
Editorial Board

Alan B. Albarran

University of North Texas, U.S.A.

Michael Dowling

University of Regensburg, Germany

Thomas R. Eisenmann

Harvard Business School, U.S.A.

Peter Glotz

University of St. Gallen, Switzerland

Peter Gomez

University of St. Gallen, Switzerland

Rolf Hoyer

Norwegian School of Management,
Norway

Otfried Jarren

University of Zürich, Switzerland

Eli Noam

Columbia University, U.S.A.

Robert G. Picard

Turku School of Economics
and Business Administration, Finland

Arnold Picot

Ludwig-Maximilian-Universität München,
Germany

Beat F. Schmid

University of St. Gallen, Switzerland

Michael O. Wirth

University of Denver, U.S.A.

Mark Wössner

Bertelsmann-Foundation, Gütersloh,
Germany

Axel Zerdick

Freie Universität Berlin, Germany

Content

JMM – Vol. 2 – No. 11 – 2000

Editors' Note

Beat F. Schmid, Peter Gomez, Peter Glotz, Dörte Wittig **59**

Changing Business Models of Online Content Services – Their Implications for Multimedia and Other Content Producers

Robert G. Picard **60**
Turku School of Economics and Business Administration, Finland

Online Newspapers in the U.S. – Perceptions of Markets, Products, Revenue, and Competition

Hsiang Iris Chyi **69**
Chinese University of Hong Kong, George Sylvie
University of Texas at Austin, U.S.A.

Evaluating the use of newspaper web sites logs

David Nicholas **78**
and Paul Huntington,
City University, London, U.K.

New Digital Media and Devices – An Analysis for the Media Industry

Joachim Rawolle and Thomas Hess **89**
University of Göttingen, Germany

Exploring the link between culture and strategy in media organisations: the cases of the BBC and CNN

Lucy Küng **100**
University of St. Gallen, Switzerland

Calendar of Events

110

Impressum

111

Order Form

111

JMM – The International Journal on Media Management

Editorial

Dear Reader

Welcome to a new issue of JMM – The International Journal on Media Management.

In this issue we have a distinguished group of authors, whose collected articles mainly cluster around the challenges arising from new digital media for the content industry. Through new services, technologies, and devices, innovative business models and products are required and the potentialities imbedded in the change have to be exploited.

Robert G. Picard leads off this issue with an analysis of business models of online content services, especially how they have changed through changes of technology and audience demand and how current business models resulted from these changes. In his article he explores the implications of these business models for multimedia and other content producers and possible prospects for the future.

In their article, Hsiang Iris Chyi and George Sylvie analyze the development of online newspapers and how they take advantage of the possibilities the online medium offers. Based on a survey with 14 online newspaper-practitioners they show that while most newspapers hope to complement print and

online products, these possibilities are not part of every newspaper's strategy. Most of them are testing several models of earning revenues to become an economically viable medium.

David Nicholas and Paul Huntington assess the use of newspaper website logfiles. The goal was to determine the most appropriate method for evaluating the use of these logfiles and to establish what types of analysis could be drawn. For this, the logfiles of The Times/The Sunday Times Web were examined. Based on these findings the study lays a foundation and identifies new classifications on which more detailed cross-classifications and modeling can be based.

Technology-driven innovations in the area of transport media and new devices pose a challenge for both media companies as well as their customers. The main questions for the media industry is how these new technologies can be exploited, e.g. through new content-oriented products or new services based on these technologies. Joachim Rawolle and Thomas Hess concern themselves with an analysis of attributes of digital contents and an assessment of different combinations of target devices and transport media. Based on this, they deliver a discussion of two emerging concepts.

The influence of corporate culture on the achievement of strategic aims in two leading international broadcasting companies – BBC and CNN – is investigated by Lucy Küng. The article aims to explore how cultural beliefs support the organizations strategic goal is assessed and to uncover senior managers' unconscious assumptions concerning organization mission, the competitive environment and acceptable strategic responses. The author concludes that culture can act as a restraint to strategic plans and that culture in general is a valuable strategic asset for media organizations.

This issue again concludes with our calendar of events. We hope you find our collection of articles interesting. We look forward to continuing to deliver strong, peer reviewed content to you and to develop our relationships with the (new) media community. You are always welcome to contribute your research or your feedback to the JMM and to take the opportunity to share your ideas with this community. Since we are a journal focused on the possibilities of new media, you will find all our content online under

www.mediajournal.org.

*Beat F. Schmid
Peter Glotz
Peter Gomez
Dörte Wittig*

Changing Business Models of Online Content Services

Their Implications for Multimedia and Other Content Producers



by Robert G. Picard,

Turku School of Economics and Business Administration, Finland

This article focuses on the business models for online content services and how they have changed during the past two decades as technology changes and audience demand have affected operations. It explores how the current business models emerged, how new developments are affecting those models, and the implications of the changes to producers of multimedia and other content producers.

It will explore the bases and problems of four major failed business models, how they evolved into the primary models existing today, and the prospects for the future.

Such business models are important in understanding the context and strategies of the major online content service providers and how producers of content are and hope to be able to co-ordinate or integrate their operations to gain benefits from the strengths and opportunities provided by these operators.

