Digital Convergence: Front end and content

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Produkzio-molde berriek, banaketak eta kontsumitzailearen harrerak definitzen dute aldizkari-argitaratzaile batek baliabide elektroniko berriez duen ikuspegia. Gaur egun, sarean argitaraturiko edukien banaketak eta merkaturatzeak gaitasuna galtzen dute hein handi batean, teknologia gabeziengatik eta baita zenbait alderdi erregulatzaile eta copyright-ari dagozkionengatik ere. Artikulu honek media inprimatuen produkzio digitaletik Interneteko aplikazioetaraino, Interneteko Telebistaraino eta laguntza Digital Pertsonalizaturaino egin den ibilbidea seinalatzen du eta hurrengo urteetan gertatuko den aurrerapena balioesten saiatzen da.

Giltz-Hitzak: "Inprimaturiko edukiek beste erronka berri bati aurre egiten diote: Komunikabide digitalak".

El enfoque de un editor de revista hacia los nuevos medios electrónicos queda definido por las nuevas maneras de producción de contenidos, la distribución y la recepción del consumidor. Hoy en día, la distribución y la comercialización de los contenidos publicados en la red se ven fuertemente incapacitadas, no solamente por las deficiencias tecnológicas, sino también por aspectos reguladores y de copyright. Este artículo indica la trayectoria del cambio de la producción digital de medios impresos a las aplicaciones de Internet, Televisión en Internet y aplicaciones de Asistencia Digital Personalizada e intenta estimar el progreso que se producirá en los próximos años.

Palabras Clave: "Los contenidos impresos se enfrentan a un nuevo reto: Los medios digitales".

L'orientation d'un éditeur de revue vers les nouveaux moyens électroniques est défini par les nouvelles formes de production de contenus, la distribution et la réception par le consommateur. Aujourd'hui, la distribution et la commercialisation des contenus publiés dans le réseau sont fortement handicapées, non seulement par les limites technologiques, mais aussi par des aspects régulateurs et de copyright. Cet article indique la trajectoire du changement de la production digitale de moyens imprimés aux applications d'Internet, Télevision sur Internet et applications d'Assistance Digitale Personnalisée et tente d'estimer le progrès qui sera réalisé au cours des prochaines années.

Mots Clés: "Les contenus imprimés affrontent un nouveau défi: les medias digitaux".

Let me share with you our view of the digital future, the facts of day-to-day online work and the consequences of digital media. The blueprint of present and future electronic media from the point of view of a print publisher.

One of Europe's largest publishing houses, H. Bauer (HBV) publishes 84 magazines and newspapers worldwide. Nearly 1,4 billion copies of these magazines are being sold per year, and 31 million germans read our products on a regular basis, which gives HBV a turnover of around 3 billion German Marks per year.

A couple of years ago, for no apparent reason the Internet went public and took most publishers by surprise. After a few month of doing nothing, business plans were developed on how to earn millions by just using the synergies between printed content and Web product. Outsiders were in most cases much more successful in catching the audiences eyeballs than the established publishing companies. Where did the publishers go wrong?

Publishers are used to shuffle large amounts of content towards the consumer on a one-way street. Rich content, but basically no interaction required apart from a letter to the editor or participating in a Bingo game.

The advent of electronic media changed this paradigm forever. Bandwidth, until then something between the printing plant and the news stand, fast became the new bottleneck for content providers. The good news is that with the Internet and other electronic media there came for the first time a valid return path from the consumer to the publisher.

Low-bandwidth applications that are well known for a long time include Audiotex, where you call a phone number and, after being charged quite a bit of money by the service provider and the telephone company, hopefully get the information you want.

CD-ROMs and video games don't have bandwidth problems as they are off-line media where a large amount of data is pressed on a silver disc and distributed by horse and carriage. Interaction is reduced to possible updates of CD-ROMs and networked gaming, entirely feasible via standard telephone lines.

More interesting applications, from the content providers point of view, are being offered by the local area computer networks, and some publishers of business content produce for this platform. Online services are changing gradually to higher-speed modems. This is blurring the difference between telephone lines and leased lines, and offering us content providers more chances to get interesting content over to the consumer.

A future publishing platform is just now becoming popular especially with the business travelers among us. Small and light-weight Personal Digital Assistants or PDAs are beginning to penetrate the well-off early adopters.

The latest hype in electronic media is called Interactive Television. The kind of TV set one can talk to, ordering movies and Television programs anytime, paying per view, publishing one's own holiday shots and videoconferencing with the whole world at one's fingertips.

This brave new world is not to come too soon, as HBV found out when participating in the Hamburg Interactive Television Trial, and bigger companies than HBV also found out, like Time Warner in its well-published ITV trial in Orlando. Time Warner is now betting on cable modems and has a suc-

cessful trial in Hawaii, called RoadRunner, and a company called WebTV offers a migration path towards interactive television by including internet access into a standard TV set with a set-top box.

