

# Optimisation of the News Process in Different Publishing Channels – A Case Study at *Göteborgs-Posten*

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Keywords: Newspaper, Parallel, Publishing, Rhythm, Workflow

**Abstract:** Newspaper companies of today are increasingly publishing content in a number of different publishing channels in parallel. Most major companies are publishing content in print and on the Internet via the World Wide Web and different mobile channels, and some even operate radio and television stations.

The decisions associated with news publishing have developed from deciding the layout of the newspaper and the placement of articles, to more complex decisions and evaluations on what content should be published in different channels and when.

In this paper, we address the optimisation problem associated with news publishing in multiple channels with an analysis of a case study from a large Swedish morning newspaper. The analysis considers publishing characteristics such as the consumers' access to different publishing channels during the day, the technological boundaries for different publishing channels, what time of the day an event occurs and how much information can be gathered regarding the event.

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## 1. Introduction

Newspaper companies have had, and still do have, different approaches to publishing in multiple channels. Some divide their editorial organisation into separate editorial staffs for the printed and the electronic editions, sometimes even organised in separate companies. Others place their reporters working for the electronic editions at a separate desk within the editorial department. This approach tends to lead to poor utilisation of the knowledge that the personnel on the editorial staff possess and double work in covering events [Sabelström, 1999; Northrup 2001]

Many attempts have been made to integrate the creation and production of content for the electronic editions into the editorial department working primarily with the printed edition. Often, the integration projects have not been as successful as desired. [Northrup, 2001] In this report, we present the results of a case study of a seemingly successful integration of web reporters on the local news desk, made at the Swedish metropolitan morning newspaper *Göteborgs-Posten*. We also point out the success factors in and the benefits of the integration.

## 2. Factors Influencing the Production of News

As a basic hypothesis, we assume that when studying the production of news, publishing and distribution as a whole with respect to the optimisation of the different parts, both the technical and the organisational aspects are equally important. To publish a competitive newspaper in different publishing channels successfully, there has to be a correlation between news evaluation, consumer behaviour, and the time the event is published.

We identify four time-related factors influencing the production of news for publishing in multiple channels:

- *The news process* describes the building-up of reports and other products surrounding an event as a function of time.
- *The work process* of the reporters and other members of the editorial staff consider the time needed to fulfil the proper ethical and qualitative demands for different publishing channels.
- *The technical boundaries* of different publishing channels imply that the different channels have different time requirements for the distribution of information.
- *The consuming process* describes how and when the consumers access news information at different times during the day.

Figure 1 illustrates the connection between the different parts of the newspaper production and the four factors listed above.

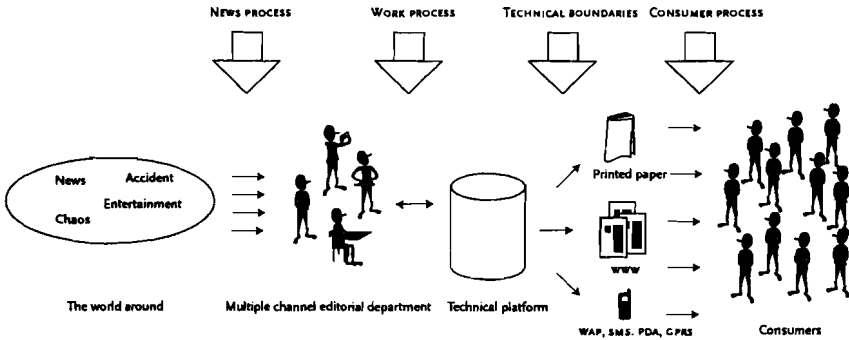


Figure 1. Multiple channel production, publishing and distribution.

The character of the reporting of a news event changes over a period of time. When an event occurs, it is usually not possible to access more than a brief amount of information concerning the event. As time goes by, the reporting of the event goes from brief news items to broader articles with background information and reports on related incidents. The rhythm of different publishing channels has an impact on the way of working as well as on the qualitative demands of different publishing channels. Thus, the rhythm and the qualitative demands are closely connected to the technical boundaries of the publishing channels. The definition of quality differs somewhat between different publishing channels, as will be discussed later in this report. In this context, not only the rhythms of the publishing channels are of importance, but also how and when the consumers make use of different services.

