

Online News in China and Norway

Arne H. Krumsvik
Oslo University College

Xiaowen Wang
Communication University of China

News has been available online since the 1970s, and the first newspaper on the proprietary online service America Online was launched by the Chicago Tribune in May 1992. But not until 1995 was the online newspaper concept of today developed, featuring among others CNN as a global news engine. 1995 was also the year in which public Internet usage had its breakthrough globally, largely due to a simpler “point-and-click” interface for the World Wide Web. After the turn of the century, there were over 12,000¹ news media online world wide, among these at least 150² in China and approximately 200³ in Norway (Deuze, 2001; Rasmussen, 2002). The media landscapes of the world’s most populous nation, as well as its small far northern counterpart were both affected. This analysis of online news in China and Norway will discuss not only traditional online newspapers, but in a broader perspective analyze providers of news content, including the online phenomena of aggregating portals without their own news gathering operations.

Theoretical Approach

Based on the knowledge of various models of social environment in which technological development takes place and diffuses, a study by Zhou He and Jian-hua Zhu (2002) proposes the social environment model shown in Figure 1 to examine the development of online newspapers:

In this model, the communication of online media is seen as a dynamic process, made up by the communicators, the message, the online channels and the audience. All these factors interact with and influence each other in a nonlinear fashion, as shown by the overlapping circles. This whole process is based immediately on the telecommunications infrastructure in a society, which influences the online communication process and is, in turn, influenced by the process as it develops. Both the online communication process and the telecommunications infrastructure are embedded in a larger social, political, economic and cultural environment, which influences and is influenced by them at the same time. (He & Zhu, 2002, pg. 122)

This comparative case study will focus on (a) online news media, (b) their market position (audiences) and the structural environment of (c) laws and regulations, and (d) the economic system.

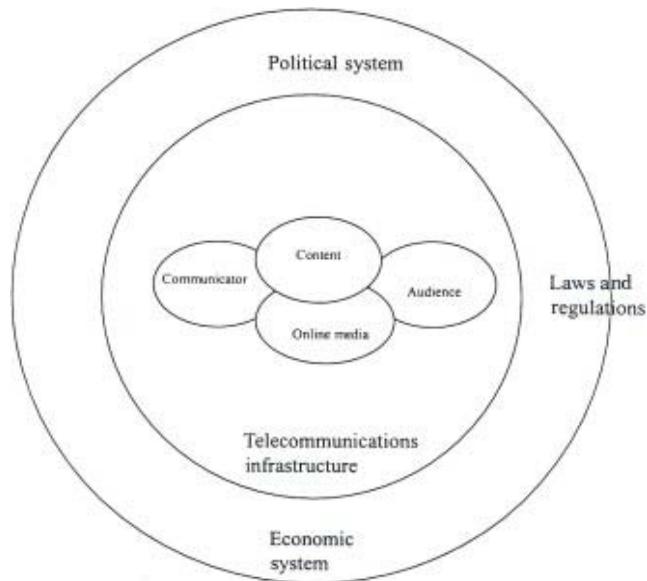


Figure 1. A Social-environmental Model of Technology (He & Zhu, 2002)

Rasmussen (2006) has developed a typology of online news media based on traditional media affiliation, audience and functions:

1. Online Newspapers Published by Traditional Newspapers is the most typical online news venture, with a strong resource base. Most traditional newspapers in the world do have some kind of online presence.

2. Stand Alone Online Newspapers are very rare, and the Norwegian Nettavisen launched already in 1996 represents a deviant case.

3. Online Niche Media are more typical for stand alone online media, dominated by publications covering information technology.

4. Online Magazines have been more experimental in developing new genres. HotWired was among the first in this category, followed in the United States by Saloon, Crikey in Australia, and Tebleka in India.

5. Portals and Search Engines became important as a consequence of the tremendous growth in the number of web pages. This category tend not to do original news reporting, but are aggregators of news content from other media outlets and distributors of news content from wire services. Yahoo! and Google are the dominating world players in this field.

6. Online Media affiliated with Broadcasters tend to focus on interaction with and promotion for broadcast shows, and distribution of broadcast content online. To a larger degree than for newspapers, these websites enrich the mother media channels.

7. Other Online Media represent the digital frontier of online news gathering and distribution, characterized by user created content in various configurations. Phenomena such

as Slashdot and Digg.com are representative for this type, alongside alternative media and blogs with political agendas.

