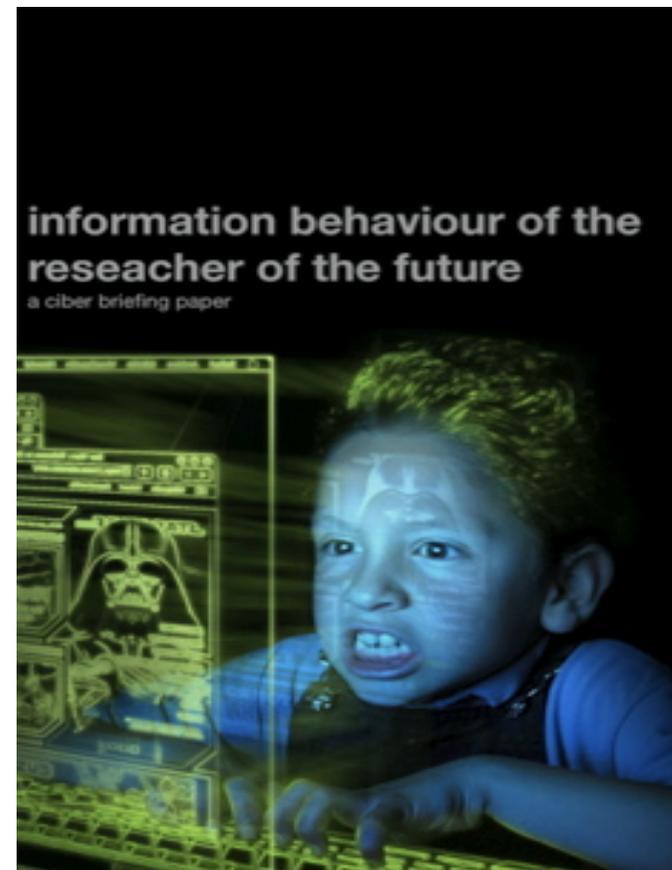


Digital Library users' experience: results of seven years of research from CIBER

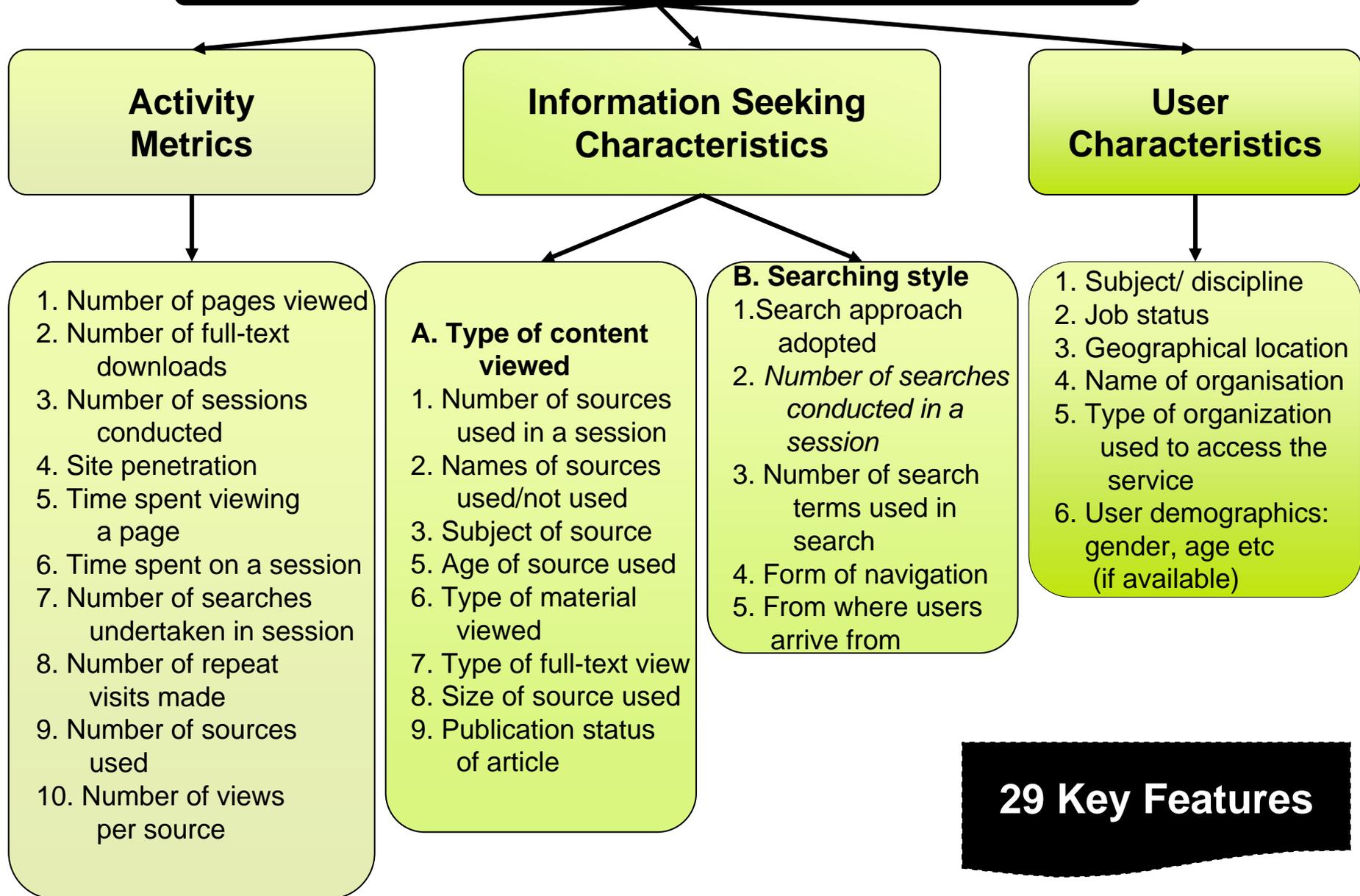
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Background

