy organization that works to encourage policies that promote an open and free internet.
- The European Commission:
    - Communications regulatory framework including Broadband, Internet, Mobile and wireless, and Satellite
    - Broadcasting regulatory framework
    - Copyright and related rights
    - The Internet Law Program at the Berkman Center includes modules and information regarding internet-related legal issues covering intellectual property, business patents, and freedom of expression.

- UNESCO has also published a comparative legal study of freedom of information law that addresses essentials questions in crafting and understanding legislation called "[Freedom of information: a comparative legal survey](#)."
- [Freedom of Information in the European Union and Elsewhere](#), a website maintained by Christopher Sobotta includes links to FOI laws in many of the countries in the Europe and Eurasia region.
- The Open Society Institute (OSI) has also developed the [Justice Initiative](#), which funds research and reports on Freedom of Information legislation to encourage open and democratic policy frameworks.

Media Law
- [The World Bank Institute](#) has prepared a useful report in May 2008 entitled, *Broadcasting, Voice, and Accountability: A Public Interest Approach to Policy, Law, and Regulation,* By Steve Buckley, Kreszentia Duer, Toby Mendel, and Sean O'Siochru With Monroe E. Price and Marc Raboy. The report addresses the current state of broadcasting policy throughout the world.
- [The Stanhope Center for Communications Policy Research](#) provides a forum for research and discussion on media policy throughout the world.
- The [EU Task Force for Co-ordination of Media Affairs](#) has issued several reports on media law issues.
- The [Open Society Justice Initiative](#) also addresses Freedom of Expression, particularly with respect to media legislation.
- The Berkman Center for Internet and Society's [Citizen Media Law Project](#) is a resource base of legal issues relating to citizen journalism for both individuals and organizations.

# AUDIENCE AND DEMOGRAPHICS: WHO IS USING NEW MEDIA?

The rates of new media use in Europe and Eurasia are uneven, but the trajectory suggests an upward trend. High growth rates of internet access and the increasing use of ICTs mean that there is a real opportunity to invest in new media as more citizens incorporate these technologies into their everyday lives. The concerns of typical new media users—youth and "early adopters" or "influencers"—need to be understood so that projects are appropriate and well utilized. Likewise, it is important to understand the uses of new media technologies in the region and how they compare with other, more traditional, forms of media.

Internet Use in Europe and Eurasia

Internet penetration rates in Europe and Eurasia are varied. While Belarus has an extremely high penetration rate of nearly 60 percent, most countries in Eastern and South Eastern Europe (Bosnia, Montenegro, Serbia, Moldova, and Russia) have internet penetration rates between 15 and 25 percent. Other countries in Eastern and South Eastern Europe, as well as the Caucasus and Central Asia, tend to have rates of use under 15 percent. The growth rates, however, are extremely high--particularly in Central Asia. In Uzbekistan and Azerbaijan, the growth rates are 23167 percent and 8333 percent, respectively. Even in those countries with lower growth rates, like Armenia, the Kyrgyz Republic, and Tajikistan, the growth rates still measure between 400 and 1000 percent between 2000 and 2007. The following charts show the rates of internet penetration and growth in the region. The source data for this chart caries by suvey methodology and available information, but the results are generally similar. In comparison,

internet penetration in North America is now estimated at 71 percent with a growth rate of 120 percent from 2000 to 2007.

Internet Usage in Select Europe and Eurasia Countries
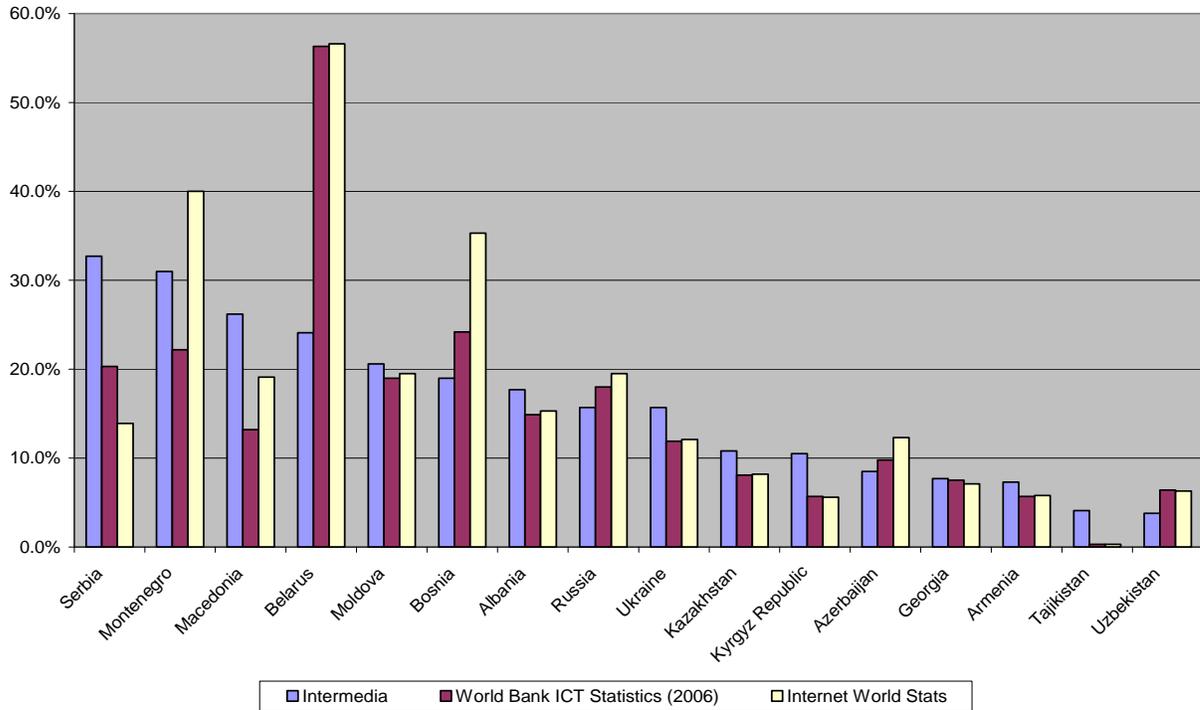
(Source: Intermedia, 2007; World Bank ICT Statistics, 2006; Internet World Stats, 2006, 2007)

