MAPPING DIGITAL MEDIA:

DIGITIZATION AND MEDIA BUSINESS MODELS

By Robert G. Picard





Digitization and Media Business Models

WRITTEN BY

Robert G. Picard¹

Media businesses need to be sustainable, but their traditional sources of income are, in many cases, drying up. In this paper, Robert Picard explains why this is happening, and what media outlets can do about it.

Too many media firms are trying to sell 19th and 20th century products in the 21st century. They need to recognize the changing environment and embrace change.

Digitization cuts costs by simplifying production. More content can be made and distributed by more enterprises and individuals than ever before. However, while the internet creates opportunities for online content, it yields only limited monetization for news and general information providers.

This is because it disaggregates magazine and newspaper content, thus stripping it of the bundled value it creates in print. At the same time, international and national news have become ubiquitous and available on many platforms at little if any cost to the end-consumer.

Yet there is still a role for content creators and aggregators (newspapers, magazines, broadcast channels and internet sites) to make selections and provide quality-control. This role is badly needed by consumers, who are overwhelmed by news, information, entertainment, and marketing messages.

Faced with this cornucopia, consumers need to become more literate about information and entertainment processes and sources.

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Mapping Digital Media

The values that underpin good journalism, the need of citizens for reliable and abundant information, and the importance of such information for a healthy society and a robust democracy: these are perennial, and provide compass-bearings for anyone trying to make sense of current changes across the media landscape.

The standards in the profession are in the process of being set. Most of the effects on journalism imposed by new technology are shaped in the most developed societies, but these changes are equally influencing the media in less developed societies.

The Media Program of the Open Society Foundations has seen how changes and continuity affect the media in different places, redefining the way they can operate sustainably while staying true to values of pluralism and diversity, transparency and accountability, editorial independence, freedom of expression and information, public service, and high professional standards.

The **Mapping Digital Media** project, which examines these changes in-depth, aims to build bridges between researchers and policy-makers, activists, academics and standard-setters across the world.

The project assesses, in the light of these values, the global opportunities and risks that are created for media by the following developments:

- the switchover from analog broadcasting to digital broadcasting
- growth of new media platforms as sources of news
- convergence of traditional broadcasting with telecommunications.

As part of this endeavour, Open Society Media Program has commissioned introductory papers on a range of issues, topics, policies and technologies that are important for understanding these processes. Each paper in the **Reference Series** is authored by a recognised expert, academic or experienced activist, and is written with as little jargon as the subject permits.

The reference series accompanies reports into the impact of digitization in 60 countries across the world. Produced by local researchers and partner organizations in each country, these reports examine how these changes affect the core democratic service that any media system should provide—news about political, economic and social affairs. Cumulatively, these reports will provide a much-needed resource on the democratic role of digital media.

The **Mapping Digital Media** project builds policy capacity in countries where this is less developed, encouraging stakeholders to participate and influence change. At the same time, this research creates a knowledge base, laying foundations for advocacy work, building capacity and enhancing debate.

The **Mapping Digital Media** is a project of the Open Society Media Program, in collaboration with the Open Society Information Program.

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I. Introduction

Digitization is the process of changing content production, storage, distribution, and consumption from an analog to a digital base. Its most important characteristic is that it changes these bases from physical form to binary electronic form.

Within media, the process has been underway for some five decades, first appearing in the production of newspapers, magazines, and books and then moving to television and audio production. Its use reduced the costs and time of production and provided enhanced storage capabilities for original content. Improvements in storage of binary information soon pushed digitization into the distribution and consumption of media, leading to the emergence of videotext and teletext, and the switch from traditional audio and audio-visual recording to CDs and DVDs.

In itself, digitization does not produce a new way of communicating, as occurred when writing appeared, when photography allowed a moment of time to be preserved or the capture and recreation of sound became possible. What it does do, is alter the processes by which those activities occur and the means of their distribution. The digitization of media and communications is not isolated, however, and must be understood as part of a broader transformation that has digitized many types of industries, enterprises, and activities because of advances in computing and telecommunications.

