Changing the Rulebook

In the digital age, sharing information is as easy as 1, 2, 3. Unless, of course, you live in a country that won't allow it. In the west, we post, we tweet, we blog, we text we pick up the phone and without calling ourselves Citizen Journalists, we act like journalists every day. But most people in the world still reside in closed societies. Dozens of countries limit or block access to the Internet. If people there report on events, they risk jail or worse.

How do we help the world do what most of its leaders say it should? The goal, enshrined by Article 19 of the Universal Declaration of Human Rights, seems clear enough: "Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers."

Knight Foundation's largest international demonstration project, which costs more than $30 million, is the Knight International Journalism Fellowships program, run by the International Center for Journalists. Across the globe, Knight Fellows show the power of free media to improve lives. In Brazil, it means mapping a deteriorating Amazon; in China and India, it means starting new journalism education programs; in Kenya, it means exposing flaws in millions of dollars of unsound public health spending. ICFJ has logged dozens of cases of good journalism prompting new laws or policies that have changed the way communities live.

In the U.S., our issues are different. We don't seem to appreciate the true value of our media or our freedom. Our public media policies lag behind other nations, far behind

Great Britain's, world-famous for its fee-supported British Broadcasting Corporation. We seem content with a public broadcasting system that not many use for news, one that doesn't change fast. We just don't know much about our fundamental laws. We know more about cartoons like The Simpsons, for example, than we do about the First Amendment.

The Newseum: Its mission is "to help the public and the news media understand one another better" and to "raise public awareness of the important role of a free press in a democratic society".

In Washington D.C., the Knight Foundation funds the Newseum, the only major museum of news. If it demonstrates anything, the Newseum shows there's no such thing as "the media." In front of the building, etched in Tennessee marble, 74 feet high, is the reason why so many journalists can say so many different things: "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof;

or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances."

Our attitudes about the idea of freedom are important, as are the issues of federal media policy. This chapter covers them because they are part of the rulebook governing the future of news.

Include social media in World Press Freedom measures

On World Press Freedom Day, you'd think the Knight Foundation would be all smiles, having invested $100 million this past decade to advance freedom of expression. But we aren't all smiles. Much more must be done.

Just look at the World Press Freedom map, produced by one of Knight's partners,Freedom House. Over time that map has come to reflect the mess of humanity at its messiest. We try to bring some order to things by labeling the world's countries "free" or "partly free" or "not free." Way too many are still not free. How did that happen? When you look at the map over time, patterns emerge.

After the Cold War ended, the map showed press freedom growing. But after the terrorism wars began, it showed press freedom shrinking. War ends, freedom grows; war begins, freedom shrinks. So which way is it headed now? Looking at the past, you'd have to say it would be forward — and backward.

We zigzag between different possible futures, some of which are frightening.

One of those futures, you might imagine, could be World War 3.0, so named because it may already have started in cyberspace, where more than 100 countries already have cyber armies. Once it branches out with modern firepower, we could easily wreck the planet. Label this scenario “not free.”

Or imagine many small wars. A Return of the Tribes. Our cyberspace cloud would be a giant virtual brain at war with itself. Digital cocoons would keep us focused on what we already believe. Social media would break all news. Flash mobs rule. Attention deficit disorder thrives. We are “partly free” but going nowhere.

Soviet-era World War Two memorial in Kiev, Ukraine.

Or maybe we see the Rise of Authoritarian Capitalism. China wins the global economic competition. The corporation is the state. Dictators run our lives. They sterilize the news. We eat up mindless entertainment to forget a world that once again is only “partly free.”

Or, many hope, we could create a Crowd-Sourced Planet. Personal expression abounds. Education is universal. We throw out the crooks and innovate to solve our problems. In this peaceful and sustainable world, we are free.

People argue a lot about variations of these futures. The crystal ball is cloudy.

Some of the futures I’ve described sound like science fiction. But science is pushing us there. Our radar is fuzzier than it needs to be because in the digital age of communication we haven’t fully changed the ways we measure and describe concepts like world press freedom.

We see violence and instability driving our traditional press freedom indicators downward, and digital revolution and popular uprisings pushing our hopes upward. If we can't tell where freedom really stands, how can we help it grow?

Let's start with violence. The 20th Century was a century of war, they said, and the 21st Century will be one of peace. That hasn't yet happened. We have dozens of national wars, civil wars, drug wars: The World Bank says 1.5 billion people are victims of poverty and violence. As uprisings spread, so do attacks on journalists. A violent world is not a free world.

A war of ideas

For centuries, freedom has crept forward during the lulls between the stops and starts of a continuous war between open and closed societies. The real war is not so much one of nations as it is one of ideas, increasingly happening on battlefields without boundaries, a fluid and confusing fight in which leaders attack their own people and in which people, corporations and nations can abruptly change sides.

Cyberspace was built for a fight like this. And there it sits. Our militaries defend against cyber attacks every day. We are probably already engaged in World War 3.0. We just don't know it. The details are kept secret.

Societies don't even agree on what cyber war is. We say a cyber attack could be shutting down an electrical grid. They say a cyber attack is any news story that contradicts state-approved information. We call Google a digital miracle. They call it a digital weapon.

Cyberspace censorship is growing. David Drummond, Google's chief legal officer, reported that in 2002, only four governments censored the Internet. But in 2011 40 do.

Voice and facial recognition software and global positioning systems can be used by tyrants to track you down. Once they tortured you to get to your sources; now they need only acquire your digital communications records to access your most private information.

During these violent times, can America be at its generous best when making the case for freedom? It's not an easy test. But we have to try: we need the moral high ground to show how freedom of expression underpins all human rights. We need to operate in a framework of freedom, exceptions strictly limited.

A mixed record

Our record is not what it could be. As the Student Press Law Center points out, student journalists are not well protected legally, nor are the increasing number of freelance and volunteer journalists; nor, for that matter, are all full-time professionals.

