OVERCOMING SOME LIMITS OF OUR INFORMATION BEHAVIOUR - CHOOSING RATIONALLY BY INTERACTIVE DIGITAL BROADCASTING

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ABSTRACT

The growth of information and its possibility to be evaluated has a reciprocal relation to reflective judgement. Our respect for systematic knowledge and our general confidence in science grew enormously, but by knowledge explosion our capacity to find specific information fitting to any situation and any question has declined. The user staggers between excessive demands of new technology and his curiosity, and the particularisation of target groups seems to build up information barriers before the innovation process even reaches the quantum leap necessary. The analogue switch-off scenario has got to be the only reasonable way to master the situation. Yet for the sake of better arguments it is important to be aware of some limits of information behaviour.

Arguing that interactive digital broadcasting corresponds well with out ability of determining judgement this paper discusses limits of educational concepts, the knowledge and ability gap, socio-technological barriers, technological innovation as status-symbol, steady promotion and cross media reference, autonomy in media consumption, fragmentation of audience and uses, and some general information problems.

INTRODUCTION

Because of popular search engines in the internet more people are able to retrieve information. But this doesn't happen as adequate as by the accurate yield of information through data base systems. Their design has the purpose to target specific information dissemination. Since the internet is better known to a broader public information demand of the individual has increased enormously, but very often it really isn't aware of it.

However, facing the gap between accurate search results and practical use search engines more and more developed the character of giant but still quite inaccurate data base systems. The situation in watching TV is quite different: There are a lot of programs but you can't fail in watching a particular category. A movie play is a movie play and an animal documentation is an animal documentation.

THE USER AND THE INTERNET

At the beginning of the decade the statistical amount of estimated miss-retrieval was striking as the common accuracy of search engines indicated didn't exceed 20%–30%.[1] With the success of Google this percentage improved, but still remains behind from particular databases with specific input, specific queries, and exact output results.

According to a study of search engines' results by the endeavour of www.dogpile.com there was less than one percent average difference in the first page results of four major search engines (Google, Yahoo, MSN and Ask). This study from April 2007 measured about 19.000 user queries and proves by the dissimilarities in overlapping results, that searching the internet does not cope with scientifically reliable and demanded search methods. Search engines neither function similarly, nor index all available content on the web or deliver the same results.[2]

According to the study the percentage of total results unique to one search engine, not overlapping with the results of another, was established to be 88.3%, the percentage of total results shared by any two search engines was 8.9%, and the percentage goes down to little more than 2 % for results overlapping by the use of three different search engines. The endeavour to find a total amount of information on a particular topic by means of the internet turns out to be an illusion.

As people get used to the arbitrary sides of the web, hundreds of millions of users developed their information behaviour similarly – at least to a certain extent. With more than 100 million searches per day and nearly 20 million hours per month spent with Google (already a couple of years ago) this search engine proves not only that search engines are different in quality and quantity measures but puts a light on rational user behaviour. It demonstrates the

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[1] cf. Carlo Tasso: Intelligent Digital Platforms for the semantic Web: New Technologies for Accessing and Filtering Information and Knowledge, Artificial Intelligence Laboratory, University of Udine/ infoFACTORY Group, Udine 2000 – euindia.dimi.uniud.it/wo6presentation/Tasso.ppt

[2] cf. Arnold Zafra: Search Engine Advocates Metasearch for Search Result Accuracy, June 13th 2007 – www.searchenginejournal.com/search-engine-advocates-metasearch-for-search-result-accuracy/5103/

frequent reuse of media as long as results are satisfactory.[3] This user behaviour also shows that it is more important to have a platform which presents sufficient quality results than to fulfil the demands of an objectively or scientifically omniscient database.

So by searching the web users seem to be very faithful: Jay McCarthy, vice president of web server log analysis company Websidestory, pointed out at the Search Engine Strategies Conference in Toronto 2005, that the number of referrals to pages deriving from search engines has surpassed those from direct links on particular pages. This means that people navigate the Web by searching more than by browsing[4] and that implies reflective judgement in order to be able for doing this.