However important and interesting the aspects of news evaluation and news development over time are, and also consumers' user habits, we will not address them in this report, but leave them to be studied and analysed in depth by journalists and social scientists.

### 3. Method

The analyses and results presented in this report are based on a case study made at *Göteborgs-Posten* during the autumn of 2000. The study was carried out in part retrospectively through studies of literature, in part prospectively through qualitative interviews. The interviews were semi-structured [Westlander, 1999] and were carried out with journalists involved in the integration project at the local news desk at *Göteborgs-Posten* and working at the web desk. Interviews were also carried out with the news editor and with people involved in the development of

new technological solutions and services at *Göteborgs-Posten*. The discussion was guided by one of the authors, but in order not to colour the compiled information, the interviewees were allowed to speak freely.

#### 4. Göteborgs-Posten

*Göteborgs-Posten* is the second largest morning newspaper in Sweden, and is the regional newspaper for the southwestern section of the country, around the city of Gothenburg. The circulation is approximately 270,000 copies per day, with 600,000 daily readers, divided into seven different editions [*Göteborgs-Posten*, 2001]. The web edition of *Göteborgs-Posten*, [www.gp.se](http://www.gp.se), was launched in 1995. Today, electronic editions of *Göteborgs-Posten* are published through several channels, both stationary, such as the World Wide Web, and mobile, such as WAP (Wireless Application Protocol) telephones, PDA (Personal Digital Assistant) and SMS-messages on cellular telephones.

##### 4.1 The Organisation of the Desks

*Göteborgs-Posten* has an editorial department divided into several desks, such as the web desk, the sports desk, the culture desk, the local news desk (*Göteborgsredaktionen*), the image desk and the news desk. The web desk is of special importance for the discussion in this report.

The will and desire to produce completely different editions (both printed and electronic) of *Göteborgs-Posten* in an integrated editorial department have stimulated the ideas of (at least) the people responsible for the introduction of the production of content for multiple channels. [Sabelström et al, 1997] However, a lack of understanding and acceptance of the electronic publishing channels among traditional reporters, and human resistance towards change, has complicated the implementation of integrated work at the different desks.

Even though the web desk staff has tried to persuade reporters from other departments desks of *Göteborgs-Posten* to create content exclusively for the Internet editions, most of the content published has been written solely by the staff at the web desk. They have also adapted content from the printed edition to the Internet editions. In the ambition to integrate the content production for multiple channels, the newspaper company has placed the responsibility for the content created for the Internet editions on the different assistant editors (that is, for example, the editors responsible for the sports, economy and the cultural sections). It is now up to the different editors to evaluate the news value of events for the different publishing channels.

The web desk is functioning as an independent unit, equal to the other desks at *Göteborgs-Posten*, and consists of a number of web reporters that

take the responsibility of functioning as web editor in turns. The web editor attends the general morning and afternoon editorial meetings. During the morning meeting, he or she reports on what the web desk has published on the Internet channels during early morning. He or she also expresses any desires for content to be created by the other desks for publishing on the Internet channels during the day. During the afternoon meeting, the front page of the printed edition is set. Decisions are taken as to what news from the printed edition may be published in the Internet editions (that is, before the printed edition is delivered to the subscribers in the morning).

Earlier, the issue of cannibalism between the printed and the Internet editions had been discussed, both in the newspaper company as a whole and particularly among the staff of the different desks. There has been mistrust towards the electronic editions from traditionalists in the newspaper company. The electronic editions would, so to speak, steal the readers away from the printed edition and compete with it. In other words, cannibalise the traditional printed newspaper. Today, however, the different desks are treated equally, and there is a single news editor responsible for the news evaluation for all output channels.

#### 4.1.1 Integration at the Local News Desk

A project consisting of the integration a web reporter at another desk was introduced in June of 2000. One reporter attached to the web desk was placed at *Göteborgs-Posten's* largest desk – the local news desk (Göteborgsredaktionen). In September 2000, the company turned the project into a permanent solution.

