4 Internet

FROM ITS EARLIEST DAYS, IT WAS CLEAR that the Internet would be, in some important ways, fundamentally different from other communication system breakthroughs. The printing press, the telegraph, and broadcasting each dramatically improved the efficiency of information distribution, but they nonetheless relied on (and allowed) a relatively small number of people to produce content and send it on its way.

The Internet was created by government-financed researchers to allow for the easy sharing of information and resources among academics. It was designed to be decentralized, with power and control diffuse. Same with the World Wide Web that developed on the Internet. As Tim Berners-Lee, inventor of the World Wide Web,[1] explained in a December 2010 *Scientific American* article:

> "The primary design principle underlying the Web's usefulness and growth is universality. When you make a link, you can link to anything. That means people must be able to put anything on the Web, no matter what computer they have, software they use or human language they speak and regardless of whether they have a wired or wireless Internet connection.…
>
> "Decentralization is another important design feature. You do not have to get approval from any central authority to add a page or make a link. All you have to do is use three simple, standard protocols: write a page in the HTML (hypertext markup language) format, name it with the URL naming convention, and serve it up on the Internet using HTTP (hypertext transfer protocol). Decentralization has made widespread innovation possible and will continue to do so in the future."[2]

Decentralization and universality—these principles insured that the Internet and the web would revolutionize not only the dissemination of news and information but how it was gathered and packaged and by whom. This would radically democratize publishing, make "sharing" an essential fuel to the new media, and along the way upend traditional business models that had sustained journalism for years.

Not surprisingly, news has been an important part of the Internet since its earliest days, when Usenet newsgroups provided places for users to discuss and share news and information. Small content websites proliferated in the early 1990s, and toward the end of the decade venture capitalists financed the creation and expansion of a wave of new businesses that published original content. Venture capital investment grew from $595 million in 1995 to $15.6 billion in 2000.[3] Content companies that launched during those heady days include WebMd, MarketWatch, Salon, Beliefnet, and Slate.[4] AOL, CompuServe, and Yahoo!—among the largest online communities at the time—expanded their content offerings.

But in late 2000 and early 2001, the Internet bubble burst.[5] Venture capitalists began pulling back their investment in existing companies that were not profitable and investing less in content firms in general. Despite a movement of ad dollars from print publications to the web, new-media pioneers found it challenging to cover the costs of content creation using traditional business and staffing models.

A few years later, web innovation and investment began to accelerate again—this time fueled by social media, or what came to be known as "web 2.0." The new generation of websites that emerged had two economic advantages over conventional content sites: First, since the bulk of their content was created by the users themselves, their content-creation costs were lower. Second, although ad rates were lower on social-media sites, they could generate page views far more efficiently than content sites could. One reason: users tended to dive into these sites more deeply—often visiting them more often and staying longer. For instance, the average reader spends 20 minutes a month on the *New York Times* website, compared with seven hours on Facebook.[6]

Within the universe of content-based websites, so-called news aggregators became increasingly significant. Google News, for instance, provides links to the most popular news stories, using computer algorithms that weigh factors like where and how often stories appear as text or hot-linked headlines in order to determine how prominently

they will be displayed on the site.[7] Digg and Delicious rely on user votes to elevate stories on their list, in effect allowing the "wisdom of the crowds" to decide which stories are recommended. Other sites combine automated algorithms with editorial judgment to select stories to feature. The Drudge Report became enormous and influential, largely by linking to a variety of columnists and news sites. Some aggregators summarize the articles in addition to providing links. The Huffington Post added original bloggers into the formula but relied most heavily on linking to and summarizing other websites' content.

Some time in 2010, a milestone was hit: more Americans were getting their news online than from traditional printed newspapers. Among younger consumers, more were getting news online than through newspaper *or* TV, according to a 2010 survey.[8]
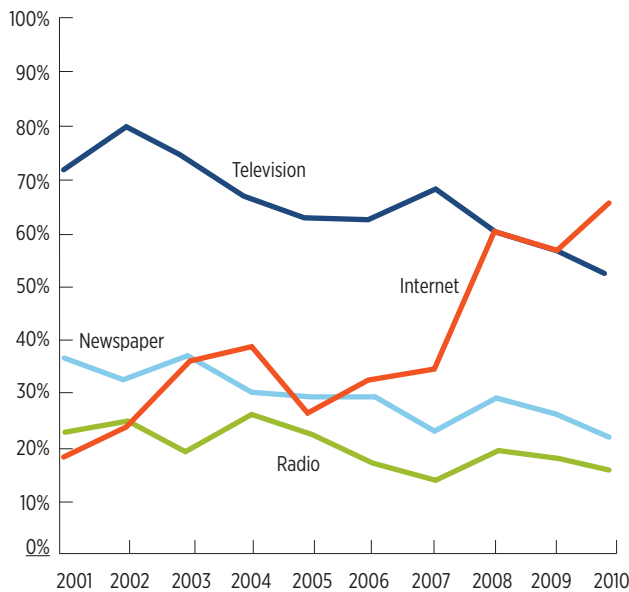
WHERE PEOPLE GOT THEIR NEWS "YESTERDAY"
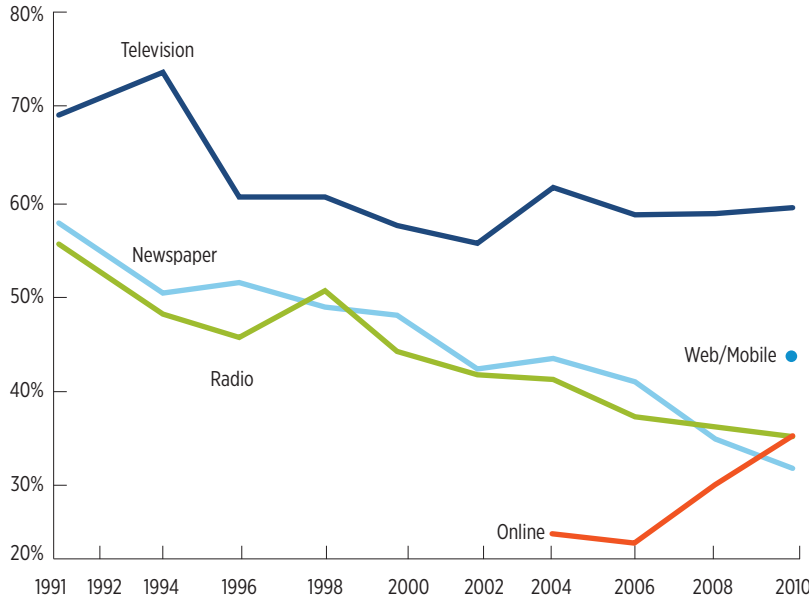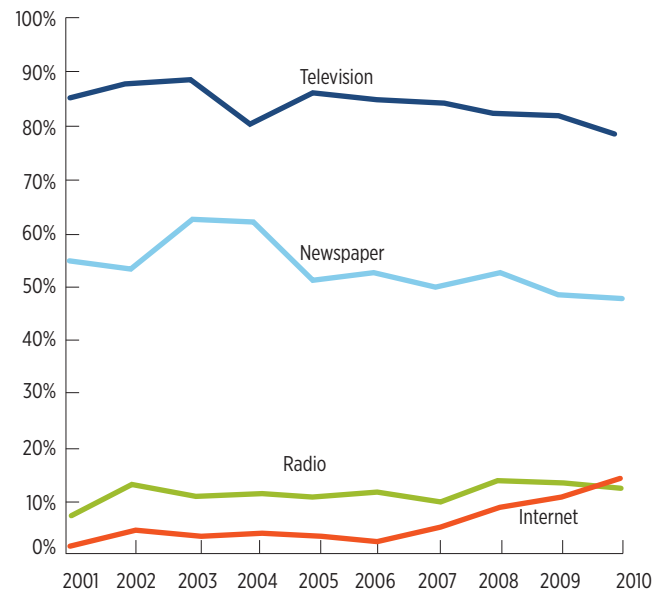

Source: Pew Research Center for the People and the Press, June 8–28, 2010.