REFLECTING AND DETERMINING JUDGEMENT

According to Immanuel Kant (1724-1804) reflective judgement is used to find facts and examples matching common concepts and notions, whereas we apply our capability of determining judgement to subsume facts and examples under broader terms and concepts.[5] Searching the web, we need both of these abilities, and we have to make use of the first and more difficult type – sometimes also called inductive method – even more often than we apply the second type. This determining judgement, our ability to subsume facts and examples under what we already know – sometimes called deductive way of reasoning – is less difficult but still requires some motivation. Though intuitive in manner and appearance the activity of browsing the web – or what is still also called "surfing" – requires determining judgement. In the whole a very complex rational behaviour is the basis to do the right choice relating questions, tasks and interests weather by the web or by any media.

INFORMATION BEHAVIOUR AND INTERACTIVE BROADCASTING

Mass media as vehicles for information, education and communication procedures are becoming linked within each other more and more. For this future TV functions and interactive programs have to be exploited as effectively as internet information. User habit is already adapting to new technologies as a study on young TV-watchers recently proved, that everyday TV-consumption is declining in comparison with the use of internet (including internet games). Ordinary TV-consumption requires "only" the ability of determining judgement because by switching to a certain program willingly you already made your choice to watch a geographical feature, a comedy, a western movie or a sequence of a criminal series.

Therefore we may say that to a certain extent complexity of the technology is not a big barrier for the use of any media but rather the content and its accessibility. Young users learned how to access to internet games though it is more complicated than to push a button at their TV set.

Limits of educational concepts: The demand for snappy imparting of key abilities and of practice-oriented knowledge is unignorable. Critics on school knowledge and the lack of it have became powerful in Germany since the first PISA-shock and also since the first signs of well suited endeavours which brought some relief according latest better educational results. The answer of the TV program consists very much in knowledge - or quiz shows, in which thrilling entertainment is produced by query of data and multiple choice questions instead of education which means coherent knowledge. Coherent knowledge is long lasting, communicable and fits to practical life. Quiz shows don't have to do anything with this type of practical knowledge: with key abilities which life and experts are asking for as well. Though the chance to attain what we call "education" is bigger by specified TV channels than by traditional TV broadcasting because of the conscious activities requested.

Knowledge and ability gap: One of the main borders of information acceptance lies in a lack of knowledge how to use tools and the absence of the wish to learn it. Interactive broadcasting gives an opportunity to simplify access to certain services. A recent survey stated that among a big majority of viewers EPG-services (electronic program guide) turned out to be as easy-to-use like remote control.

Socio-technological barrier: Trust in technological innovation is an important force to try new services. Interest to learn about them is highly limited if there is not enough confidence. As innovation doesn't occur always in a skilful step-by-step manner users become often demotivated and remain extraordinarily patient to wait for later improvements to gain better results relating to cost-benefit ratio. Only strengthening self-esteem related to the ability to make a good choice and technological curiosity overcomes information barriers like ignorance, demotivation, and the lack of time or money.[6]

Non-participating in status symbols: Or, on the contrary, innovative technical approaches of linked media appear to be activating and make users curious. They even become accustomed with malfunctions and rare content in beta-phases. To belong to an in-group already using highly developed technology sometimes is more important than a substantially proper utilization of the equipment. This process is a question of the right timing.

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[3] cf. 1 cog Webdesign, Bristol UK – www.1cog.com/search-engine-statistics.html

[4] cf. Websidestory, May 2005. www.seroundtable.com/archives/001896.html

[5] cf. Critique of Judgement, B XXXVI, (Germ. Edit.)