America's leaders speak eloquently on the "freedom to connect." But we fail to live up to our promises. Our Pentagon says military employees should not look at the WikiLeakswebsite. Apple goes after the blogger who leaked the iPhone specs. Teachers won't let students use cell phones. The Rev. Jerry Falwell Jr. blocks his students from a local news website.

Can you hear Stalin out there somewhere, applauding? He said ideas were more powerful than guns. He would not allow his enemies to have guns. Why would he leave them free to know and share ideas? Stalin would face difficulty today in a world in which we can instantly share ideas. Like the sun, water and air, news wants to flow freely. But

that doesn't stop threatened nations from fighting back. They fight and traditional press freedom indicators fall.

That said, freedom may be growing, even if our world press freedom map says it isn't. Why? Because we tend to focus on the worst human rights tragedies — journalists killed in Pakistan, Mexico and Iraq; jailings in Eritrea, Burma, China and Iran. We follow the decline of institutions. We watch the states of the former Soviet Union recreate repression. We track every negative. But what about positives? There are now 5 billion cellphones on a planet of 7 billion people. Where is that on our maps? You hold a printing press, broadcast station and telephone in your palm and can say what you want to whomever you want, times five billion. That's some free expression.

Look at Egypt, with as many as 90 million cellphones, depending on the source, for a nation of 80 million people. Suddenly, the whole media ecosystem is different. (Remember, news does not care how it flows. Like water, it takes the easiest path.) Someone might post a note on Facebook about a rally in the square, or tweet it, or call a friend, or text it, or blog it. Or people in the square might talk to each other (yes, that can be news). Or watch it on satellite TV and share that on the Internet.

Our usual indicators show little freedom in Egypt's traditional media. But those measurements didn't matter. When Arab Spring arrived, the uprising was digital. Facebook mattered. The journalism on Al Jazeera mattered. Even Twitter mattered. People communicated. Theirs was a Digital Uprising, not yet a revolution but a protest that ousted a president.

We need a new calculation: Track the freedom in today's digital media ecosystem. Subtract the censorship, and then see where we are.

To do this, we need a real-time picture of where digital media is on the planet. Regulators should require global companies to tell us the level and type of technology in various countries. Internet providers should alert us when service is blocked. Governments must disclose far more about cyber attacks.

We need better radar to know exactly how best to help. If many-to-many media is causing a new era of freedom in spite of institutions, not because of them, we need to deal with that. We already know enough to call for a much bigger effort. We must support good work, such as the Committee to Protect Journalists and the Inter American Press Association's to fight against those who would kill journalists. At the same time, we must expand.

Expanding media development

Knight Foundation is supporting a legal defense fund created by the Open Society Foundations. Our part in the project's launch is to help defend bloggers and website proprietors unfairly jailed around the world, as we already do here at home with the Reporters' Committee for Freedom of the Press.

On the digital front we support other work: The World Wide Web Foundation, founded by Sir Tim Berners-Lee and dedicated toward universal use of the Web and The Aspen Institute's IDEA project, which pushes for greater Internet freedom through free trade. Over the years International Center for Journalists has been a key grantee, with fellowships that use digital approaches to create lasting, visible change in journalism and its impact.

Marcus Brauchli, former executive editor of the Washington Post, says press freedom is increasingly shaped in the “unsettled territory” of cyberspace. He urges support for “the journalistic standards of emerging media.”

New types of media open the door for the creation of new rules. This reinvention of communications should cause western governments, the largest providers of media development aid, to exponentially increase support. But like the promised century of peace, this isn’t happening, either.

Media development money is just a pimple on the nose of international aid. Globally, estimates put it at $500 million a year — the price of four F22 Raptors. This makes no sense. Media development aid creates the independent journalism that tells you whether all the other aid is being stolen. Just as freedom of expression supports all other freedoms, media aid supports all other aid.

A report by CIMA shows the U.S. spends only a sliver of a percent of all its aid on media in developing countries. This is before calculating budget cuts. So let’s summarize our federal strategy: Spend vast amounts of money on traditional aid that keeps an Egyptian leader in power for decades. Spend tiny amounts of foreign aid on building independent media. Watch in surprise when there is an uprising. Some media aid might have shown that all the other aid was not doing its job.

Our global challenges don’t give us many more chances to get this right. We owe it to the brave people who gave life and liberty for the cause of freedom to try to do better. We know free countries prosper. That honest governments are more stable. That people must be free to act to advance their own true interests.

Let's use social media to let freedom ring. Tweet or text or blog or post a simple message about freedom of expression. Ask your friends to pass it on. Use what we have as we work to get more.