MAIN NEWS SOURCE, BY AGE

Source: Pew State of the News Media 2011, citing Pew Research Center Dec. 1–5, 2010. Figures add up to more than 100% because respondents could volunteer up to two main media sources.[9]

NIELSEN TOP 25 NEWS WEBSITES (2010)

Rank	Domain	Unique Visitors Annually (000s)
1	Yahoo! News Websites	40,459
2	CNN Digital Network	35,658
3	MSNBC Digital Network	31,951
4	AOL News	20,821
5	NYTimes.com	15,948
6	Fox News Digital Network	15,502
7	ABCNEWS Digital Network	13,251
8	TheHuffingtonPost.com	11,510
9	Google News	11,382
10	washingtonpost.com	10,095
11	CBS News Network	9,947
12	USATODAY.com	9,147
13	LA Times	8,314
14	Daily News Online Edition	7,247
15	BBC	6,519
16	Examiner.com	6,242
17	Bing News	4,855
18	The Slate Group Websites	4,526
19	Topix	4,409
20	Boston.com	4,336
21	New York Post Holdings	4,314
22	Telegraph	4,044
23	Guardian.co.uk	3,885
24	NPR	3,835
25	Chicago Tribune	3,785

Source: Pew State of the News Media 2011 Report, citing Nielsen

Meanwhile, the advent of free, simple-to-use blogging software was making it possible for every American to be a publisher, reporter, and pundit. By May 2011, one of the most popular blogging platforms, WordPress, was hosting 20 million blogs.[10] Though only a few bloggers have audiences large enough to place them among the top 100 websites, their contribution to news and commentary online has been revolutionary. The "long tail" came into view: instead of information being provided primarily by a few large players, the ecosystem now could support millions of smaller players each serving a small but targeted audience.[11] The democratization of content creation caught on quickly. Wikipedia and other "wikis" enabled readers to collaborate in the creation of content; YouTube allowed a full range of users—from creative geniuses to proud parents to freaks—to "broadcast" their own videos; and Facebook gained national dominance as an all-purpose platform for self-expression and communication. Millions of people became not only consumers of information but creators, curators, and distributors. Remarkably, WordPress, Twitter, Wikipedia, YouTube, and Facebook offered these publishing tools to users for free.

It is hard to overstate the significance of these changes. In just a few years, the cost of publishing went from being relatively expensive to almost free—at least in terms of the publishing technology.[12]

The digital world continues to change by the minute. Smartphone applications, tablet apps, e-Readers, and other new services now make it easy to access news and information on-the-go, using the Internet as a pipeline but bypassing the need for a web browser to display it. As consumers increasingly gravitate to applications and services that make use of the Internet through more closed systems, such as smartphones, some even question the viability of business plans built on the current search-based, website-centric Internet.[13]

The crop of news and information players who gained prominence on the web 2.0 landscape—bloggers, citizen journalists, and Internet entrepreneurs—was initially mocked by traditional media leaders as being inferior, worthless, and even dangerous. Famously, Jonathan Klein, then-president of CNN, declared, "Bloggers have no checks and balances. [It's] a guy sitting in his living room in his pajamas."[14]

Hardly. It is important to appreciate the extraordinary positive effects the new media—including those contributing while in pajamas—has had, not only in the spread of freedom around the world, but specifically in the provision of news, reporting, and civically important information.

How the Internet has Improved News and Information

More Diversity and Choice

Traditional media limited the number of voices that could be heard, not (usually) for conspiratorial reasons but because of something less sinister: space was limited. Column inches in a newspaper and minutes in a newscast are finite. Many editors choose wisely, some do not—but they do have to choose. A local newspaper editor putting together a package on abortion might appear fair-minded by including one spokesperson from a pro-life group and one from a pro-choice group, even though there are variations of opinion within and outside those movements. Now, on the

Internet, an editor can provide—and a reader can search for—a much wider range of perspectives.[15]

The Internet has the luxury of unlimited space and a cost-of-publication that approaches zero, which means that it is no longer only—or primarily—editors who get to decide which voices are heard. Consider how the Internet has transformed a staple of the traditional newspaper: the letter to the editor. On a typical recent Sunday, the *New York Times* published nine letters to the editor in its print edition. By contrast, the comment area on just the home page of The Huffington Post included 73,234 reader comments.[16] Think of those as instantaneous letters to the editor, and one can understand how much more easily a typical citizen can now reach a large audience with her viewpoint.

By 2010, a historic milestone had been hit: more Americans got their news online than through newspapers.

When one considers both online and offline media, most communities have seen a rise in the number and diversity of outlets. A study of news outlets in Baltimore by the Pew Center for Excellence in Journalism found 53 different news and information sources, not including occasional bloggers.[17] On the national level, choice is even greater, because consumers can tap into newspapers and publications that may have been difficult or expensive to access in the past. In 2009, only 17 percent of *The Washington Post*'s print circulation went to readers outside the Washington, D.C., metro area—but 91 percent of the newspaper's *online* readers live outside the D.C. area.[18] Along similar lines, a conservative living in liberal Berkeley can find refuge online at NationalReview.com; a liberal in Orange County can join the DailyKos.com community; an African-American in an all-white town can explore TheRoot.com; and an evangelical in a secular enclave can bond with believers on ChristianityToday.com.

And individuals can personalize their information flow with amazing precision. There is not a topic area that does not have aggregators providing headlines from around the world. News about Ultimate Frisbee? USA Ultimate provides that.[19] News about Geocaching?[20] Groundspeak has that.[21]

Greater Depth

Consider how a typical newspaper might have covered a speech by the president before the Internet. In about 750 words, a reporter could include six or seven quotes from the president, some context on the issue at hand, and two or three quotes from people reacting to the speech. By contrast, today's online experience might start with an article similar to the newspaper piece. Then, the reader can examine the speech itself, in excerpts or in its entirety, through video, audio, or transcript. And, in addition to the brief sound-bite quotes from three experts, one can now get detailed analysis from dozens—even hundreds—within a few hours of the event, rather than the next day. After all that information is absorbed, one can scour the web for even more, perusing instantaneous fact-checking efforts and connecting with others online who share an interest in the speech.

Traditional media companies can now offer much of this additional information themselves and in doing so make a story more relevant to viewers and readers. In a pre-Internet age, the network news shows might have simply reported on a problem regarding federal regulation of toxic waste dumps, for instance. But now they can also post a list of the dumps to their website and update it as new information becomes available; viewers can see if any are near their home, and experts can use the data to create maps of the hazards.

The ability of websites to sort and store data easily makes large volumes of information customizable in ways that makes it far more relevant to individuals. For instance, the Texas Tribune, a news startup in Austin, Texas, offers online readers the ability to sort through data about Texas lawmakers, prisoners, and public employees. Readers can set the parameters as they wish, based on their particular interests, and the gizmo tailors the results to them. Built as one feature—a database—from a consumer perspective it actually provides thousands of different "stories."

More Diversity in Commentary and Analysis

The commentary business is far more open to new players. In the past, there were a handful of well-worn paths to pundit-hood, usually requiring work as a big-time newspaper reporter or a top level government official. The Internet allows for more newcomers. Markos Moulitsas, a former army sergeant, was a web developer when he created the Daily Kos, which has become the leading liberal blog. Glenn Reynolds, one of the top libertarian bloggers, is a

professor at University of Tennessee. Matt Drudge was a telemarketer before he created the pioneering conservative aggregation site, the Drudge Report, and Andrew Breitbart, a leading conservative media entrepreneur, got his start in the online news world while working for Drudge.

The best web analysts have used the technology to improve the quality of their offerings. Andrew Sullivan was among the first to use the interactivity of the Internet to hone his argument in public, putting out an initial viewpoint and then adapting it, as new ideas or information challenged him. The best bloggers write with the knowledge that shoddy reporting or thinking will be caught in a matter of minutes.

