

The changing online landscape

From free-for-all to commercial gatekeeping

Eszter Hargittai

Introduction

Each day, millions of people across the world turn to the Web to find information about countless topics. Given the vast amount of material available online, users rely on intermediaries to channel them toward content. Whether through the use of search engines, directory listings, or links supplied by favorite destinations, people often rely on content aggregators and third-party sites to help them find information of interest. The majority of these intermediary sites are for-profit ventures. Does the commercial nature of these sites influence what types of content are most easily accessible to users? Is all content on the Web created equal? Or are there ways in which some materials online get more exposure than other content regardless of relevance and quality? And do such differences limit the level of content diversity that is realistically within the reach of most users? When considering the Web's implications for a global civil network society, it is important to recognize the institutional factors that may influence how users benefit from this global medium.

The mass diffusion of the Internet across the world has led many to speculate about the potential effects of the new medium on society at large. Enthusiasts have heralded the potential gains resulting from use of the technology suggesting that it will reduce inequality by lowering the barriers to information, allowing people of all backgrounds to improve their human capital, expand their social networks, be more direct participants in the political process, search for and find jobs, have better access to health information, and otherwise improve their opportunities and enhance their life chances (e.g. Anderson *et al.*, 1995). Some have gone as far as to say that the Internet will lead to "universal liberty," a new overarching tolerance and the "restoration of ethics" (Barlow, 1997). In contrast, skeptics have warned against the potential costs of such a technology due to its ability to overwhelm us with often useless information (Rochlin, 1998; Shenk, 1997) and isolate us from our social networks leading to loneliness and possibly even depression (Nie, 2001; Nie and Erbring, 2000).

Historical studies (Carey, 1988; Marvin, 1988; Pool, 1983) suggest that understanding how technologies are adopted involves two levels of analysis. First, we need to look at users and what characteristics at the individual level shape

how different segments of the population adopt a medium. Second, we must recognize that the institutional structure of a communication medium is not preordained, rather, it is situated in a particular economic and legal environment. Consequently, it is wrong to make blanket claims about the Internet's potential implications for society without considering the myriad of factors that influence how technologies are adopted in society. In this vein, it is also incorrect to assume that simply having access to the Internet will improve people's life chances. There are numerous institutional factors that influence how a communication medium diffuses across the population and to what uses it is put. From hardware manufacturers to content creators, from federal regulators to local government policy-makers, from university administrators to corporate managers, lots of institutional players are contributing to the emerging shape of the new medium. In this chapter, I focus on one institutional level variable, namely, the evolution of business interests online and how this influences people's use of the medium.

Studies have looked at how people use the Internet (for a review, see DiMaggio *et al.*, 2001) and in particular what types of content users view online (e.g. Howard *et al.*, 2001). There is a separate body of literature that looks at how people use information retrieval systems and, in particular, how people search for information on the Web (for a review of this literature, see Jansen and Pooch, 2001). However, these two areas of inquiry exist in isolation from each other. There has been little discussion of how people's online actions may be influenced not only by their interests but also by their abilities to find various types of content online (Hargittai, 2002). Does the way in which content is organized, presented, and distributed online influence people's ability to find their way to material on the Web? In this chapter, I look at the evolution of point-of-entry sites and the most popular search engines online to show how various business strategies have shaped the ways in which content is presented to users and how these business decisions influence users' everyday online actions.

Much of the promise of the Internet for global communities is based more on the person-to-person communication possibilities afforded by the medium rather than the information retrieval aspect of the network. However, in order to participate in civil society and find networks of interest, users need to have the ability to find the relevant types of groups and communities with which they want to be involved. In this respect, the nuances of information retrieval become an important component of who may be able to find and join communities and how far reaching these interactions can be. In this chapter I look at what processes mediate what online information reaches users.