Major operators are useful for the development of independent producers of multimedia and other content because they can help to provide access to the distribution systems and entry points that are necessary for commercially viable operations.

This article discusses the underlying economics of these systems, how and why current business models are employed, and how independent producers are crucial to the success of the new business models.

Influences on Demand for Information and Communication Technology

To begin, it is useful to undertake a broad perspective regarding the nature of modern electronic communication capabilities. Although the term “revolution” is often applied to contemporary developments in information and communications technology (ICT), the technologies should not be confused as being part of a content revolution. The revolution is in software, equipment, and infrastructure and in their capabilities for presentation and dissemination but not in the substance of the content itself.

This is an important element in understanding the nature of demand for the products and services associated with new technology because it comes to the core of the question of who will use the technology, for what purposes, and at what price.

If one looks past all the marketing and excitement surrounding the technologies, new ICT based technologies cannot revolutionise content because they provide no real new communications capabilities. They are not affecting communications in such fundamental ways as did the arrival of the printing press, telegraph and telephone, photography and motion pictures, and broadcasting, which provided the abilities to move text, sound, and images with or without terrestrial lines.

If one carefully considers the combination of computers and telecommunications, it becomes clear that the convergence itself is not producing any revolutionary change in communication. Rather, its primary effect is increasing the speed and flexibility of communication. The most revolutionary aspect of the technology is that it creates new economies of scope and integration that change the economics of content distribution. New technologies permit the combination and integration of the other existing means of communications and allow readers/viewers/listeners more control and choice. It provides different methods for participating in and receiving communication. These changes, and particularly the interactive possibilities that permit users to select materials and the forms of that material, create a significantly different relationship than exists between users and traditional media. But, given the existing technologies and the technologies currently in development for media and multimedia, that interactivity is fairly limited to making more effective use and personal choices based on already existing content forms or combinations of those forms.

This is not designed to give the impression that these developments are unimportant. The combination of existing content modes creates new methods of presenting content, the new technologies provide flexibility of use, and they shift control over communications. All of these factors provide significant advantages to users. And where there are advantages, there are consumers willing to spend time and money.

However, the demand for the products and services providing these advantages must be understood as a part of, and an extension of, demand for existing content products and services. That demand is within those who communicate and receive communications using existing means. New methods of

accessing, using, and combining that content must increase value to these users and help simplify their search for and access to the content.

It is ignorance or misunderstanding of this essential demand element that has made it so difficult for so many firms to find ways to profitably exploit the potential of the new ICT technologies and associated products and services. Many believe the rhetoric that new and unique products and services are being created that will significantly alter the behaviour of individuals and transform society. In reality, most of these products and services are just creating faster, easier, and more flexible means for consumers to do what they are already doing.

Coming from the business perspective, it is important to understand that this demand and a variety of forces from within and outside the ICT industry must be harnessed in order to create sustainable products or services.

The success or failure of new communications technology is not dependent upon whether it is innovative, useful, or desirable but rather on questions of whether it can find a means of obtain-

ing and maintaining sufficient usage and turnover so that it is not rejected by users, entrepreneurs, or financiers (Picard, 1998). The competing interests of a variety of factors play significant roles in the process, and the area in which their interests converge is relatively small (Figure 1). When those interests do converge or can be accommodated, the likelihood of success of a new application or technology increases. When all interests intersect the degree of risk is low, but for each interest that diverges the risk of failure increases.

This means that the technologies and their associated applications will succeed only if the market believes that they create value that is currently absent today. Further, these new products and services must be able to fulfil needs of businesses and consumers that cannot be fulfilled by alternatives that are less costly or disruptive to current business operations and consumer behaviour.

It is exactly this problem that makes many sectors of the ICT industries so risky and has forced entrepreneurs and those with high-risk capital to fund most new communications technolo-

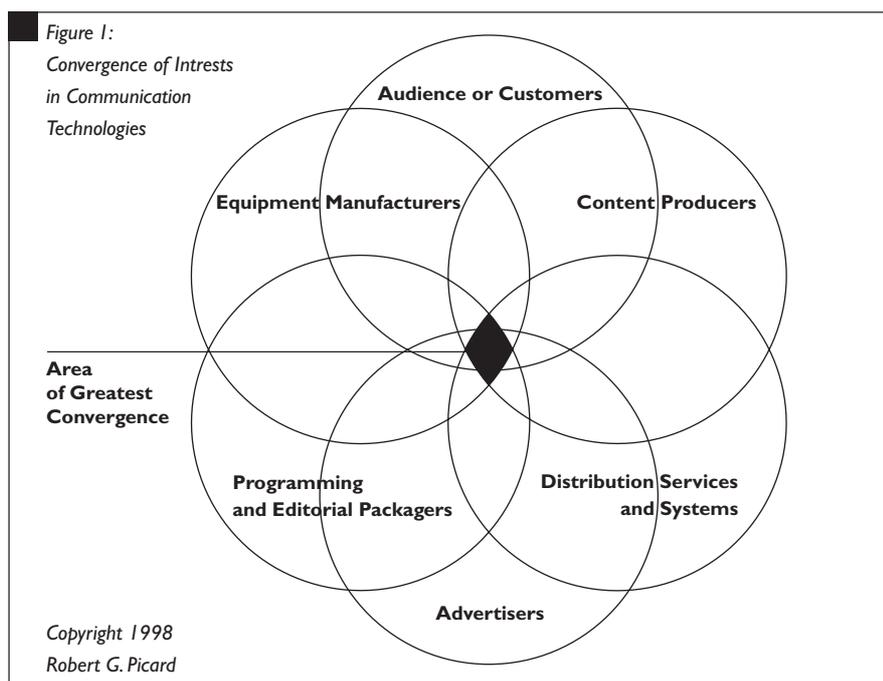
gies and applications. This has been especially true for developments involving Internet and multimedia, where limited patience for results has caused the rapid movement of financial resources from certain products or services to others that are perceived as having more potential to create sufficient demand to make the product or service viable.