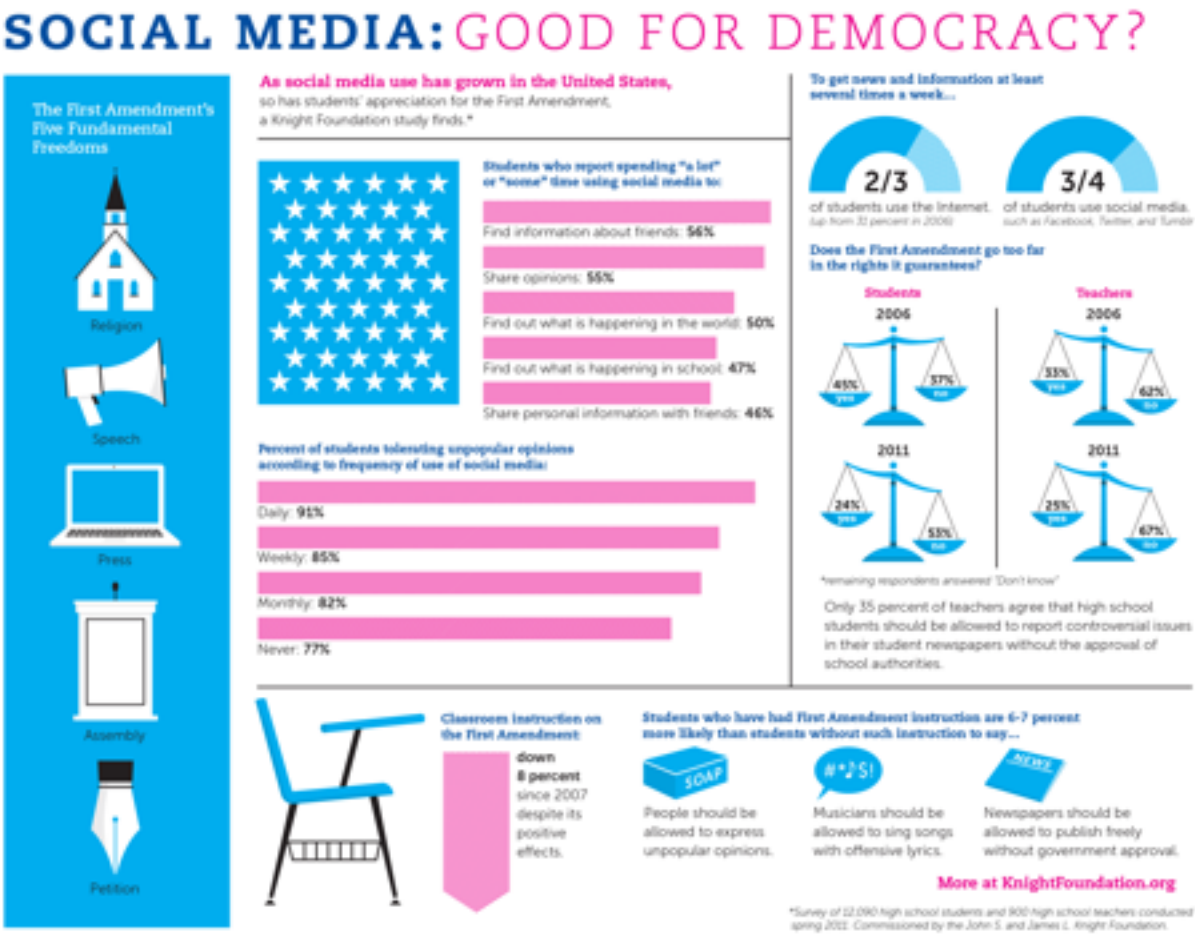
The original version of this speech was delivered on World Press Freedom Day at the Newseum in Washington D.C.

As social media grows, so does First Amendment appreciation

Each year on Constitution Day, students and teachers celebrate the most fundamental laws of our republic. This year, they should celebrate Twitter, Facebook, Tumblr and all other social media children of the digital age.

Why? Because social media are good for the Constitution. More precisely, social media are good for the First Amendment, the lead item of the Bill of Rights, etched into our national history in 1791, protecting freedom of religion, speech, the press, assembly and petition.

As researcher Ken Dautrich put it: "There is a clear, positive relationship between student usage of social media to get news and information and greater support for free expression rights."



Dautrich, a University of Connecticut professor, has done four major national surveys of high school students on First Amendment issues and has co-written "The Future of the First Amendment: Digital Media, Civic Education and Free Expression Rights in the Nations' High Schools." For the 2011 national study detailed here, he surveyed 12,090 high school students and 900 high school teachers.

The findings were exciting.

Fully 91 percent of students who use social networking to get news and information daily believe people should be allowed to express unpopular opinions. But only 77

percent of those who never use social networks to get news agree that unpopular opinions should be allowed.

These sorts of surveys are good at establishing connections but not as good at explaining why those connections exist. Do social media make you a First Amendment lover? Or do First Amendment lovers just use more social media? Or are both things true?

How it works exactly, I can't say. But the connection makes sense. Students using their cell phones to express themselves — to text, tweet and blog and post — are more interested in rules having to do with freedom of expression.

The First Amendment survey also showed students' use of digital media for news and information is growing. Since 2006, it has doubled, with three quarters of the students getting news from social media several times a week.

Appreciation for freedom improved right along with that development. In 2006, 45 percent of the students surveyed said the First Amendment "goes too far." But by 2011, only 24 percent thought there was too much freedom.

Public opinion shapes law

You might ask: Since our courts determine how the First Amendment is to be interpreted, why do our opinions about it matter?

Because the Supreme Court's decisions reflect long-term changes in public attitudes — and that's as true for First Amendment doctrine as it is for other parts of the Constitution.

As Judge Learned Hand put it in 1944: “I often wonder whether we do not rest our hopes too much upon constitutions, upon laws and upon courts. These are false hopes. Liberty lies in the hearts and minds of men and women; when it dies there, no constitution, no law, no court can save it.”

Since young people represent the future of American public opinion, they are the real overseers of the future of the First Amendment.

That’s why we need to survey their attitudes.

Some of the study’s results were frightening. While more students now understand that government can’t censor the media in this country, almost 40 percent of them still think state censorship is allowed. While more students say they think about the First Amendment, most of them still don’t.

There is still plenty to teach about how responsibility comes along with all these rights. Even so, when we see the numbers start to move in the right direction, it’s cause for celebration. Should we thank our nation’s teachers for the recent improvement in First Amendment attitudes?

Not really. The percentage of students getting First Amendment instruction in school seems to be going down. Only 30 percent of the teachers said they are teaching it, though 86 percent admit the First Amendment is “very important.” This is a shame. The surveys show that if you teach high school students about the First Amendment, they’ll learn.

I'm afraid many teachers actually are a drag on First Amendment learning. The survey says most teachers do not support free expression rights in a school context. They don't think the school newspaper should print controversial articles. They do not believe students should post things about school on their Facebook pages. They think social media hurts teaching.

Are young people learning as much about freedom via texting as they are via teaching? Maybe. To their credit, teachers say more digital media literacy education is needed in schools. I agree.

The digital age has dramatically changed how we consume news and information. Students are adapting to these changes faster than adults, using them for networking and news and now to better appreciate freedom.

Maybe we should learn something from them.

UPDATE:

This article, distributed by the American Society of News Editors, originally appeared as an opinion piece in newspapers nationally. Since its appearance, Knight Foundation partnered with ASNE to create Free to Tweet, a scholarship competition for noteworthy social media expressions of freedom. ASNE also produced a teacher's guide to social media.