[6] „Kompetenz im Umgang mit Medien wird in der digitalen Informationsgesellschaft immer wichtiger. … Bürger und Bürgerinnen [müssen] mehr denn je beurteilen können, welchen Quellen sie vertrauen können und wo sie in der Flut der digitalen Informationen zuverlässige und seriöse Inhalte finden. Dies wird zu einem wichtigen Bildungs- und Erziehungsziel ... Noch fehlen aber konsequente Digitalstrategien in sehr vielen Bildungsbereichen." Deutsche Digitalcharta, Berlin 2007, hg. von Jo Groebel und Bernd Schiphorst, Deutsches Digitalinstitut, Berlin 2007, Leitsatz III, p. 16 – www.deutsches-digital-institut.de/downloads/IFA_CHARTA.pdf

Steadiness and cross media reference: Continuity in building up information awareness and in innovation promotion will fulfill their purpose. Repeated cross media reference by conventional TV-program on VoD or NVoD (Video-on-Demand or Near to Video-on-Demand) in the internet or in digital broadcast strengthen users' awareness. For the viewer it is important that he can choose content at a certain time, individually from a particular type of news or from an amount of trailers and features.[7]

Autonomy in media consumption: Consumers' expectations of digital television have to face their current viewing habits and their daily life. According to an IBM-survey on consumer anticipations people are aware of the advantages of individual choice of programs.[8] A survey in the Netherlands proves that young families "tend to regard the active, selective and individualistic viewing promised by the industry more as a threat than as an improvement to their current television use". Thats why "in the hectic and – by necessity – rigidly organised daily lives of these families passive, random and shared television viewing seems to make the best suited leisure activity".[9]

Fragmentation of the audience and uses: There is a gap between the forecasts of television operators and the outcomes of independent consumer studies as a result of fragmentation of the audience and use. Still moving towards individual accessibility of information and entertainment like through the internet and by interactive digital broadcasting is the only way to face consequences of this fragmentation gap. Until now PPV (Pay per View) and betting are the only media activities where the consumer is willing not only to use it but also to pay for it. Or, to put it more general, users usually take interest in digital advantages but they very often have either an aversion to the technical equipment or to the subscription. Nevertheless, promoters and producers of digital broadcasting have to conceive fragmentation of purposes and needs as a great chance for the switch-over to the new technology.[10]

Avoiding general information problems: Information retrieval or knowledge research through the internet faces four major problems: 1. oversupply, overload, 2. miss-retrieval, 3. untimeliness, and 4. information waste.[11] In its core digital broadcasting avoids these factors so that the future of information supply may be quite free from them.

CONCLUSION

At least the first three problems don't occur by using digital broadcasting, whereas we should speak of information waste only if people don't switch on their TV-set.

Information waste in digital broadcasting would mean a waste of program capacity and economic resources as well. For the sake of the TV-watcher or interactive program user producers will avoid information waste as efficiently as they can. Relating to technological education in the long run digital broadcasting doesn't only face our predominant capability of determining judgement but serves information needs more accurately than ordinary TV program or the internet did before the time of web 2.0 approach.

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[7] cf. Kabel Deutschland (ed.): Stellungnahme zur Revision der RL 89/552/EWG („Fernsehen ohne Grenzen") Themenpapier für die Liverpooler Konferenz zur audiovisuellen Politik. Regeln für Audiovisuelle Inhaltsdienste, München 2005, p. 3f.

[8] cf. IBM (2006): Konvergenz und Divergenz? June 2006; cf. DocuWatch Digitales Fernsehen. Eine Sichtung ausgewählter Dokumente und wissenschaftlicher Studien, (ed. Hans-Bredow-Inst. für Medienforschung an der Univ. Hamburg), 2/2006, p. 4

[9] DokuWatch. Digitales Fernsehen, 1/2006, p. 30 – short review on Aalberts, Chris/ van Zoonen, Liesbet: Televisiekijken in het digitale tijdperk, in: Tijdschrift voor Communicatiewetenschap, 33rd year, 2005 No. 4, p. 347-364

[10] cf. Digital Switchover in Broadcasting. A BIPE Consulting Study for the European Commission, April 12, 2002, p. 48-54, Cf. for the fragmentation of the audience and uses also Eric Karstens: „Fernsehen digital: Eine Einführung, Wiesbaden (VSVerlag für Sozialwissenschaften) 2006

[11] cf. Carlo Tasso, ibid. (note 1)