- Choice, digital transition, unbelievable access, Google & disintermediation transformed information landscape
- Because so much information seeking goes on remotely and **anonymously** we have not woken up to this yet. Yet digital transition has further to go
- Still working on the basis of old paradigm – risk of **decoupling**
- Keep looking at the future, and blaming the kids



The digital information footprint



29 Key Features

What have we learnt?

Tremendous activity but...

- **Access** main driver. More people drawn into scholarly net (all scholars now!) & existing users can search more freely & flexibly.
- Lots of ‘noise’, which unfortunately is regarded as demand & satisfaction by many.
 - majority of users **robots** (HofC)
 - of human users many are ‘**foreign**’ and all have very short attention spans
- Use volatile, varying dramatically according to month, day of the week and hour of the day. **Gov Labs!**



They are promiscuous

- Around 40% do not come back
- Choice, shop around, lured away by search engines
- Poor retrieval skills (2.3 words) and leave memories in cyberspace add to 'churn' rate
- Direct result of end-user checking
- Younger they are the more promiscuous they are; men more promiscuous than women!



They bounce

- Over half visitors view 1-3 pages from thousands available. Bounce in and then out again – related to promiscuity.
- Bounce because of search engines, massive choice, an ‘acceptance of failure’ - shortage of time & overload
- Bouncing not always a sign of failure but can be
- Younger people bounce more



The horizontal has replaced the vertical

Promiscuity and bouncing creates
flicking. Victoria!

Hoover through titles, contents
pages & abstracts at a huge rate
and its pleasurable:

- *I can update my knowledge very quickly...the sheer number of books is overwhelming, if I can look at them very quickly – you know within 15 mins, I can look at 3 or 4 books – and get some very superficial knowledge of what is in them, nevertheless it improves my scholarship, because in the back of my mind, these books already exist*



Viewing has replaced reading

- Power browsing
- Have been conditioned by emailing, text messaging and PowerPoint
- Don't view an article online for more than 2-3 minutes
- If its long, either read the abstract or squirrel it away for a day when it will *not be read* (digital osmosis)
- Go online to avoid reading!



Navigators: love to travel, do not always like getting there

- Navigating towards content in very large digital spaces a major activity. Motorways and roads. E-books
- People spend half their time viewing content, rest of the time they are trying to find there way to it or avoiding it



...they are not all the same (same platform)

- **National differences:** Germans most 'successful' searchers and most active information seekers.
- **Age differences:** older users more likely to come back, and view abstracts. Elderly users had most problems searching – two thirds of searches obtained zero returns!
- **Gender differences:** women more likely to view articles in HTML and return to a site (less promiscuous!)