The web reporter is located at and works closely with the staff of the local news desk. He or she attends the morning meeting of the local news desk every day, where the content of the Gothenburg section of the newspaper is set.

The web reporter has up to this date already published some shorter news items on the web, such as short reports of incidents from the rescue services during the last twenty-four hours. He or she synchronises the reports with the specialised reporters at the local news desk. According to Johan Boström, assistant editor at the web desk, the idea is to use their special knowledge to write in-depth reports on different events for all the different output channels. Either the web reporter interviews the specialised reporters, or they write their own articles or news items solely for the Internet editions.

When the interaction between the web reporter and the specialised reporters of the local news desk is working properly, the web reporter contributes information on events that could be investigated further. The

specialised reporters, on the other hand, produce articles and news items for both the printed and the Internet editions, according to Alvaro Susena, freelance reporter in the integration project. One important thing to remember, however, is that the specialised reporter can choose to share his or her knowledge with the Internet audience, either by writing the story him or herself, or through an interview by the web reporter. Each individual reporter has his or her own method of working.

#### 4.2 News Placement

When the printed newspaper was the only output channel for the newspaper company, the decisions associated with the publishing of news were restricted to news evaluation, layout and placement of articles for *one* channel. Today, however, news evaluation and placement decisions have to be made concerning both the suitable channel(s) for the news and the time of day that an event occurs.

The news evaluation and the quality of the presented information are equally important for all publishing channels at *Göteborgs-Posten*, and the same ethical rules apply to all publishing within the company, Cecilia Nilsson-Krönlein, news editor at *Göteborgs-Posten*, relates. However, the structuring and the presentation of an article or a news item differ. Although the everyday decisions are made by the individual reporter or in co-operation with the assistant editor of each desk, the ultimate decision as to what news should be published where and when at *Göteborgs-Posten* is made by the news editor.

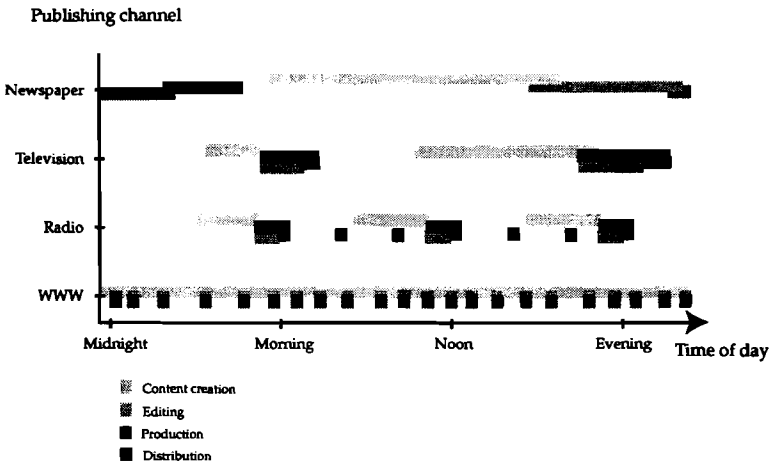
The web is a publishing channel very well suited for topical information, such as reports on incidents, sports results and information about exchange rates [Sabelström, 1998]. Topical information is published at [www.gp.se](http://www.gp.se) as soon as the reliability of the news source is certified. *Göteborgs-Posten* publishes available information about the event on the web (and on the mobile channels). This makes great demands on the printed edition of the newspaper, says Johan Boström. The information and analysis of an event that has been presented in advance on the web has to be elaborated upon (as compared to when the printed edition was the only output channel for the newspaper company).

General news, such as the Parliament's budget bill, is published in print and on the Internet channels in parallel. The deeper analysis, slant of the news and follow-ups are published in the printed edition, while the web edition usually presents a lighter news item and (often) a link to the original document (i.e. the budget bill). It is preferred to publish the investigative journalism presented in *Göteborgs-Posten* in the printed edition. The article at the top left corner of the front page of tomorrow's printed newspaper (which is the most important news) is never published in the Internet editions in advance.