The changing online landscape

The promise of the Web

Billions of Web pages are available on the Web for public use (Bergmann, 2002; Lake, 2000). Any individual or organization with the know-how to create a site

can contribute content to the public Web. The technicalities of making such content as available to users as the most popular Web sites are more or less the same. The Internet has the potential to create arenas for more voices than any other previous communication medium by dramatically reducing the cost of the replication and distribution of information. Writers, musicians, visual artists no longer have to rely on large production agencies and distributors to get their work out to the public. Politicians and activists have the potential to reach citizens without having to go through media giants or the difficulty of pamphleteering step by step impeded by geographical limits.

The facility associated with the use of the network – both with respect to posting and retrieving information – has led to much enthusiasm about its potential to connect members of marginalized groups, to give voices to those without many resources, and to provide information to those in remote locations lacking access to more mainstream media outlets. By allowing a vast reduction in the replication and distribution costs of a product – whether text-based, audio, video, or multi-media – the Web puts product dissemination within the reach of the individual. This reduces the salience of the gate that functions between the creator of information and its materialization. Not only can a person create a product easily, it is also possible to make numerous copies of it available at very low cost. Moreover, because it is no longer necessary to transport these items physically, it is also nearly effortless to allow access to the product from various geographic locations.

The challenge of reaching audiences

Information abundance sometimes exacerbates the problem of attention scarcity. Ironically, even people who have recognized the importance of attention scarcity have suggested that any individual will be able to sidestep organizations and corporate packaging in an attempt to receive attention (Goldhaber, 1997). In contrast, I emphasize that attention scarcity leads individual creators of content to rely on online gatekeepers to channel their material toward users and leads users to rely on such services to find their way to content on the Web. Web services that categorize online information – search engines, point-of-entry sites – can be considered gatekeepers on the World Wide Web.

The term “gatekeeper” refers to points that function as gates blocking the flow of some material while allowing other information to pass through (White, 1950). Studies on industries that make cultural products (Hirsch, 1972; Lopes, 1992; Peterson and Berger, 1975; Powell, 1985) have explored the role of gatekeepers in influencing the type of products that are produced and distributed on the market. With previous media, the costs of production were so high that a vitally important gatekeeping step concerned the decision about what products should be produced. Individual creators of cultural products had to go through both producers and distributors of their products to get attention on the market. The final link in the distribution chain – supermarket rack jobbers, disk jockeys,

movie critics, book review editors – can be a key figure in allocating people’s attention to material. Although there may be less emphasis on these intermediaries in the online world when it comes to producing and making available content, the final step of reaching audiences remains a crucial part of garnering attention for one’s material.

Although there may be numerous high-quality sites on the Web, there is no guarantee that anyone will find their way to them. The central concern is no longer what is produced, but what consumers hear and know about. Accordingly, gatekeeping activity still occurs online, but now takes place at the level of information exposure. Its location has shifted from the decision about what should be produced to control of what materials get to consumers and of what material they become aware. In this vein, it is important to distinguish between content that is merely present on the Web in contrast to content to which users are easily exposed. “Available” content is material that is present online but which should be distinguished from “accessible” content which is realistically within the reach of users.

The rise of search engines and portal sites

Due to the ease with which users could add content to the Web, thanks to the rise in the number of users, and as a result of an increasing number of organizations embracing the Web as a communication tool, the amount of content available online has risen exponentially. In 1995, there were approximately ten thousand Web sites (Prettejohn, 1996); by 2003 this number had grown to more than thirty-five million (Netcraft, 2003). Not surprisingly, services that help users find their way to content of interest are crucial to the Web’s ability to be a useful tool for people.

As the amount of Web content skyrocketed, search engines became increasingly important in sifting through online material. The first search engines appeared in the mid-1990s and several of them came out of research universities (see Table 5.1 for dates and information about origins). In many cases, academic research settings sponsored their creation and their one goal was to help people better navigate Web content.

