

A Converged Regulatory Model for Search Engines?

he facts¹ say it all: search engines are a ubiquitous phenomenon. Over 80% of users rely on search engines to search for information and believe that search engines are the best way to find information. Nearly



With search engines being such a vital part of the consumer experience of the Internet, **Nico van Eijk** asks if there is room for a regulatory regime which covers them

70% consider the search results reliable (a mere 19% do not trust search engines). Search engines are among the most important resources for finding answers to problems. When looking for information about health problems, 66% use a search engine first, and only 15% verify the results found. One study neatly summarizes the situation: 'Internet searchers are confident, satisfied and trusting - but they are also unaware and naïve.'

When we look at search engine market shares we see that Google,

Yahoo and Microsoft represent a collective market share of about 95% in both the USA and vast areas of Europe. It should be pointed out that Google alone represents a market share of more than 85% in various European countries. However, there are extremes – including

the Netherlands, where Google's share is around 95% and the competition's position is negligible.

Business Model

When users look for results that correspond to their questions, the attention of these users (their 'eyeballs') is the basis for the provider's business model. Search engines basically have one source of income only: advertising. The advertising appears in the form of small ads next to search results and are related to the context. They take the form of banners, pop-up windows, and so on. Other sources of income are inappreciable. Just look at Google's financial figures: during 2004-2008 'licensing & other revenue' represented only 1% of all income. The rest was generated by advertising on Google's own sites or through Google's activities on third-party sites.

Google shows the potential of its advertising model. Growth is pursued in other areas of the online advertising market, for example by the recent takeover of DoubleClick. Knowledge acquired from Internet advertising is applied to other markets, for example the distribution of advertising time for radio broadcasts. A third example is vertical integration, which refers to acquiring or creating content, and the development of applications which generate even more personal data. Examples include Google Earth, YouTube, Google

Books, Google Scholar, Gmail and Google Apps.

Markets, Conflicting Interests and Manipulation

Looking at the business model, what are the relevant markets in which search engines operate? Is it the advertising market, or the search market? The business model indicates that the market in question is a multisided market with various stakeholders, including the advertiser, the Internet content providers and the user searching for information. One thing is clear: the search market is not an independent market; instead, search engines are ultimately focused on creating 'eyeballs' for advertisers. Consequently, the search engine market resembles the broadcasting market in certain aspects, for example. Consider the commercial exploitation model, in which the emphasis is not on programme content - instead, the primary aim is to create the largest possible viewer audience to 'sell' to advertisers.

Still, the search market is extremely relevant to the providers of information and the users searching for it. This is where the conflict of interest takes shape: search engines striving to maximize or optimize advertising revenues, information providers vying for the top position in the search results, and users wanting the 'best result' based on their search question. Search engines are in a dual bottleneck position: they control the information provider's access to the user depending on how information is made accessible, and at the same time they control the user's access to the information provider depending on how the search question is interpreted.

Considering the huge interests at stake, manipulation is a well-known phenomenon in the search engine business. Search engines are in the position to manipulate search results, and information providers likewise employ manipulative tactics in order to generate the most favourable search results. Manipulation may be guided by the best intentions but in many cases it is not transparent. Well-known types of manipulation include paying for a higher search result listing and hiring third parties to improve search results; in fact, there is a booming industry built around 'Search Engine Optimisation' or SEO. Its toolkit includes dozens of new schemes with colourful names to match, such as spamdexing, cloacking, linkfarming, doorway pages, pagejacking, etc.

General Interest and Regulatory Intervention

The dominant role of search engines in making information accessible undeniably represents a public interest in today's information society. This interest is reflected in issues surrounding fundamental rights such as freedom of expression, freedom of education and privacy. Accordingly, Introna & Nissenbaum examine search engines from the perspective of a public good in their well-known article 'Defining the web: The Politics of Search Engines.'²

As soon as the public interest becomes relevant, the question of further embedding and safeguarding arises. Is there cause to regulate search engines? The significance to the information society is a respectable argument in addition to the relevance to the previously mentioned fundamental rights, which are often subject to additional regulatory embedding. The structure of the existing market and the bottleneck functions indicated are also possible valid reasons for intervention.

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control as opposed to damage prevention. Experience has also shown that it is very difficult to apply market regulation criteria, for example, to nonmarket issues such as freedom of expression, pluriformity and privacy.

Does sector-specific regulation apply to search engines? It turns out that existing European sectorspecific regulations for the

the impact alone that search engines have on the access to information justifies classifying the services offered as information or content-related services questions regarding the effective application of such regulation.

An important reason why search engines occupy a regulatory vacuum is the fact that the activities are difficult to classify under existing regulatory concepts. Is a search engine a service on a par with a telephone directory, or is it a service that directly involves content? In my opinion. the impact alone that search engines have on the access to information justifies classifying the services offered as information or content-related services.

Towards a Converged Regulatory Model

All things considered, the existing sector-specific regulatory framework provides interesting leads for the regulatory embedding of search engines. These include the concept of 'significant market power,' which is potentially applicable as the basis for deciding upon imposing market regulation; market regulation instruments such as regulated access (for example for information providers) based on non-discriminatory, transparent and objective criteria; minimum quality criteria (dealing with search questions, indexing information); consumer empowerment (level of control by users); responsibility of search engines (is there editorial control?). In terms of privacy there are recent recommendations on search engines made in the EU by the Article 29 Working Group concerning relevant legal issues. Issues that need further examination (just to mention one) include 'cloud computing,' which, although it may be efficient in business economics terms, results in a complete

Present Regulatory Environment

The regulatory framework could be based on general rules and regulations, such as competition or consumer protection legislation. However, there are limitations to generic rules. These types of rules often have an 'ex post' character that makes them more suited to damage communication sector (the Communications framework) and the media sector (the Audiovisual Media Services Directive) either do not apply or only very marginally apply to search engines. In fact, search engines are explicitly excluded in many cases. Privacy regulation is relevant to search engine issues, but there are serious lack of transparency regarding the location of sensitive data. Territorialism would seem in order, and would it not make sense to ask that sensitive data of European origin be kept within European borders? This can help prevent legal systems with an entirely different set of standards from gaining access to European data on the basis of liberal national authority (experience shows that having safe harbour regimes does not always provide a sufficient guarantee). In addition, what would be the added value of expanding on auditing and good governance processes? For example, search engine providers could be subject

to – independent – auditing, for example of the way in which information is (allegedly) indexed and data is processed (storage, access). Within the scope of good governance, risks must be clearly defined. Search engine providers offer no more than an extremely brief summary of risks. No concrete information is provided about – attempted or successful – break-ins or the compromising of data integrity.

Beware

The development of a regulatory framework for search engines cannot be based on cherrypicking. The very fact that convergence plays a role would suggest that considerable thought must first be given to the current lack of coherence between regulatory frameworks. Every effort must be made to avoid the unbalanced application of market regulation on content. Although assigning search engines editorial responsibility in the same way as 'regular' audiovisual media services may seem easy, it fails to address the question as to whether that model as such has been sufficiently thought-out. Fundamental freedoms may not be harmed. Being overly enthusiastic about regulating is as dangerous as trivializing the relevant issues. Search engines are here to stay and must be taken seriously.

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Endnotes

1 The figures here are cited in an indicative way. However, the sources are available upon request. 2 *IEEE Computer*, vol. 33/1, pp. 54–62; a slightly adapted version was published as 'Shaping the web: Why the Politics of Search Engines matter' in: *The Information Socie*ty, vol. 16/3, pp. 169–185.