There is no single formula for creating a successful arrangement within the interests, and different firms and technologies seek different models for transferring the potential of technologies into successful business enterprises.

Basic to these, however, is the issue of creation of content that is of interest to users. Advances in the development of interactive and multimedia technologies are increasing the number of producers and the availability of content and are forcing traditional information and publishing industries to develop new understanding of their roles in creating, processing and storing content (European Commission. The Content Challenge, 1998).

The development of electronic publishing, which is often based on content generated through traditional publishing, has created a growing sector of economic activity and pushed traditional content providers to enhance their competitiveness and survivability in the face of new entrants from audiovisual, multimedia and other sectors (European Commission, Electronic Publishing in Europe, 1997, and European Commission, Strategic Developments for the European Publishing Industry Towards the Year 2000, 1996).

European publishing industries have some advantages over multimedia and other new content producers because they are parts of mature industries that do not face the developmental and resource problems of European communications firms in audiovisual production, multimedia, information tech-



nologies and telecommunications (European Commission, Competitiveness of the European Union Publishing Industries, 1999, and European Commission, *The Digital Age*, 1998).

As publishers and multimedia producers have moved online in Europe and worldwide, a variety of different arrangements to co-ordinate the needs of content producers, content organisers, technology providers, and the others have been attempted. If one looks at the arrangements carefully and combines issues of investment and operational capital, there are clear models that have been adopted across sectors of the ICT industries at different times. This article focuses on the models that have been employed in the online content sector.

The Nature of Business Models

The term business model is often confused with that of strategy, such as company strategies, product strategies, general marketing strategies, or pricing strategies. Strategies are the means employed by firms to meet their goals (Grieve Smith, 1990; Karlöf, 1989). A business model is much more fundamental, however. Business models are understood and created by stepping back from the business activity itself to look at its bases and the underlying characteristics that make commerce in the product or service possible. A business model involves the conception of how the business operates, its underlying foundations, and the exchange activities and financial flows upon which it can be successful.

Business models have been described as the architecture for the product, service, and information flows, including a description of the various business activities and their roles. They include a description of the potential benefits for the various business actors and the sources of revenues (Timmers, 1998).

In terms of modern communications, business models need to account for the vital resources of production and distribution technologies, content creation or acquisition, and recovery of costs for creating, assembling and presenting the content.

A business model then embraces the concept of the value chain, that is, the value that is added to a product or service in each step of its acquisition, transformation, management, marketing and sales, and distribution. The value chain concept for products and services is now well established in business literature in which it was widely embraced after its exploration by Porter (1985). This value chain concept is particularly important in understanding market behaviour because it places the emphasis on the value created for the customer who ultimately makes consumption decisions.

The issues of value chains and value added are especially salient in European settings where value-added taxes rather than sales taxes are the traditional methods used by government to raise revenue. As a result, many European firms have an advantage in identifying and comprehending the elements of value chains over firms in nations and regions where value-added taxes are not present. Despite that advantage, however, even many European businessmen and women are unable to identify the value added by their activities. This is problematic because if one cannot articulate that value, one cannot properly manage and market a product or service.

Understanding the business model under which a firm or product operates or will operate is especially important when new products or services are developed or the industry in which one operates is in a state of significant change. As the environment in which a firm or industry changes, the factors that support a business model change

simultaneously. As a result, business models that may once have been successful may become less successful and be abandoned. Business models that seem appropriate for new products or services may not produce the support and structures necessary as the business milieu changes and may then be altered or abandoned in favour of other models.

Some individuals make the mistake of assuming that failed or abandoned business models can never again be successful. This is not always the case if the conditions in which they failed are no longer present or resistance to some elements disappears. Situations may then arise in which such a model may be reintroduced successfully for the same or a different product or service.

Business Models of Online Content Services

We may now focus on the business models of the major online content service providers, i.e., those firms that provide users access to content of interest including news, information and entertainment, leisure activity, and other materials.

In this discussion we are not focusing on Internet service providers but rather those firms who make their business in organising materials and providing access to content. This includes firms such as AOL.com (America Online), Yahoo!®, MSN™, Netscape Netcenter™ Excite.comSM, CompuServe.com, digitalcity.com and scores of similar organisers.

In terms of usage, these content organisers provide the most visited sites on the World Wide Web. If one considers the top 10 web sites receiving the most visitors during a recent measurement period, all but one – Microsoft's home site – are general online content organisers (see Table 1).