The online news media landscape in China and Norway will be described and analyzed based on this online news media typology and the social environment model, with a special emphasis on how regulations and the economic system affects the relative presence and dominance by various types of news media.

The Case of China

There are two main categories of online news media in China – one belongs to traditional media and the other comprises commercial websites. The latter identified news content as important for attracting audiences from the very beginning.

Sina, Sohu, and Netease became well-known to Chinese online users. In 1995, an infamous magazine named “ShenZhouXueRen” launched its electronic version online, which was the first time traditional Chinese media appeared on the internet. “China Trade Journal” became the first online newspaper the same year. In 1996, the opening of “Guangdong People Radio Internet” and CCTV Internet marked the beginning of the online journey of traditional media. Before 1998, most Chinese online news media was available in an electronic version and most news media websites repurposed content from traditional media. Later some major news media developed large-scale comprehensive stand-alone online media sites, named “People Internet” or “XinHua Internet.”

The new commercial online media operations had more resources for technical development than most media organizations and aggregated news content from traditional media. This pattern of priorities is common among portals globally, but in China the main rationale for not building news organizations was government regulations rather than economic efficiency.

Regulations

China online regulations included access, news gathering, and content distribution. According to national regulations, a license is needed for news gathering operations, and this is only given to traditional media organizations.

In January 2000, the first online news propaganda conference was held by the News Office of State Council in Beijing. By the end of May, the international online news propaganda industry development sketch was formally put forward by the Publicity Department and the central propaganda office. In the document, the guiding principle and target of online news propaganda industry was proposed, and the Chinese Internet News Center, People’s Daily, Xinhua News Agency, China Radio International and China Daily was identified as the first key online news propaganda websites.

Economic System

The main income source for online news media in China is advertising. The development of online media affiliated with traditional media was funded by their mother organizations

and to some extent direct government subsidies, while news commercial media are funded by investors.

An example of multi-dimensional investment was QianLong Net and Eastern Net. QianLong Net obtained fund support from the Beijing nine traditional media in the first three years. Shanghai's Eastern net got 600,000,000 Yuan funds from "the Eastern Pearl" Group, the "Wenxin News Group," "Liberation Daily" and so on.

An example of investment from other places is "China Youth online," which, operating under the status of "The Beijing Online Network Information Technology Company," obtained the Hong Kong Enterprise's investment. As a result of the national policy limit, the media websites' ability to attract funding is relatively limited.

Online Media

Currently the main force of China's online media are those websites that are authorized by the State Council Information Office, which has four levels, (a) the central press units websites, (b) the central state organs and departments media websites, (c) provincial autonomous regional and municipalities media websites, (d) integrated commercial units websites. Furthermore, online media held by newspapers, periodicals, radio stations, and TV stations.

Online Newspapers Published by Traditional Newspapers

Compared to large-scale media online companies, it was rather simple for many newspapers to start their online businesses by reissuing their content on the web, without revision. Print had priority and staff was limited. The national policy was the third restricted factor. For considering resource integration, the government issued "Regulations on the Ways of Online Media News Publicity" to limit online news publicity. On the other hand, the birth of key online news media also pressed the growth of online newspapers.

Online Niche Services

China Youth Net and Chinese Economy Internet represent major niche services targeting the young audience and the business community.

Portals and Search Engines

Yahoo! and Google have adapted to Chinese regulations and provide local language versions of their services. The strongest local player is Sina, an IT company founded in 1993. "SiTongLiFang information technology limited cooperation" was founded in Beijing and became one of the fifty companies strongly supported by the Beijing government. "SiTongLiFang" opened its website "SRSNET" at the Internet tide.

In July 1998, "SiTongLiFang" gained exclusive rights and broadcasted live the World Cup in France, a major event by a non-media identity. It was planned and executed by two online pioneers, ChenTong, later Sina's vice executive officer and editor-in-chief, and WangYan, the later CEO of Sina Group. The website created the highest visit record at that

time among Chinese sites; almost two million clicks came through everyday. This became a new starting point of “SiTongLiFang,” and they changed the name into “LiFang Online” and developed the concept of a Chinese portal in China.

On November 1st, 1998, “Lifang Online” announced plans to buy the largest Chinese Internet company, “Huayuan Information,” and establish the largest Chinese website, “Sina,” both domestic and abroad.