Together, these developments have combined media, computing, and telecommunications industries to create *convergence* that combines and integrates various means of communication.² These in turn increase flexibility and speed, create economies of scope and integration that change the economics of content distribution, and shift greater control to consumers by allowing them to select, filter, search, control, and participate in multiple forms of communication.

^{2.} T.F. Baldwin, D. Stevens McVoy, and C. Steinfeld, 1996, pp. 3-7.

II. Forcing Change on Business Models

Although these changes had some effects on media businesses in the first two to three decades of digitization, the business models of media remained relatively stable because newspapers, magazines, and books continued to be printed on paper, recording of audio and video for retail distribution remained as a physical good, and all these types of products continued to be distributed and sold in traditional ways.

That situation has evolved rapidly since the mid-1990s, when changes in software, applications and connection capabilities began to transform computer networking systems that had previously required specialist knowledge and skills into the relatively easy-to-use internet that we know today. The internet has now become a general purpose technology that can be used in a wide variety of ways and is transforming business and the economy on the same scale as older technologies such as mechanization, steam engines, and electricity.³

The technological networking of society affects all business and is fundamentally changing the strategies of all types of firms.⁴ It has certainly affected the business models of so-called "legacy media" (print and analog broadcasting). It is bringing many new entrants into their markets, creating new types of content, and providing a wider variety of ways to access news, information, and entertainment. It has broken monopolistic and oligopolistic control over distribution mechanisms, and empowered consumers to seek and share content in new ways and to become producers as well as consumers of content.⁵

Consequently, existing business models of established media are losing their effectiveness and need reconsideration. This in turn requires an understanding of the nature and elements of business models.

^{3.} R.G. Lipsey, K.I. Carlaw, and C.T. Bekar, 2005, especially pp. 82–130.

^{4.} P. Evans and T.S. Wurster, 1997, pp. 4-7; C. Shapiro and H.R. Varian, 1999, pp. 1-18.

^{5.} L. Küng, R.G. Picard, and R. Towse, 2008, pp. 9–11, 67–68, 170–177.

III. What is the Central Value?

Business models conceptualize the underlying business logic of an enterprise. They reveal company competences, how a firm creates value through its products and services, what sets it and its offerings apart from the competition, how it undertakes its operational requirements, how relationships are established and nurtured with customers and partner firms, and how it makes money.⁶

Many argue that the business models of media are broken because they do not produce the revenue that they did in the last two decades of the 20th century, and that new sources of income or the enhancement of existing sources are now needed.

The fundamental problem for media firms, however, is not that the revenue portions of their business models are ineffective, but that too many of them are trying to sell 19th and 20th century products in the 21st century. And in many cases they are trying to do this without changing the value they provide, or the relationships within which they are provided.⁷

Traditional media contents were created in technical, economic, political and information environments that no longer exist. If they are to evolve and prosper, media companies must revisit the foundations of their businesses to ensure that they are providing (a) the central value that customers want, and (b) their products and services in unique or distinctive ways, and in ways appropriate for the contemporary networked setting.

^{6.} R.G. Picard, 2011, pp. 32-34.

^{7.} R.G. Picard, 2010, pp. 131-135.

IV. Challenges to Different Media Industries

Although digitization affects all media, its effects on business models are not universal. Print outlets, for example, are now struggling with digital distribution and consumption challenges. The pursuit of cost savings and flexibility through digitization is pushing book, magazine, and newspaper publishers toward *e-readers* as consumption platforms.⁸

Moving from physical to digital distribution and consumption will reduce current industry costs by about half if printing is stopped and physical distribution is ended. (See Figure 1, p. 11.) It will allow producers to capture more of the value produced by the content. The decision when to end print production will be difficult for publishers because print and digital products of the same company are joint products, not independent products. Hence the decision requires careful economic and financial modelling. It is likely that many will make the decision to shift fully to digital platforms over the next two decades, as the combined effects of declining print readership in developed nations, improvements to and rising adoption of e-readers, tablets and other screen devices, and the costs of physical production and distribution make it more difficult to cover print costs without significant price increases.