Table 1: Most Accessed Web Sites

Rank	Site
1	Yahoo.com
2	Netscape.com
3	aol.com
4	Microsoft.com
5	Excite.com
6	Geocities.com
7	Infoseek.com
8	Lycos.com
9	msn.com
10	altavista.digital.com

Bold face indicates

general online content sites

Source: Relevant Knowledge, March-April 1998 period, unique visitors, 12 and older

Today, these sites no longer provide mere organisation of and access to information sources but are broad service portals that provide free e-mail, messaging services, voice mail, user customisation, online shopping, notification services, software downloads, chat lines, and access to a wide variety of online communities and content.

It is useful to consider the evolution of general online content providers and the various business models that have been used during their history in attempts to recoup investments in development and operations. These provide a means for understanding the con-

straints faced by these firms and why they increasingly need relationships with content producers.

One can divide the history of online content service providers into periods coinciding with four abandoned business models, a model in current use, and an emerging model evolving from the existing model. These models can be labelled 1) the videotext model; 2) the paid Internet model; 3) the free web model; 4) the ad push model; 5) the portal and personal portals model; and 6) the digital portal model.

Each was made possible by particular developments in technology, had different financial bases, and produced different results, as outlined in Figure 2. The importance of the technological developments that made the services possible cannot be diminished because these were very often the results of significant financial investments involving agencies and firms other than the content services whose purposes were not always similar.

Four Failed or Abandoned Business Models

Videotext

Videotext indicates the initial attempts to use television screens as a means of conveying text-based content to a

wide audience. Efforts to create videotext as a commercially viable activity emerged in the 1970s and were led primarily by newspaper companies in North America.

The impetus for creating this new content service resulted from newspapers' change to ICT for phototypesetting. Because the new processes associated with the technology captured keystrokes, it was now possible to reuse or easily alter content prepared for the newspaper for use in a videotext operation. Supporting this use was the development of cable television systems that could be used for easy and inexpensive distribution of the content.

The concept of videotext was particularly attractive because it would allow publishers to update materials and convey breaking news during the times between printed newspaper editions.

Because most of the infrastructure and content creation and formatting costs were already covered by revenue from the newspaper operations, the financial costs of this secondary use and distribution of the content were relatively low. This permitted publishers to offer videotext at a low price or to provide it free as promotional costs for the newspaper itself. Some television channels produced similar content offerings, reusing material prepared for magazine

Figure 11: Business Models for Online Content Services

	Videotext	Paid Internet	Free Web	Internet/ Web Ad Push	Portals and Personal Portals	Digital Portals
Made Possible By	Change in production method of print media and cable systems	U.S. military-industrial complex investments	European nuclear science community investments	Additional use of internet service subscription lists and ad placement on web pages	Changes in server and software capabilities	Digitalisation of audio and video media and telecommunication improvements
Financial Bases	Secondary use of available material for a small fee or a promotion for newspaper	Telephony style pay-for-use	Costs paid by content providers	Direct mail style advertiser payment and advertisement in speciality publications	Newspaper and magazine style advertiser payment	Cable and satellite service subscriptions/pay-per-view
Result	Audience rejected	Audience rejected	Audience accepted; commercial content providers and content organisers rejected	Audience, services, and many advertisers have rejected	Audience and advertisers are accepting	Audiences, advertisers, content providers and online services indicate support

and newspaper program listings and marketing efforts in what became the initial forms of text TV that are now more common in Europe than in North America.

Implementation and improvements of videotext created the idea of aggregating information and providing limited interactivity. Innovative publishers and broadcasters began to see themselves in broader terms as content producers with both traditional and online distribution. In addition to news, many videotext operators began adding material such as listings of local organisations so users could select pages for the organisations in which they were interested. Sports news and information were placed on certain pages for users to select and once they reached the index for the sports news, they could then select the stories in which they were interested. Even timetables for trains and airports were added to some text sites.

Although the producers of videotext had strong technological development and cost advantages in producing and distributing the material, the consumers – either as audiences receiving it free or purchasers of the service – were generally uninterested. When tested or implemented, use among the public was relatively low and only occasional. This may have been because the amount of content and interactivity was limited or because it duplicated content that already available. Whatever the reasons, it became difficult for many producers to justify even their relatively low expenditures given the performance in the marketplace.

As a result, most content providers abandoned the videotext model. It still exists in a few locations where acceptance was higher or where it plays a larger role in the marketing strategies of the content producers. Videotext as a precursor of Internet-based content providers, however, provided the un-

derstanding that a free access business model for a service that only offered limited improvement on the availability of information existing elsewhere would produce small audiences that were financially unjustifiable as promotion for the providers of that information.

Paid Internet

When videotext did not produce results desirable to content providers, they did not abandon the prospect of additional use of existing materials. Rather, they began to seek methods through which costs could be recovered from individual users and perhaps generate profits. This possibility would only be viable with a pre-existing infrastructure, and it soon became clear that the Internet was the most attractive alternative for distribution of the materials.