At that time, “SiTongLiFang” had a business model of providing Chinese platform software, which was considered “the Hottest Welcomed Software in China.” Even when Sina prepared to be listed on NASDAQ, it was clearly written in the prospectus that the software income represented more than 70 % of the total revenue.

On March 26th, 1999, Sina put forward a special topic about “the Kosovo Crisis,” which used traditional reporting methods combined with the rapidity and interactive character of the Internet to attract many users. On August 8, Sina was the first to report the NATO missile hit of the Chinese embassy in Yugoslavia. News centers became the most up-to-date place for promptly and comprehensively reporting news, and at that moment the visits were five times greater. After chatting and email services, online news attracted most users.

On March 25th, the famous anchor WuXiaoli of Phoenix TV station in HongKong visited Sina which raised the curtain on celebrity online chatting.

The main business of Sina was narrow in the field of Sina Internet (sina.com), Sina wireless (sina.mobile) and Sina Hotline (sina.net). Among them, the short message income of Sina Wireless and ads were about 40% and 50% respectively. The fast growth of Sina Hotline was expected to be a revenue source for the future.

Sina and other portal services were labeled “News Supermarket” for their practice of copying content from traditional media without clearing copyright. In the beginning of 1999, Xinhua News Agency and People’s Daily stopped the supply to Sina. The crisis was solved after signing an agreement over news supply. At the beginning of 2006, the Liberation Daily Newspaper Group proposed to establish a newspaper association in order to raise the charge for online media news transfer.

Online Media Affiliated with Broadcasters

CCTV Internet was founded in December 1996, and enlisted as a national key news website in December 2000. On May 25th, 2001, CCTV founded an online propaganda department with the object to “propagandize Chinese culture to the world and entertain the globe by video and audio programs”. CCTV Internet has launched 50 web-channels, including English, Spanish and French foreign language channels.

Each day, the total length of time for live broadcast programs and VOD programs on CCTV Internet is 118 hours. CCTV-NEWS, CCTV-4 and CCTV-9 channels broadcast live around the world all day long. The key programs of channel CCTV-1, CCTV-2, and CCTV-5 have fulfilled online synchronized live broadcast, and 280 television programs including news, arts, sports and science are available as video on demand (VOD).

CCTV Internet is also in charge of interactivity with television viewers, receiving more than 2000 letters daily and hosting 50 forums in which famous television stars, TV anchors, arts stars, political commentators and experts and scholars hold discussions with online users.

Original online programming also includes a news channel and an entertainment channel targeting young people.

Other Online Media

News gathering regulations limit the development of Stand Alone Online Newspapers and Online Magazines in China. But new online formats depending on user generated content are not regulated, and these represent an important part of original content for commercial websites.

Audiences

According to the CCNIC Chinese online development statistics survey up to July 2007, there were nearly 162 million online users in China and 77.3 % were users of news websites. Above 90% stated that, when in need of news information, they would seek it online first, and 76.3% said they usually got major news from the Internet.

In market reach, the commercial portals without news gathering operations are the dominant providers of news, a phenomenon also observed internationally. In the U.S., Yahoo! is the largest news provider.

According to Alexa.com⁴, Sina is the third largest website in China after Baidu.com and qq.com. The Chinese version of Google is the fourth largest site. All top four distribute online news. Baidu pioneered the new generation news portal concept, providing valued-added services such as news search and individual news subscriptions.

The Case of Norway

Norway was among the first countries outside the U.S, to connect to the network we today know as the Internet⁵.

Regulations

The Broadcasting Act of 1992 and The Media Ownership Act of 1997 regulate broadcasting (distributed over the air, by cable or by satellite) and concentration in ownership of traditional media in Norway. The purpose of The Media Ownership Act is to “promote freedom of expression, genuine opportunities to express one’s opinions and a comprehensive range of media”. But there are no regulations for online media.

Economic System

Online news is supported by advertising. Newspapers receive various subsidies, but there is no direct governmental funding of online media development. A strong newspaper industry and active participation in online development by Telenor (the national Telco), might represent indirectly governmental support of the development of online news media. After turbulence in the aftermath of the America Online financial collapse in 2001, the year 2005 represented the commercial break-through for the online newspaper business, receiving

more demand for advertising space than they could offer, and making high profit margins. The largest media group, Shibsted's online activities produced strong figures in 2006. The revenue grew by more than 60%, and these activities' share of the Group's operating profit (EBITDA) was 24%.