The impetus to cut costs is not only about reducing operating costs; it is also driven by the fact that print media penetration has been declining for a number of decades.¹¹ This has led newspapers and many magazines to shift from the 'mass media' to the 'niche media' category, and reduced the incentive of many advertisers to use them to reach the public.

^{8.} *E-readers* are handheld devices for reading digitized content, such as e-books, newspapers and documents. They may have wireless connectivity, enabling them to download content directly from the internet.

Operating costs for production and distribution alone are about 40 to 45 percent for newspapers, but they account for about 80 percent of the
investment costs in facilities and equipment (Brody & Picard, 1997). In the magazine industry, production and distribution costs are about 70
to 80 percent of total costs, because most magazines outsource production.

^{10.} R.G. Picard, 2003, pp. 134-136.

^{11.} L. Bogart, 1989, pp. 6–7; L. Becker and K. Schoenbach, 1989, pp. 353–361; J. Brody and R.G. Picard, 2003, pp. 17–25. Penetration is related to how many people in the population receive the publication. In Europe and North America, circulation was relatively stable in the last decades of the 20th century but populations increased significantly. These trends progressively reduced the penetration of print media.

Although the business model for the press that evolved in the 19th and 20th centuries is still in place, its effectiveness is diminishing. This model will need to be augmented and partly replaced in order to provide a sustainable basis for the continued operation of newspapers and magazines. Over time, consumers will increasingly be asked to pay higher prices as advertising revenue falls, and publishers will seek new ways to use their title to generate other revenue, including sponsorships, e-commerce, and provision of services to other firms.

The internet provides some opportunities for online content, but it has yielded only limited monetization for news and general information providers. This is because it tends to disaggregate magazine and newspaper content, thus stripping it of the bundled value it creates in print. This issue has not been well understood because print media have tended to be seen as information distribution platforms.

In reality, as information *services* that are distributed *via* the platform, they are much more complex than that. The real economic value is created by editors choosing what will best serve the interests of their audiences from among the enormous amount of news and information available, and organizing (that is, bundling) it in a way that moves their readers fluidly through the content. Content is created by journalists within the frame of reference of the intended publication and audience.

The value created by these services and bundling activities diminishes online because the logic of online media is to *disaggregate*, forcing users to select on the basis of personalization and search functions or to group stories together by topic, in a way that diminishes the value created by editors and journalists in print. Because of the ways that websites, aggregators, and search engines are being used by the bulk of online news and information seekers, and because websites have difficulty maintaining exclusive information due to cross-platform dissemination, linking, and forwarding capabilities, it is likely that commercial news websites will in future be used primarily by publishers to obtain marketing benefits, as platforms for delivering aggregated content to e-readers, and for search capabilities of publishers' archived material.

Although the online model works for many types of specialized publication which receive online subscription and advertising information and general information based on advertising, it is not working effectively for new provision—except for a few financial publications and national newspapers of record in economically advanced countries. It has not solved the challenges of funding local journalism or in-depth, investigative reporting.

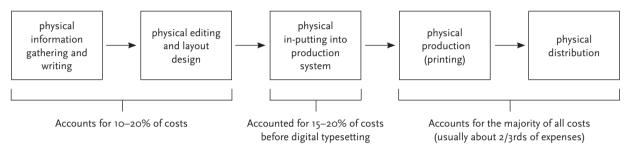
The business model of internet advertising is especially problematic because it requires hundreds of thousands of regular users before it can begin obtaining a significant revenue stream. Increasingly, publishers are adding scores of online revenue streams including payments for some content, provision of web hosting services for local advertisers, and sales of tickets to local events. To date, however, these have not provided sufficient funding to maintain the levels of journalistic activity previously provided by print newspapers.