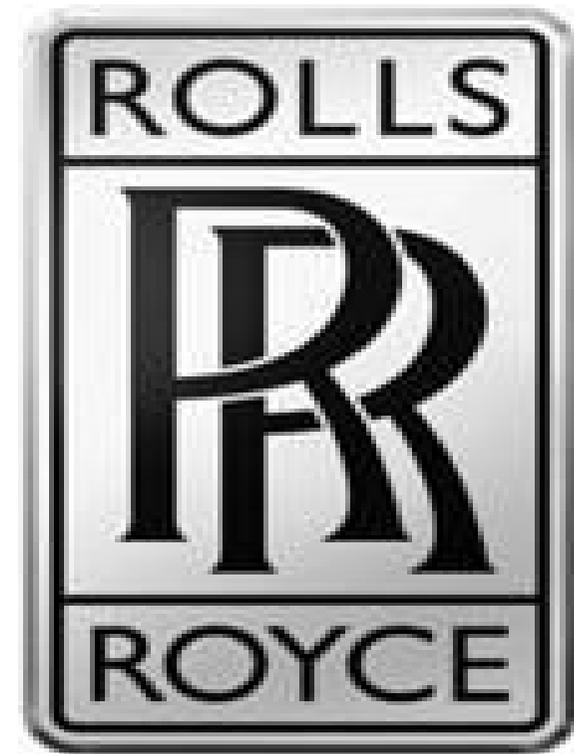


Like ‘immersive’ information environments not monasteries!

- Said something which threw us all initially - they could not understand why they had to do all the work in getting something from the website. At first this was attributed to laziness but it turned out not to be that. They felt the content was locked, submerged and they had to dig a lot to see it, when maybe the service could make some things available automatically – the data coming to them, rather than having to chase it.
- Returned book trolley!

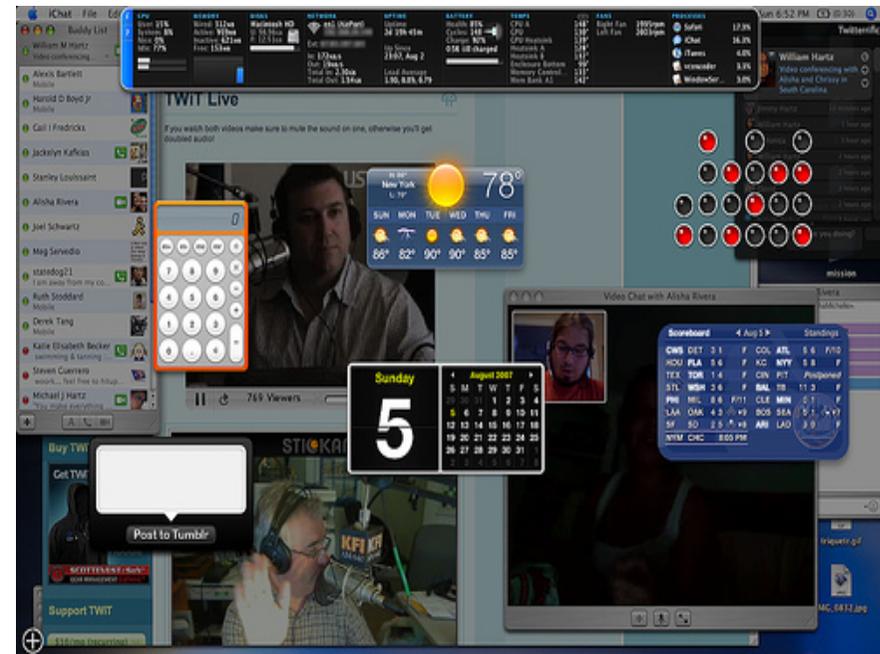
Brand is more complicated than you think

- Difficult in cyberspace: responsibility/authority almost impossible in a digital environment – so many players, so many brands
- Also what you think is brand is not what other people think. Tesco!