Online Media

Dagbladet (single copy sales, nationally distributed tabloid) launched the first major online news operation in Norway March 10th, 1995. VG (single copy sales, nationally distributed tabloid) brought forth its online edition on October 10th of the same year. And even though Dagbladet re-launched a more news-focused issue the day before, it did not keep the country's largest daily from taking the lead online as well. A solid brand and interactive services were its main weapons.

Online Newspapers Published by Traditional Newspapers

Sigurd Høst has kept a register on the development in the number of online newspapers since 1996, and "following a certain amount of hesitation in 1995 (only 17 newspapers registered online by February 1996), a quick expansion came in 1996. Then came three years of relatively slow growth until activities boomed once more in 2000" (Høst, 2001, p. 18-19, our translation). This boom was also echoed in media coverage of this new area in the media landscape.

Table 1. Growth of Online Newspapers in Norway

Year	Number of online newspapers*	"Nettavis" in Atekst**
1995	17	1
1996	72	87
1997	74	331
1998	102	481
1999	120	511
2000	157	1456
2001	201	1775
2002	-	1519
2003	212	1684
2004	-	1803

Notes: *Registration at the end of the year, except 1995, which has registration data from February 1996 (Høst, 2004).

** Search for "nettavis" (online newspaper) in the Norwegian search database Atekst.

By the end of 2000, there were 157 newspapers online, and out of these 126 offered a news service as part of its output. Dagbladet started the new millennium by establishing DB Medialab, responsible for its activities in digital media.

Separating online activities into separate companies served to make visible its values to the market, increasing the value of the owners' shares. And while print papers were marked by processes of efficiency improvement, the spirit of entrepreneurship was cultivated in new media.

The trend of separation spread to other major Norwegian newspaper companies, such as VG, Aftenposten and Stavanger Aftenblad (a regional subscription-based newspaper).

The maturing of the online newspaper market measured by the number of print newspapers with their own respective online editions does not follow a classic diffusion curve, and Sigurd Høst (2000) emphasizes two explanatory variables:

If we compare the pattern of diffusion (...) with the ideal-typical S-curve for diffusion (...), it is most notably the fast growth in 1996 which does not fit. Instead of waiting to see what would happen, as many papers did in 1997-1999 (...), many were now anxious to get on early. The explanation is both that they were afraid of being surpassed by the technological development ('being left on the platform as the train leaves'), and that it was possible to create a fairly decent Internet service at a low cost (Høst, 2004, p. 14, our translation).

In addition, the launch of Nettavisen.no in 1996 made a significant impact, contributing to changing the market structure.

Stand Alone Online Newspapers

The entrepreneurs of Nettavisen.no lacked proper funding to launch a new printed paper, and a central part of the business idea was to function as a meta medium in relation to newspapers. By systematically surveying and citing the most interesting stories published in the print media every day, Nettavisen, despite its limited resources and within a short period of time, was able to offer complete news coverage, previously only available through the largest newspapers. And then a few self-produced stories were often quite elegantly developed to make the evening television news, hence promoting Nettavisen.

After some time, Nettavisen's breadth constituted a substitute for the omnibus print paper, instead of promoting the original messenger of the particular piece of news. The newspapers responded by increasing efforts in their own online editions and thus reinforced the effect.

The news battle was no longer about 24 hours, but about minutes. This was strengthened by the fact that editors publicized the exact time a story was made public. The news competition was given preference over experimenting with new forms of expression and developing the characteristics of the new medium. The new channel was also well suited to news transmission, given its ability to continuously combine the advantages of newspapers, radio and television through the use of multimedia.

In 1995, most newspapers had to ask themselves whether this was in fact a case of cannibalism, but the concerns had to be put aside in favor of looking at the realities of the competition on the market.

Now, all online papers cite each other, and the problem for print papers that wish to withhold stories from their online editions is that the readers may now find the story in its

online rival, and not where it would be logical to start the search. It is precisely the good, exclusive stories that one wishes to withhold. The problem is that these are also the ones that will be cited (Krumsvik, 2006).