**Internet Penetration Growth in Select Europe and Eurasia Countries (2000 - 2007)**
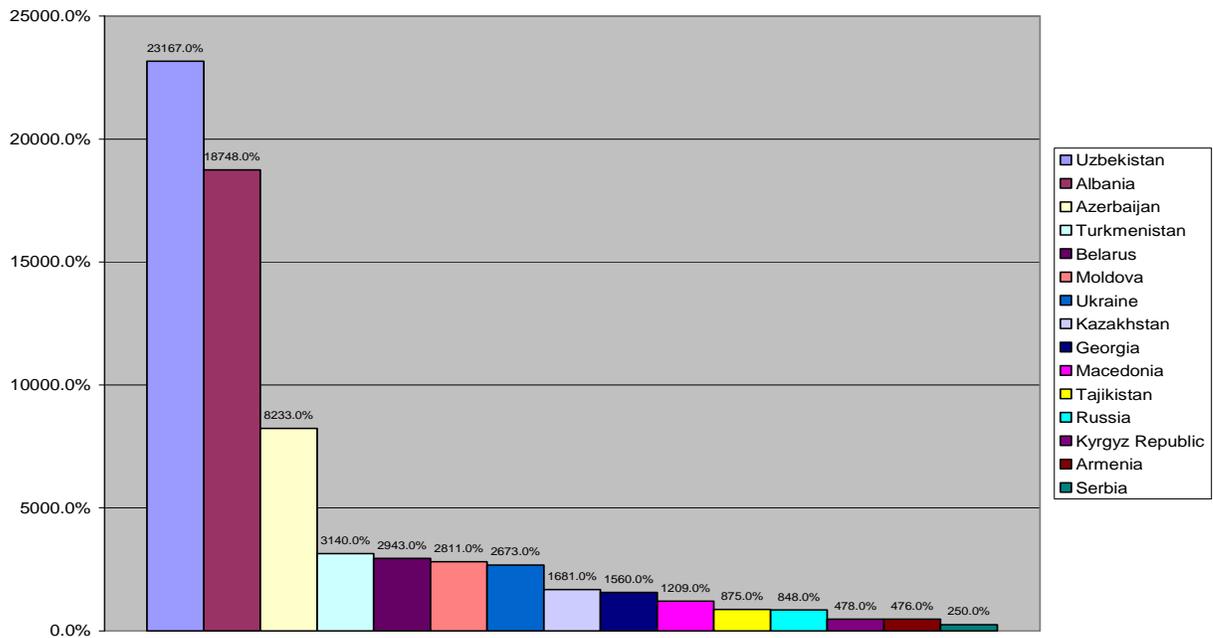
(Source: InternetWorldStats - Europe, 2007; InternetWorldStats - Asia, 2007)

While access remains a major obstacle in many countries, the growth rates from 2000 to 2007 suggest a continued upward trend. The infrastructure and technology is likely to improve, particularly in countries where there is political will to reduce restrictions and find ways to lower costs. For example, in Turkmenistan, where internet use stands at less than two percent, president Berdymukhammedov recently pledged to increase access through public internet access points along with state investment to provide schools with computers and internet connectivity. In those countries with lower rates of access, it remains an open question as to what types of information and news sources will be available as the audience increases.

Bandwidth Access in Europe and Eurasia

Bandwidth levels affect website usability and how new media content can be utilized by their intended audiences. The following chart shows the most popular types of internet connections available in Europe and Eurasia. While high-speed connectivity is increasing, most users continue to use dial up connections:

Percent of Citizens With Access to an Internet Connection in Select Europe and Eurasia Countries
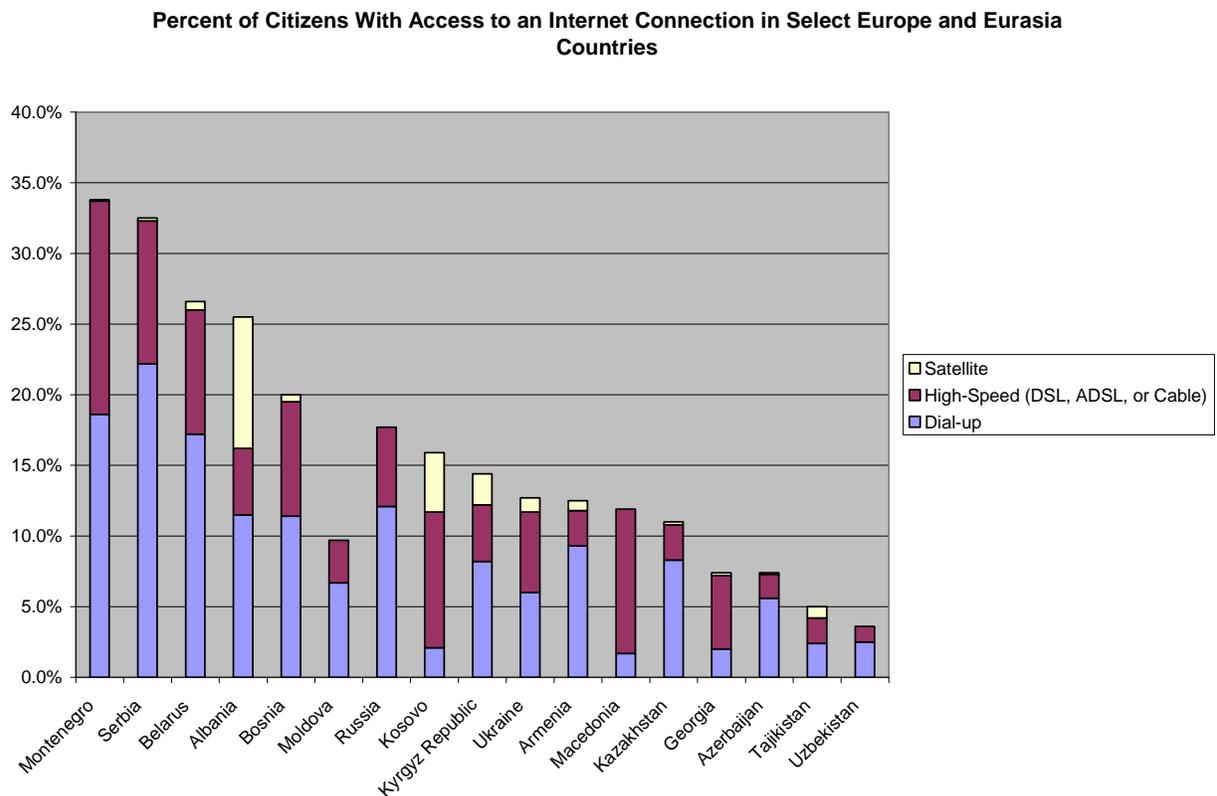
(Source: Intermedia, 2007. Values reflect respondents availability to internet access *anywhere*, with the exception of Moldova and Macedonia. In Moldova and Macedonia, respondents were asked what type of connection they have access to only *in their home*.)

Online News Media Access in Europe and Eurasia

According to survey data collected by InterMedia, it is possible to chart some of the reasons why users in Europe and Eurasia are accessing the Internet. The following chart illustrates internet use by country for the purpose of accessing current news.

Internet Use (at Least Once a Week) to Access Current News in Select Europe and Eurasia Countries

Legend: Montenegro, Macedonia, Serbia, Belarus, Moldova, Russia, Ukraine, Bosnia, Armenia, Kazakhstan, Albania, Azerbaijan, Kyrgyz Republic, Georgia, Tajikistan, Uzbekistan

Values: 24.1%, 23.2%, 20.4%, 16.4%, 13.4%, 13.2%, 11.9%, 11.4%, 8.2%, 7.5%, 6.7%, 6.4%, 6.4%, 5.4%, 3.6%, 3.2%
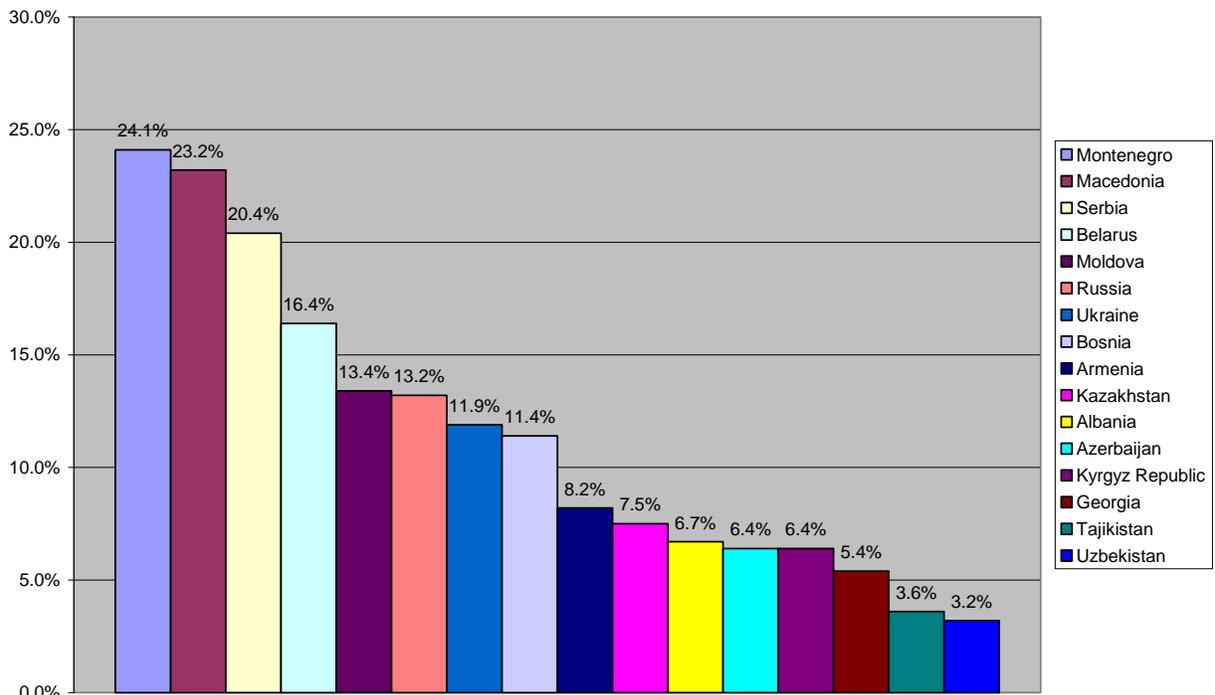
(Source: Intermedia, 2007. Some values not available.)