As mentioned earlier, the quality of the presented information is equally important in all publishing channels. However, apart from the reliability of the information, the definition of quality differs somewhat, according to Cecilia Nilsson-Krönlein. In the online and mobile publishing channels, the depth (that is to say the extent to which a report is extended and adapted in terms of journalistic analyses and additional background information) of the news information is comparable to news on the radio. Thus, the quality lies in the speed of presentation; that is the time between the actual occurrence and its being published. In the printed newspaper, on the other hand, the time aspect is of less importance. Instead, the depth of the surrounding information and the analysis of the occurrence are what matters.

### 4.3 Different Rhythms

The work associated with newspaper publishing used to be less complicated compared to the multiple channel publishing of today. This holds true for both the placement of news as discussed earlier and for the rhythm of publishing news. The traditional printed newspaper is with very few exceptions published once a day, whereas the online and mobile channels require continuous updating. *Figure 2* is a general picture that illustrates different production and publishing rhythms for different publishing channels.



Source: Sabelström, 2000

Figure 2. Production and publication rhythms in different publishing channels.

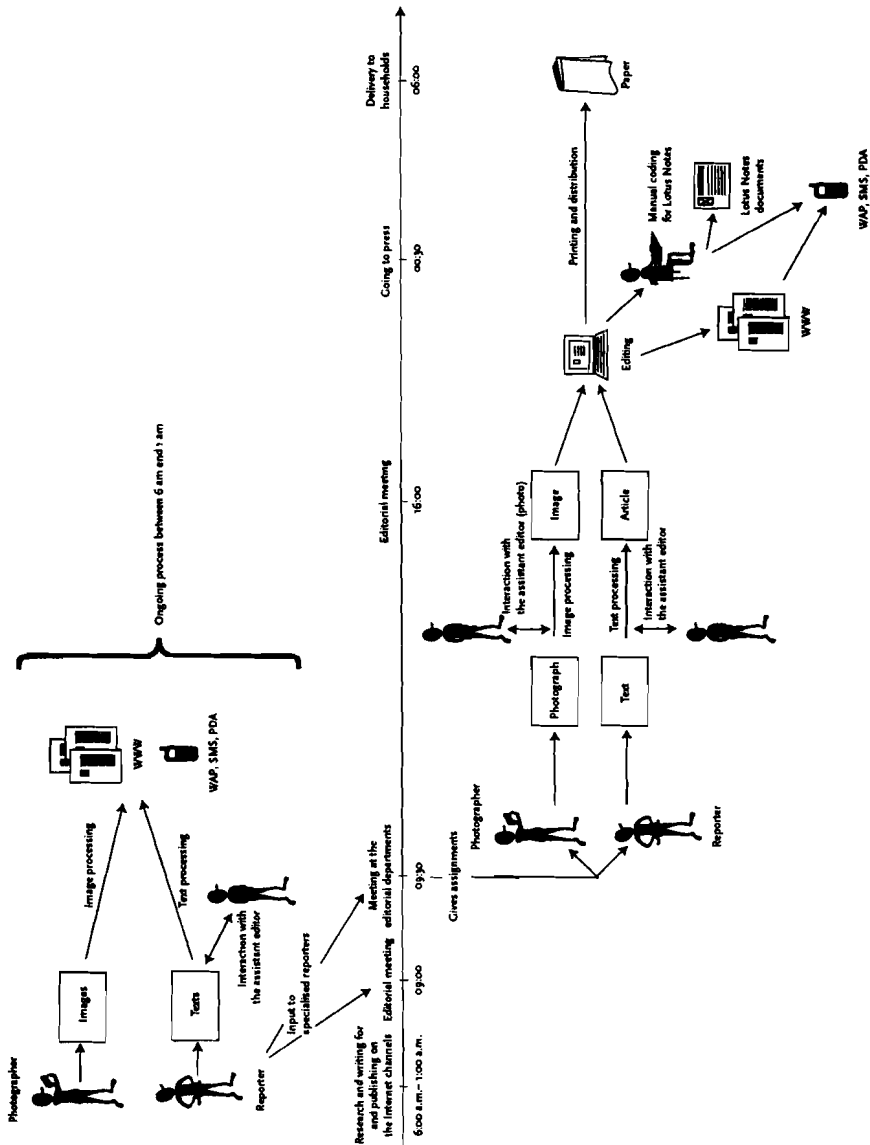


Figure 3. The workflow and rhythm of Göteborgs-Posten.