The existence of the Internet and the software required for its operation had been funded by the United States government as a communications system between the Pentagon, military contractors, and scientists working on military projects at universities in the late 1960s. The U.S. Department of Defense Advanced Research Projects Agency (ARPA) created the ARPAnet – the first nation-wide computer communications network (Cringely, 1992) – to communicate and co-ordinate activities because research, development, and manufacturing were well distributed in different geographic locations. By the 1970s the system had spawned the Internet to link sites not engaged in military projects, primarily universities.

The existence of this system and its potential for commercial use were used to change the system to allow wider use and access. Content producers discovered by the last half of the 1980s that they could make their materials accessible through the dial-up services using traditional telecommunications and

the Internet and charge a fee for access to the content. Many of the producers who originally considered videotext and numerous others moved to provide material to users in this manner. Consumers would pay either flat fees for access or pay per actual usage typically charged against a pre-existing account set up for the customer. A variety of content providers began to develop services in this environment including the Times Mirror, New York Times and Dow Jones. All three began offering direct dial-up and Internet accessible services for a fee.

The market, however, did not look so kindly on the development. General audiences, who could wait a few hours to receive the information in print, did not embrace the idea of paying more to get information just a bit earlier and were often unhappy with the complicated processes required to access the information. The greatest market success was not for general information providers but for specialised data providers such as those creating and distributing financial and technical information.

This can be seen in the fact that today the paid Internet content creators are typically limited to speciality online services such as those providing detailed and real-time financial information. Examples of these services include Financial Times Interactive Data, Dow Jones Interactive and Bloomberg Professional.

As a result, general content providers soon began abandoning the model based on providing content through the telephone and Internet and recovering the costs from audiences. Perhaps the most ambitious failure was the electronic service Viewtron that was established by Knight-Ridder Inc., one of the largest newspaper companies in the U.S. In the three years the service operated, it managed to attract only 50,000 subscribers at a cost of \$50

million. Other services such as those provided by the New York Times and Times Mirror have also dropped fee-based services for general information.

A variety of online companies such as AOL, CompuServe, and Prodigy began in this environment, aggregating access to content from other sources for a monthly fee. The value provided to consumers by these companies was increased usability and ready access to multiple information sources. Despite increasing number of subscribers, they too were unable to recover sufficient costs and began seeking additional means to cover the costs of their operations.

Free Web

Although general content providers rejected the paid Internet model, the benefits of Internet distribution remained attractive. But some complicated processes that audiences disliked and difficulties in displaying content still remained. These problems were removed by the creation of the World Wide Web and associated software and browsers. These technological developments were not the result of the content or ICT industry investing to solve the problem but also came from governmental investments. In this case, the technology resulted from efforts by the European nuclear science community to improve its ability to convey data, graphic displays, and other materials to researchers throughout Europe and the world.

Work for the European Centre for Nuclear Research in Geneva, and especially the efforts of Tim Berners-Lee of the United Kingdom, produced the World Wide Web and introduced it as a workable alternative by the early 1990s (Pavlik, 1996). The widespread distribution of browsers in standard software packages for new computers, as well as their availability in retail stores, rapidly made the web the pri-

mary online use of general consumers.

With this infrastructure and acceptance in place, increasing numbers of content providers began moving to the web. Many new types of content providers began moving rapidly onto the web, exponentially expanding material available each year. These materials were generally provided free of charge as promotional materials for commercial firms or as special interest materials provided by individuals or organisations.

Media and other content providers soon grasped the utility of the web in providing advantages for distribution and creating a system in which individuals could access materials they produced. Some began operations to reuse existing materials again – as they had under the earlier videotext model – but this time with the advantages of true graphic capabilities. Other firms developed means to organise materials in a way that reduced the frustrations of users seeking content.

Time Magazine became one of the first major publications to successfully exploit this possibility. It made itself available at no cost through America Online in 1993 and within 6 months more than 1.5 million users had visited the site. In 1994 the New York Times launched its free service @Times. Revenue for the sites came from fees paid by content aggregators such as AOL who incorporated the sites within their portals.

Users of content accepted these free information services. Because the material was free of charge, the lack of cost made use the equivalent of obtaining material from free television or radio and this appealed to consumers. The model of operation, however, did not provide means for the commercial content creators' and aggregators' firms to recover sufficient costs for providing material or organising content from

the users so they soon rejected the model as unworkable.

Internet/Web Ad Push

The desire to find a mechanism to find a non-user revenue stream led some content providers, Internet service providers, and content organisers to attempt to use lists of subscribers and users, combined with demographic, lifestyle, and other profile information obtained through registration, as a means of attracting advertising that could be targeted to specific users. In other cases they attempted to find advertisers for products and services related to web pages on which particular content was organised.

In both cases, the firms "pushed" advertising toward audiences that would be most interested in the products or services offered.

The first process made secondary use of subscription lists and information and created an advertising system based on direct mail models in marketing through printed materials. The second process followed a system based on advertising in speciality publications.

Although the model created a revenue stream to support operations, audiences were unhappy with content and service providers who used such systems because they say it as an intrusion on their mailboxes or felt they were confronted with too many advertisements when they reached sites. Internet service providers and content organisers did not want advertisers not associated with them to use their system.

Many advertisers saw negatives in the intrusiveness of individually directed ads. In addition, they questioned the effectiveness of the model particularly because it was difficult to measure the effectiveness of mere exposure to the limited advertising messages on many sites.