In South Eastern and Eastern Europe countries like Montenegro, Macedonia, Serbia, and Belarus, people tend to use the internet to access current news at higher rates, between 16 and 25 percent. Central Asian countries, along with the Caucasus use the internet to access online news at lower rates, while Russia, Ukraine, and other countries in Eastern and Central Europe fall somewhere in the middle. Comparing internet penetration rates in the region suggests that using the internet to access news online directly corresponds to higher usage rates. Media development professionals should take this information into account when considering projects.

The following websites provide additional statistics on internet usage throughout the world:
- World Bank ICT country profiles
- InternetWorldStats is a website providing different resources on internet, as well as mobile phone usage that includes many of the countries in the E&E region.

Demographics: Youth

Many of the technologies considered "new media" have made significant inroads among young people. Because these youth are interacting with the media using fundamentally different mediums and technologies than their parents, news outlets have struggled to keep abreast of these changes. According to a 2007 Pew Report, of the 93% of American teens who use the internet, almost two-thirds participated in "content-creating activities" which included creating blogs or journals, posting photos or video, or sharing written text. As American youth culture tends to drive pop culture around the world, media development professionals need to understand how younger demographics use the internet.

Online Pursuits: Teens who report going online for the following:

Chart legend:
- Visit chatrooms
- Download a podcast
- Look for health, dieting, or physical fitness information
- Buy things online, such as books, clothes, and music
- Play computer or console games online
- Get information about a college or university you are thinking of attending
- Use an online social networking site like MySpace or Facebook
- Watch video sharing site
- Send or receive instant messages (IMs)
- Get information about news and current events
- Go to websites about movies, TV shows, music groups, or sports stars

Bar values (top to bottom): 18, 19, 28, 38, 49, 55, 55, 57, 68, 77, 81

X-axis: Percentage of Teens (0 to 90)

(Source: *Teens and Social Media*, Pew Internet & American Life Project, 2007)

From the chart above, it is clear that younger internet users tend to use digital media technologies not only to access entertainment information and engage in multimedia activities, but also to communicate with friends and get news and information. While this particular information deals with Americans, similar data of online pursuits in Central Asia confirm that the highest ranked activities like watching videos, listening to music, and learning about news apply around the world.[15]

- The Berkman Center has resources on how this generation thinks about media. See the Digital Natives project at as well as the short "Myth-busting" wiki which attempts to dispel some common myths about youth and their engagement with digital media.
- For additional academic research, see the work of Danah Boyd, a PhD candidate at the School of Information (iSchool) at the University of California (Berkeley). Her work regarding youth and the use of social networking sites is especially appropriate for understanding how youth use new media to communicate with friends and share news and information.

Demographics: Influencers

A recent report by the Institute for Politics, Democracy, and the Internet at American University argues that many of the most active "plugged-in" internet users make up a group called "poli-fluentials." These individuals tend to be not only intensely interested in and involved with political campaigns, but also influential elites within their own community who help drive public debate. Importantly, this

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[15] , "Central Asia + Information and Communication Technologies (CAICT) Project," University of Washington, 2007.

demographic tends to be early adopters of newer technologies and makes extensive use of the internet and mobile technologies to consume news and information and communicate with their network of contacts. New media development projects need to understand this group because, in addition to youth, poli-fluentials represent the demographic that will be most likely to engage online media and spread ideas by creating or expanding existing networks of friends, family members, and colleagues.

The Institute for Politics, Democracy, and the Internet also publishes free and public reports on internet use and politics. These reports, which mostly deal with the American context, provide valuable insight into the demographics of internet users who are increasingly engaging new media as one channel for obtaining news. Several useful reports are available online and can be downloaded in PDF form, including:

- Poli-fluentials: The New Political Kingmakers
- The Audience for Political Blogs: New Research on Blog Readership
- Person-to-Person-to-Person: Harnessing the Political Power of Online Social Networks and User Generated Content

Additional Resource on New Media Use

Because these technologies are changing constantly, it is difficult to provide a set of resources that will remain up-to-date over time. The following represent a series of more general resources on new media demographic use and trends.

- Nieman Reports, a journalism publication, has several good issues that deal with new media and the impact on traditional media. A particularly useful resource for those who work in media development is the winter 2006 issue "Goodbye Gutenberg," which takes account of journalism in the Internet era.
- Another excellent resource is the The Central Asia + Information and Communication Technologies housed at the University of Washington. The project is a multi-year assessment of internet and digital technology access and understanding in Central Asia (Kazakhstan, Kyrgyz Republic, Tajikistan, Tajikistan, Uzbekistan) and includes extensive survey data from the region on internet usage, as well as more in depth explanations about attitudes toward digital technologies. At present, survey data from 2006 and 2007 are available on the website.
  - The project also houses reports and papers on diverse new media subjects. This is an extremely useful resource on ICT use, access, and perception in Central Asia.
- The Center for International Media Assistance (CIMA), part of the National Endowment for Democracy (NED) has published a report by Shanthi Kalathil titled "Scaling a Changing Curve: Traditional Media Development and the New Media," that does an excellent job of placing new media development projects within the existing landscape of media development assistance.
- A research group devoted to Russian internet studies called Russian-cyberspace plans to include a regularly published journal and a blog which contains updated content.