In figure 3, we illustrate the workflow for news publishing at Göteborgs-Posten. The traditional printed newspaper has a publishing cycle of twenty-four hours, of which only some fifteen hours are actually active reporting time (see figure 2 and 3). The planning of tomorrow's newspaper starts with the general editorial meeting at 9 a.m., where the as-



sistant editors of the different desks discuss which events will be covered. At the morning meetings at 9:30 a.m., each assistant editor informs the staff at his or her desk about the outcome of the general editorial meeting, and the assignments for the day are distributed. Reporters and photographers work on their assignments during the day in cooperation with their supervising editors. A layout editor compiles and edits the printed newspaper and sends it off to be printed and distributed. The different assignments have different deadlines, but the major deadline is at 10 p.m.

*Göteborgs-Posten* also distributes the complete content of the first edition of the printed newspaper electronically to, e.g., the Swedish Parliament, using Lotus Notes. The print-ready documents are logically prepared, that is to say each news item or article is logically connected to headline, introduction, body text, captions, etc., and to each other through manual programming. The electronic version of the first edition is also distributed to PDA's through file transfer via the Internet.

All desks at *Göteborgs-Posten*, except the web desk, work on a twenty-four hour basis. The reporters at the web desk start publishing news items and articles in the morning, reporting on events that have occurred during the night, and perform ongoing publishing until 1 a.m.

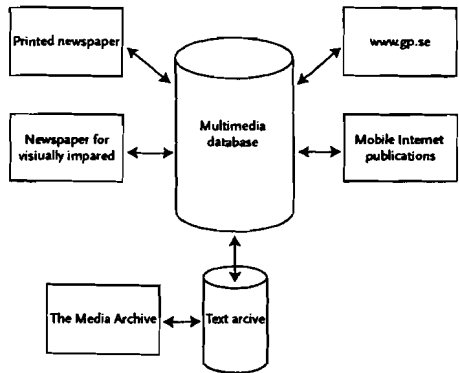
According to Johan Boström, there is no particular deadline for the online editions, and it is hard not to put excess time into the writing of a report and to set journalistic limits. The average writing time per item should be approximately ten minutes (not including research etc.), but the fastest publishing time – from event until publishing – is around five minutes. It is common that the reporting from an event is first published in text only, and thereafter supplemented with, for example, images and graphics. The reporting, writing and publishing of information in the Internet channels is on-going from six o'clock in the morning until one at night. The publishing rhythm and the depth of the news on the Internet channels are comparable to the work at and information provided from news agencies, according to Sabina Schatzl who works as a reporter at the web desk.

The timing and speed is of utmost importance for the online and mobile publishing channels. In order to manage the quick publishing of news, as few people as possible are engaged in the news production for the Internet channels, Johan Boström relates. That is to say that the reporter that covers an event first-hand is preferably the one who writes the article or the news item for publishing. The streamlined reporting and publishing organisation of the web desk implies that the photographers should use digital cameras. It can be controversial for experienced photographers to work with such time-dependant output channels, since they are used to work with high-quality cameras and resolutions intended for, and the

rhythm of, the printed edition. Another solution is for the reporters themselves to take pictures when reporting from an event [Sabelström, 2000]. This has not been implemented to any greater extent, as the standpoint of *Göteborgs-Posten* is to use the professional photographers employed by the company.

#### 4.4 Technology

*Göteborgs-Posten* uses an editorial and publishing system based on a subset of SGML (Standardized Generalized Markup Language) and is built upon an RDB-structure (Relational Data Base). In theory, the metadata of the content elements [Sabelström et al, 1997] and the elements themselves (texts, images and graphics) stored in the editorial database should be updated automatically with every change (See *figure 4*). According to Gunnar Springfeldt, Development Manager at *Göteborgs-Posten*, it is desirable to have a function in the layout software that could automatically include the logical connections between different parts, such as headlines, images and body text, of an article to each other, as well as the logical connection between the article, the placing on the page, the section of the newspaper, etc.