Initially, these sites functioned in one of two ways. Some provided the option of openly searching the Web’s content (e.g. WebCrawler and Lycos) while others organized information into Web directories and people could access content by clicking on categorized links (e.g. Yahoo). The former relied on computer programs whereas the latter were manually compiled. At this point the one goal seemed to be to feature interesting and high-quality content. In time, the ventures left academic settings and became profit-seeking commercial enterprises.

Another source of popular portal sites were the default home pages that came up during the use of the most popular browsing software applications, Netscape Navigator and Internet Explorer. At first, those sites offered little more than software upgrades, but soon they grew into much more than a place to download

Table 5.1 The launch date of some major search engines and their original institutional affiliations

Search engine	Launch year	Original affiliation
Lycos	1994	Carnegie Mellon University
WebCrawler	1994	University of Washington
Yahoo!	1994	Stanford University
Altavista	1995	Digital Equipment Corporation
Excite	1995	Excite, Inc.
Infoseek	1995	Private
HotBot	1996	Wired Ventures
Google	1998	Stanford University (Google, Inc. by the time of launch)

an application. In 1998, the Microsoft Corporation made a conscious effort to consolidate all of its online ventures into one site at MSN.com, creating a massive one-stop point-of-entry site (Broersma, 1998).

Strategies for profitability

Government support for media content is rare in the United States. (Although the Web is an international medium, all of the most popular search engines and portal sites originated in the United States, thus the focus on that one country.) This left the burden of financing these online ventures to other potential sources. The model in the 1990s was to turn to corporate sponsorship. Alternatives could have included individual subscription fees or funding by private foundations. Most online services were funded through advertisements, by venture capitalists, or through corporate cross-subsidization where the profitable division of a company covered the costs of the online undertaking. In order to legitimate funding, Web sites had to attract and keep visitors and encourage them to stay and revisit frequently.

To achieve this, search engines and portal sites expanded their repertoire of services beyond simply pointing people to content elsewhere on the Web. Instead, they changed their business models to the goal of keeping users on their sites as long as possible. By contracting with large content providers they offered sports information, entertainment news, current events, and many other services (e.g. free email accounts and space for personal home pages) all under one roof. As Lycos openly proclaimed: "The Company seeks to draw a large number of viewers to its Websites by providing a one-stop destination for identifying, selecting and accessing resources, services, content and information on the Web" (Lycos, 1998).

The online landscape had clearly changed. For example, contrast the launch of Lycos by academics and the launch of Yahoo by students in 1994 with the

launch of Go.com in 1999 as a joint profit-seeking venture between the Disney Corporation and the Infoseek Corporation. In just five years the commercial nature of search engines and big portal sites became unmistakable. The focus was no longer to simply offer guidance to the rest of the Web and point users to other sites. Instead, the goals of the newer sites became to keep users on their own territory as long as possible maximizing revenue from advertisements presented to users while on the host site.

However, no one such site could ever offer access to all of online content. In fact, any one search engine is only able to index a small percentage of the Web and even combined they can only account for a portion of online material (Lawrence and Giles, 1999). This means that only a fragment of what is publicly available online is realistically within the reach of users. If a site is not indexed or does not get pointers in a Web directory it can easily fall into oblivion, never to be seen by any users.

According to one survey, 85 percent of users have ever used a search engine (Pew, 2002) suggesting that the majority of Web users turn to content aggregators at least part of the time to locate material online. By 1999, search engines and portal sites dominated the list of most popular Web sites, garnering traffic from millions of unique visitors each month. Often users are locked into whatever portal is the default setting when they buy their computers. Research by Netscape in 1998 showed that 50–60 percent of users did not change their default browser homepage (Guglielmo, 1998) leaving them with a prepackaged site from a provider. America Online constitutes a special case in that AOL users are not only presented with a very specific AOL-sponsored content box when they first log on, there are other proprietary AOL services that users have to sidestep to find Web sites not related to the service provider.

