

The Waning Importance of Categorization

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The mobile phone has caused us to plan less and communicate more. The Internet causes us to categorize less and search more – and media’s increasing Internet nervousness is driven not just by fear of diminishing revenues but from the fear of a loss of importance of categorization. When everybody can find everything and networked computers determine what is relevant, media companies lose their ability to create agendas. To maintain their influence, they will need to let the Internet shape their main products, not desperately try to keep the world as it is.

Media companies – newspapers, publishers, TV, radio, movies and music companies – display increasing nervousness when faced with an ever more efficient and effective Internet. Broadband connections, search engines, blogs and collectively created knowledge repositories such as Wikipedia means that the Internet goes from being one source among many to becoming the main source of information and entertainment for a growing part of the population – especially the young ones, the future customers.

I am impressed with the thickness and size of the industries’ blinkers. Only in the last months, I have I have met young journalists who do not read blogs or even know what they are, music industry executives who think the “copying problem” may be solved (here in Europe) because now customers can pay with their cell phones, textbook publishers who insist that highschoolers prefer paper textbooks, and publishing executives who wonder what kind of cookbooks they will produce in the future. (Answer: Those that can compete with standing in front of your fridge, entering its contents into Google, and picking one of the recipes that pop up. Search for ”scallops wild mushrooms pepper” in Google, and see what I mean...)

These people certainly aren’t stupid, but they tend to live in a self-selected cocoon where use of the Internet still is modeled on the analogue world – where computers and the Internet still are used to do the same thing as before, only faster, better, cheaper. And then they don’t notice that many users have creatively adapted their behavior to its new, not previously exploited possibilities.

In a 1991 *Scientific American* article, MIT professors Malone and Rockart described how broadly usable technology tends to go through three phases: First, we use the new technology as a substitute – horseless carriages instead of horse-drawn in the case of cars, for instance. Secondly, the technology becomes cheaper and more accessible – we get mass production which allows widespread ownership, new usage patterns such as car holidays, complementary innovations such as highways and gas stations. Lastly, the technology forms a basis for our whole lifestyle – imagine suburbs, IKEA, Wal-Mart and McDonald’s without cheap private transportation. This three-phased evolution is happening with the Internet as well – it Internet started as a substitute for other ways of moving data and accessing computers, became widespread through the World Wide Web and especially email – and now is the basis for more and more of our daily transactions and interactions, not to mention lifestyle.

If you want to understand how current technology will be used in the future, don't look at your colleagues – study the kids. This became clear to me a few years ago, when I did research on the use on mobile communications, and began to pay attention to what my children did with their cell-phones. Their patterns of communication were dramatically different from mine.

When I was young and wanted to go to town with friends, we had to agree to a time and place to meet beforehand. Today's kids go to town without dates, either by themselves or in small groups, and figure out what to do by rapidly communicating through text messaging or chat groups. Incidentally, lest you think this change is confined to the teens, notice what people do the next time you host a dinner party: Rather than ask for detailed directions up front, they will drive as close to your house as they can and then call on their cell phones, requesting guidance in real time. In short, ubiquitous, inexpensive and simple mobile telephone leads us to *communicate rather than plan*.

A similar change in how we use the Internet is taking place right now – a change from Malone and Rockart's phase II to phase III. Email and information search drove public adoption of the Internet – and these two uses still dominate, though many new ones have popped up. Despite online buying and selling and banking, we tend to spend a lot of time using search engines, and we tend to become aware of things from friends, through email, chat rooms and, increasingly, blogs and personal web sites such as MySpace.com.

A search engine spins through a collection of documents looking for various attributes, and then sorts the relevant documents according to relevance. The alternative to search, when looking for information, is to navigate through some form of categorization – read through a table of contents, or look through an archive based on categories and sub-categories. This categorization can be done by ourselves, or by someone else.

As search engines become better, they will cause us to *search rather than categorize*, just like mobile phones have caused us to communicate rather than plan.

A small and personal example: I used to sort my email and my documents into folders, based on content and priority, so I could find them again. I still do that, but much less than before, for I have installed a small program called Google Desktop, which lets me easily search through the 1,206 folders, 23,565 documents and 120,000 emails I feel a need to carry around. In surprisingly few seconds this program finds the files or emails I was looking for – and many more, some of them important and forgotten. This process is much faster and better than browsing through folders and files with once clever file names I long ago lost my connection to.

The same effect – search rather than categorization – can be seen both in the publicly available Internet and inside companies: Rather than sorting millions and billions of documents, let the computer sift through them all. It will find things you could not find before, as the CIA discovered recently when the *Chicago Tribune* named 2,600 of their

agents and located more than 40 of their locations simply by smartly searching publicly available information.

When categorization becomes less important, those who categorize – the industries which tell you what is in and what is out, good or bad – also become less important. As the amount of available and searchable information increases, Internet becomes the first stop for information. Companies and people who aren't on the Internet simply don't exist. Wikipedia replaces “officially” recognized sources of knowledge and papers made freely available on the Internet replaces textbooks and copyrighted articles. Relevance and influence is determined from how visible and used something is on the Internet – and traditional media companies will have to choose between profitless visibility (“get a blog so we can link to you”) and profitable obscurity (paid access for the few).

So far, the old industries have tried to ignore or hold back this evolution: The record industry with ineffectual copy protection schemes, publishers with increasingly strident law suits and self-defeating access controls (driving readers and teachers over to public domain content), and newspapers with half-hearted websites and even more half-hearted speeches about having a dialogue with their readers (except they never read or respond to comments). Old opinion producers whine about how the unwashed blogging masses drown out their pearls of wisdom.

Faster media channels have always been the market access for the slower ones: Books and movies and music are marketed through newspapers and TV. Over time, slower media is shaped in the faster media's image, the way USA Today – including its dispensing machines – was designed to look and feel like TV.

The Internet is the fastest medium of them all, swarming with updates, links and searchability. Influence is determined by its readers, who, using dialogue and references, feed priorities to the search engines. Media companies who do not shape their product to this evolution, will gradually lose their ability to decide what is important.

Not unlike how the church lost much of its influence when movable type was invented.

Enough about this, I have to go search for a good dinner recipe...

[Espen Andersen's last essay for Ubiquity was the very popular "[Why You Should Choose Math in High School](#)".]

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