Some of these commentators perform the same function as the best newsmagazine and newspaper reporters: connecting dots (recognizing the links between seemingly isolated events) and finding inconsistencies in publicly available information. A handful of conservative bloggers, for instance, figured out that a key document in Dan Rather's controversial *60 Minutes* report on George W. Bush's military service must have been fake, in part by noticing that the typeface on an ostensibly 30-year-old letter was suspiciously similar to a modern Microsoft Word font.[22]

In just a few years, the cost of publishing has gone from quite expensive to almost free.

The ease of sharing content—by emailing a link or posting news to a social network—has transformed the process of news storytelling. Posts on Twitter, Facebook, and Ustream, for instance, can be read in raw, flowing form or sifted through by editors or writers and shaped into a cohesive story. Both processes played a key role in keeping the world informed during the revolutions in Iran and Egypt.

Editors or citizens can see broad national patterns far more easily. For years, local newspapers wrote occasional stories about cases of priests abusing children and being protected by church hierarchies. When the *Boston Globe* ran such a story in 2002, however, something different happened: The story was passed around via email to editors at other newspapers and activists around the country. The editors called on their own reporters to investigate whether cases of abuse existed in their towns, and before long, it became clear that this was a crisis for the entire Catholic Church.

Enabling Citizen Engagement

With 76 percent of cell phone owners using their phone to take pictures,[23] we may one day conclude that, as remarkable as it is that most Americans now carry around a minicomputer, it is just as significant that most now carry a camera. News organizations can rely on not only a stable of professionals but also on a much larger corps of amateurs; it has become a staple of modern news coverage to include photos and videos from citizens who captured images with their phones. Perhaps the most important piece of citizen journalism in this new era was the video taken by an Iranian doctor on his cell phone of a woman named Neda Agha-Soltan being murdered on the street in Tehran.

The term "citizen journalism" has come to include any instance when a non-professional contributes not just opinions but facts, sounds, or images to a developing news story. In Egypt and Iran, citizens used social media not only to organize each other but to report—providing real-time information that both educated citizens and fed the work-product of professional journalists. Shrewd reporters have come to view social-media content neither as frivolous froth nor "the truth" that should be passed on without question, but rather as comprising invaluable eyewitness accounts, tips, and ideas, as well as manifestations of raw emotion.

In some cases, web journalists have enlisted their own readers to help report a story. Joshua Marshall, editor and publisher of the award-winning TalkingPointsMemo website, asks readers to help scour government "document dumps" and report to him on behavior at local polling places on Election Day.

Citizen reporting works not only in the case of disaster but also in more pedestrian aspects of civic life. The website SeeClickFix.com enables citizens anywhere in the world to report and track non-emergency issues in their community; for instance, they can photograph a pothole and forward the geographically tagged image to other citizens and to city officials.[24] Even Internet-based message boards and community forums, which many people dismiss as places for bloviation and social chatter, often become venues where citizens share important information with one another—about which schools in the area have the best principals, which clinic has the shortest line for vaccinations, and which hotels have bedbugs. In the words of New York University professor Jay Rosen, "When the people formerly

known as the audience employ the press tools they have in their possession to inform one another, *that's* citizen journalism."[25]

Web scholar Clay Shirky estimates that the citizens of the world have one trillion hours of free time annually—what he refers to as a "cognitive surplus"—that could be devoted to shared projects and problem solving.[26] Technology has enabled some of this time to be spent on frivolous enterprises ("lolcats," perhaps?), but some has been applied to civically important communal digital projects, as well. Shirky cites this example: Ory Okolloh, a blogger in Kenya, was tracking violence in the aftermath of her country's December 2007 elections when the government imposed a news blackout. She appealed to her readers for updates on what was happening in their neighborhoods but was quickly overwhelmed by the flood of information she received. Within 72 hours, two volunteer software engineers had designed a platform called "Ushahidi" to help her sort and map the information coming in from mobile phones and the web, so readers could see where violence was occurring and where there were peace efforts. This software has since been used "in Mexico to track electoral fraud, it's been deployed in Washington, D.C., to track snow cleanup and most famously in Haiti in the aftermath of the earthquake," Shirky says.[27]

In other words, the technological revolution has not merely provided a flood of cool new gizmos. It has also democratized access to the world's vast storehouse of knowledge and news.

Speed and Ease

The most obvious change brought by the Internet is speed. Once an article is done being edited for a print newspaper, it must then be laid out, printed, and physically delivered—a process that could take at least half a day. Online, that same article can come before a reader within seconds of being edited. *The Daily Show* correspondent Jason Jones captured the essence of the shift when he pointed to a print edition of the *New York Times* and challenged an editor: "Give me one thing in there that happened today."[28]

The new media's fixation on getting news published quickly has its downside, as reporters and editors may take less time to analyze and contemplate the information they have gathered. But if a hurricane is approaching, the ability to have real-time updates can be lifesaving.

Expanding Hyperlocal Coverage

In order to maximize revenue, news operations that rely on advertising have traditionally sought to appeal to a broad range of consumers. But the larger and more diverse the region of coverage, the more difficult it is to address the full spectrum of issues that matter to its citizens. An individual reading a big-city metro section or watching the local TV news will rarely see stories about his or her neighborhood. Community newspapers may offer more local content, but they are typically published weekly or monthly (rather than daily) by tiny staffs covering an entire town. The new-media universe, however, is rife with ways for people to share information about events in their community and on their block—including Listserv® and other email groups, blogs, and social-media sites. For example: Arlington Virginia's ARLNOW blog in May, 2011 had a discussion of a zoning debate regarding whether live music can be offered at a local outdoor pub.[29] Universal Hub, a community news and information website for the Boston area, features contributions from hundreds of local residents

> Since everyone now can, in effect, publish his or her own opinion, it is tempting to suggest that the Internet is all about lowering the bar. But it likely has made pontificating more meritocratic.

and bloggers; in its "Boston Crime" section, crime data are plotted and made searchable by neighborhood.[30] Though many hyperlocal sites do not make much money, they do not need to, because they function more as civic organizations than businesses, relying on volunteer efforts rather than cash.

Among businesses that aggregate news, there are some that focus specifically on hyperlocal news, such as Topix, Outside.In, Placeblogger, and MSNBC.com's Everyblock.[31] Without the burden of the infrastructure required to produce and distribute a newspaper, hyperlocal websites—whether run by an individual or a large corporation—can keep costs low. Executives of Patch, a network of hyperlocal sites owned by AOL, say that a Patch site costs 4.1 percent of what a comparable print daily community newspaper does to operate.[32]

With 76 percent of cell phone owners using their phones to take pictures, we may one day look back and conclude: society was changed as much by the fact that most Americans now carry around a camera as that they now carry around a mini-computer.

Serving Highly Specific Interests

The traditional mass-media model often left content providers struggling to lend expertise to a broad range of niche topics. A TV station might have a city hall reporter but be unable to afford to have someone cover every community board. Now, citizens, activists, and experts (professors, consultants, retired officials, etc.) can receive and contribute information through their own blogs or through any number of sites devoted to highly specialized topics. For instance, Irish Philadelphia focuses on music, dance, art, food, genealogy, and other local news and culture for Philadelphia's Irish American community.[33] Bikeportland.org collects information on biking news and personalities in Portland, Oregon.[34]

Cheaper Content Distribution

As costly as content creation (reporting, writing, developing expertise, etc.) can be in the traditional mass-media model, distribution is an even greater expense. Indeed, for newspapers, 33 percent of spending goes into distribution and production versus 14 percent for editorial.[35]

In the new-media world, the cost of distribution is dramatically lower—not only because publishers can by-pass the printing process but because they can rely on informal networks to spread news from one person to another, through email, texting, or social media. In fact, a Pew Internet Project survey found that 32 percent of Internet users in Philadelphia, Pennsylvania; Macon, Georgia; and San Jose, California, use social-networking sites to get local news.[36]

Cheaper Content Creation

Researching an investigative story often entails accessing and reading through piles of documents. Previously, only the biggest news organizations had the resources to sustain comprehensive reference libraries; now everyone has access to massive numbers of online documents and research sources, often regardless of where they are located. Bill Allison, a veteran investigative journalist and editor, recently recounted how he used to "spend days and days" going from the Securities and Exchange Commission to the Office of the Clerk of the House of Representatives to the Senate Office of Public Records to the Justice Department to track down Freedom of Information Act records.[37] "Now," he says, much of that information can be obtained online "with one search," making for huge savings of time.[38]

Technology has reduced the cost of reporting in a variety of less obvious ways. Finding sources is far easier and less time-consuming. A reporter can supplement her Rolodex with web searches or by reaching out to people through social networks. Cheaper video cameras have made it possible for more people to shoot footage; cheaper editing software has lowered the cost of pulling together video into a coherent story. In some cases, information is put in the public domain, and someone in the general public finds an inconsistency or error—and so contributes to the reporting effort, without getting paid or raising a media company's labor costs.