The Current and Emerging Business Models

Portals and Personal Portals

Content organisers needing to gain the advantage of the advertising revenue stream but also to control advertising exposure soon moved to the current business model based on portals. In this system users of web browsers are brought to an organising interface and advertisements. As users move to information of interest, additional or related advertising appears. As providers have attempted to differentiate themselves and increase satisfaction with portals, personalisation of portals has developed.

The current revenue model is based on newspaper- and magazine-style advertising in which readers are brought into contact with advertisers' messages while making other use of the pages. In most portals only a single ad appears on each page and because of its limited size it is designed to "pull" or attract users to click through the ad to gain additional information from the advertiser.

The current model is attractive to many of the major players because user resistance is not strong and a regular advertising stream is being produced. A variety of arrangements are found in payment terms for portal web advertising, the most common being based on page views, flat rates, or click throughs. Where advertisers engaging in direct electronic commerce are involved, revenue splits, transaction fees, and customer acquisition fees are becoming common payment terms as well.

For its improvement on other models, however, the current model is still not producing profit for portal operators. The major players are expending large amount of risk capital obtained through stock offerings in hopes of creating strong brands that can survive until the current technology and appli-

cations are surpassed by improvements that create a new environment and hopefully profitable business model.

This strategy is based on the fact that portals create value by organising access to content in a way that creates a brand for the portal that attracts returning users.

A side effect of this strategy is that portals rarely create significant content. Content creation is expensive and difficult so portal operators primarily make deals with those who have content to enhance its availability to the wide audience of users that the portals provide or to create additional revenue streams or brand identification for the content creators.

Digital portals

The current hope for portal providers, backed by significant investments and new competition from telecommunication firms, is the development of multipurpose digital portals. Digital portals, which are not yet widely available because bandwidth and compression technologies are still being improved and installed in many locations, allow the combination of the aspects of current content portals with digitalisation of video and audio.

Although related to the contemporary portal model, the digital portal model makes it possible to provide services that provide new and additional revenue to portal operators and content creators. Under this concept video and audio can be pulled over telecommunications lines and accessed using Internet-based applications. It is believed that fully digital portals provide the best means for searching, selecting, purchasing, and using content by organising access to the available materials in a commercially viable manner.

A user of such a system could utilise a portal to view broadcast channels world-wide, to obtain pay-per-view ser-

vices, to view potential non-broadcast channels, to search video clip archives, to use a variety of multimedia materials, to seek additional information about the content, to chat with others while viewing a programme, and to determine the language in which the content is received.

The ability to recoup costs by obtaining revenue not only from an advertising stream but also from users through pay-for-view and premium services makes this attractive to a variety of players.

The major content organisers in operation today are hoping to use this new environment and business model to capitalise on strong online portal brands created during operations under the current model. The telecommunication firms planning to enter the market are hoping to capitalise on the brand recognition they already have as well.

This new environment is attractive because it will require only limited new technology investments for content providers and organisers because it builds upon existing systems and operations. Similarly, the consumer costs for acquiring new hardware and software and telecommunications services will be limited, but should not be ignored because the number of users willing to do so is unclear.

Thus, the development of digital portals faces constraints. Content aggregators and suppliers will have to upgrade facilities and equipment and make investments in organising video and audio content so both financial and temporal constraints will affect the pace of this development. The greatest constraint will occur with consumers, however, who will be required to purchase or upgrade computing resources used to process and store video content, as well as paying higher prices for telecommunications lines, and added costs for use of video content.

If consumers are willing to make such expenditures the digital portals will become a kind of kiosk or corner store for online communication. They can use the new portals to access online news, to view magazines, to make purchases of goods, to purchase or rent a video or audio product they do not wish to own and have it downloaded online, to use education and training materials, to obtain cultural materials, and to play games.

The digital portal model will provide more opportunities for content providers and aggregators to gain income from audiences/consumers. Whether these new revenue opportunities are sufficient to make this a viable business model has yet to be proven.

Implications of Online Content Organisers for Multimedia Producers

The experiences of content producers and aggregators during these changes in business models provide lessons that can be used today by multimedia and other content producers. They also provide opportunities that can be pursued.

Perhaps the most intriguing opportunities arise from the improvements of portals and the new business model that may support them. They are important to producers of content, especially multimedia producers. The emerging model would seem to provide significant opportunities for independent producers. When multimedia, audio-visual, and audio producers make materials available in the new model they can do so at no cost (sponsored by the company or advertisers), as pay-for-use, or as direct sales.

Digital portals become especially important in this regard in that they reduce marketing costs for the producer. The largest potential audiences and highest number of users for multimedia products are more likely to be

gained by portal click-through than by independent click-through or information or product seeking in retail stores. Online use can provide samples of the materials even if full access is not provided.

Portal operators will be willing to deal with independent producers because their own brands are enhanced by availability and the operators will not have to bear the cost and risk of content production. Portal operators need to provide a variety of choices to enhance their relationships with consumers, so they need to have access to a wide variety of materials from producers. Thus, the same types of relationships that exist between portal content organisers and text-based and graphic content providers today are likely to be transferred to multimedia providers. When multimedia providers offer materials for a fee, it is likely that digital portal operators will use similar types of transaction or customer-based fee arrangements that are now becoming common in e-commerce.