The reason for most of the content problems encountered on the web was and to a certain degree still is the incapacity of print people to understand the difference between print-broadcast and web-pointcast. Being in the magazine business means basically to print some millions of copies and to distribute these more or less identical magazines to the customer. Regionalisation apart, what we are seeing here is the typical broadcast model.

It's an entirely different thing to offer content on the web. The consumer logs on with PC and modem and the content provider offers a linked HTML-homepage, inviting the user to schoose from this content. Contrary to print this is a typical pointcast application, where the final result may look entirely different for every user.

An important sentence to keep in mind: The internet does not make borin things interesting, it only makes interesting things easier accessible.

New distribution platforms will help to get rid of bandwidth restrictions. Cable modems are just around the corner, and the cable companies deploy these new gadgets as fast as Motorola can produce them. A cable-TV customer now has the choice between analog or digital cable and internet access by his old cable company, and we as content providers enter the field of push marketers.

No longer does the consumer have to log on, being permanently on-line via his or her television cable and no more telephone fees for internet access. A modern cable system easily handles 10-20 megabits per second through the pipeline and that means that television quality programs can be delivered from the cable operator's server to the PC or other back ends that the consumer chooses. What we eventually want to achieve here is a situation where accessing the web is as easy and natural as the telephone is today.

What helps enormously at H. Bauer Publishing to develop a web product is the fact that the entire magazine and newspaper production has been fully digitized for more than ten years now and there are extensive editorial data bases where new interfaces are easily attachable.

The editorials looked for partners in the industry to sponsor their web sites and to place ads. A difficult business: If the quality of the web product is too high, the magazine risks that the consumer no longer buys your product at the news stand. The answer was the offer of the sort of online content that the consumer cannot get in a magazine, and clicking through this web site the consumer finds a personalized recipe collection that reflects his or her personal life style. These recipes also reflect the time of the year and prefers ingredients that are seasonally and economically optimized - a perfect add-on to the printed magazine!

H. Bauer is market leader in the segment of German television program listings magazines. 11 millions copies sold per week mean 46% market share, and we successfully managed to carry that leadership to the internet, too. TVMovie and its sister TVMovieOnline are among the leading products of their kind at the kiosk as well as on the web. Here, too, we introduced a kind of intelligent agent that helps the user to quickly and easily find what he or she wants. Navigating through the maze of weekly television programs may be fun with access to

a good data base. Here again the consumer enters a personal profile once, indicating tv channels as well as preferences, and TVMovieOnline's "TV Butler" plans the TV evening or weekend. A big success with consumers and advertising agencies .

The overall amount of ad money spent on the web is actually not too high. But what makes one think twice about the internet is the progression rate with which this amount is growing. Advertising expenditures more than tripled in the last year, and the prediciton for the next five years is compelling. Not all studies agree with these 7-Billion-plus in 2002, but all come to the same conclusion: there's money out there for the asking, and there might even be a lot of it.

It's no longer exclusively search engines earning money. Within the last year consumer products have taken over from the Yahoos, the Lycoses and the Altavistas of the world, the trend is goods and services now. The advertising money follows the first wave of narrow-band electronic content as the networks are developing more and more towards broad-band capable delivery vehicles. The traditional role pictures of publishers and broadcasters alike begin to tumble.

The printing business in the past performed the task of brokering between the industry and the advertising agencies and enabled them to get their product message through to the end user. With progressing broad-band networks this approach will have to be re-thought.

Content owners, ad agencies and the industry itself develop a tendency to adress the consumer directly because the technical facilities are there. It's just a lot easier to put an ad onto a web site than to print and distribute it. It's easier to offer a product description on a company's internet site than to produce a 4-colour brochure for the dealer. The good news is that most big companies have found out the hard way that their presence on the web is not only a costly way of doing business but also in some cases a dead end. In order to get the user to visit your site it has to be damned interesting, and if a bank or a car manufactorer or a table water company's site is boring the web surfer will never visit it again.

As a publisher we know that and we successfully offer our services to all these companies and agencies to produce eyeballs for them, the new currency in the online business. When it comes to proving that so and so many consumers have seen your ad, HBV is in a leading position in Germany to do that. Jointly with all interested groups we developed a measuring standard for "PageViews", nowadays also called "PageImpressions" and "Visits" of web sites, and it looks as if this standard will be accepted by the internet community and develop into a world wide measuring standard. The access figures are published every month and are beginning to serve as a basis for advertising and sponsoring price lists.

The Internet has, in the last years, for HBV become another platform to establish content brand names, to foster cooperation with sponsors and advertising agencies and is now seen as an additional medium to communicate with our readers, by chat areas that we installed for their us, guest books and editorial contacts.