Direct Access to Community and Civic News

Consumers can now obtain relevant information without journalistic intermediaries. Previously, residents of New York who wanted to know which local schools had gotten positive evaluations would hope that a local newspaper reporter would ferret out the information *and* mention that one particular school they were interested in out of the hundreds. Now, those same New Yorkers can go to the Department of Education website and see reviews of every school in the city[39] or go to one of several citizen-run websites that link to the government's evaluations.[40] Government offices now use new media to directly interact with and provide information to citizens. Legislative representatives announce their votes to their Facebook followers. Presidential contenders answer questions submitted on YouTube. Various new apps allow citizens to track issues of importance to them.(See Chapter 16, Government Transparency.)

However, the Internet Has Not Solved Some of Journalism's Key Problems

Given the dazzling ways the web has improved information dissemination—and the continuing arrival of a new innovation seemingly every day—one might expect the Internet to have already solved all of the reporting gaps left by the contraction of newspapers. It has not.

Abundance of Voices Does Not Necessarily Mean Abundance of Journalism

There is no question that the Internet has brought consumers a profusion of choice: It offers countless news *outlets* (newspaper websites, TV news websites, web-only news sites, national and local news sites, news aggregators), a variety of *formats* (video, audio, text) that can be accessed by computer or phone, and ever-expanding *options for sharing* news (email, Twitter, Facebook, etc.).

But how does the Internet rank when it comes to local accountability reporting?

The Pew Center for Excellence in Journalism conducted a study in Baltimore to evaluate how the entire media ecosystem was working in a single city.[41] For one week, researchers tracked every piece of content supplied by every local news operation—"from radio talk shows, to blogs, specialized news outlets, new-media sites, TV stations, radio news programs, newspapers and their various legacy media websites."[42] On one hand, the study showed that Baltimore had a booming collection of news and information outlets. But Pew did not stop there. It analyzed the content, looking particularly at coverage of critical civic issues (e.g., the city budget), and found that 95 percent of the stories—including those generated by new media—were based on reporting done by traditional media (mostly the *Baltimore Sun*).[43] Yet, at the same time, those traditional media organizations were doing less than they had in the past. In 2009, the *Baltimore Sun* produced 32 percent fewer stories on any subject than it did in 1999, and 73 percent fewer stories than in 1991.[44] So, the original reportage being chewed over by these secondary outlets was likely thinner and not as well researched as it would have been previously. (See Chapter 1, Newspapers.)

Other studies have demonstrated the same phenomenon: the growing number of web outlets relies on a relatively fixed, or declining, pool of original reporting provided by traditional media.

> In 2009, Michigan State University researchers studied media coverage of municipal government in 98 major metropolitan cities and 77 suburban communities.[45] After evaluating 6,811 stories by 466 news outlets, they concluded that "citizen journalism" was doing a marginally better job covering local government than local cable television, but both were at the bottom of the heap—with most of the original news still being created by the traditional media: "For all cities, the dominant providers of news and opinion about city government were daily newspapers, weekly newspapers and broadcast television."[46] Traditional media sources were responsible for 88.6 percent of the news about city governments and 93 percent about suburban governments.[47] "This finding," the researchers warned, "should give significant pause to those who believe that the 'new media' will fill any gaps left by the 'old media.'"[48]

> Nate Silver, a statistician and blogger at the *New York Times*, recently did a search in Google News and Google Blog Search for the phrase "reported" after the name of a news outlet—as in, "the Chicago Tribune reported"—to see who was providing the underlying information chewed over by the rest of the Internet. Of the top-30 most-cited sources, 29 were traditional news-media outlets (the one exception being gossip site TMZ).[49]

> In Philadelphia, a study by J-Lab: the Institute for Interactive Journalism, which funds innovative web journalism start-ups, found a plethora of new blogs, hyperlocal sites, and budding collaborations—including 260 new blogs (at least 60 with some "journalistic DNA") and as many as 100 people working part time or full time to produce news about Philadelphia.[50] Yet despite that explosion of news "outlets," J-Lab researchers concluded that overall, "the available news about Philadelphia public affairs issues has dramatically diminished over the last three years [from 2006 to 2009] by many measures: news hole, air time, story count, key word measurements."[51]

> Researchers at Harvard's Nieman Journalism Lab looked at 121 distinct stories listed on Google News about attempts to hack into Google from China. They found that only 13 "contained some amount of original reporting" and only "one was produced by a primarily online outlet."[52] The other 100-plus stories were essentially rewrites, summaries, and links to or rehashes of reporting done by a handful of outlets.[53]

> The Knight Foundation's New Voices initiative found that most of its 55 local web-based news projects were providing (often very useful) hyperlocal coverage that had never been offered by metropolitan dailies before. But a study assessing these programs concluded that, "Rarely did they replace coverage that had vanished from legacy news outlets—or even aspire to."[54]

> A snapshot of the Huffington Post home page on January 8, 2009, illustrated a similar phenomenon: of 29 news stories, 23 were copies or summaries of journalism produced by mainstream media outlets. The others were based on public domain information (e.g., public press conferences, TV shows, etc.).[55]

Disappointing Financial Track Record for New Local, Online, Labor-Intensive Accountability Journalism

There has been an explosion of impressive local news websites in the last few years. Some were started by laid-off newspaper reporters, some by concerned citizens. Some are for-profit ventures, including the Alaska Dispatch, the Batavian, and the Arizona Guardian. (See Chapter 25, How Big is the Gap and Who Will Fill It?) Some are nonprofits, such as MinnPost in Minneapolis,[56] voiceofsandiego.org,[57] and the Texas Tribune. Several have broken even or appear to be on their way to doing so. (See Chapter 12, Nonprofit Websites.) In trying to get a head count, Michele McLellan of the Reynolds Journalism Institute at the University of Missouri compiled a list of more than 140 local news websites.[58]

Yet while journalistically many of the local news start-ups have soared, financially most have not gained traction. A 2010 survey of 66 of the most exciting online news start-ups—a mix of nonprofit and for-profit—delivered this sobering news: half of the organizations had annual revenue of less than $50,000, and three-quarters had annual revenue of less than $100,000.[59]

Even those that are breaking even are doing so on a scale that makes them unlikely candidates to fully fill the reporting gaps left by newspapers. A 2010 gathering of leaders of the top 12 local nonprofit news sites revealed that together they employed only 88 staff reporters. (Recall, more than 13,000 jobs in newspaper newsrooms have disappeared in just the last four years.) While foundations have contributed more than $180 million to local news start-ups over five years,[60] the Poynter Institute's Rick Edmonds estimates that budget cuts in traditional media have constituted a $1.6 billion drop in newspaper editorial spending *per year*.[61] The uneven math tells the story: billions out, millions in.

Part of the problem is that the new sites have not been able to generate enough page views to attract sufficient ad dollars. An FCC staff examination of three cities—Toledo, Ohio; Richmond, Virginia; and Seattle, Washington— found that not one of their local web-based start-ups cracked the top 10 websites visited by local residents. (See Chapter 21, Types of News.) In a paper on the economics of online news, the Pew Internet & American Life Project concluded that: "even the most established citizen sites are not in a position to take on the job of traditional news outlets."[62]

One study of 6,811 stories concluded that most of reporting came from traditional media. Another study looked at 121 distinct stories about attempts to hack into Google from China. They found that only 13 "contained some amount of original reporting."