The new digital portal environment further reduces the previous advantages of company size in content production by reducing traditionally needed marketing, sales, warehousing, and distribution operations. It increases the competitiveness of independent and small producers by providing easier access to the marketing and distribution systems needed, by providing direct sales mechanisms, and by reducing the need for warehousing because of reducing the number of physical copies of products that must be produced for retail sales.

As portals continue to develop, the need for video, audio, multimedia, and related materials by their operators will induce them to work directly with producers to gain access to materials. Some relationships will be based on barter and others will be based on a variety of compensation methods. The beginnings of these types of relation-

ships can be seen among some content aggregators and content providers, and aggregators and e-commerce firms. In the future it evolve into ownership interests as is now common between major cable television service providers and cable content producers.

Content providers, however, need not see the portal and digital portal developments and business models as the only online opportunities. Although traditional information and general content producers and aggregators abandoned the previous business models, there are elements that can still be used by multimedia and other content producers. As noted earlier, business models can be reintroduced or used differently by different products and services. Although the failed or abandoned models discussed above may not have proved successful for major general content providers or aggregators, they can still be useful for other types of content producers.

The paid Internet model in which users paid for access, for example, may not have been suitable for general products but it may be a model that can be used for some educational or unique entertainment products in multimedia or other forms. The improved abilities to collect for pay-per-use and subscription services that exist in the contemporary e-commerce environment enhance this possibility. These methods also give producers the advantages of cost saving by reducing or eliminating the need for physical production and distribution and stocking requirements of retail establishments.

The free web model presents opportunities for introducing and marketing multimedia and other content that may ultimately require purchase through pay-per-use or direct sale transactions with physical or digital distribution of a product. The use of web sites for sales promotion can be enhanced, as many software companies are already doing, with free

samples of multimedia and other content and the opportunities to select paid use of full services or electronic purchasing of the product.

Multimedia producers, then, can benefit significantly from the further development of online content services as well as some of their earlier activities. To do so, however, they need to become increasingly familiar with the business practices and strategies of the existing and emerging content organisers and to begin developing alliances to provide that material and gain access to portals from which new customers and financing will emerge.

References

Cringely, Robert X. (1993). *Accidental Empires: How the Boys of Silicon Valley Make their Millions, Battle Foreign Competition, and Still Can't Get a Date*. New York: HarperCollins.

European Commission (1999). *Competitiveness of the European Union Publishing Industries. Report by Media Group, Turku School of Economics and Business Administration (Finland)*. European Commission, DG III.

European Commission (1997). *The Content Challenge: Electronic Publishing and the New Content Industries. Report by Techno-Z FH Forschung & Entwicklung (Austria)*. Brussels: European Commission, DG XIII/E (October).

European Commission (1998). *The Digital Age: European Audiovisual Policy*. European Commission, DG X.

European Commission (1997). *Electronic Publishing in Europe: Competitiveness, Employment and Skills. Report by IDATE (France)*. Brussels: European Commission, DG XIII/E (October).

European Commission (1996). *Strategic Developments for the European Publishing Industry Towards the Year 2000: Europe's Multimedia Challenge (Executive Summary)*. European Commission: DG XIII/E.

Grieve Smith, John (1990). *Business Strategy*. Cambridge, Mass.: Blackwell.

Karlöf, Bengt (1989). *Business Strategy: A Guide to Concepts and Models*. London: Macmillan.

Pavlik, John (1996). *New Media and the Information Superhighway*. Boston: Allyn and Bacon.

Picard, Robert G. (1998) "Interacting Forces in the Development of Communication Technologies: Business Interests and New Media Products and Services," *European Media Management Review* (No. 1), pp. 16-22.

Porter, Michael (1985). *Competitive Advantage*. New York: The Free Press.

Relevant Knowledge, Web Access, March-April 1998 period.

Timmers, Paul (1998). "Business Models for Electronic Markets," *Electronic Markets*, Vol. 8, No. 2, pp. 3-8.

The Author

Robert G. Picard (robert.picard@tukkk.fi) is professor and manager of the Media Group, Turku School of Economics and Business Administration. His work focuses on competitive dynamics, financial structures and performance, and managerial economics of media firms. He was founding editor of the *Journal of Media Economics* and is the author of 12 books on media issues.

Calendar of Events

September

■ 09/06/2000 – 09/08/2000

**LUMIS 2000:
Second International Workshop
on Logical and Uncertainty Models
for Information Systems**
Greenwich, London, UK
<http://www.dcs.qmw.ac.uk/~mounia/LUMIS.html>

■ 09/12/2000 – 09/14/2000

**USM 2000 3rd IFIP/GI Int. Conf. on
Trends towards an Universal
Service Market**
Munich, Germany
<http://usm2000.informatik.uni-muenchen.de/>

■ 09/11/2000 – 09/15/2000

**SAB2000:
The Sixth International
Conference on the Simulation
of Adaptive Behaviour**
Paris, France
<http://www-poleia.lip6.fr/~sab2000/>