News consumers mix and match information sources

Local news ecosystems are more complex than is commonly understood. The digital transformation of news is causing us to mix and match content with media in new ways. Mobile media, for example, are becoming popular for “out and about news,” like restaurant tips or weather reports. The web, accessed by desktop, is seen as especially good for education news and local business news. Local TV is popular for weather, breaking news and traffic. Newspapers are best for overall civic news, especially government news.

The study detailing these findings was a partnership between the Pew Research Center’sProject for Excellence in Journalism and the Pew Internet & American Life Project in partnership with Knight Foundation.

Almost half of us, the survey said, don’t have favorite news sources. We don’t turn to particular “packages” of news. What’s more, we are no longer hooked on “appointment news.” There’s no need to wake up for the paper at 6 a.m. or sit down to the television newscast at 6 p.m. All that news lives in cyberspace. We send each other the news, through social and mobile media. Some 41 percent of us are creating our own news flows by contributing stories or data of our own.

Most of us now get news from three or more sources. Increasingly, we consume news a la carte — picking the correct vessel for each type of news, as one would choose a bowl for soup at a buffet. We do not yet fully understand the complexity of these a-la-carte flows of local data, events, issues and ideas, nor why they are different across generations.

As study co-author Tom Rosenstiel puts it: “Research in the past about how people get information about their communities tended to focus on a single question: ‘Where do you go most often to get local news?’ This research asked about 16 different local topics and found a much more complex ecosystem in which people rely on different platforms for different topics. It turns out that each piece of the local information system has special roles to play.”

For those concerned about the future of self-government, some of the findings are worrisome. The newspaper comes out on top for local government news. But not that many people actually care about local government. (Just look at local election turnout). So most people — 69 percent — don’t think the death of the newspaper would matter. Yet without government news, we can’t mind our own civic store — and that’s the reason you hear about increasing numbers of scandals.

This article originally appeared on Knight Blog.

4 Cs of successful community media

This is an edited excerpt from an interview for “Empowering Independent Media,” a publication produced by theNational Endowment for Democracy’s Center for International Media Assistance (CIMA). My point was that policy makers need to think about the long-term survival of media they are seeding and feeding.

Question: Which business models do you see emerging that seem most likely to be able to help support independent media in developing and emerging countries?

Newton: Business models need to match the realities of the local media ecosystems in which they intend to operate. In general, all models have four successful elements: relevant and credible content, appropriate technological connectivity, vigorous community engagement and innovation in seeking capital.

Those are the four Cs:
Content
Connectivity
Community
Capital

The most successful models tend to show more than one source of revenue. On the expense side, the model must match the revenues — trying to create a highly professional investigative reporting project on an annual budget of $25,000 a year simply may not work. But at that level, a volunteer citizen media project might be sustainable.

Q: Given your long-term investments in media development, what practices have you identified that help independent media become self-sustaining? How are those changing?
Newton: Community engagement is key. The content must engage people, the connectivity must engage them, and when appropriate, they need to be asked directly for money to help. News proprietors need to be able to clearly show the impact of the work. If people do not believe news and information matters, if they do not see the

impact of journalism, establishing and maintaining professional media organizations is difficult.

Q: What approaches seem least likely to work?
Newton: Here's a recipe for failure: Get all your money from an out-of-country source; create a media model that exists only in richer countries; use technology that's too old or too new to reach people; become fixed in your ways and do not develop the capacity for continuous change. Be an editorial-only operation with no good business people and no good technologists. Don't check your facts; write about things that don't matter in ways that are difficult to understand; don't allow for feedback of any sort and do not collaborate with anyone. You'd be surprised how many people try to work that way.

Q: What critical gaps in management and business-side skills have you observed among both traditional and new media?
Newton: We need more design, technology and business people in these operations, good ones who can iterate but also journalists who can "speak" tech or who can understand business. We need differently taught journalist-programmers who can design high-tech platforms and differently trained journalist-proprietors who can run companies — renaissance people who can operate in different fields.

Q: Going forward, how will these changes and gaps affect your foundation's investments in media development and training?
Newton: The speed of change in digital media will continue to present significant challenges. The reality is that no one really knows what the future will be. We know that the fair, accurate contextual search for truth will always be important. We know free expression is the social sunlight that makes civilizations prosper. We just don't know enough yet about the new forms to settle into larger decisions. In general, we have

increased our journalism and media work and have advocated for other funders to do the same. The digital age is a critical transition in the history of news, and we think investments now will have a good chance to show high-impact results.

What can the Federal Trade Commission do?

Consider the Roman philosopher, orator and politician Marcus Tullius Cicero. Two thousand years ago, when Cicero was sent to the provinces, he was unhappy with the commercial news packets coming from ancient Rome. As New York University's Mitchell Stephens explained in "A History of News," Cicero wrote back to Rome to complain. He wanted to know how the senate voted. Instead, he got stories about gladiators and ostriches. Many people have felt this way — that the news isn't what they wish it was.

The Newspaper Association of America tells us there are fewer than 1,400 daily papers covering more than 50,000 cities, counties and "minor civil divisions" like towns and villages. This means a great deal of our democracy is not being covered by the fourth estate. It has always has been that way. A newspaper I edited, the Oakland Tribune, won awards for watchdog coverage. But we thoroughly watched over perhaps only 5 percent of the government within our region.

The point is, the market has not suddenly failed to provide news in the public interest. Markets always pick and choose. That's why I like to repeat this statement, made by theKnight Commission on the Information Needs of Communities in a Democracy:

“Journalism does not need saving so much as it needs creating.”

The Federal Trade Commission should care about shrinking local flows of news and information. But it also needs to think about how American might create 20 times more than what we have now. What is holding us back from that goal?

This nation has made rules involving media for hundreds of years. They start with Benjamin Franklin’s postal subsidies for the colonial press. For the most part, though, our nation’s current media policies are just old and in the way.

Our policies are children of the industrial age, not the digital age. They often block innovation and the creation of new journalism.