Online Niche Media

In the first phase, publications covering information technology were the typical stand alone online media. A new phenomenon in Scandinavia is the joint development of new online niche media by online newspapers. E24.se started the trend by using the business and economics content from Svenska Dagbladet combined with the distribution power of Sweden's largest online newspaper Afronbladet. The owner of these newspapers, the Norwegian media group Schibsted, copied the success in Norway with a joint venture between Aftenposten and VG. In both markets the new business web sites became the online market leaders in their niche and were profitable after the first year of operations.

Online Magazines

Most advertisers prefer large news services, and thus far there has not been a market potential for online magazines in Norwegian. Magasinet published as part of Dagbladet.no represents the deviant case, experimenting with online feature journalism.

Portals and Search Engines

Scandinavia Online was launched as a joint venture between Telenor (the national Telco) and Schibsted (the largest media group) in 1997, and became the default home page of 80% of the private online users. Hence it also became the most important portal of online news, but all traffic was sent to the media of origin. The Swedish Telco Telia joined the venture, and through mergers and acquisitions SOL became a major player in Norway, Sweden and Denmark. The initial rationale was partly defensive in response to expansion plans by America Online. This never became a reality, but the positions in the portal and search markets were strong enough to make Yahoo! leave Scandinavia.

After the online financial crisis in 2001, Scandinavia Online was sold to the Yellow Pages operator Eniro, and Schibsted developed VG.no as their main portal initiative in Norway and Aftenbladet.se in Sweden. Default start pages became less important for market reach, and the online newspapers in Norway had developed a very strong position due to major investments as a consequence of the competition from Nettavisen.

In 2006, Schibsted re-entered the national search market to compete with the dominating position of Google, using the domestic developed Fast technology, with a comprehensive news search as a differentiating factor. One year later the Sesam search venture joined forces with Yahoo! in this struggle.

Online Media Affiliated with Broadcasters

The public broadcaster NRK (the Norwegian Broadcasting Corporation) is Norway's major broadcasting institution with nine radio channels and two TV channels with an approximate 100% coverage. NRK began experimenting with the World Wide Web in 1995,

starting with offering a selection of program related material. Due to advice from the European Broadcasting Union (EBU) not to invest too much on Internet activities, they started rather low scale. Today this is used as an explanation of why NRK is not in a leading position, as is the case in every other market they operate.

The first online organization had three employees. They got financial resources to finance their own salaries, and a “license to beg” for production funding from the other departments at NRK. This led to an online offering dependent on the willingness to pay in various parts of the organization. The most prestigious part of the programming felt no need to invest in new media development, hence there was no online news offering for the first five years. For a broadcaster financed by license, the income was fixed, and new ventures had to compete alongside existing activities for resources.

The general online optimism leading up to the millennium, and advertising financing of parts of selected BBC products online, led to a new strategy at the NRK. There was a need to allocate more resources to the online service, and advertising was identified as the solution. In order to open for such revenue, the online offering had to be defined outside the public service mission of NRK. A new division named NRK Futurum was established with a mission of creating new streams of revenue for the public broadcaster, and an ambitious goal of taking a dominant place in the online space was proclaimed in 2000. Online news then became a part of the offering.

The dot.com downfall of 2001 limited the potential of online revenue, and the online organization was reorganized. Online production became an integrated part of the various production departments. In 2004 the decision was made to make all regional transmissions, both radio and television, available on the Internet across all national borders. In the case of major news events, the NRK web site transmits live from the sites where events are taking place.

The broadcaster had high hopes for better market positions as video consumption was expected to grow substantially due to increased online penetration. 2005 became the break thru for online video. But NRK did not manage to realize the potential. Mandatory registration of video users was removed to enhance usability, but the automated production was detached from the online news staff, and the integration of video in online news developed slowly.

The national newspapers started web-tv offerings in 2006, and the largest newspaper, VG, also became the leading online broadcaster, to the frustration of the nations dominating broadcaster, NRK.

The leading commercial broadcaster, TV 2, had become a major player in online news through the purchase of the online only Nettavisen. TV 2's strategy was to offer online video as premium service requiring a paid subscription. As the dominant player in this niche, this became a profitable venture based on on-demand news and entertainment previously aired on television.

Hence the traditional major newspapers took the lead in development of original multimedia news content for the web.