Digitization and convergence have created multiple ways to access content on mobile devices. Across the world, mobile devices such as smart phones and internet-equipped mobile devices are replacing personal

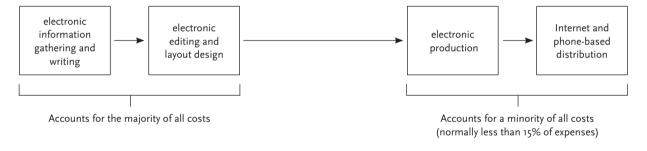
computers as the primary means of digital content acquisition.¹² In many parts of the world—especially Asia, Africa, and Latin America, where the cost of computers is high and electrification low—individuals who have never had personal computers are skipping that platform altogether and moving to mobile platforms. However, these changes are not likely to lead to the death of the PC in the near future, because PCs remain necessary for business, education, health, and media production.

Figure 1.
Production Process and Cost Differences in Print and Digital Production

News Production in the Analog Context



News Production in the Digital Context



^{12.} M. Castells, M. Fernandez-Ardevol, J.L. Qiu, and A. Say, 2006, pp. 245–248.

V. How Digitization Changes News Production and Costs

The cost-saving effects of digitization result from its simplification of production processes. Consequently, more content can be produced and distributed by more enterprises and individuals than ever before. This is illustrated by the effects of digitization of news production and distribution, shown in Figure 1 on the previous page.

Digital news gathering reduces some of the need for physical travel to locations of events and information; the writing of news stories and provision of photographs is achieved through digital files that flow seamlessly into the editing and layout systems. As these are already in digital form, the third step in the analog process is skipped altogether, which allows direct cost savings. Production for news websites, e-readers, tablets, and mobile applications is done with computer technology and the results are distributed via telecommunications technology on the internet or mobile platforms. These production and distribution savings are enormous, and reduce overall costs by 80 to 90 per cent.

Even more significantly, digitization changes the locations where costs are incurred so they are no longer associated with the distribution platform, and are invested primarily in content production itself.

Today, most established news and information providers have implemented digital technologies in the pre-production and distribution processes of their business. They are now engaging in a variety of digital production and distribution activities, but most of them still maintain their physical production and distribution activities. Thousands of new enterprises worldwide, however, are now operating as digital-only operations and their numbers are growing.

VI. Effects of Digitization on Output

Media industries have always been characterized by a high oversupply of news, information and entertainment offerings, and by bottlenecks in the distribution networks.¹³ Getting content through these bottlenecks has always been an important determinant of success.

Digitization and convergence are actually increasing the oversupply of content and reducing some of the monopolistic control over distribution systems. This creates difficulties for some existing providers who have benefited from monopolies over distribution systems, because they have to adjust to a power shift that gives more control to the users of content.

Digitization also brings many new producers to the market because digital content is less expensive to produce and relies on software that integrates functions which were previously only available by employing skilled professionals. (FrontPage, for example, makes it possible for those with limited IT knowledge to produce and administer websites; Apple's Final Cut Studio makes it possible for users to edit video using professional techniques; and Wavepad does the same for audio.)

This means that professional and amateur writers, musicians, film makers and video producers no longer require the services of large and expensive organizations to produce their content.

By gaining the ability to produce, more individuals are able to express themselves creatively and to have their creations read, listened to, or viewed by more people. It also means that domestic production in smaller countries is less dependent on services from enterprises in larger countries.

This production capacity, combined with new distribution opportunities, creates a number of ways to avoid traditional bottlenecks. These have been important in creating opportunities for content such as African films to reach audiences they could not effectively reach before, and thus create markets and bring new voices into the motion picture industry.¹⁴

^{13.} Picard, 2011, pp. 7-9.

^{14.} See "Lights, camera, Africa", *The Economist*, 16 December 2010. Available at http://www.economist.com/node/17723124?story_id=17723124 (accessed 24 June 2011).

As neo-professional and non-professional production increases, so does the need for audiences to judge the quality of content provided. Consequently there is still a role for content aggregators such as newspapers, magazines, broadcast channels and internet sites to make selections and provide a level of quality-control that is embodied by their brand or brands. Because of the public's ability to interact with content provision today, they are now able to play roles as quality indicators. Aggregated audience recommendations can also be used as a means of providing a quality indicator. Individuals who have read, viewed, or listened to content are increasingly asked to rate it and their scores are combined to yield quality ratings.