Some examples:
Public media. Much of the government money that flows to public media is status quo money. Not good enough. Why shouldn’t everything the Corporation for Public Broadcasting funds should be for media innovation, for making public media more local and more interactive? That would require a new policy.
Nonprofit digital startups. Our old rules don’t treat them fairly. Tax rules make switching to being a nonprofit or a L3C difficult. Nor do the rules allow these types of news organizations to exercise as much community leadership as for-profit entities, in, for example, the writing of editorials. Access rules don’t give nonprofit news organizations equal access to press galleries.
University journalism. Students everywhere are showing they can do great journalism. (By the way, if the nation’s 200,000 journalism and mass communications students spent just 10 percent of their time doing actual journalism, that would more than replace the journalism lost in the past 10 years from the elimination of jobs by badly run

news businesses.) But our old rules don't treat student journalists fairly. Many of our shield laws don't protect them. They aren't considered true journalists.
The government itself is a huge producer of mass media today. In general, however, it is not a good producer. For the most part, local, state and national government can't seem to use new technology to do a better job obeying its own freedom of information laws, not even on the people's websites that it now runs.

I'm not sure how much of this the Federal Trade Commission can or should try to change. Some of it falls squarely on the shoulders of digital media literacy. If schools and universities expand the teaching of that literacy, the Ciceros of the world will demand more on their own. There is one big thing the FTC can do: Be sure consumers have universal broadband access.

Without digital access, what kind of journalism falls in the forest doesn't matter. You won't hear it. You won't be part of the digital public square. The FTC should be out there saying: "Hey, Federal Communications Commission, we are going to dog you until you deliver on universal affordable broadband for all consumers." That's the level playing field upon which everything depends.

UPDATE:

This speech was originally was presented at a Federal Trade Commission hearing on the future of news. Since then, Knight Foundation focused two of its grant competitions, the Knight News Challenge and the Knight Information Challenge, specifically on the challenges of open government.

Why we need a public media technology transformation fund

This letter was submitted to the Federal Communications Commission after it hired Steven Waldman, founder of Beliefnet.com, to produce a comprehensive study of America's news systems. Waldman's 2011 report was named "Information Needs of Communities" after the Knight Commission report that preceded and inspired it. As my update at the end of the letter shows, private foundations continue to pursue these projects, though the federal government has been slow to change.

Dear Mr. Waldman,

Thank you again for the invitation to speak at the Federal Communication Commission's recent Future of Media Workshop.

You've asked how a content-neutral Public Media Technology Transformation Fund might accelerate media innovation in America.

Below are some ideas I hope you will find helpful. I should note this is not an official paper from Knight Foundation. These are my own personal views, after three careers, as a journalist, news historian and media philanthropist. At the same time, my views obviously are informed by work our president, Alberto Ibargüen, and our team at Knight have done since 2007 to try to advance media innovation.

Why a public media technology transformation fund?

The Federal Communication Commission has embarked on what may well be the most significant reexamination of public media policy since the Carnegie report recommended the creation of public broadcasting.

The issue: How are we going to deal with the digital age?

How can we help existing public broadcasters transform, to recapture significant past public investment in public media and secure its future? At the same time, how do we broaden the definition of public media to help the new startups, which are accomplishing amazing things with lesser resources?

At the heart of this is technology. Digital technology is causing the "creative disruption" that is remaking media ecosystems. The government has helped public broadcasters turn their external television and radio signals into digital signals. Now it needs to help them turn their internal news and information collection systems into modern digital systems.

Digital tools provide new ways to do journalism. Technological breakthroughs allow one well-trained journalist to do things that used to require dozens if not hundreds of old-school reporters. A major fund would maximize the adoption of these changes in public broadcasting. For the first time, having only two reporters at a public radio station need not be an impossible editorial challenge. With breakthroughs in crowd-sourcing (Public Insight Journalism), data-mining (TracFed, Sunlight Foundation) and automated applications (OpenBlock), two reporters can do the work of many more.

Yet despite comments to the contrary, public broadcasting is not adopting those tools rapidly enough and is thus missing an opportunity to rapidly gain in popularity. Projects such as PBS Engage, NPR Argo, the joint public media platform and Web work by Frontline and NewsHour are notable. But the money involved is a fraction of the operating costs of the organizations involved. Even the most innovative among them might devote no more than 10 percent of their budgets to technology transformation.

The Knight Commission for the Information Needs of Communities in a Democracy recommends that we increase support for public media aimed at meeting community information needs. Why? Because the creative destruction of new information technology is causing the heart of America's news system — the daily newspaper — to cut back dramatically on local coverage. If public broadcasting could turn its "most trusted" brand toward local news and greater interactivity, that would help communities across the nation.

Philanthropy has started new, nimble, Web-based public media organizations that are rapidly gaining audience. We also are funding new open source technology that helps nonprofits and businesses automate and improve journalistic functions. In a contest like the Knight News Challenge, however, thousands enter but only dozens win. We are leaving a lot on the table. We have proven the concept that a content-neutral technology fund can accelerate media innovation. But we seem to be working with the early adopters, not the middle of the bell curve, and certainly not public broadcasting. And most foundations are not doing what we are doing. A report from the (then-named) Grantmakers in Film and Electronic Media, called "Funding Media, Strengthening Democracy," notes once again that grant makers must move faster and more seriously into technology in their media funding.

Washington can approach this problem in myriad ways. One that resonates with the challenges of the age and with the experiments we have funded is a content-neutral technological fund that would help the existing public broadcasters and the new startups, which — who knows? — may either replace, become partners with or even eventually be absorbed by traditional public broadcasters. A fund could help make technological innovations universally usable in the public media system. It could help public broadcasters use digital technology to become more local and more interactive. And it will help during a time when money is scarce and public broadcasters are hard pressed to keep the lights on and innovate at the same time.

Government should create a Public Media Technology Transformation Fund for all the same reasons it promotes universal broadband. Without it, the nation will simply not be competitive in this century. People must have access to broadband but also have reasons to use it. Today, the multiplier effect of these investments is hard to ignore. If we unleashed open source software applications and the technology needed to operate them and gave away money for code and machines to news organizations across the country, we would be building a new field of public media innovation — by repurposing existing content and creating new content.