As digital terrestrial television (DTT) is about to be introduced and analogue shut off is decided, a new situation emerges for the traditional television channels. NRK and TV 2 will not be the only channels with full distribution. In preparing for increased competition the

traditional market leaders introduce niche channels. TV 2 went from being a family channel to offering a family of channels, with sports, news and movies as part of the new portfolio.

NRK decided to re-launch NRK2 as a news channel in competition with TV 2 and to establish a children's channel in addition. As TV 2 launched the news channel in February 2007, NRK did a soft launch of their news channel online and reorganized the news department in order to realize the new strategy on continual publication of online news in all three channels.

Internal conflicts led to a compromise of two news organizations, one responsible for all traditional prime time news shows on radio and television, and the other responsible for the new continuously updated news offerings in all channels. The latter was supposed to control the news gathering resources, but the traditional shows are struggling for control over dedicated reporters.

One of the objects of reorganizing was to produce more without increasing the total resources. As more people are dedicated to specific program offerings, fewer resources are available for a centralized multi-channel production.

Other Online Media

The major online newspapers have developed into mega sites in Norway, also providing games, entertainment and venues for user created content. Hence their major competition on this field is the international (e.g. American based) players.

Audiences

Norway is one of the most digitally sophisticated markets in Europe, according to Jupiter Research. 80% of the population over 12 years of age uses the Internet regularly⁷. Among the top 10 national sites five are traditional news organizations affiliated with newspapers and broadcasters, with the online newspaper VG.no as the market leader. The other five are portals and search sites⁸. This makes Norway the deviant case in the dominance of national newspapers in the online industry.

Discussion

The development of online news is influenced by a larger social, political, economic and cultural environment. At first sight the difference in laws and regulations due to different political systems tends to be the main variable of the environment in which technological development takes place and diffuses in China and Norway (He and Zhu, 2002). The Internet technology is truly global, as are the basic economic models for online news. Regulations, however, might become less significant as a limiting commercial factor.

Nevertheless, competition from new Stand Alone Online Newspapers, such as the Norwegian Nettavisen, has not been and is still not possible in China today, due to limitations in news gathering for online media. In the early phase of Norwegian online news development, Nettavisen was a significant event triggering the traditional newspapers to invest earlier and heavier in online news development. Hence the Norwegian national newspapers have an unprecedented strong position in the overall online market.

Both China and Norway had commercial portals dominating the market of online news, without any major investment from the portals in original reporting, in the first phase of online development until the financial crisis in 2000. After this point, the market structure in China is more typical for the global Internet, dominated by relatively young online brands.

The main portal in Norway, Scandinavia Online, was sold to a Yellow Pages operator, and lost its position as the home page for most online users. The dominating media group, Schibsted, made a strategic choice to let their online newspapers be the main vehicle of online expansion, and this reinforced the strong newspaper's position from the first phase, introducing entertainment features and online community functionality normally associated with portals to their online news services.

In China traditional media are the driving force in developing Online Niche Media, due to news gathering regulations. In Norway traditional media have the same position due to their distribution power and content creation capability.

In China Online Magazines developing new genres are less likely to appear due to regulations. In Norway this is also less likely due to the limited size of the market.

Regulations might change, but there will only be incremental growth in the Norwegian online market. Large Chinese ventures, such as Sina, are accessing global capital markets to finance their expansion, economies of scale makes this less probable for Norwegian ventures⁹. The level of sophistication might be maturing in Norway while China represents a new frontier for online content development, depending on changes in the social, political, economic and cultural environment. Hence the market size seems to be more significant for the diversity of online news content over time.

Online media affiliated with broadcasters tend to focus on interaction with and promotion for broadcast shows, and distribution of broadcast content online in both China and Norway, and other online media might to a larger degree represent the digital frontier of online news gathering and distribution in China, as this represents a possibility to bend the rules of content creation.

Conclusion

This comparative case study has been focusing on various types of online news media, their market position (audiences), and the structural environment of laws and regulations, and the economic system in China and Norway. The two markets are on the opposite side on the main variables of social environment. Norway is low on regulations and low in market size while China is high in both areas (See figure 2).

