

Micro Economics



Gatekeeping Economics

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..... It has become fashionable among Internet and Web watchers to notice threats on the horizon to the open Web. For example, in garish colors, *Wired* magazine's September 2010 issue declared the open-access Web dead. Jonathan Zittrain's 2008 book, *The Future of the Internet and How to Stop It*, developed a related thesis in great detail (as well as much more).

Economics tends not to take such an alarmist approach to the future of the Web, viewing it with more equanimity or acquiescence, depending on your perspective. In this column I want to illustrate that approach by discussing a specific practice, gatekeeping, which is an anathema to many openness advocates.

Gatekeeping encompasses two related activities. In one case, a vendor controls and manages a user's access to proprietary content, charging a fee for access. Famous recent practitioners include Rupert Murdoch, whose company, News Corp, owns the *Wall Street Journal*. His company does not allow unrestricted viewing of online articles from the *Journal*. From time to time Murdoch publicly mutters a threat to block search engines from indexing his site if such blocking could lead to more revenue.

In a second type of gatekeeping, a vendor uses proprietary code to control and manage a user's, developer's or advertiser's experience. The most famous practitioner of this approach is

Bill Gates. Recently, Steve Jobs, whose rules for iPhone application developers change frequently, has been getting all the attention for restrictive practices.

Let's take a closer look.

The Web and gatekeeping

Some facets of the Web preclude gatekeeping and some do not. This should not be news to Web watchers, but making this point requires a review of what the Web's development involved, and what the Web enabled.

The first key creation behind the modern Web was technical—namely, nonproprietary software to permit links and hypertext. Tim Berners-Lee had mostly worked out the basic elements by 1992, when he invented and deployed HTML, HTTP, and the URL.

The second key creation was the World Wide Web Consortium, which governs and manages these technical tools' evolution. Founded in 1994, the W3C has upgraded the software's capabilities over the years, as well as adding XML to its arsenal of standards.

The W3C kept the code uniform everywhere. That accomplishment is often taken for granted. The consortium held the Web together against proprietary attempts to fork the code during the browser wars, for example.

The widespread and uniform Web made the costs of sharing existing files quite low. What had been a cumbersome operation no longer was. If a

document was already in digital format, webservers and linking technologies made it extraordinarily inexpensive to retransmit it multiple times to anyone with a browser.

That brings up the Web's second and more subtle effect: Easy-to-use browsers lowered accessibility costs. That is, the Web's widespread diffusion lowered the costs of accessing existing information placed on a webserver. Anyone with a browser could get to those documents, and, as it turned out, almost everyone got a browser—they either bought one or got it as part of their operating system, whether they had wanted it or not.

Although anyone with a webserver could potentially reach a large audience at low cost, the Web's creation did not change the costs of creating information. Newspapers, magazines, and other news outlets found those costs were still high. So did a large range of retailers who built webpages from scratch.

The Web's creation did not lower the costs of finding files either. That required the invention of a lot of indexing tools and search engines.

Where gatekeeping thrives

Gatekeeping arose easily and quite naturally in some activities, while facing big hurdles in other activities. It arose especially among revenue-generating activities, such as retailing goods and services. If information complemented

the key economic action, gatekeeping was easy; vendors simply did not ship a good unless a user paid.

Ticket purchases illustrate the trend. It did not take long to remove travel agents from most train, plane, auto, and hotel purchases. Web technology allowed users and vendors to deal with each other directly.

A related innovation, which we might call the *inexpensive automated intermediary*, arrived quickly. After a firm set it up, a user (or purchaser) could easily query a database for seats or rooms (or just about any object). These services extended into many other areas, such as vacations, concerts, theaters, and restaurant reservations, not to mention the inventory-tracking systems at Fedex and UPS.

To a more limited extent, electronic retailing also exploited complementarity between sharing information and routine retailing, once again, because the gatekeeping was easy. This has turned out to be especially true for goods such as books, clothing, and household gadgets.

After the dot-com implosion, a lot of this still remained. The catalog industry, in particular, continues to evolve these technologies in new directions.