Everyone can win. A local newspaper, a commercial or public broadcaster, ethnic and alternative media, citizen media, new Web-based startups, all of them can use open source news technology. The technology does not care whether they are liberal or conservative, old or young, city dwellers or rural Americans, black or white or any color of the rainbow. People will still be free to choose what news they would like to consume; they will, in fact, have greater choice in a media ecosystem richer in local media.

Seven ways a major fund could make a difference

To illustrate, I've set the fund at $300 million a year, not because any particular number needs to be set in stone but to make the point that a major fund can accomplish major things. This would be one dollar per American per year, to preserve previous investment of billions and to try to help public media's new leaders create a new future.

Here are seven ways a major fund could produce major results:

1. Technology Transformation and Tool Adoption in Existing Public Media Organizations

A general grant fund might give out half the total amount set aside each year, say $150 million a year. That money could be flexible, given out across silos. Any kind of organization could apply. It could be one-time money for new machines, software and technology staff.

I would give traditional public broadcasters infrastructure grants when 1.) Their project (even an existing one) makes use of digital technology to create news and information that is more local, personal, portable and participatory. 2.) They are willing to co-support their futures by finding matching money within their own organization. In Philadelphia, I like WHYY's idea to start a Web-based local project called News Works using significant amounts of its own money. But I worry that WHYY's entire Web operation is simply not nimble enough. Can it use all the open source software being invented nationally as well as doing its own project? In Miami, we helped public broadcasters develop a community video platform, uVu. But they need more than an experiment. They need more money to scale the platform, to provide cameras and training to all the community groups that will feed the video into uVu and to set aside an increased Web staff for a few years to make sure it takes root.

Existing public media organizations also could use this one-time money to cover broadband streaming costs while they make the business model changes needed to cover those costs long term.

We should expand the definition of an existing public media organization to include the nonprofit news organizations now thriving on the web, so long as they can demonstrate a commitment to news in the public interest. I define news in the public interest as the news people need to run their communities and their lives. Established web-based public media outlets, such as the Center for Public Integrity, could reach far larger audiences with a steady stream of new technology. The same is true for the new investigative reporting centers. If a center proves itself editorially, if it is raising significant funds for content from its local supporters, it could qualify for a technology grant that expands its capacity during the next five years. These “new traditionals” are offering high quality news for the news stream, which is a goal of public broadcasting. Many newspapers now have no journalists in Washington and no one covering the statehouse. At relatively low cost, this sort of news can be provided by the new traditionals, provided they have the technological capacity to keep up with changing software. Many of the most iterative web-based public media organizations now change their websites fundamentally every few weeks. That sort of culture of constant innovation needs to be built into existing and new public media.

This can be an open-ended annual fund or a time-limited initiative along the lines of the Public Television Digital Conversion project. Based on the reaction to our Knight News Challenge, I would suggest at least a five-year effort. It took many years to establish the status quo in public broadcasting. It will take years to transform it. Simply scaling up the projects that already are good — the common public media platform and Public

Insight Journalism, for example — could take most of what this fund has to offer in the short term.

2. Partnership and Mergers through Technology

A substantial amount of money, perhaps $55 million a year, could be set aside to help existing public media improve through partnerships and mergers.

If a public radio station and a public television station want to create a joint website (such as Ideastream in Cleveland), they can grow their memberships and keep their technology costs under control at the same time,. This would free up more money for local journalism. Some forward-thinking public broadcasters (Denver, Austin) are partnering with new web-based investigative projects. There are only a few, though. A partnership and merger fund could change that.

America's media policy has never been a single policy, but rather, as fits our power-sharing philosophy, a mishmash of diverse things done by different agencies. We see that in communities as well. In some communities, you might have strong public broadcasters (the less than 20 percent with good newsrooms). In most, you might not. You might be lucky enough to have one of the good 211 systems. Or one of the few good community access cable channels. Or one of the new web-based public media outlets. Or strong libraries that can teach digital literacy. But if your community is normal, you'd be lucky to have even one of these in a significant form. Compare that to what is being lost through the 13,000-plus newsroom jobs cut in the past few years at daily newspapers.

Again, I would define public media partnerships quite generously. Local governments interested in 2.0 sorts of community engagement applications might also qualify, so

long as they are open source and sharable and subject to community input. Partnerships between universities and public and private media are obvious choices as well.

Ethnic media should be included. Something like 25 percent of America consumes ethnic media, and technology needs there are huge. A whole suite of basic templates, content management systems and applications could be developed in partnership with such groups. Ethnic media are forming hubs to translate their work into English and share it more broadly (New American Media), partnering with local foundations (San Diego) or collaborating with traditional media (New York, San Francisco). A partnership fund could spread those best practices more broadly.

Even if all a merger fund did was help public radio and public television create dozens of Ideastreams, the nation would be better off. But a larger goal is more useful: A merger or partnership fund would encourage all media people to look more broadly and intelligently at their local media ecosystems.

3. News Technology Testing Labs

This could be a $25 million annual fund that would transform the roles of the university and the nonprofit media innovation community by creating technology hubs that would act as universal help desks, retooling labs and distribution centers for a new generation of open source software.

We've learned from the Knight News Challenge that "interoperability" of software, even open source software, is key. One of our experiments might be adopted by only a handful of news organizations; another by thousands of websites, even mobile media. This difference can be a purely technical one. Editors or news managers might want the

new technology, but, depending on the software profile of their existing operations, they simply may not be able to adopt it.

Enter the News Technology Testing Lab. You could look at it as a technological version of the local journalism centers already funded by the Corporation for Public Broadcasting. The labs could be based at major universities through competitive bid or in a networked way within nonprofit media developers.

Universities would need to show that they will use this money to forge a new relationship between computer science and engineering departments and journalism or communication schools. (This will add a key element to leading journalism schools and prepare future journalists for a high-tech world.) Media innovation nonprofits would need to prove they can partner with major media organizations to test the new tools.