The venture capital world—which funded much early and current Internet innovation—has been cool to local news start-ups. Esther Dyson, chairman of EDventure Holdings and an Internet pioneer, explains, "News start-ups are rarely profitable and, by and large, no thinking person who wanted a return on investment would invest in a news start-up."[63] She says that investors are more interested in low-cost ways of drawing communities together: "The way to attract their attention is to talk about a 'local Craigslist'—not local content. They're looking at things that revolve around user reviews."[64]

What about national Internet companies attempting to offer local coverage? AOL's Patch service has hired more local editor/reporters than any other media company in recent years: as of March 2011, its 800 sites employed about 800 reporter/editors.[65] Examiner.com, founded by entrepreneur Phillip Anschutz, has sites in 233 cities, employing 67,000 "examiners" who write on local topics. In November 2010, Examiner.com sites counted 24 million unique visitors and generated 68 million page views.[66] Both companies have spread their technology costs across the entire country, so local content contributors can post material without have to bear the cost of creating a new website.

But while these sites offer tremendously useful content, it seems unlikely that they will fill the gaps in labor-intensive accountability reporting at the city and state level. Examiner.com president, Rick Blair, says that to work financially the sites tend to focus on lifestyle topics, such as entertainment, retail, and sports, not investigative reporting.[67] And it is possible that the Patch formula is only commercially viable when it is applied to affluent towns of a certain size, its focus so far. (An AOL marketing page boasts, "Patch & AOL Local is in 800 of the most affluent towns across the US, where 70% of all big box stores are located.") [68]

In fact, AOL has said that since its business model would not sustain a more varied socio-economic range of Patch sites, it created a noncommercial adjunct, the Patch.org Foundation, "to partner with community foundations and other organizations to fund the operation of Patch news and information sites in communities that need them most: inner-city neighborhoods and underserved towns."[69] It remains to be seen whether AOL's approach will change with its acquisition of the Huffington Post, which also has been diving into the local space, using an effective formula relying on unpaid bloggers, news links, and summaries of news from other media outlets.

Having studied the new breed of news websites, Michele McLellan wrote that those websites often offer hyperlocal services that traditional media never did but, on the other hand, do not fill the gaps in reporting left by the newspapers, "The tired idea that born-on-the-Web news sites will replace traditional media is wrong-headed, and it's past time that academic research and news reports reflect that."[70]

Why Has the Internet Not Filled the Reporting Gaps Left by Newspapers?

The Great Unbundling (Consumer Choice)

Before the advent of the Internet, readers had limited say in how they received their news. For one thing, most of them lived in cities or towns with only one local newspaper. And for another, although they tended not to think of it this way, purchasing a newspaper meant buying a whole bundle of goods, even if they only wanted certain parts. Readers who only cared about box scores got a lot more, including articles about health, education, and city hall. This was not an onerous burden since the paper was so cheap—25 cents for a newspaper produced by hundreds of people each day was an incredible bargain—and consumers and society alike benefited from readers tripping over the occasional story about the mayor.

Newspaper editorial spending dropped $1.6 billion per year. Meanwhile, foundations have contributed $180 million toward the creation of local nonprofit journalism startups over _five_ years.

Most consumers were not conscious of it, but by selling all types of content in a bundle, newspapers had developed a cross-subsidy system. Readers buying the paper for the box score helped pay the salary of the city hall reporter. Ann Landers funded the Bagdad bureau. The horoscope helped pay for a cub reporter to attend every school board meeting.

Today, a reader can go to a website, or get a phone app, that only delivers box scores (and does so with the added value of pitch-by-pitch updates), never coming into contact with that article about city hall—let alone being drawn inadvertently into reading it. The bundle is broken—and so is the cross-subsidy. When people go to a sports website instead of buying a print newspaper, they have stopped contributing to a jerry-rigged system in which profitable topics subsidize unprofitable coverage. Some cross-subsidies still occur—websites still sometimes post articles they know will not attract much traffic (see Chapter 25, How Big is the Gap and Who Will Fill It?)—but web editors are exquisitely sensitive to which articles draw eyeballs, and resources typically shift toward those areas.

Free Riding

Unbundling makes apparent which articles or video clips are not carrying their own weight financially. It challenges us to consider why consumers are not more inclined to click on or pay for a certain type of content.

Markets usually respond to consumer demand. But what happens if consumers don't demand something they essentially need? Economists have long argued that certain types of goods are valuable to consumers, regardless of whether that is reflected in their spending.[71] News is one such "public good," meaning that it has certain characteristics:

It is deemed "nonexclusive," in that people can consume it, whether or not they pay for it. It is also "non-rival," meaning that one person's consumption of a news item does not make it unavailable for others to consume, as well. Public goods often confer benefits to society that are in excess of what the producer of those goods stands to gain—which economists refer to as "positive externalities."[72] A city hall reporter watching over budget spending may save taxpayers money, for instance. And a story about a school being torn down might spur citizens to act collectively to solve problems that led to the decision. The Knight Commission on Information Needs of Communities in a Democracy summarized the public benefits of local news and information as: contributing to the coordination of community activity, collective problem solving, public accountability, and public connectedness.[73] But, alas, economists teach us that people do not like to pay much for public goods. And when consumers do not pay, the market may respond by not providing.

Why would consumers not want to pay for goods that are so beneficial? The short answer is: because they do not have to. They can receive the information or the benefit of the information's creation regardless of whether they have paid for it, essentially getting a "free ride." Newspaper journalism that helps prevent corruption by aggressively covering city hall contributes to civic health, benefiting those who do not buy a newspaper just as much as the people who do.

Just because they have not paid for it, does not mean they do not value it. Consider a December 2008 series in the *Raleigh (NC) News & Observer* on the state's probation system. The three-part series established that 580 North Carolina probationers had killed people since the start of 2000,[74] which prompted the new governor to expand funding and fix the program.[75] The series occupied several staff over six months, costing in the range of $200,000 to produce.[76] The benefits of this accountability coverage were widely distributed across the residents of the Research Triangle area—yet the benefits were, by their nature, mostly unrecognized. Some citizens of Raleigh are walking around today, not murdered, but they will never know who the lucky ones were, let alone make the connection to why they were spared.

It has always been a struggle in American society to sustain certain types of journalism. Fear that pure consumer demand would not be sufficient to support a newspaper industry prompted the Founding Fathers to offer postal subsidies. (See Chapter 33, Print.) This is also evidenced by the fact that many American political magazines in the 20th century lost money, because they were unable to find enough paying customers to underwrite journalism about civic affairs.

Free riding has always been possible—with minor inconveniences, like having to get your friend to Xerox that interesting article he mentioned and hoping your neighbor watched enough of the evening news tell you what you want to know. But the Internet has made free riding far easier: most news websites are free; friends can send links to you with a click of the mouse; news headlines appear before our eyes, unsolicited, on portals like Yahoo or AOL; free news apps on mobile devices find and display news from around the Internet. It should come as no surprise, then, when young people these days say they do not feel the need to seek out news sources, because if something important happens "the news will find me."[77]

The problem is that if everyone gets the news without paying for it, media outlets do not make enough money and are therefore less likely to employ the reporters producing the information. Among new-media mavens, one of the most famous phrases of the Internet era is "Information wants to be free."[78] True, people want to distribute and receive information for free. But what this leaves out of the equation is the small matter of what it costs to dig out certain types of information.

Information may want to be free, but, it turns out, labor wants to be paid.

Some kinds of information will be provided to the public even without paid reporters making it happen. Movie listings will be posted by theaters, the mayor's ribbon cutting will be publicized by the mayor's staff. Other types of information—for instance, information that the mayor *does not* want publicized — may only come to light as a result of persistent reporting by a full-time professional.

And there's the problem in a nutshell: civically important content often costs a lot to produce; yet relatively few readers want to consume or pay for the material. High cost, low revenue—an economic model that will excite few publishers.