Reflections on the future scholar, worker etc

- In broad terms people's behaviour can be portrayed as being frenetic, bouncing, navigating, checking and viewing. Also promiscuous, diverse and volatile.
- Possibly because of lacking a mental map, sense of collection, what is good, lacking information literacy
- Does this all constitute a dumbing down?



Possibly

- *The study confirms what many are beginning to suspect: that the web is having a profound impact on how we conceptualise, seek, evaluate and use information. What Marshall McLuhan called 'the Gutenberg galaxy' - that universe of linear exposition, quiet contemplation, disciplined reading and study - is imploding, and we don't know if what will replace it will be better or worse. But at least you can find the Wikipedia entry for 'Gutenberg galaxy' in 0.34 seconds*

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The networker

Thanks, Gutenberg - but we're too pressed for time to read

John Naughton

The Observer, Sunday January 27 2008

Article history · Contact us

The First Law of Technology says we invariably overestimate the short-term impact of new technologies while underestimating their longer-term effects. The invention of printing in the 15th century had an extraordinary short-term impact: though scholars argue about the precise number, within 40 years of the first Gutenberg bible between eight and 24 million books, representing 30,000 titles, had been printed and published. To those around at the time, it seemed like a pretty big deal.

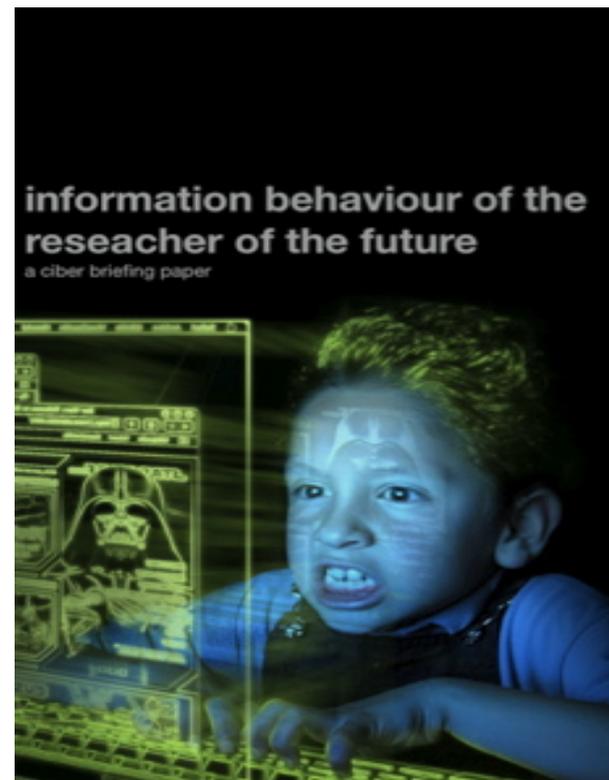
'In our time', wrote German humanist Sebastian Brandt in 1500, '...books have emerged in lavish numbers. A book that once would've belonged only to the rich - nay, to a king - can now be seen under a modest roof... There is nothing nowadays that our children... fail to know.' They didn't know the half of it.

They didn't know, for example, that Gutenberg's technology, which enabled lay people to read and interpret the bible for themselves, would undermine the authority of the Catholic church and fuel the Reformation. Or that it would enable the rise of modern science by facilitating the rapid and accurate dissemination of ideas. Or create new social classes of clerks, teachers and intellectuals. Or alter our conception of 'childhood' as a protected early stage in the lives of young people. In an oral culture, childhood effectively ended at the age when an individual could be regarded as a competent communicator, ie, about seven - which is why the Vatican defined that as 'the age of reason' after which individuals could be held accountable

We are all the Google Generation!

However, the really big surprise :

- Is that we have been studying older people's information seeking and everyone has these characteristics
- Our latest research shows that the older folk are pretty good at skimming, bouncing, viewing etc than the kids. But the kids are more promiscuous and more likely to 'read' online.



Big thinking

- Was it always so and worked with the wrong (ideal) models? Take book borrowing
- The future is now
- Understanding information seeking a prerequisite to determining outcomes...access is not an outcome
- Are we really benefiting from the information society and always on. Fast forwarding the e-citizen to what?
- And whose responsibility

Plug for the book of the PowerPoint



- <http://www.facetpublishing.co.uk/index.shtml>