These curation or quality-control functions are central to business models because they produce additional value to the content itself and are often the basis from which financial value is generated through revenue activities.

The ability of the public to comment on content, redistribute it through social networks, and provide knowledge to news and information is also transforming traditional media operations by providing new kinds of content that were not available with 'legacy' media. In this regard there is a democratization of the ability to express ideas and opinions, but there is also a cacophony of voices offering widely varying levels of discourse, not all of it intelligent and civil. However, it also serves as a recommendation function that steers friends and colleagues to content that is not readily available through mass channels, thus helping create traffic necessary for many online business models.

^{15.} Although the term 'aggregator' is often used to refer to internet-based firms such as Yahoo!, MSN, etc., the so-called legacy media were all aggregators. Newspapers drew information and content from many sources they trusted for quality (news agencies, syndicators, companies, and community information sources) and bundled them together. Broadcasters aggregated programs, films, and news from multiple independent sources. All organized bundling of content for public consumption thus represents aggregation of content that has been screened for an acceptable level of quality.

VII. Where is Digitization Taking Us?

Digitization and convergence are altering media and society by creating a networked society that operates at many levels (personal, community, national, global). This process alters traditional social relations and changes the roles of legacy media. How it will ultimately change social life is not yet fully apparent, but it is clear that emerging roles and types of relationship reduce the roles of—and the power previously exercised by—social institutions such as the state, church, parties, unions, clubs, and associations.¹⁶

Members of the public are today reducing participation in civic, religious, trade, and political organizations and pursuing their interests through other—often less formalised—interest groups and virtual communities that replace many social interactions that were facilitated by traditional social institutions. These changes appear to be altering the influence of those institutions on attitudes, norms, and public opinion formation, and increasing the influence of new interactions and less formal networks. Media organizations that once enjoyed significant control over the agendas of public discourse are also losing influence, as people increasingly become content redistributors and creators themselves.

Video and audio on-demand systems are maturing. As more capacity is built into broadband networks, these systems will continue taking audiences away from streaming broadcast and cable/satellite channels. Magazines, books, newsletters, recordings, videos and other material of interest to small, narrow audiences that could not be profitably produced and distributed in the analog age will become viable in the digital age. This will increase choice for audiences.

The future will be particularly difficult for news media because general international and national news and information have become ubiquitous and available on many platforms—radio, television, internet, and scrolling billboards—at little if any cost to the end-consumer. By taking away one of the traditional functions of newspapers and news agencies, this endangers their survival, unless they can find new functions and roles. This, of course, has implications beyond their sustainability: few would dispute the notion that a sufficiently funded, independent and diverse news profession is fundamental to democracy.

R. Putnam, 2000, p. 1528; M. Castells, 2001, 116–136; M. Bakardjieva, 2005, pp. 165–188; J.A.G.M. Van Dijk, 2005, pp. 165-171; C. Fuchs, 2007, pp. 299–334.

International and national news and information still aggregate large audiences across media and in multiple units of media, so that their costs can be borne by advertising or offered as part of a package of information services. However, financial difficulties are currently being experienced by regional and local news enterprises, particularly in North America and Europe.

Media outlets in towns of about 100,000 inhabitants are currently viable with the traditional business model, but large metropolitan newspapers and broadcasters are challenged because much of the content they provide is also available from national providers and digital sources, and because they have difficulties providing local news for suburban towns and multiple neighborhoods. Consequently they have been losing significant audiences and advertising, and are desperately searching for new revenue.

At the other end of the size spectrum, small neighborhoods, villages, and towns tend to be underserved by news media because traditional advertising revenue has not been sufficient to sustain operations.