The Great Unbundling (Advertiser Choice)

Along with consumers, advertisers have benefited from the unbundling of content. Remember the saying attributed to department store executive John Wanamaker: "Half [the money I spend on] advertising is wasted; [the trouble is] I just don't know which half."[79] On the Internet, in most cases the executive *can* know which half he is wasting, and stop the foolishness. The media world has been transformed by the simple fact that web advertising is far more measur-

able than TV, radio, or newspaper advertising. Advertisers can see precisely how many people looked at a page with their message on it and how many clicked on that ad.

Google embraced this fact—and turned the advertising business model upside-down. Instead of asking advertisers to take the chance that enough readers will see their ad to make what they spend worthwhile, Google assumes the risk, offering a stunning promise to advertisers: you only pay us if someone clicks on the ad.[80] Imagine if the newspapers had said to car dealers, you only have to pay if someone comes to your car lot.

So what is the problem? The new advertising reality has commoditized advertising placement opportunities, driven ad rates down, and attracted dollars away from the sites that create the most labor-intensive types of content.

Downward Pressure on Internet Advertising Rates

As noted earlier (see Chapter 1, Newspapers), from 2005 to 2009, newspaper print advertising revenue dropped from $47.4 billion to $24.8 billion.[81] One might wonder whether newspapers could have offset this loss with online ad revenue if they had only grown their web traffic more rapidly. Well, during that same period, newspapers' online traffic *did* skyrocket—from 1.6 billion page views to about 3 billion page views,[82] leading to a $716 million increase in online ad revenue.[83] But, alas, print ad revenue dropped $22.5 billion during that time.[84]

PAGE VIEWS FOR NEWSPAPER WEBSITES
Average Monthly Page Views (in millions)

Source: Nielsen for Newspaper Association of America[85]
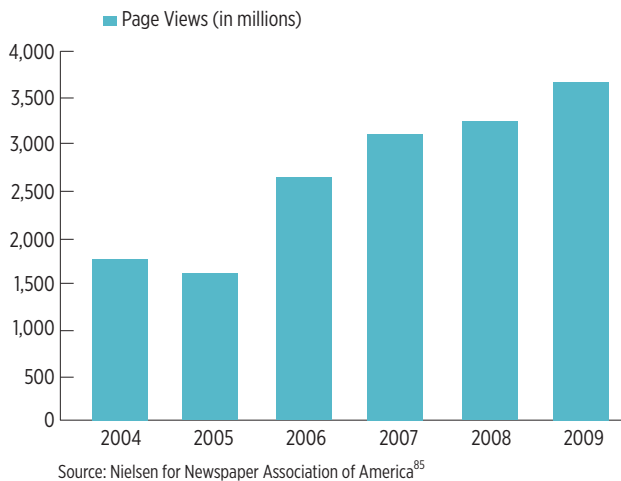
Online advertising rates mostly pale in comparison with ad rates for other media. In May 2010, a typical online ad cost about $2.52 per 1,000 viewers (CPM, or cost per 1,000 impressions).[86] If a blog has three ads on a page (a typical number), and generates 100,000 page views per month, those ads may produce $756 in monthly income. By contrast, the average CPM for broadcast television networks (primetime) was $19.74 in 2010.[87] In 2008, the average CPM for newspapers in larger markets was $19.72.[88] If that blog could charge TV or newspaper rates instead of Internet rates, monthly revenue would go from under $1,000 to around $6,000—from sustaining a hobby to creating a paying job. Newspapers' transition from print to online would have been much less painful if they could have replaced their print dollars with even digital dimes or quarters, instead of pennies.

RELATIONSHIP BETWEEN TRAFFIC, CPM AND REVENUE

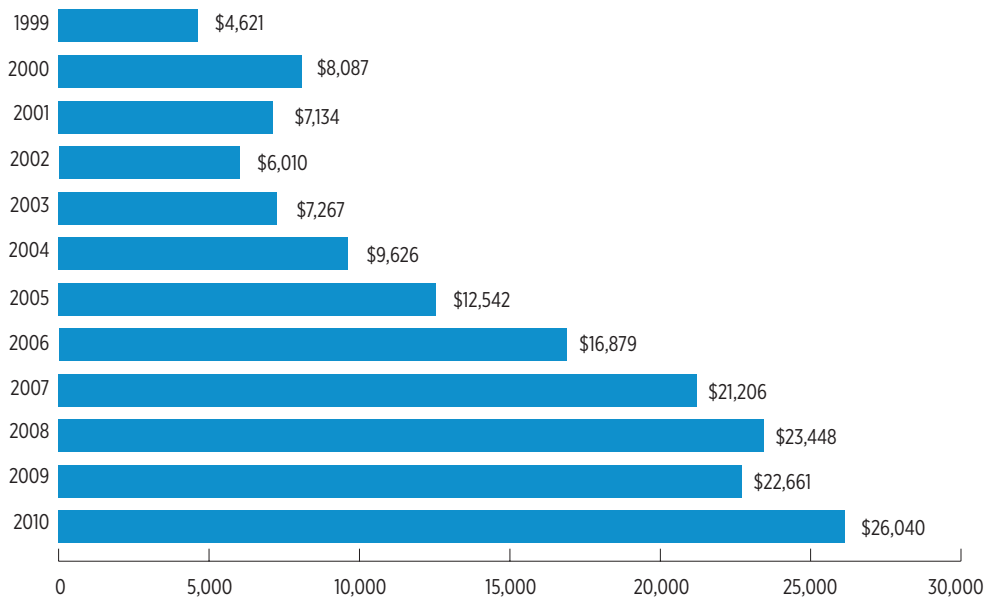| Monthly Page Views	Average CPM (assumes 3 ads per page view)							
	$1.00	$2.52	$5.00	$7.50	$10.00	$15.00	$20.00	$25.00
100,000	$300	$756	$1,500	$2,250	$3,000	$4,500	$6,000	$7,500
500,000	$1,500	$3,780	$7,500	$11,250	$15,000	$22,500	$30,000	$37,500
1,000,000	$3,000	$7,560	$15,000	$22,500	$30,000	$45,000	$60,000	$75,000
5,000,000	$15,000	$37,800	$75,000	$112,500	$150,000	$225,000	$300,000	$375,000
10,000,000	$30,000	$75,600	$150,000	$225,000	$300,000	$450,000	$600,000	$750,000

Source: Flatiron Media ; CPM=Cost per 1,000 impressions

The general softness of digital ad rates is compounded by a challenge those in the news business have always faced: advertisers generally do not want their products associated with controversy. That holds true on the Internet just as in traditional media. As Hal Varian, Google's chief economist, observed, "online world reflects offline: news, narrowly defined, is hard to monetize."[89]

There is some silver lining, however: Although the average ad rate on the Internet is $2.52 CPM, the average rate for large newspaper websites is $7—still a fraction of the ad rates for their print editions but at least higher than the Internet average.[90] Certain topics are so attractive to advertisers that websites that focus on them can fetch even higher rates. This is especially true for health and financial content, which is why a disproportionate number of the successful content websites have been in those sectors (e.g., WebMD, Everyday Health, CBS MarketWatch, the Motley Fool).