All in all, what service provider one uses and, accordingly, what content first shows up on one's browser has a potential significant effect on users' online actions. This phenomenon can be summed up by the term: *default homepage advantage*. Most users do not choose their default homepages – the computer manufacturer, their service provider, or their employer or library does. Many users do not change the settings, leaving the default homepage advantage in the hands of corporate entities. The goal of these actors is to benefit from driving users' eyeballs to particular content whose prominence they can influence via their default homepage advantage.

The implications of commercial interests online

To understand whether different types of content are given equal opportunity to reach audiences, we must consider how sites achieve good rankings on search engine result lists and prominent positions on portals and directories. For the most part such decisions are proprietary information and companies do not disclose the details of their search engine algorithms or how they make decisions about directory listings. Nonetheless, it is possible to collect some information

about site practices and get some idea of the role of commercial interests in how content is categorized and presented online.

The strategies described here do not pertain to explicit graphical advertisements displayed on Web pages. Rather, they all involve the role of financial incentives in search engines and directory placements. There are several ways in which sites can achieve good positioning by paying a fee (this is often referred to as pay-for-placement). Most search engines now have various sponsored programs where site owners can purchase a particular position after certain specified search terms. For example, one can contract to be placed in the list of "Sponsored Links" (e.g. on Google in 2003) or "Sponsor Match" (e.g. on Yahoo in 2003) after users run a search on a particular term. However, these "sponsored link" designations are sometimes quite ambiguous on search engines and even when they are clearly noted users do not necessarily notice them or know that they are the result of behind-the-scenes financial arrangements. Sites vary considerably in how prominent they make the fact that a particular result came up because of sponsorship and not necessarily because of overall relevance to the search query.

Undoubtedly, the entry of the private sector into the Internet world encouraged its wide spread and the growth in online content. Search engines and portal sites assist millions of users every day in finding information online. So why is it a problem that commercial interests sometimes guide the content selection on popular sites? The concern is that search engines that are guided by profit motives may point people away from the most relevant and best-quality sites in favor of those that have paid the highest bids for placement on the results page regardless of their quality and specific relevance to the search query.

Analyses of large-scale search engine usage data suggest that users mainly rely on the first page of results to a search query. A study analyzing almost one billion queries on the AltaVista search engine showed that in 85 percent of the cases users only viewed the first screen of results (Silverstein *et al.*, 1999). Web users' habits have not changed much over the years. Another study (Spink *et al.*, 2002) compared data on the use of the Excite search engine from 1997, 1999, and 2001 and found that the mean number of results pages users looked at had decreased over time. The data in this study also show that the majority of users rely on simple queries without the use of advanced search features (e.g. use of multiple terms in a query, the use of Boolean operators or quotes around terms to limit results).

These findings suggest that users heavily rely on sites for presenting them with information rather than using sophisticated search techniques to fine-tune their queries. This implies that information prominently displayed on portal sites – whether selected because of high content value or for commercial reasons – has a good chance of being the destination of visitors. If users do not possess advanced know-how about how content is organized and presented to them online then they are especially at the mercy of what content sites decide to feature prominently and make easily accessible to them.

Sites spend significant resources on optimizing their content to show up as results. In fact, an entire industry has sprung up around "search engine optimization", offering advice on how companies and others can best ensure that their Web sites climb to the top of search engine results. In contrast, the sites with the most relevant content may be posted by a non-profit organization or an individual on his or her own initiative and only appear far down the results list because the owners of such sites do not necessarily have the resources to optimize for search engine positioning. In fact, free Web-hosting services which non-profits and individuals are more likely to use are known to be discriminated against in search engine listings (e.g. search engines place much less emphasis on large sites such as Geocities that provide free Web site space, rarely ranking them highly on results; moreover, users tend to question the reliability of content on these sites which leads to even less traffic). So the overall concern due to the prominence of commercial interests on the Web is not that users will unknowingly be roped into purchasing information they could otherwise obtain for free – although this may happen as well – but that they may not find what they are looking for or may miss the best available information because those resources are crowded out by the profit-seeking ventures.