CONCLUSION

As recently as twenty years ago, personal computers were gadgets for the rich, mobile phones were rare, bulky devices, and the internet was anything but commonplace. Considering the digital tools outlined in this paper, the pace of technological change is rapid and will bypass even the most astute "with it" observers. The trend toward exponential growth of computer processor speed and memory—known as Moore's Law—has largely proven accurate over the past 40 years. Computers are becoming faster machines with more comprehensive applications packed into smaller devices. The rate of technological adoption is likewise tremendous. Today, there are now more internet users in China than any other country—including the United States—with room for additional growth. Development professionals need to appreciate these rapid changes and understand the shifts in communication and information exchange they foreshadow.

For the development community, the response to these changes has been to invest in new media technologies—many of which have been mentioned throughout this paper. Funding has been directed toward new media technologies to remain relevant, broaden appeal, and communicate with important demographics.

This rapid technological change means that the issues covered in this paper will also change. As internet policy frameworks become established, there will be more clarity about how digital technologies affect freedom of expression and security. As news content continues to migrate to online formats, new business models will develop. Any technological assessment, much like this "taking stock" paper, has a limited shelf life.

Given these changes, and the fact that the "new" media technologies discussed in this paper will become outmoded, a measure of flexibility is needed. For media development donors, this means flexibility in determining project design and the metrics used to evaluate success—allowing for experimentation and encouraging innovation. For implementers, this flexibility should translate into a willingness to experiment with new techniques and increase knowledge sharing with other organizations. For everyone, it means a willingness to try new approaches and listen to new ideas.

APPENDIX A: CASE STUDY SUMMARIES

The Orange Revolution and New Media

In November 2004, Ukraine was preparing for presidential elections that would pit regime-backed Victor Yanukovych against the anti-corruption reformist challenger Victor Yushchenko. Like most Post-Soviet countries, Ukraine had serious problems with corruption throughout the 1990s. Elected to the presidency in 1994, Leonoid Kuchma had presided over a state administration responsible for extensive corruption. Kuchma's presidential tenure was to end in 2004, however, so his regime handpicked a successor—Yanukovych—to continue the autocratic legacy.

The opposition, however, was also preparing for the election. Buoyed by popular support for the pro-transparency reformer Yushchenko, the opposition coalesced against the regime. But this campaign was markedly different than the preceding ones. The organizers made intentional use of new media technologies to circumvent the official state media's pro-regime messaging. The internet provided a new space that the state could not control. Following the second round of voting in November, the announced results differed significantly from exit polls, leading opposition groups to stage protests.

In one prominent example prior to the election, the opposition used the internet to distribute a video that would otherwise have had little impact. The video showed a campaigning Yanukovych being hit by an egg and melodramatically falling to the ground. The Yanukovych campaign immediately cried foul and claimed he was physically assaulted with a camera battery. After the video surfaced and was circulated, the Yanukovych campaign was both literally and figuratively left with egg on its face. Online forums and news sites also became hubs for pro-democracy advocates to voice their opinions and spread their message when the state-controlled media would not allow such dissent.[16]

In addition to internet organizing, SMS text messaging with mobile phones was employed. The pro-democracy group Pora set up a system to use text messaging technology to organize their demonstrations and disseminate information.[17] Estimates of mobile phone access in Ukraine in 2004 stand at 29 percent, while internet penetration was much lower, covering as little as 2-4 percent of the population.[18]

This example suggests that, even in countries where technological access is low, new media have a role to play in providing access to information.

European Radio for Belarus: Multi-platform Programming

Under the authoritarian government of Alexander Lukashenko, Belarus has proven to be a very difficult environment for the development of independent media. Most of the newspapers, radio and television are controlled by Lukashenko and the state apparatus. State monopolies control news printing and distribution services. Independent news outlets that have managed to survive are sometimes on the receiving end of government harassment and threats. In this environment, journalists are generally discouraged from openly criticizing the regime.[19]

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[16] Joshua Goldstein, "The Role of Digital Networked Technologies in the Ukrainian Orange Revolution" (December 20, 2007), Berkman Center Research Publication No. 2007-14, 12.

[17] *A Case Study on the Civic Campaign PORA, and the Orange Revolution in the Ukraine,* Civic Party Pora, December 2005.

[18] Goldstein, "The Role of Digital Networked Technologies," and *Focus: Ukrainian Mobile Market Boom May Soon End*, Cellular-News, August 8, 2006.

[19] *Belarus - Annual Report 2008*. Reporters Without Borders.

In 2005, with the support of international donors, a group of independent Belarusian journalists came together to start what would become European Radio for Belarus (ERB), a news and entertainment radio station tasked with providing accurate and interesting programming to Belarusian citizens. ERB broadcasts a traditional FM radio station from Poland into Belarus and over satellite. But the radio station wanted to expand their reach beyond traditional markets and target their intended audience: younger demographics.