Persistently limp online ad rates were not what experts anticipated in the early days of the Internet. Some predicted that online ad rates would rise over time.[91] It was not a crazy theory. As consumers spent more time online, advertising dollars would follow them there, driving rates upward.[92] The theory turned out to be partly true: consumers do spend significantly more time online, and the amount of ad dollars has indeed grown steadily. (In fact, in 2010, advertisers spent more money online than in print newspapers.)[93]

INTERNET ADVERTISING REVENUE (IN MILLIONS) (1999–2010)

Year	Revenue
1999	$4,621
2000	$8,087
2001	$7,134
2002	$6,010
2003	$7,267
2004	$9,626
2005	$12,542
2006	$16,879
2007	$21,206
2008	$23,448
2009	$22,661
2010	$26,040

Source: Internet Advertising Bureau (IAB) Internet Advertising Revenue Report 2010[94]

But those who believed that this would lead to a windfall for content websites did not count on two factors.
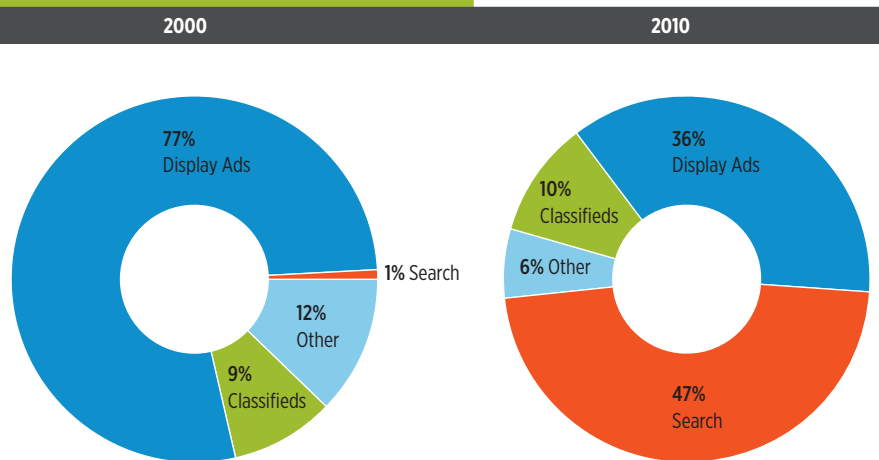
First, the volume of web pages grew exponentially. Google, the most popular search engine during the last decade, had an index of 26 million pages in 1998.[95] In mid-2008, Google indexers counted one trillion "unique URLS on the web."[96] More web pages, meant advertisers had more places to park their ad dollars, and the small number of media entities could not get away with charging higher rates.

Second, a huge and growing portion of online ad dollars went to search engines instead of to content sites. In 2000, search advertising generated one percent of online ad dollars.[97] By the first half of 2010, it brought in 47 percent of the total.[98]

Advertising Is Less Dependent on Content

In traditional media, advertisers always have been strategic about placing ads in a particular editorial context. To some extent, the editorial quality of a publication would have a "halo" effect: if a reader trusted and respected the local news-

INTERNET ADVERTISING BY TYPE

2000	2010

2000
- 77% Display Ads
- 1% Search
- 12% Other
- 9% Classifieds

2010
- 36% Display Ads
- 10% Classifieds
- 6% Other
- 47% Search

Source: Internet Advertising Bureau (IAB) 2010 Revenue Report[99]

paper, he would trust the car dealer advertising in its pages. But mostly, advertisers wanted to appear in proximity to certain types of editorial content in order to reach particular readers. An advertiser that wanted to market to 30-year-old women would advertise in *Glamour*, *Elle*, or another magazine catering to that demographic. A local advertiser would have few options but the local newspaper to reach residents of that community.

But using content as a proxy for reach was always a rougher science than publishers wanted to admit. The hardware store might well get its message in front of the man thinking of buying a lawnmower but it would be inadvertently marketing to many other people who had no interest in lawnmowers. The advent of directed search on the Internet has removed much of the uncertainty, allowing advertisers to get directly in front of the desired consumer at the optimal moment.[100] Where, in the past, car dealers would run TV promotions, knowing that only a small fraction of viewers were actually shopping for a car, now they can advertise on car websites or associate their ad with search phrases like "best subcompact car." This targeting ability is becoming more finely tuned by the day. Google places ads next to searches not only on the basis of the exact words in the search but also on the basis of patterns in consumers' previous behavior online—purchases made, websites visited, searches conducted.[101]

Thus, advertisers now can reach consumers more expediently without placing their message in an editorial context. Currently, only 36 percent of online advertising spending goes to display advertising (such as banner ads), the sort most likely to benefit content creators.[102] And of this relatively small amount, an even smaller portion goes to the sites that invest in content creation: about 16 percent of online display ads run on TV station, newspaper, and news and current events websites.[103]

Search engines have had a mixed hand in the fate of news websites, making them the subject of much debate. On the one hand, there is no question that they send significant amounts of traffic to news sites: between 35 and 40 percent of news sites' traffic comes from search engines.[104] In that way, they help news providers mightily. On the other hand, 44 percent of online news consumers look at Google News headlines—and then do not click to read the full stories.[105] They get the gist of the news, without visiting the site that employed the people who created that gist. In the olden days, when a consumer bought a newspaper, he or she would both scan headlines and dive deeply into a smaller number of articles. But it was fine with the newspaper if a reader only scanned some, since they'd purchased the whole newspaper. Hence, the paper would derive value from both scanners and deep divers. On the Internet, news sites only capture financial value from the deep divers (i.e. those who click).

Google has made some efforts to help newspapers and other content creators better monetize their efforts—for instance, the company worked with newspapers to create "flip pages" that allow readers to view newspaper content in a visually appealing bundle. On the other hand, consumers have many ways to avoid ads if they choose. For instance, a popular third-party application on Google's browser product Chrome strips out ads from sites that Chrome users visit, thereby depriving the destination sites of this crucial way of monetizing the content.[106] Several popular iPad apps create virtual magazines, displaying content from a variety of publications, while stripping out the ads. (See Chapter 5, Mobile.)

It Is Easier to Generate Page Views Without Investing in Journalism

Some of the ad dollars that media experts expected to shift from offline content creators to online content creators have instead gone to websites that repackage content but generally do not bear the main cost of its creation. Of the top-20 news sources online, as measured by Hitwise, a leading online metrics firm, seven are either pure aggregators (sites that primarily draw traffic by summarizing news unearthed by other publications or posting links to content on other sites) or hybrids (which summarize news and link out to stories).[107]

Consider the economics from the perspective of the newspaper: The publication might pay a reporter to work on a story that takes several weeks to research and write. When the story runs, it may or may not turn up as a top link in search engine results—most often it will not. (Items that are listed on the first page of search engine results, especially those at the top, get the vast majority of clicks.) At the same time, hundreds of other sites can list the headline, summarize the story, and comment on the original material and do quite well in search results if they meet other search engine criteria (such as the number of other sites linking to them). They then draw clicks and the associated ad revenue.

It is easy to see how, from a purely economic perspective, one could conclude that it is preferable to be the company telling others about content than the company creating it. On the web, it is extremely difficult for the company that invests in the creation of content to capture enough ad dollars or subscriber fees to pay for the labor-intensive journalism required. When *Rolling Stone* broke the story about General Stanley McChrystal criticizing Obama administration officials in the summer of 2010, it was big news.[108] AP ran a story about it, which was "tweeted" by NBC; soon Politico.com and Time.com printed the entire *Rolling Stone* story, prompting *New York Times* columnist David Carr to note, "a PDF of the piece the magazine had lovingly commissioned, edited, fact-checked, printed and distributed, was posted in its entirety on not one but two web sites, for everyone to read without giving *Rolling Stone* a dime."[109]

If that blog could charge TV rates instead of Internet rates, monthly revenue would go from under $1000 to almost $6,000—from sustaining a hobby to creating a paying job.

Search engines, summarizers, and aggregators are not the only operations that have managed to generate page views—and attract ad dollars—without investing in costly, labor-intensive journalism. "Content farms," such as Associated Content and Demand Media, pay small fees to writers who produce content on topics that appeal to advertisers—and rarely involve enterprise reporting.[110] Demand Media content generates 621 million page views per month globally,[111] and, prior to its acquisition by Yahoo! in May 2010, Associated Content (now Yahoo! ContributorNetwork) drew "about 16 million unique visitors per month, according to comScore numbers," and generated "1.75 billion page views" between its launch in 2005 and its sale in 2010.[112] Some of this content is quite useful; *USA Today* has begun using Demand Media for its travel tips section.[113] But it is rarely the sort of civically important reporting that newspapers previously did—and because writers are paid only a small stipend, the cost-per-page-view basis is a small fraction of what it would be for the content a newspaper produces.