*Figure 4. Ideal technical solution for Göteborgs-Posten.*

In practise however, sufficient metadata is not automatically connected to each content element (See *figure 5*). In order to get all the logical connections mentioned above from the layout software, the planning of the layout of the paper must be set before compilation and thereafter not changed.

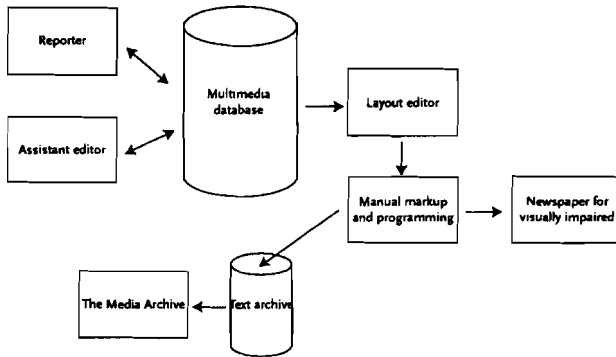


Figure 5. Connection between the different technical solutions at Göteborgs-Posten today.

This is not acceptable for the different desks, and restricts the flexibility of news reporting and newspaper production. Systems such as the one described above are tied together through true system integrators. These connections are rather complex and not easily manageable. The ideal solution is to build the system around a true multimedia database, which interacts with different suitable tools for different channels. One important aspect is to manage tracking and scheduling of material and resources. Thus, we see a future of more channels with different rhythms, which demands that members of the editorial staff needs to know what to publish where and when, and of course to be aware of what already has been published.

### 5. Discussion

The integration project at Göteborgs-Posten was successful and, as mentioned earlier, it was turned into a permanent solution after only three months. It takes time to change people's view on news publishing and the way that they work. However, the web reporters working at the local news desk sense a change in attitude from the traditional reporters towards writing for the web. The web reporter at the local news desk is seen as an extra resource. The division of work between the web reporter and the other reporters at the local news desk is a give and take. In order to get extra help from the web reporter in covering the local news, the reporters at the local news desk give the web editor news items and articles intended for the printed edition for publishing on the web edition before going to the press.

The integrated work at the local news desk of Göteborgs-Posten has led to better utilisation of the human resources at the desk. Short stories that normally would have been rejected and not published in the printed newspaper are published as new items on the web. If the stories prove to

be of greater importance than was first estimated, an in-depth story is published in the printed newspaper. The benefits of the online channels have become apparent to the personnel at the local news desk, and the work process and organisation within this part of the editorial department points towards a more optimised solution. The fact that the news editor has the responsibility for evaluating the news for all output channels is an essential issue.

### 5.1 The Editorial Staff of Multiple Channels

For several years, the aim of a number of different newspaper companies has been to integrate the desks for the companies' different publishing channels. The major Swedish newspapers have alternated between an organisation with completely separate editorial departments for the printed and the Internet editions and (at least) the idea of totally integrated desks for all conceivable publishing channels [Sabelström, 1999]. The technology has not been the main obstacle but rather the resistance from the people working within the organisation.

Some six years after the beginning of news publishing on the web (i.e. 1994), the view on workflows within the newspaper organisation has changed. There are signs of a more varied view of the integration of desks and of the re-use of content in different publishing channels. However, there are still different attitudes towards the organisation of the desks of different output channels.

It is the authors' belief that, in the future, the desk of the Internet editions will be transformed into a pure technical department, whereas the editorial work performed at the web desk today will be integrated into the other desks of the newspaper. The change of work methodology for the web desk is divided into two parts; firstly, the organisation must integrate and embrace new technology together with new working methods; secondly, the technology must be more user friendly so that the editorial staff does not need to have an extended knowledge of technology in order to be able to produce content for different channels.

The editorial department and advertising department will work toward several output channels. Important to bear in mind, however, is that even though the desks for different output channels will be integrated, it does not necessarily mean that every reporter will work with all output channels in mind at all times. In order to utilise the knowledge and qualifications of each employee, it is important to work in an organisation and with working methods well suited for everybody.