In conjunction with traditional broadcast technologies, ERB has pursued a multi-platform approach, whereby the radio station has also developed a companion website to increase its audience reach. ERB's online presence complements their traditional terrestrial and satellite broadcasting by offering enhanced programming options and a multimedia experience for viewers. The website allows users to listen to the broadcast programming over the internet for 24 hours a day, and download recorded programs for later use. The website also contains more extensive news articles with regularly updated content on world and local events, as well as politics. This news-oriented content is integrated along with the entertainment-centered music and cultural programming, providing potential listeners and readers with multiple reasons to visit the site.

The ERB web design also integrates its entertainment content with more news-oriented material by utilizing several new media web technologies. Website viewers are encouraged to interact with the station by sending in messages via instant message (IM) or Skype (internet phone service) and the site hosts contests with prizes for winners. News stories can be read online, or delivered to subscribers via RSS feeds—a form of internet syndication that allows new content to be delivered directly to the user. ERB has also used the social networking site MySpace to reach potential listeners. News and music programs are also distributed as podcasts, so they can be accessed on personal devices at another time.

This web design and integration of news content with entertainment is a strong example of the kinds of techniques that should be used to reach younger audiences. Studies exploring the reasons youth access the internet have consistently shown entertainment (music, pop culture, video) to be a top priority, with news and information also ranking high.[20] Given this, media development projects should be encouraged to follow the multi-platform approach. Including new media technologies can effectively utilize limited resources and attract younger audiences who may not engage with traditional media in any significant way.

YouTube Reporting in Armenia

When the Armenian government used violence to crack down on opposition protesters in February 2008, Armenia's online media quickly became a major source for accurate, on-the-ground reporting. Following the February 19 elections which left the opposition and several outside observers claiming irregularities and fraud, demonstrators took to the streets to protest Armenia's ruling government. On March 1, along with issuing a state of emergency, President Kocharian enacted a media blackout. Under the crackdown, the media was only allowed to report on official information provided by the government. Armenia's online media, which had been a source of independent news and information, also came under attack. The government, in conjunction with the Internet Society of Armenia (ISOC), blocked access to independent websites reporting inside the country, as well as foreign media outlets like Radio Free Europe/Radio Liberty (RFE/RL), which was forced to broadcast over short-wave radio.

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[20] For example, a recent Pew Internet & American Life Project found the most common online pursuit among teens to be visiting websites about "movies, TV shows, music groups, or sports stars." *Teens and Social Media,* Pew Internet & American Life Project, Washington DC: December 19, 2007; also see the 2007 CAICT Survey, "Central Asia + Information and Communication Technologies (CAICT) Project, University of Washington.

Despite the media blackout, the internet remained a crucial space for accurate information. A1+ TV, one of Armenia's critical pro-opposition media outlets, began operating its own YouTube channel and received an estimated 60,000 visitors on its website.[21] The media blackout was also extended to prominent independent and opposition news sites as the government systematically blocked access to these internet IP addresses. As a result of this blockade, the Armenian blogosphere became a central hub for reporting on the demonstrations and providing information about what was happening in the capital city of Yerevan.

Blogs such as Armenian Observer and Unzipped took the opportunity to shoot video footage of the protests and post the videos online. This community of blogs also worked to share video footage generated by other groups—documenting instances of police violence and reporting on the demonstrations themselves. Further, when the government unilaterally began blocking the IP addresses of opposition and independent sites, Armenian Observer posted valuable technical instructions on alternative ways to access the information.

Despite official levels of internet penetration standing at less than 6 percent in 2006, the government considered these independent online voices a danger (World Bank ICT Statistics). The Armenian government also blocked access to the entire YouTube site, apparently considering the videos of the demonstrations being posted by citizens too threatening. This suggests that just as the Armenian case reveals the power of ordinary citizens to use the internet to circumvent state-imposed controls, governments will increasingly want to control access. As online video production gains traction as a form of both citizen and traditional journalism, that authoritarian governments will increasingly use their resources to block access and filter content, limiting the possibilities of the internet to support independent media.

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[21] Onnik Krikorian, "Caucasus: Armenia & Georgian Blogosphere Assessed," Global Voices Interview, June 13, 2008.

APPENDIX B: GLOSSARY OF TERMS

Avatar: The virtual representation of an internet user in graphic form; may refer to a simple digital image or a three-dimensional figure that can be manipulated and made to act by the user in role playing games.

Blog; blogging: A website that can easily be updated by its owner without having to understand internet design or coding. The process of updating is often as simple as typing into a text box and clicking "update" and the post is then available on the blog. Posts are typically organized in reverse-chronological order so that newest content is read first. "Blog" is a derivative of "web log," see also "vlog."

Bluetooth: A close-range wireless technology that allows for data to be transferred, typically between a mobile phone and another device. One innovation, Fluid Nexus, is intended for activists and development professionals to send and receive messages via an *ad hoc* wireless network using blue tooth technology when a traditional cellular network is unavailable or unsecured.

Citizen journalism: Refers to the use of new media technologies like blogs, RSS feeds, and podcasts for ordinary citizens to engage in the production and dissemination of news media.

Crowd Sourcing: Refers to the process of having work once performed by professionals or contractors accomplished by a large, undefined group or "crowd." With respect to online journalism, this typically takes the form of using amateur-produced images, video, or other creative or intellectual content rather than contracting the job to a professional, dedicated firm. [example: Innocentive.com]

DDoS (Distributed Denial of Service): Refers to a malicious software attack that overwhelms a website with illegitimate traffic. Unable to handle the traffic, the website becomes inaccessible to legitimate users.

Digital Divide: Refers to the technological disparity between the electronic "haves" and the "have-nots." In the context of media development, understanding ICT (Information Communication Technology) access and understanding is key to successful implementation.