To their credit, these companies—aggregators, summarizers, and content farms—have managed to build sustainable business models for at least some types of content creation. That consumers flock to their sites indicates that they are offering a valued service. Even when they pay writers little or no money, they are providing them other benefits, such as the opportunity to share their expertise and ideas with a large readership. But there may be an unintended casualty: this drives down pay rates for professional freelance writers, producers, photographers, and journalists. A Kaiser Family Foundation study about the declining coverage of global health issues reported:

> "Arthur Allen, a former AP staff writer and now an author and freelancer, said a prominent online publication recently dropped its rate from $1,000 to $500 a story. Another pays $300 a story. 'I asked why they are decreasing payment and they say, "Some people are writing for nothing,"' Allen said. 'It's a hobby for people who have other gigs…Certainly doctors and lawyers have a lot to say about things, but it's difficult for people like me who are journalists.'"[114]

Allen said that although *The Washington Post* will pay him up to $1,000 for a piece (and some publications pay even more), those stories can take two or three weeks to complete, so when you break it down to a per-hour basis,

the higher fee still does not amount to much. So, Allen thinks hard about story selection: "My journalism has become over the last year or two, picking low-hanging fruit and grabbing something that I feel I can do a relatively quick kill on," he said. Some freelancers who do not want to limit themselves to "quick kill" pieces try to supplement their income with money from foundations or advocacy groups, but both are in limited supply and the latter may come with ideological strings attached.[115]

Social media will continue to generate advertising-ready page views inexpensively. Facebook's 500 million users spend over 700 billion minutes per month on the site.[116] The Internet marketing and metrics company comScore concluded that if it were not for the sheer volume of page views on Facebook and MySpace, ad rates online would be 18 percent higher now.[117] Facebook and MySpace are doing nothing wrong. They attract the audience, and the ad dollars, because they are providing a highly desired service. But the easier it becomes for advertisers to reach online audiences without subsidizing content created by full-time reporters and writers, the harder it will be to sustain business models in which journalists and others involved in the content creation process actually get paid.

Then, there is the issue of outright copyright violation. Search engines don't automatically distinguish between a website that steals another website's content—copies it and pastes it into a new template without attribution—and the site where it originated (unless the violation is reported to the search engine, which will then remove it from search results). So, the site that stole the content can easily rank high in search results and monetize the content using ad networks or Google AdSense. A recent study found that 70,101 online news articles generated 400,000 cases of articles being printed without permission[118] — and, of course, none of the sites involved initially shared their revenue with the entity that had invested in creating the content.[119] In December 2010, Google announced that it was taking measures to crack down on content farms[120] and make it easier for content creators to notify them about piracy and less likely that such content could be monetized through AdSense.[121]

Hal Varian, Google's Chief Economist, concluded that the "online world reflects offline: the news, narrowly defined, is pretty hard to monetize."

When it comes to pirated video, Google has offered an intriguing solution. If a content creator notifies YouTube (which is owned by Google) that a pirated video appears on its service, YouTube then diverts any ad revenue generated from the pirating company to the original content creator.[122] This is even better than taking the material down, since the content creator earns some revenue. But, implementing such a system outside of YouTube would be far more complex. So far Google has not taken such action when it comes to pirated text-based articles that generate AdSense revenue when they come up in its search engines.

In sum, pre-Internet, most advertising spending went to businesses that created content—newspapers, magazines, radio, and TV shows. The majority of ad spending online goes to entities that do not create the content—search engines, summarizers, and aggregators. The earlier media system rewarded both the distributors and the creators of content; the new one primarily rewards those who find and distribute content. This does not mean that aggregators or search engines are evil or parasitic. It simply means they have found a way to make money locating and distributing content rather than creating it. They are not the villains of this new world; they are simply its main beneficiaries.

Fragmentation Slices the Pie into Smaller Pieces

On a local level, a handful of websites capture a majority of the traffic, and yet often they still do not attract enough ad revenue to sustain their business. Our analysis of the local sites in Toledo, Richmond, and Seattle indicates the difficulty of reaching a critical mass on a local level. The number-one site in Toledo, ToledoBlade.com, generated 2 million page views per month. A typical site with two million page views generates $15,000 per month, assuming an average effective CPM of $2.52 and three ads per page.[123] The number-four site, FOX Toledo, drew 73,408 page views, which typically would generate under $1,000 per month. Even if both sites succeeded in sustaining ad rates at double or triple the average, it would be extremely difficult to operate a newsroom on that kind of revenue. In addition, because they don't have the marketing clout of a traditional media company behind them, it is especially difficult for independent web sites to reach scale.

What is more, the ad departments of local news sites must now compete not only with each other but with national Internet companies that run local ads—even when they do not offer local content. If someone from Toledo

Pre-Internet, most advertising spending went to businesses that created content—newspapers, magazines, radio and TV shows. Now, the majority goes to entities that do not create the content—search engines, summarizers and aggregators.

visits Yahoo! News to read a national story, they may see a local ad. The ad market in Toledo is now split not only among the local content creators, but the national players capable of targeting local ads. Indeed, this is part of the reason that the lion's share of digital ad dollars is spent on a relatively small percentage of websites. According to the Interactive Advertising Bureau, since at least 2001, the top-10 companies have received at least 70 percent of online ad revenue.[124] These leaders include Google, Yahoo!, Microsoft, AOL, and Facebook.[125]

Newspapers' share of online ad revenue has actually fallen in the past few years, from 16.2 percent in 2005 to 11.4 percent in 2009, and PricewaterhouseCooper projects that their portion will shrink to 7.9 percent in 2014.[126]

Conclusions About the Internet

We disagree with those who claim that the Internet has provided us with a world of pajama-clad bloviators and parasitic aggregators as opposed to real reporters. In fact, the Internet has brought *improvements to* news and information ecosystems in a variety of ways:

> Unlimited space and lower barriers to entry have led to a greater diversity of voices and more choices for consumers.

> Links make it possible for any piece of content to point toward huge numbers of additional sources of information, allowing an interested reader to access a far greater depth of information.

> The everyone-is-a-publisher economy has allowed for the rise of a new commentariat, and a system that is arguably more meritocratic than before.

> Citizen contributions have enhanced the coverage of important topics, including weather events, disaster recovery, local zoning decisions, scheduling of community events, and the quality of public transportation.

> The cost of some types of reporting has dropped dramatically.

> Thanks to volunteer contributions, database-driven tools, and low-cost publishing platforms, hyperlocal reporting and news is now able to thrive like never before.

Yet it is also possible that while the Internet is doing all of the above, it is doing something else as well: undermining the business models that enabled legacy journalism firms to employ reporters, especially on beats that are costly to maintain. One can appreciate the incredible benefits of the web while still confronting head-on some of its more unfortunate repercussions:

> As of now, in many cases, communities now have more news distribution outlets and, simultaneously, less accountability journalism.

> So far, relatively few new websites have been able to create sustainable business models that would support significant hiring of reporters on a local level.

> Revenue from advertising has, up to this moment, not been sufficient to replace losses in print advertising revenue or sustain news start-ups because:

> > Rates are low and showing no signs of rising.

> > Ad dollars are getting scooped up by a small group of advertising venues.

> > Advertisers have less and less need to advertise next to content as a way of reaching their targeted audience.

> > Internet companies (and would-be investors) can generate monetizable page views in far more cost-effective ways if they avoid hiring of large numbers of reporters and expensive freelance writers.

These limitations do not nullify the benefits, but it does mean that while the Internet solves many problems, it does not solve all of them.

This still leaves us with a crucial question: even if the new-media system has not filled all of the gaps so far, does that mean it will not or cannot? With digital technology and business models changing rapidly, is it not possible—even likely—that the problems existing today will be solved tomorrow? In the next chapter, on mobile platforms, we look at some of the new ways that publishers are trying to charge for content and improve their advertising businesses. And in Chapter 25 (How Big is the Gap and Who Will Fill It?), we look holistically at the likelihood of the commercial sector evolving in ways that will lead to the gaps in accountability reporting getting filled.