The international association for newspaper and media technology, Ifra, is working in co-operation with the University of South Carolina College of Journalism and Mass Communications, USA, in a project called

Newsplex. A model newsroom for multiple channel publishing is built up, where a central desk with a set of so-called story managers evaluates incoming news and decides which news or part(s) of news should be published in different channels. [Northrup, 2001]

## 5.2 The Time Aspect

Different publishing channels require different types of planning and creation of content, as the publishing cycles and the publishing rhythms differ (see *figure 2*) [Sabelström, 2000]. In the following discussion, the printed newspaper and the WWW edition will serve as opposite examples.

Newsgathering and reporting for printed morning newspapers have traditionally been planned for and assigned to different reporters in the morning. Generally speaking, the reporters have had some twelve hours to search for information, perform interviews, compile and write their articles and news items before the evening deadline. Furthermore, the limited space in the printed newspaper makes demands on news evaluation and the selection of the most interesting events. The focus here is to manage and meet deadlines and to use the workforce in an optimal manner in order to produce the intended product on paper. This requires a rather complex tracking and scheduling of material and primary resources [Nordqvist, 1996].

For the WWW edition, the reality is different. As the web site on the whole has no limitation in space, all news that is considered interesting enough can be published. This, in combination with a 24-hour deadline (content can be published whenever ready at all times during the day), makes demands on the individual reporter to limit the research and writing of an article or a news item. The web editor also has to be sensitive as to what is or is not interesting to be published in a far more conscious manner. The selection of the most important news to publish on a limited space in the printed editions corresponds to the need to weed out the less important news and *not* to publish them in the web edition. That is to say, as the number of news items and articles that are available to be published are virtually limitless, there is a risk that the quality of the news is not preserved. Reporters working with an eye towards online publishing channels, such as the web, have to find the right balance between the depth of the article and the passage of time between the event and the publication of the article. The work is very much comparable to the work of reporters at news agencies and radio stations.

The time aspect is not as prominent for investigative news or feature articles. This kind of information often has a longer life span. In the case of *Göteborgs-Posten*, it is preferable for investigative articles to be published in the printed newspaper while, for example, background infor-

mation, hypertext links and original documents are presented on the web. The choice of publishing channel might change over time, if the online audience increases. The need for scheduling is different for the online channels. The tools and methods must be integrated with the traditional workflow but become even more flexible to enable more re-scheduling. As with the printed newspaper, tracking of published content is an important factor.

The creation time versus the depth of articles and news items in different publishing channels will eventually lead to a division of what content will be published in the different channels. News information is push oriented and topical and satisfies both a functional and an entertainment need in the reader [Sabelström, 1999]. Accordingly, the more push oriented the online channels become, the greater the likelihood for event news to migrate from print to online publishing. The relative slowness of the printed newspaper will force the newspaper companies to publish topical content in the electronic publishing channels, and to publish in-depth articles and analyses in the printed newspaper. This will be essential in order to maintain a leading position as a news provider in the increasing competition from radio, television, free daily newspapers and online services.

### 5.3 Migration of Information Types

Classified advertisements are one type of content that has great potential to migrate from the printed newspaper to the web edition. Classified advertisements are pull oriented and topical, which makes them very well suited for publishing in a pull oriented online channel, such as the WWW. [Sabelström, 1998]. However, there is also an element of entertainment in classified advertisements. People tend to scan the classifieds just to see what is offered without looking for anything in particular. This indicates that classified advertisements will remain in the printed edition of the newspaper for the foreseeable future. The entertainment element in the classified advertisements has more of a push-nature and the printed-paper still offers a better overview of the listed content. The two opposite natures of the needs fulfilled by classified advertisements make the audience want them both on the web and in the printed edition of the newspaper [Fernsund, 2001].