Social Environment of Online News Development

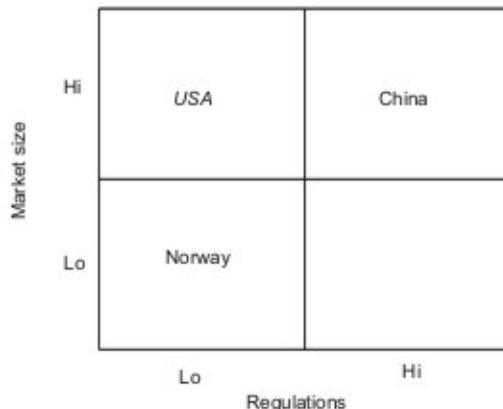


Figure 2: Market Size, Regulations and Social Environment of Online News Development

Chinese online regulations include access, news gathering, and content distribution. The main consequence of regulations is the limitation of news gathering for online media in China. Hence the dominating commercial portals are limited to repackaging and redistribution of news from other sources. This is however the same model used by the American (and global) portals Yahoo! and Google. They have the possibility of news gathering in most markets of operation; but they do not find the investment interesting. The diversity of news will be limited in the Chinese model, but this tends to be the same effect in Western societies due to mainstreaming (Piene, 2008).

The Norwegian market is not regulated, but the market size limits development of online magazines and other stand alone web sites targeted for more narrow groups. Hence the number of large players is very limited, and they use their distribution power to dominate new niches of economic interest as the market develops. This might lead to discussion of regulations to ensure diversity, potentially moving Norway to the quadrant of low market and high regulations – not a desirable position for players in the market.

China might over time move to a position of lower regulations, making this the most interesting online market on the globe. The major players like Yahoo! and Google have met some controversy for their willingness to compromise over regulations in order to be positioned, and as we have seen, their main concepts and business models are adaptable to the Chinese social environment of online news.

Notes

¹ In April 2001, the American trade journal Editor & Publisher Interactive had registered in its database 12,878 news media online.

² Estimate by Zhou He and Jian-hua Zhu (2002).

³ Sigud Høst (2004) registered 157 in 2000, 201 in 2001, and 212 in 2003.

⁴ http://www.alexa.com/site/ds/top_sites?cc=CN&ts_mode=country&lang=none retrieved December 13, 2007.

- ⁵ NORSAR (Norwegian Seismic Array) at Kjeller was one of about 50 nodes of ARPANET in 1975.
- ⁶ Schibsted (SCH) annual report 2006. Earnings before interest, taxes, depreciation and amortization (EBITDA) is a metric that can be used to evaluate a company's profitability.
- ⁷ TNS InterTrack, March 2007.
- ⁸ TNS Metrix, December 2007.
- ⁹ Sina is listed on the NASDAQ stock exchange in New York.

References

- Chen, Z. & Huang, Z. (2006, April). The dilemma and outlet of commercial portals. *Communication Research*, 90-91.
- Deuze, M. (2001, October). Online journalism: Modeling the first generation of news media on the World Wide Web. *First Monday*, 6(10). Retrieved from http://firstmonday.org/issues/issue6_10/deuze/index.html
- He, Z. & Zhu, J. (2002). The ecology of online newspapers: The case of China. *Media Culture Society* 24, 121.
- Hu, S. & Wang, J. (2005). The ponder of network time. *Advanced Television Engineering*, 8, 51-53.
- Høst, S. (2000). Avisåret 1999: Nye gratisaviser, flere aviser på Internett. Rapport 2/2000. Fredrikstad: Institutt for Journalistikk.
- Høst, S. (2004). Avisåret 2003 – Farvel til fullformatet? Revidert utgave. Rapport 2/2004. Fredrikstad: Institutt for Journalistikk.
- Krumsvik, A. H. (2006). What is the Strategic Role of Online Newspapers? *Nordicom Review*, 27(2), 283-295.
- Liu, L. (2007). *Theory about the New Media: The first decade of CCTV Internet*. Beijing: China International Broadcasting Press.
- Peng, L. (2005). *The first decade of Chinese Online Media*. Beijing: Tsinghua University Press.
- Piene, B. (2008) "På nett med verden". In Ottosen R. and Krumsvik, A. H. (Eds). *Journalistikk i en digital hverdag* [Journalism in a Digital Environment] (pp. 174-184). Kristiansand: Høyskoleforlaget/IJ-forlaget.
- Rasmussen, T. (2006). *Nettmedier: Journalistikk og medier på Internett* [Internet Media: Journalism and the Internet] (2nd ed.). Bergen: Fagbokforlaget.