The testing lab would take the open source software emerging in the public media center, rewrite it and promote its adoption by public media. Take a program like OpenBlock, which scrapes the Web for crime statistics, building permits, restaurant inspections and other public information, and organizes it by neighborhood block. It was written as open source code in the software framework Django. A testing lab could rewrite it to work on other platforms, test the new versions, develop frequently asked questions, build a software developer community around the application or introduce it into an existing community. If public radio or public television websites in America all had their own versions of OpenBlock's open source code, an astonishing amount of information would be available to news consumers. Reporters can find important stories much more easily with these sorts of data tools. And when consumers can easily find public information on the web, they demand more of it from their public institutions.

We believe technology labs could be run at two dozen major cities, in various geographic locations, for roughly $1 million a year per location. A five-year startup commitment would be needed. By then, universities or nonprofits could either develop new revenue around the labs or build them into their existing operations, or both. If you focus on a few major university cities in which the highest-speed Internet exists, you will be developing at the "top end," and as faster broadband spreads, so will this new technology.

All in all, news testing labs would help speed adoption of open source software and the applications that run on it. They would be able to develop numerous applications to run on the universal public media platform proposed by NPR and its public media partners.

4. Media Innovation Projects: a "circle of champions"

Spreading the adoption of existing technologies is not enough. In the digital-age culture of continuous innovation, a steady stream of even newer ones must be invented. Thus, an additional $20 million per year can seed the most promising open-source media innovation projects.

Nonprofits advancing open-source media innovation technology could qualify for funding to "scale" if they have won a previous open competition, such as the Knight News Challenge or one of the two dozen other major technological competitions run by philanthropy. In other words, federal money could be available to scale the "circle of champions" — those whose fresh open-source software has received the best results from field tests with media partners. This leaves a creative role for philanthropy: helping identify new ideas. But it puts national leadership behind the notion that the best of these breakthroughs in the open-source software world should have the best chances of universal adoption.

Since this software can be used by business as well as public media, it can also help accelerate digital transformation on the commercial side. An example of this: DocumentCloud, a new tool for investigative reporting invented by a nonprofit in connection with employees from ProPublica and the New York Times. If resources existed to widely train toward the adoption of this software, citizen journalists as well as professionals will find it easier to use original source documents in stories. In addition, when the news links to the underlying source documents, stories have greater credibility. Users can trace citations back to their source. In five years, DocumentCloud will be in popular use at the largest news organizations. A federal program could accelerate its distribution. In the digital age, speed matters.

Open-source tools could be funded even if for-profit entities develop them. A number of notable Knight New Challenge entries are open-source tools created by for-profit entities (DevelopmentSeed, Stamen). Others build on existing open-source tools (PRX) or are built-from-scratch projects (DavisWiki). They range from mapping to data visualization to local wikis. Ventures like Google's Summer of Code, where Google pays students a summer stipend to work on pre-approved open-source projects, are notable models.

5. Senior Fellowship Fund for Master Teachers

A senior technology fellowship fund could be a $20 million "senior geek squad" of traveling fellows who retrain public media for the digital age. Google, for example, allows its engineers to devote 20 percent of their time to whatever sort of work they want, including volunteer work. A public-private partnership, possibly with philanthropists organizing the competitive aspect, could choose fellows each year to travel to public media sites around the United States — for such digital transformation

projects as training, new interactive product adoption and revamping existing systems. These would be professional technologists who treat the media organizations as clients. They would be experts on tech-enabled journalism, data-driven reporting and visualization, multimedia, contextual delivery, content management systems, plug-and-play widgets and applications. Even at $20 million, not even half the existing public media outlets would be able to host such fellows.

6. Scholarship Fund for Tomorrow's Media Technologists

In addition, a $20 million annual scholarship fund could create a cadre of students co-majoring in computer science and journalism. Northwestern and Columbia have started these sorts of programs and many other universities are considering them. A pilot program at Northwestern has proven successful. A major expansion would ensure we are graduating at least 200 of our best and brightest students each year who can help us reshape our public media landscape. In return for the scholarship, the students would each spend a year as a circuit rider helping public media better transition to the digital age, working with the senior fellowship program above. After their year of service, many will go on to join the private sector.

7. Beyond the Classroom: Digital Literacy

Digital literacy is arguably the most important literacy of the new century. But few educators are actually using digital tools to advance this goal, even though digital teachers never sleep and are available to any student of any age at any time. An annual $10 million fund could award grants to leading journalism schools and professional organizations for digital platforms that offer digital media education to all: everything from digital literacy to training for citizen journalists to public media training. In some of Knight Foundation's pilot programs, educational digital games are among the most popular teaching tools. Schools that teach journalism or news literacy classes could

apply for classroom grants for current technology. Examples of these sorts of platforms, started by Knight but always in need of more help are what is now StudentJournalism.org and newsu.org.

Conclusion

A Public Media Technology Transformation Fund could create a culture of constant innovation within public media, needed not only to protect the public's previous investment, but also to offer more choices to the American consumers.

A Technology Transformation Fund could do more than prevent the unnecessary dismantling of public investment in quality broadcasting as consumers continue to seek out news that is portable, personal and participatory. A fund could help provide the tools for a community news renaissance in the United States, repositioning the nation as a creative force internationally in building high-tech community news systems.

History shows us that not all Americans wish to, are able to or can afford to consume news and information through the commercial system. Noncommercial alternatives provide more choice. This is why billions are donated to public media by "viewers and listeners like you."

As a public media consumer, here's my view: If you want to increase money for public media, you need to increase the media being offered to the public. Meaning, we need public media that is more local, more interactive and more diverse.

In some parts of the nation, public broadcasting is a primary news source. It would be a poor use of government funds to do nothing more than support the status quo when we

know the future is digital — not just digital signals but digital platforms and news collection tools.

The Corporation for Public Broadcasting's innovation efforts are laudable, but proportionately puny, perhaps as little as 10 percent of its budget. And CPB money is only a fraction of the overall public media budget. So right now, technology transformation money is a fraction of a fraction of what we are putting into public broadcasting.