These challenges have led many to suggest subsidies, grants, or community funding models for media outlets in smaller communities and metropolitan areas.¹⁷ Foundation grants, donations from viewers and users, grants of use of facilities and IT infrastructures operated by secondary and higher educational institutions, volunteer labor, paywalls, advertising, and sales of subsidiary products are all being used. In most cases, multiple revenue streams to reduce reliance on advertising income are being sought. These new revenue sources help overcome the limitations of the traditional advertising- and audience size-based mass circulation model. It is still unclear, however, whether such media can generate sufficient support from these sources to sustain themselves over time.

^{17.} B. Nordenson, 2007; A. Currah, 2009, pp. 145-148; L. Downie Jr. and M. Schudson, 2009, pp. 72-94.

VIII. Key Policy and Legal Issues

If digital communication is to flourish, society needs to guard against control over distribution by internet, cable, and other telecommunications providers which might seek to use the capacity and advantages of these systems to promote their own interests. There is a need for policy and law to preserve equal access to and use of these systems for individuals and enterprises, and for various forms of communication to be treated fairly and impartially. Some of this enabling public policy will come through telecommunications policy; other elements will come through enforcement of competition law.

Cable system operators, for example, may choose to primarily carry channels in which they have an ownership interest or that can pay the system for carriage, thereby making it difficult for competitors' channels or small socially useful channels to gain access. Internet service providers may try to limit the amounts of certain types of content a consumer may receive—video, for example—in order to reduce their need for additional investments in capacity.

Policy mechanisms may need to be put in place to prevent control of these distribution systems. These may include

- specific protective measures to ensure that competitors' content is not excluded as a means of unfair competition
- net neutrality regulations
- requirements that certain types of content or content providers must be carried on distribution systems.

Because the means of distribution are now global rather than national, conflicts occur worldwide over taxation of content and how to handle content deemed subversive, offensive, or otherwise undesirable. Domestic and international law regarding taxation, the freedom to disseminate and receive, and mechanisms to censor or punish were created in the analog age, when borders, importation processes and domestic distribution systems were more controlled.

Although we live in the digital age, policies and laws are not aligned to the new realities of digital products such as personalization, global distribution, and fluid networks. Most policies and laws on taxation, trade,

libel, privacy, obscenity, and copyright date from an era when there were clearly identifiable producers, publishers and broadcasters who created and disseminated information—and could be held responsible for it. Today, content is not disseminated merely through traditional channels for which policy processes and procedures were established, but is transported through constantly changing networks in which identifiable and anonymous users choose whether or not to access content, reconfigure and retransmit content, and create content of their own—thus gaining power over the content themselves.

Another critical issue is to ensure that mechanisms exist for content creators to benefit financially from their labor. While there are economic and moral prerogatives for these protective mechanisms, these must be balanced against the social benefits brought by the flow of information and ideas. Consequently, copyright and related rights protection needs to be balanced with fair use and other provisions that protect use by educational institutions, libraries and protected groups, such as disabled persons.

Many provisions to protect the business models of audio and visual producers have been put in place internationally and domestically over the past decade. The "related rights" have been enshrined in copyright law mechanisms, including the Digital Millennium Copyright Act in the United States, the Copyright Directive in the European Union, the World Intellectual Property Organization Copyright Treaty and Performances and Phonograms Treaty.¹⁸ Newspaper publishers are arguing for similar protection against aggregators, social networks and bloggers in the U.S. and a number of European states, and there are efforts to obtain a similar type of protection for broadcasters against retransmissions.¹⁹

^{18.} Digital Millennium Copyright Act, http://thomas.loc.gov/cgi-bin/query/z?c105:H.R.2281.ENR; EU Copyright Directive, http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32001L0029:EN:HTML; WIPO Copyright Treaty, http://www.wipo.int/treaties/en/ip/wct/; WIPO Performances and Phonograms Treaty, http://www.wipo.int/treaties/en/ip/wppt/trtdocs_wo034.html (accessed 24 June 2011).

^{19.} The proposed treaty on the protection of broadcasting organizations is designed to halt unauthorized reception and redistribution of broadcast signals by creating a new internationally recognized "related right". See http://www.wipo.int/meetings/en/doc_details.jsp?doc_id=77333 (accessed 24 June 2011).