Commercial sites will often rise to the top of result lists despite not having the relevant information. A search on Overture – which is an openly pay-for-placement search engine – for something as specific and non-commercial as the "museum of modern art" will yield eight commercial results before listing <http://www.moma.org> which is the museum's own site (this search was performed in January, 2003). And although Overture may not be a widely used search engine, it has deals with several of the most popular search engines to feature its results on their pages (e.g. in 2003, Yahoo!, MSN, AltaVista, Dogpile, and Lycos all featured Overture results prominently on their results pages with varying levels of disclosure about this partnership). This example shows that financial incentives do play an important role in what content users see prominently on the most popular Web sites.

Undoubtedly, the evolution of search engines and portal sites continues. Like other media (Piirto, 1994), Web sites also evolve over time as use patterns and the media landscape change. Content aggregators develop new strategies to remain important players in the industry. Google was a relatively late entrant into the search engine market yet gradually gained a sizable share of users with as many as 30 percent of searchers turning to its services five years into the company's inception (Sullivan, 2003). As of this writing, Google does not allow commercial considerations to affect its main search engine results. Nonetheless, Google also showcases ad-supported content on its results pages. Moreover, portal sites which contract with Google for their searches – such as Yahoo! and MyWay – display Google's ads from its AdWords program in ways different from those on Google's own site. For example, on MyWay, the results show up right above the regular results and the words signaling that these are "sponsored listings" are in very small font and unobtrusive.

So although Google's own site may not engage in some of the practices that raise concerns outlined earlier, a large number of users still depend on sites that feature ad-supported content before information that may be more relevant to their needs. Moreover, Google – like any other search engine – does have the ability to censor certain sites without users knowing about it. Local versions of Google in countries other than the US have been shown to engage in such content exclusion (Zittrain and Edelman, 2002) and some such cases have been documented for its American version as well. To be fair, Google has engaged in these exclusionary practices due to legal pressures and has developed a method to document and make public such legal reasons for censorship (Gallagher, 2002). Nonetheless, these are additional examples of ways in which search engines may manipulate to what content users have access.

Strategies for non-profits

Given the many ways in which commercial sites have advantages in the online landscape when it comes to gaining an audience – from the ability to employ search engine optimization experts to having the resources for paid search engine placements – non-profit content creators are faced with a challenge when seeking to reach a user base. This section outlines some strategies that do not require large monetary resources yet do contribute to visibility and encourage exposure.

First, it is important to recognize that having a large number of visitors may not be the primary goal. In many cases it is likely more important to reach relevant users instead of numerous Web surfers who are not interested in the site's content; thus it may be best to focus on the quality of the visitors instead of the quantity. If the site is for the online presence of an offline organization then there must be some information about membership and interested parties. If the site is a stand-alone enterprise then the site creators need to judge from their content and from gathering information about initial users to figure out the target population.

Second, it is important to figure out what other resources exist on the Web that would cater to similar users. This is important for two reasons. On the one hand, it is probably not advisable to spend large amounts of resources to replicate content that already exists. On the other hand, it is important to identify potential allies. Some search engines include in their algorithms information about how many and what types of other sites link to a Web page (e.g. Google's search algorithm works this way (Brin and Page, 1998)). The more links a Web page gets and from the higher-profile sites, the higher it gets ranked on some search results listings (Walker, 2002). So it is in the interest of like-minded non-profit content providers to join forces and cross-link, thereby contributing to the prominence of all involved in the linking. Once site owners identify other sites of interest, it may be a good idea to contact their maintainers and establish cross-links whereby each site points to the other. It may also be beneficial to include

a link to the welcome page of the site from every other page on the site. In addition to the importance of this to search engine rankings, such clear navigational hints on pages aid the usability of the Web site.