Another interesting perspective is the network people's point of view. They are the ones to provide publishers with access to the consumers PC, his TV set, his Personal Digital Assistant when he's on the road and to connect us with his flat when he's at home. It's been a long way from the Plain Old Telephone Service to Integrated Services Digital Network with 128 kilobits per second. But the race is not yet over, and some

say it hasn't even begun. Connecting an ADSL or SDSL modem to a standard four-wire telephone circuit boosts its performance to some megabits per second, and a cable modem is theoretically able to supply its owner with more than 20 megabits per second. This is the main reason why the cable companies are so eager to enter this market.

The next step in television is digitization. It's no longer necessary to waste bandwidth for analog TV as you can fit up to ten digital channels in the space of one analog channel in terrestrial, cable and satellite distribution. Speaking of satellites: a handful of consortias plans to put hundreds of satellites into a low orbit. That's why these networks are called LEOS, Low Earth Orbit Satellites, they shall initially provideglobal coverage for mobile telephony, but in the foreseeable future they will also serve as distribution platforms for multimedia data for personal digital assistants and other applications.

Digital distribution of television programs is important for a broadcaster. But why should it be important for a content provider? Two reasons: the distributed data mustn't necessarily be a television signal. It can be any form of multimedia content imaginable, the processing is done in the set-top box and the TV set is used just as a screen for digital content from home shopping to digital newspapers to games, Bingo and bets on horse races.

And there's a return channel via telephone or in the fore-seeable future via the satellites themselves. This principle serves today as the transmitting and receiving infrastructure for publishing models like DirecPC, where the consumer can surf the internet on a PC and get the heavy bulk data not via clogged phone lines but by satellite download. With all these new possibilities in the market, more and more households find themselves today confronted with the problem of how to cable all this new technology without breaking down the walls and getting the floor boards out.

The building industry has asked the standardisation bodies to develop interconnection standards to bring together all the essential equipment a future average household will need, like radio and TV, PC, modem and fax, to enable them to make provisions for the interconnecting in-home network, which is really more like the local area network you find in your companies to interconnect office computers. These standardisation has been reached and the respective standard is based on a world wide accord known under the name of "FireWire" or IEEE 1394.

The technical side of the future seems clearer now, but what's in it for the end consumer? Nobody can say that the industry doesn't care for the consumer's needs. In the contrary. The evolving digital technology will not only serve to make existing TV set and PC obsolete . The good news is that it will provide the consumer with an enhanced perception of media.

There is a lot of potential in internet applications and content. The distance learing paradigm shift is definitely taking place right now with Stanford University offering 15 courses via the internet, and teleworking via the web is gaining ground all over the world. This development might be especially interesting for a community like the Basque Country and definitely a lot cheaper that satellite channels. Even if the initial gold-rush of internet applications is over now, and I'm sure that in the long run the web will be generally accepted as a mass medium like radio and television.

In earlier days the media world was perfectly separated into the TV set and the PC. Broadcasters streamed their pro-

grams to the television set and online service providers were accessible by the computer and a phone modem.

Then things began to change and the components of the digital surroundings began to converge. Streaming content was coming over the internet and looked amazingly like television, and some TV programs began to look like the desktop of a computer. Streaming content using software like RealAudio and NetShow allows a content provider to support full screen video on a PC using bandwidths as low as 200 kilobits per second in reasonable quality and to transmit moving content over lines as low as 14.4 kilobits per second.

Stations like Blomberg TV and to a certain degree CNN use only part of the TVscreen for the usual moving content, the rest is given to news headlines, stock market indices, weather reports and, of course, advertising. The next step will be the complete integration of TV and PC, and it will become undistinguishable whether one talks to a TV set or watches PC.

So, will these back ends finally come together and converge into one set? Will the PC screen make place for the TV screen, and will the processor disappear into the set-top box? No, and the reason is simple.

We have different ways of communicating with our TV set and with our computer. Watching TV is still basically a group experience, and even with built-in interactivity like home shopping or gaming it will be located at a distance of more than 2 meters from the viewer. The TV will stay in the living room, and the PC in the den or the sleeping room. If you ever tried one of those infrared keyboards that come with the WebTV-kind of equipment you know what I'm talking about. It may be enough to get an email on the road, but it's no fun. Web surfing and computer applications are much more easily done with a real keyboard and a mouse and are a one-to-one experience from a distance of less than one meter from the screen. This fact alone will keep convergence at bay.

But of yourse the applications and content will converge, and they have begun to do so for quite a long time now. Parallel evolutionary paths wil lead the television set towards internet applications and email and finally to video-mail and video telephony. Within the same time frame the telephone is expected to grow into a universal communications tool, also embracing email and eventually video telephony, and the PC will lead the pack with telephony and enhanced television.

Most of the developments are in place right now. Streaming media can be watched and listened to on a standard Pentium PC, when ordering a CD over the web one rightly assume to be able to listen to a sample, and reasonably priced videophones will certainly be among the christmas presents of the early adopters."