■ 09/25/2000 – 09/28/2000

**Web Site Content Management
Summit**
San Francisco, U.S.A
<http://www.iqpc.com/cgi-bin/templates/0/index.html>

October

■ 10/15/2000 – 10/18/2000

**Strategic Management Society
Annual Conference 2000**
Vancouver, Canada
<http://www.smsweb.org/Pages/Frames/00/00main.html>

■ 10/19/2000 – 10/22/2000

**7th Annual – Human Resources
Management and Organizational
Management/Behaviour (HRMOB)
Converence**
Charlotte, North Carolina, U.S.A.
<http://www.aom-iaom.org/hrmob/index.html>

■ 10/23/2000 – 10/24/2000

**Measuring & Analyzing Online
Customer Behaviour**
Chicago, U.S.A.
<http://www.iqpc.com/cgi-bin/templates/0/index.html>

■ 10/24/2000 – 10/25/2000

Online Intellectual Property
Washington D.C., U.S.A.
<http://www.iqpc.com/cgi-bin/templates/0/index.html>

■ 10/30/2000 – 11/04/2000

WebNet 2000
San Antonio, Texas, USA
<http://www.aace.org/conf/webnet/webnet2000call.htm>

November

■ 11/16/2000 – 11/17/2000

**ACM Conference on Universal
Usability: Solutions, Systems, and
Methods**
Washington D.C., USA
<http://www.acm.org/sigchi/cuu/>

December

■ 12/04/2000 – 12/05/2000

**2nd IFIP / MASSYVE Working
Conference on Infrastructures
for Virtual Enterprises
– Managing Cooperation in Virtual
Organizations and Electronic
Business**
Florianopolis, SC, Brazil
<http://www.uninova.pt/~prove/>

2001
January

■ 01/03/2001 – 01/06/2001

**Hawaii International Conference
on System Sciences 2001**
Maui, Hawaii, U.S.A.
<http://www.hicss.hawaii.edu/>

Impressum

Title

JMM – The International Journal
on Media Management

Edition: Vol. 2 – No. 2 – 2000

ISSN (printed edition): 1424-1277

ISSN (electronic edition): 1424-1250

Editorial Office

mcm – Institute for Media and
Communications Management,
University of St. Gallen/Switzerland
Müller-Friedberg-Str. 8
CH – 9000 St. Gallen
Phone: +41-71-224 34 28
Fax: +41-71-224 27 71
Email: media.editors@netacademy.org
URL: <http://www.mediajournal.org>

Published by

mcm – Institute for Media and
Communications Management,
University of St. Gallen/Switzerland
Müller-Friedberg-Str. 8
CH – 9000 St. Gallen
Phone: +41-71-224 34 28
Fax: +41-71-224 27 71
Email: media.editors@netacademy.org
URL: <http://www.mediajournal.org>

Editorial Team



Beat F. Schmid



Peter Glotz



Peter Gomez



Dörte Wittig

BEAT F. SCHMID – Editor-in-Chief

PETER GLOTZ – Co-Editor

PETER GOMEZ – Co-Editor

DÖRTE WITTIG – Executive Editor

Layout

BELAU, Duisburg, Germany, info@b-e-l-a-u.de

Printer

Niedermann Druck, St. Gallen, Switzerland

Remarks

This publication is part of the NetAcademy on
Media Management at the mcm – Institute for
Media and Communications Management,
University of St. Gallen/Switzerland.

Articles from the contributors do not neces-
sarily reflect the opinion of the editors.

Copyright

© mcm – Institute for Media and
Communications Management

Partial or total reproduction will be permit-
ted upon application, subject to acknowledg-
ing the source and sending two copies to the
editorial office.

The editors wish to thank Bertelsmann Foun-
dation, Germany and Heinz Nixdorf Foun-
dation, Germany, for their support with the
publication of this journal.

The journal will observe the following issues closely

- Strategic, managerial and organizational
aspects of the media sector and the media
industry
- Economics of traditional and new media
- Evolution of the media industry and me-
dia industry segments
- Technology, infrastructure, user behavior
related to the changes in the media sector
- Effects of new media on economy, society,
politics, law and culture

Our goal is the close analysis of new industry
structures, organizational forms, and critical
competencies developing as a result of
reconfigurations in the media value chain. We
want to bring together academics and indus-
try figures to explore the transition from „clas-
sic“ to „new“ media and identify the factors,
which will determine organizational success
and economic efforts in a fast changing and
converging environment.

We are interested in receiving your submis-
sion to the JMM. Articles, which deal with one
of the above issues, are more than welcome.

Orderform

Annual Subscription (4 Editions)

■ Institutional: US\$ 300*

■ Individual: US\$ 64*

*(plus tax and postage)

Single unit price:

■ Regular: US\$ 22*

*(plus tax and postage)

I wish to subscribe to JMM

This is an institutional subscription

This is an individual subscription

Name

Company

Department

Street

City

ZIP Code

Country

Phone

Fax

Primary Activity

Comments

Please return to

mcm – Institute for Media and
Communications Management,
University of St. Gallen/Switzerland
Müller-Friedberg-Str. 8
CH – 9000 St. Gallen
Phone: +41-71-224 34 28
Fax: +41-71-224 27 71
Email: media.editors@netacademy.org
URL: <http://www.mediajournal.org>