IX. Key Issues for Media and Consumers

Media firms and industries need to recognize the changing environment and respond aggressively to the new milieu by embracing change, and innovating their business models and products to make them sustainable. Many firms and industries have invested heavily in protectionist ventures to preserve their existing model, such as instituting distribution zone controls on DVD and placing digital rights protections on CDs (some of which have been deemed to violate consumer protection and IT laws and policies). Although these may delay change somewhat, investing in innovation will provide greater long-term benefits.

Media companies also need to learn to cooperate more with other media and non-media firms. Historically, they have preferred to control fully all resources and activities in the value chains, but the complexity and costs of maintaining large fully owned conglomerates has made many inefficient. The range of technologies and distribution and interactive platforms available in the 21st century require that firms should increasingly see their business activities as cooperative processes requiring coordination and interdependence with external firms, and with their customers.

Standing isolated and alone—at arm's length from the customer—is no longer viable. Television channels that have traditionally made it difficult for viewers to contact journalists and respond to stories will need to become more open and find better ways to interact, as must newspapers and other news media. Not only permitting audience reactions and complaints, but facilitating and learning from them, is necessary. Finding ways for audiences to more effectively contribute information and photos/videos to stories and suggesting ideas of stories and events they deem important need to be standard practices.

In the new environment, consumers face the daunting prospect of being overwhelmed by the amount of news, information, entertainment, and marketing messages being thrust at them. If they are to cope with this cornucopia, they need to become more literate about information and entertainment processes and sources, and develop their capabilities to select and filter content using both technological and non-technological means, and to take more responsibility for their choices. They need to consider issues such as:

- 1) *The reputation of the provider*: Is the creator or distributor known, and do they have standing as a respected or recognized provider?
- 2) *The motivation of the creator*: Why has someone created this content? As a creative activity? As a journalistic activity? As a professional or amateur activity? To attack or defame?
- 3) *The quality of the content*: If it is information or news, what is its veracity or accuracy? Is it at least from a reputable source? If it is entertainment, what levels of creative, performance, and production standards does it achieve?
- 4) *The appropriateness of the content*: For whom is the content appropriate? Should it be withheld from children or others in the home?
- 5) *How to filter content*: How can search technology choices, personalization software, content advisories, and parental controls be utilized?
- 6) *Deciding what content to pay attention to*: How much time should be spent on news, information, entertainment, and private communication?
- 7) Deciding what content to pay for: Determining what the media and content budget will be, and how it should be divided among the many possibilities. What is necessary for basic participation as a member of society? What can be spent on fun and entertaining content?

In today's environment, the media, consumers, and policy-makers all have to re-establish their roles and functions in communication processes, recognizing how digital communication has changed those roles, how content is created and provided in society, and how society pays for this content.

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Mapping Digital Media is a project of the Open Society Media Program and the Open Society Information Program.

Open Society Media Program

The Media Program works globally to support independent and professional media as crucial players for informing citizens and allowing for their democratic participation in debate. The program provides operational and developmental support to independent media outlets and networks around the world, proposes engaging media policies, and engages in efforts towards improving media laws and creating an enabling legal environment for good, brave and enterprising journalism to flourish. In order to promote transparency and accountability, and tackle issues of organized crime and corruption the Program also fosters quality investigative journalism.

Open Society Information Program

The Open Society Information Program works to increase public access to knowledge, facilitate civil society communication, and protect civil liberties and the freedom to communicate in the digital environment. The Program pays particular attention to the information needs of disadvantaged groups and people in less developed parts of the world. The Program also uses new tools and techniques to empower civil society groups in their various international, national, and local efforts to promote open society.

Open Society Foundations

The Open Society Foundations work to build vibrant and tolerant democracies whose governments are accountable to their citizens. Working with local communities in more than 70 countries, the Open Society Foundations support justice and human rights, freedom of expression, and access to public health and education.

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