Virtually all these types of firms make their sites open on a limited basis. For advertising and marketing purposes, they want to be searched by potential buyers, just not in any way that threatens their ability to do gatekeeping. Gatekeeping helps to raise revenue.

Information markets

The economics of the Web is more complicated for firms that can create unique information. Two fundamentally different models have competed in information markets.

In one model, an information provider formats the presentation of information, selling advertising space to another party. These sites want search engines to find them. This model involves little gatekeeping of the user. Much of the open commercial Web operates this way.

In the other model, an information provider sells passwords to users. The passwords either allow unlimited access to a wide range of material, or they allow the vendor to track usage and require incremental payments roughly proportional to the material delivered and received. The passwords are a form of gatekeeping, and these sites generally do not allow search to threaten that gatekeeping ability.

Vendors can charge serious subscription fees for passwords when the information is unique enough that users are not tempted to go to the free advertising-supported alternatives. During the dialup era, AOL had both models figured out. It made lots of deals for exclusive rights to proprietary and unique content. Once its proprietary site became a focal site for social networking and community building, it became hard for any of its users to move off the site, even in the face of advertising a user found unpleasant.

AOL's later decline does not prove anything about the merits or problems with the walled garden strategy. The company was done in by two other matters: its ill-conceived merger with Time-Warner, and the lack of a viable transition to broadband.

More recently, the *Wall Street Journal* has had a bit of success providing unique coverage of financial matters. Differentiation is important to success: do not look for WSJ.com to develop its sports page. Similarly, many sports teams have started gatekeeping for deep coverage of team matters. They can charge their most passionate fans for access to interviews and other material that goes beyond widely available information, such as sport scores.

In most other news markets, in contrast, gatekeeping had a hard time surviving because it was not valuable. This outcome should be blamed on competition among many news outlets with similar material. If one vendor tried to restrict access with gatekeeping activity, another vendor could offer the same

information for free, thereby attracting another eyeball for their advertisers. Users tended to go to the latter, undercutting the former.

This outcome arose because the cost of sending files to one more reader is nearly zero, which makes it tempting for competitors to charge nothing and sell advertising. If that attracts large numbers of users from the gatekeeping site, it renders any gatekeeping strategy unprofitable.

Tradeoffs

Web idealists seem disappointed with users who are happy to surrender to proprietary services. Economics asks: Why is this so surprising?

Twitter can illustrate the issue. Until recently Twitter could not be systematically searched by Bing or Google or any other search engine. Twitter's management did not make the service open in this sense.

Did this lack of openness matter to users? Frankly, it seems as if it did not. Plenty of subscribers and users returned to Twitter stream of tweets and did not care whether it had become open to search engines. Indeed, why should a user care at all?

Twitter has now cut a deal with Bing and Google, who pay Twitter a fee to have access to real-time feeds of text. Twitter's refusal to be searched without a fee is rather understandable. With its size, the service can make a small buck licensing access to its feeds to the search engines. I am not saying such licensing will benefit users or alter the quality of their experience in any way. Rather, it is not surprising that Twitter's management aspired to cover its costs this way.

Apple's iPhone and iPad platforms went further, illustrating another type of action. They manage APIs for applications while protecting the brand by policing developers at the same time. Once again, economics asks: why is this so surprising? For obvious branding reasons, the platform's management wants to keep pornography off the

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platform. To be sure, the heavy-handed control that keeps porn off a platform also can be extended selfishly.

The firm refuses to make it easier for developers to support applications on the iPhone and Google platforms, kicking Flash off its system, for example. Their rules also prevent developers from supporting independent advertising networks on their own, increasing dependence on Apple. Recently Apple backed off from some of these restrictions, allegedly due to government

investigation of potential anticompetitive actions.

Steve Jobs' behavior is not surprising, but it is ironic. After all, Bill Gates behaved similarly more than a dozen years ago.

So it goes

No economic law ever said gatekeeping had to win or lose in markets. Sometimes services are more useful and profitable when they use open protocols, such as Web technologies, and

sometimes not. It depends on what users accept and where users find their value.

More to the point, the open Web is not on its deathbed at all, nor are proprietary strategies making much of a comeback. Both strategies have been around for a long time, and will continue to be. So it goes.



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