Worth noting are such efforts as Public Radio Exchange, which demonstrate that government can invest in innovation for public media when it sets its mind to the task.

Also, while philanthropy including Knight Foundation has demonstrated how easily new tools can be developed, private grant makers simply do not have the resources to "scale" these innovations. If we try, we will be hard pressed to continue to develop new ideas.

Let me end with two personal observations.

At the Newseum, we studied news and information going back to the earliest spoken word. I can think of no period of history, from the Roman roads of old to universal phone service funds of today, when successful leaders did not try in some systematic way to improve their news and information technology. In all the history work we did, we found no American leader saying, "We would have succeeded if we just hadn't spent that much on our information technology."

At Knight Foundation, I have been impressed by the boundless human creativity driving ideas for new technologies in this new age. One of our projects is with Web creator Tim

Berners-Lee and the Media Standards Trust. By creating an open source micro-formatting system, that project is helping the Associated Press and hundreds of newspapers meta-tag news stories, so news organizations can, in essence, footnote the news. Eventually, this may provide an entirely new way of searching for news. Instead of getting whatever stories a Google algorithm provides, you might be able to find only eyewitness accounts of an event or accounts from award-winning journalists or from the writer on the scene the longest, etc.

Finding ways to help public media use these innovations is essential if we are to have public media in the future. Old tools are just not much help these days. The old metaphor for journalism was to shine the light, and people would find their way. Just try using a flashlight at noon on Miami Beach. Not much help. What you need in a world that is all lit up is not a flashlight but a good pair of sunglasses. They still help you find your way. In the digital age, we do indeed need new ways of looking at things.

UPDATE:

The Corporation for Public Broadcasting's plan to advance "the 3Ds," digital, diversity and dialogue, hasn't changed its basic approach. Video, audio and fundraising race on line but CPB is still a status-quo-supporting bureaucracy; it experiments with a tiny slice of the budget. Other federal agencies have been little help. Google and the Associated Press started media/tech scholarships, not government. Northwestern University's news innovation lab started with foundation funding, not government's. KCET in Southern California and Link TV merged on their own, not as a government-funded project.

PBS Digital Studios opened to fanfare, but basic station budgets don't seem to be changing. Government initiatives did not create accelerators like Matter at

KQED in San Francisco, the innovations from PRX, the Mozillaproject that puts programmers in newsrooms or even the civic software from Code for America. Tax money still goes to content, not the politically neutral technology changes essential to the future of public broadcasting.Web-based public media startups have taken in millions of dollars and users in the gaps left by public broadcasting.

A bright spot is NPR, which dropped the word radio from its name and promoted a digital expert to its top content job. Overall, public radio draws most of its funding from private sources. Yet much of that comes in from local stations. As national content moves on line, they must either develop better news relationships with their communities, or die.

The public case for universal, affordable broadband

When a big newspaper goes bankrupt or shuts its doors for good, what's really at stake?

In recent years, great American cities have asked themselves that question. In Philadelphia and Chicago, once rock-solid newspapers have filed for bankruptcy protection. In Seattle and Denver, the "second daily" has closed.

But what does it really mean, for the city in question, for the greater community, for us as consumers of news? Does it matter?

An august body of experts from a First Amendment lawyer to a software engineer, traveled the nation to answer that question.

Their conclusions appear in a 118-page report of the Knight Commission on the Information Needs of Communities in a Democracy.

The commission says:
Information is as vital to our communities as good schools, safe streets or clean air.
The current financial challenges facing private news media could pose a crisis for democracy.
Journalism does not need saving so much as it needs creating.

That makes sense to us here at the Knight Foundation. The Internet has thrown our longtime news delivery systems — tree to paper to press to truck to your driveway — into a state of economic chaos.

But rather than try to turn back the clock, we're trying to help create what's coming next.

Community action

We have seeded more than a hundred community news experiments — and have been surprised by how many have quickly taken root.

Traditional news organizations also are using digital technology to their advantage. They're reaching greater numbers than ever, working with local bloggers and citizen journalists, interacting with — rather than talking at — their communities.

What can a community do to help? The Knight Commission offers 15 ideas, from championing news literacy in the public schools, to making public libraries centers for digital training and access; from creating public broadcasting that is more local and more interactive, to building city hall websites that actually make public information easy to understand.

But my favorite is this one:

America needs universal, affordable broadband access. Everyone, no matter their age, race, income or neighborhood, should be able to go online to get whatever they want — video, audio, photos and text — from anywhere in the world as fast as anyone else can.

A need for access

In the digital age, countries without high-speed broadband will become second-class nations filled with second-class citizens, able to vote but not knowing why they should; able to work but not knowing how to find a job online.

Trains like this one, on a route to and from Canada, carried mail and newspapers along with its other duties. Until the telegraph, as a general rule news could travel only as fast or far as the leading transportation system of the day.

This isn't the first time we've faced a need to connect the nation. In the 19th century, we linked east and west with the transcontinental railroad. In the 20th, we linked driver to destination with the United States Interstate Highway System.

Today, we need to link people and ideas. Almost two dozen other nations now rank ahead of the United States in high-speed broadband. That just won't do.

Digital cities will be the best markets for local news products, the most interesting laboratories for new ideas, the perfect places to chase the American Dream.

UPDATE:

After this column appeared in the Miami Herald, the Knight Foundation went on to help several "Knight communities" (cities in which the Knight brothers once owned newspapers) win federal broadband deployment grants. That said, universal broadband access needs to be followed by universal adoption. Yet municipal wi-fi and other free Internet systems are routinely opposed by cable and phone companies. Public libraries provide free access and in many cases digital media literacy training, but they need more support. One promising effort is Connect2Compete, offering low-cost Internet access. Another is the Knight School of Communication at Queens University in Charlotte, which has taken on the mission of raising the digital media literacy rate of the entire city.)

In addition, universities across the country did a series of research papers and public events to keep a conversation going on the ideas in the Knight

Commission and FCC reports, both named “Information Needs of Communities.” The videos from the University of Missouri events can be seen here.