In the early days of newspaper publishing on the WWW, newspaper companies often offered their classified advertisers the opportunity of publishing classified advertisements on the web for free when advertising in the printed newspaper [Sabelström et al, 1997]. Today, however, newspaper companies have reached the critical mass of users and advertisers on the classified web pages necessary to start charging the advertisers extra for classified advertisements on the web. *Göteborgs-Posten* administrates and co-ordinates a separate web site for job classified ad-

vertisements. The advertiser has to pay an extra fee in order to get the classified advertisements from the printed newspaper published on the "job site".

Other examples of making use of the possibilities of online publishing channels are *La Vanguardia* in Barcelona, Spain and the *Wall Street Journal*, New York, USA. The newspapers have signed agreements with real-estate companies, recruiting companies, etc. The companies upload the content of their databases to the newspapers, allowing the well-known brand name of the newspaper generate traffic to their businesses. [Ramos, 2000; Lee, 2000]

During the Olympic Games 2000, another Swedish daily newspaper, *Svenska Dagbladet*, offered its readers information on new Swedish medals instantly via SMS to their mobile telephones. The newspaper also offers their Internet users the possibility to upload information, such as the latest news and information on TV-programmes, on their PDA's and WAP telephones. Several other newspaper and media companies offer similar services.

The online services described above will develop further as technology becomes even more widely spread among newspaper readers, and the understanding of what kind of information that is suitable in what channel is investigated thoroughly and recognised by the newspaper companies.

#### 5.4 Cross-Promotion

The more the newspaper companies develop their knowledge of and skills in publishing content in different channels, the more differentiated publishing products will appear. Today, newspaper companies cross-advertise their different publishing channels. For example, the Swedish morning newspaper *Dagens Nyheter* uses a display advertisement on the front page to invite their readers to participate in an online discussion on a topic in the printed newspaper. The Dutch free daily newspaper *Sp!ts* has launched a feature in the printed edition of the newspaper in order to connect the articles to information available on the web. In connection to some of the articles in the printed edition, a bar code is printed. The code can then be scanned, using a small scanner in the shape of a pen.

The pen is connected to a PC using a cradle, and web pages containing information connected to the printed articles are automatically shown. [Volmer, 2000] However, this approach is not new. As early as 1994, the *San Jose Mercury News* launched a service linking the printed newspaper and the electronic Mercury Center together. By entering four-digit codes assigned to articles in the printed editions, the readers could retrieve additional information from the AOL-based electronic Mercury Center. [Mitchell, 1994]

## 6. Conclusions

In the future, the printed newspaper will probably change from being a daily, in depth broadsheet product with several special sections for all readers into a daily fast and easily digested newspaper, probably in a smaller and more manageable format. This form of rapid and highly qualitative base product will be delivered to all subscribers. In addition, readers will be subscribing to sections and other products that will be inserted into the newspaper on daily, weekly or monthly basis. The Internet based newspaper will deliver fast news through the mobile Internet, and in-depth and pull-based information will be handled over web-based channels. The key is to use the channels and the technology best suited for different consumers. The future subscription of a newspaper will be more of a monthly news service package where different products of interest are delivered in different channels at different times.

In order to manage this diversity of personalised products in different publishing channels, the organisation and workflow has to be optimised based on the subscribers' needs. The more the subscribers compose their own set-up of news coverage in the different channels, the more essential it becomes to have a central news desk with news editors making decisions as to what to publish in which channel at what time, and a flexible editorial staff working with multiple channels to support the news flow and publishing. This is very much in line with the basic hypothesis presented in the beginning of this report.

Naturally, the technical systems have to be designed to support the work of the staff for a multitude of output channels. Great demands will be made on the management of content in production and publishing, as well as on the connection between the subscription and personalisation databases, in order to deliver the right content in the right channel to each subscriber.



## 7. Acknowledgements

The authors wish to thank the staff at the web desk at *Göteborgs-Posten* and especially Johan Boström, Sabina Schatzl and Alvaro Susena, and news editor Cecilia Nilsson-Krönlein, IS Manager Per-Arne Fernsund and Development Manager Gunnar Springfeldt. We also extend our gratitude to the entire editorial organisation. In addition, we would like to thank professor Nils Enlund for his apt comments and support in the creation of this report.

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- Nilsson-Krönlein, Cecilia  
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- Springfeldt, Gunnar  
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