Feed Aggregator (RSS Reader): An application or piece of software that acts as a place for users to have feeds sent directly to one place. The user can then read all the updated content (news stories, blog posts, etc.) from one convenient application without having to visit each individual website. Think of this as an email account that displays new "feeds" just like your email service.

Filtering: The act of using software or other means to block access to particular parts of the internet.

Folksonomy: In social media, folksonomy refers to the process of collectively tagging and naming content by users. This approach is collaborative and non-hierarchical and makes content easy to locate through searching methods because it can be tagged multiple times, depending on how users wish to classify the content.

HTML (Hypertext Markup Language): The main computer language used to create documents on the internet. HTML is used to design the structure and configuration of a page through the use of HTML "tags."

ICT for Development (ICT4D): Refers to the use of ICT for economic, social, and political development. The idea is to use technologies to improve the lives of citizens in developing countries. For more, see resources provided through the Institute for Development Studies.

Malware (Malicious Software): Refers to any piece of software that is intentionally designed to infect other computers or cause damage. Such software poses both security and privacy risks for internet users.

Message Board (Online forum): A website to which users can post and respond to others creating a running dialogue on any given topic. These forums are increasingly being integrated into online news sites so that readers comment on, and critique media—effectively turning the news story itself into an ongoing conversation.

Microblogging: A type of blogging which uses mobile phones and text messaging so that users can send information via SMS message. These "updates" are then sent out via text message to other users who have registered to receive the information and posted on the internet blog. The most popular applications are Twitter.com and Pownce.com.

News Aggregator: A type of website that collects news stories and videos from media outlets and online news sites and presents them together on a single site.

Onion Routing: Refers to a technique for avoiding internet surveillance or filtering and establishing user anonymity. By directing information through the internet by a series of proxy addresses, the process protects the user's identity and secures the content of the data being transferred.

Peer-to-Peer: A type of computer network in which each user is connected to the others in a decentralized manner rather than through a single server. This allows bandwidth to be spread more evenly and is particularly useful for file-sharing applications.

Podcast (Originally from i*pod* + broad*cast*): An audio file that works like an on-demand radio channel over the internet. In addition to being available for individual download, the channel can be subscribed to so that users receive new *podcasts* through feeds like RSS when new files are made available.

Post: The new content or information which is added to a blog by its author. Posts are titled and dated like a journal entry or like a news article for more news-focused blogs.

RSS (Really Simple Syndication): A very common type of feed that can be used to deliver updated web content to subscribers over the internet.

Serious Games: Software applications that are intended to be used for non-entertainment purposes. They often have the look and feel of typical entertainment-driven computer games and use many of the same technologies, but are instead created for training or learning purposes.

SMS (short message service): a service that enables short text messages to be sent between and to mobile phones. Users can send messages using their mobile keypad. Alternatively, messages containing news and information can be sent to a large number of mobile phones from one source such as a media outlet or political campaign.

Social Media: Web sites that function as news portals. Users rank and comment on stories from media outlets to influence the type of coverage they achieve at the news portal site. Popular sites include Digg, Reddit, and NewsVine.

Social Networking Site: A website that allows users to create individual "pages" that function like a virtual identity. Users upload information about themselves to construct this online identity and then network with other users through links and groups. The sites are also used to send messages and share news or information. The most popular North American sites like Myspace and Facebook are generic, but

there are more targeted social networking sites as well that cater to business professionals, non-profit workers, and even political campaigns. Users think of these applications as virtual places rather than tools, so that rather than 'having a Facebook,' a user is 'on Facebook.'

Tagging: refers to an internet-based method of categorizing information by multiple keywords or *tags* to describe content. For example, bloggers will *tag* their posts with pertinent labels or terms which then act to order the content for future reference and searching. The process allows for a more efficient search process and organization of content by useful labels or *tags*. Tags are displayed as hyperlinks in the website content.

Telecenter A public location at which people can use computers, typically access the internet, and use other digital communications technology. The goal is to provide access to modern Information Communication Technology (ICT) at the community level. Depending on the context, they may be run as either for-profit businesses or non-profit community centers.

Twitter: Refers both to the social networking and microblogging website and is also used as a common slang verb to describe the process of using SMS text messaging to post online.

Viral (e.g. "go viral"): refers to the way digital media (video, image, phrase, etc.) can achieve widespread distribution by reproducing itself repeatedly either through reposting of the media elsewhere on the internet or in email.

Vlog (Video blog): A blog that specifically incorporates video media into its posts, often generated by the owner.

VOIP (Voice over Internet Protocol): The technology used to transmit voice conversations over a data network using the Internet Protocol. Such data network may be the Internet or a corporate Intranet.

Web 2.0: Refers as much to newer internet technologies and websites as to a new way of thinking about how internet sites should engage their users. Increased interactivity, streamlined design, and collaboration all work to create a different internet experience. Taken together, these technologies, applications, and sites

Webcast: A media file which can be broadcast live over the internet as streaming content.

Widget: A common feature of interactive Web 2.0 sites, widgets are small applications that can be embedded in an existing website's code. They are often used by bloggers and on social networking sites as add-on features that build on an existing platform.

Wiki ("Wiki" is derived from a Hawaiian word that means "fast"): A website that allows users to add or edit existing content so that the information is dynamic and reflects the community that manages it. Wikis are a prime example of how user-generated content is changing the way that individuals interact with the internet. The most famous example is [Wikipedia](#), now functioning in over 250 languages. The premise is that communal activity to update content results in quick, relevant changes.