Third, the organization or group must make sure that the content on the site is regularly updated. There are two separate reasons for this. On the one hand, visitors will be more likely to keep coming back if they know they can expect fresh content. On the other hand, providing up-to-date materials boosts the frequency with which search engines will index a site. Search engines have programs – often referred to as robots or spiders – that crawl the Web's content to update their databases with what is available online. These robots tend to pass by sites that are frequently updated more often than other sites (Hiler, 2002). Ideal in this case would be to include a blog or Weblog on the site with nearly daily updates. A blog is a frequently updated site with entries most often presented in chronological order (Stone, 2002). Various software programs exist to automate much of the process, requiring very little to no technical expertise. The entries on blogs do not have to be lengthy additions, they can be no more than simply pointers to other content online. The advantage of a blog is that it is relatively easy to maintain, it can have an interactive component, it does not have to include the addition of much content at any one time, and it can boost the rankings of a site if frequently updated (Hiler, 2002).

Fourth, allowing users to become actively engaged with site content can boost popularity and encourage loyalty as users become more directly involved. An interactive section on a site in the form of a Web forum can allow for this. However, such an interactive component may be complicated or expensive to launch and maintain. A viable alternative is to start an electronic discussion list. Users can sign up and receive emails from other participants. The site creators can make sure that they post periodic updates about site content on such a list, prompting people to visit the site for updated materials. Such lists are especially crucial for groups and organizations whose main mission lies in connecting people on an ongoing basis. For those users who are not interested in such frequent communication, it is also a good idea to offer the option of an announcement mailing list. On such lists only the list owner or list manager has rights to post a message. Such a list can be used strictly to update subscribers of upcoming or recent events, additions to the Web site and other related services.

Finally, it is important to recognize the power of word-of-mouth recommendations in spreading information about sites and online communities. If users receive periodic updates that include content potentially relevant to non-members they should be encouraged to forward the messages and draw in new users. To this end, it is important to identify clearly the Web site in every message that is sent out. Moreover, it is also worth investing in a personalized domain name, which are now available for a small fee. (Domain names are the .com, .org, etc. names used on the Web to easily identify Web sites.) The information about a site can be communicated easily and quickly, preventing spelling mistakes and mistyped characters that would result in dead ends for those seeking to reach

a site. Moreover, the Web site address should be prominently featured on all communication materials of the group or organization (whether weekly email updates or hard-copy print resources).

At the organizational level, a possible strategy to sidestep commercial influence would be to create a non-profit portal or search engine where commercial interests do not play a part in determining content (Hargittai, 2000; Schuler, 2001 and 2002). In addition to keeping it commercial-free, it would be important to make the search algorithms openly accessible and transparent. One problem with existing search engines is that the algorithms they use are proprietary, leaving users in the dark about what rules guide the selection of the content they see (including possible exclusions as noted earlier). Unfortunately, there is a considerable limitation to these proposed avenues: even if such non-profit services did exist, there is no guarantee that anybody would know about them given the difficulty in attracting attention to a Web site, especially one without commercial backing.

Conclusion

Although seemingly neutral, search engines and directories systematically exclude certain sites in favor of others either by design or by accident (Introna and Nissenbaum, 2000). Commercial interests underlie the most popular Web sites and those to which users turn to find their way to online content. Non-profits lack many of the resources that nowadays seem essential to obtaining the necessary exposure for reaching users. The implications of this for diversity of content online is that sites presented by non-profits and individuals lacking resources will have less of a chance to reach audiences and users may not find the most relevant information in response to their needs.

Given the current state of online content organization and presentation, users must be educated about the myriad of commercial incentives that influence search result listings and directory placements. They have to be conscious of the fact that the most prominent results are not necessarily the most – or the only – possible sources online in response to their query. Users also have to learn how to do more refined searches and how to turn to a more diverse set of resources online in order to avoid the sidetracks that result from commercial interests. Although the Web does offer all users the ability to contribute to online content, all content is not created equal when it comes to reaching users. It is essential to keep this in mind when considering the Web's potential for giving voice to marginalized groups and its ability to bring together people into effective communities.

Part II

Snapshots of community practice

Community Practice in the Network Society

Local action/global interaction

Edited by
Peter Day and Douglas Schuler