WiMAX: A wireless technology that allows for higher speed data transfer over longer distances (up to 50 Km), typically using registered frequency. This technology has important implications for international development projects because it can easily fill the need for "last mile" broadband access where existing infrastructure does not yet exist. USAID has supported the development of this technology, including an ambitious project to bring WiMAX coverage to the entire country of Macedonia.

APPENDIX C: URLS OF WEBSITES MENTIONED IN THIS REPORT

- 160characters: http://www.160characters.org
- A1 Plus News: http://www.a1plus.am
- Alexa: http://www.alexa.com
- Armenian Observer: http://ditord.wordpress.com
- Berkman Center for Internet and Society: http://cyber.law.harvard.edu
- BlogTalkRadio: http://www.blogtalkradio.com
- Center for Citizen Media: http://www.citmedia.org
- Center for Democracy and Technology: http://www.cdt.org
- Clicky Analytics: http://www.getclicky.com
- Del.icio.us: http://www.del.icio.us
- Digg: http://www.digg.com
- Diplopedia: http://diplopedia.state.gov/index.php?title=Main_Page
- DIY Communications: http://cjt-site.tacticaltech.org/
- Ethan Zuckerman: http://www.ethanzuckerman.com
- EU Task Force for Co-ordination of Media Affairs: http://ec.europa.eu/information_society/media_taskforce/index_en.htm
- European Radio for Belarus: http://belradio.fm/
- Facebook: http://www.facebook.com
- FeedBurner: http://www.feedburner.com
- Freedomhouse: http://www.freedomhouse.org
- Friendster: http://www.friendster.com
- Frontline Human Rights Defenders: http://www.frontlinedefenders.org
- FrontlineSMS: http://frontlinesms.com
- GlobalVoicesOnline: http://www.globalvoicesonline.org
- Google Analytics: http://www.google.com/analytics
- Google Blogsearch: http://www.blogsearch.google.com
- Hi5: http://www.hi5.com
- IceRocket: http://icerocket.com
- IJNET: http://www.ijnet.org
- Institute for Policy, Democracy, and the Internet at George Washington University: http://www.ipdi.org/
- International Media Lawyers Association: http://www.internationalmedialawyers.org
- Internet World Stats: http://www.internetworldstats.com
- Internews: http://www.internews.org
- IReport: http://www.ireport.com
- IREX: http://www.irex.org
- Knight Citizen News Network: http://www.kcnn.org
- Lojoconnect: http://www.lojoconnect.com
- Media Know How Resource Center: http://pcmlp.socleg.ox.ac.uk/knowhow/
- Media Lab at MIT: http://www.media.mit.edu/
- Media.ge: http://www.media.ge
- MediaScrape: http://www.mediascrape.com
- MediaShift: http://www.pbs.org/mediashift/
- Mobile Active: http://www.mobileactive.org
- Moscow Media Law and Policy Institute: http://www.medialaw.ru
- Moskovsky Domsomolets: http://www.mk.ru

- MySpace: http://www.myspace.com
- News University: http://www.newsu.org
- Newsvine: http://www.newsvine.com
- NGO in a Box: http://www.ngoinabox.org
- Nieman Reports: http://www.nieman.harvard.edu/reports/contents.html
- Oknoklassniki: http://www.odnoklassniki.ru
- Open Handset Alliance: http://www.openhandsetalliance.com
- Orkut: http://www.orkut.com
- Poynter Institute for Media Studies: http://www.poynter.org
- Quantcast: http://www.quantcast.com
- Reddit: http://www.reddit.com
- Reporters Without Borders: http://rsf.org
- Russia-cyberspace: http://www.ruhr-uni-bochum.de/russ-cyb/
- Shadowserver Foundation: http://www.shadowserver.org/wiki/
- Stanhope Center for Communication Policy Research: http://www.stanhopecentre.org
- Symbian Foundation: http://www.symbianfoundation.org
- Technorati: http://www.technorati.com
- Telekritika: http://www.telekritika.ua
- The Center for International Media Assistance (CIMA) at the National Endowment for Democracy (NED): http://www.ned.org/about/cima.html
- The Center for Social Media at American University: http://www.centerforsocialmedia.org
- The Central Asia + Information and Communication Technologies: http://depts.washington.edu/caict/index.php
- The Committee to Protect Journalists: http://www.cpj.org
- The Eurasia Media Forum: http://www.eamedia.org
- The Global Internet Policy Initiative: http://www.internetpolicy.net
- The Hub: http://hub.witness.org
- The International Pres Institute: http://freemedia.at
- The Open Society Institute: http://www.osi.org
- The OpenNet Initiative: http://www.opennet.net
- The South East European Network for Professionalization of Media: http://www.seenpm.org
- The World Bank Institute: http://www.worldbank.org/wbi/
- Twitter: http://www.twitter.com
- TXTmob: http://txtmob.com
- UN ICT (Information Communications Technology) Task Force: http://www.unicttaskforce.org
- Unesco: http://www.unesco.org
- VKontakte: http://www.vkontakte.ru
- Websites Mentioned in this Report
- Wikipedia: http://www.wikipedia.org
- World Bank ICT Statistics: http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,,contentMDK:20459133~isCURL:Y~menuPK:1192714~pagePK:64133150~piPK:64133175~theSitePK:239419,00.html
- YouTube: http://www.youtube.com
- Zephoria: http://www.zephoria.org

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