This paper presents a self-contained summary in English of the results of a research project conducted for the Nordic Council of Ministers to define problems, advantages, and disadvantages of the electronic dissemination of information for consumers, and to determine whether consumer organizations should adapt their information activities and consumer policies to suit developments in information technology. The Introduction and Chapter 1 provide background information on the project, and Chapters 2 through 6 contain detailed documentation of electronic data media--teletext, cabiertext, and videotex--and other means of accessing databases, together with forecasts of future developments; the use of electronic and visual media in neutral consumer information in the United Kingdom, the United States, West Germany, and the Nordic countries; and the internal use of electronic data media by consumer organizations. The material presented is based on a comprehensive literature review and personal interviews with individuals from the above countries. Chapter 7 uses consumer behavior and communication theories to derive a series of general consumer requirements to be applied to information and advertising, and Chapter 8 presents a proposal for a Nordic consumer policy of consumer information in the electronic media. A list of persons interviewed is included, as well as a comprehensive reference list which includes works in English, Danish, French, German, Norwegian, and Swedish. (DJR)
Preben Sepstrup and Folke Olander

CONSUMER INFORMATION
IN THE ELECTRONIC MEDIA

* neutral information
* advertising
* selling
Preben Sepstrup and Folke Ölander

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INTRODUCTION

In this Working Paper we present a summary of the results of a research project carried out for the Nordic Council of Ministers - the cooperative body of the Nordic governments.

The full report - partly in Danish, partly in Swedish - is a 400 page publication of 11 chapters.

Chapters 2 - 6 contain a detailed documentation of the 'state of the art' regarding the electronic media, and their use in neutral consumer information, advertising, and selling, in the USA, the UK, West Germany, and the Nordic countries.

Chapter 7 uses consumer behaviour theory and communication theory to derive a series of general consumer requirements to be applied to both neutral consumer information and advertising. These general requirements are to be found in Chapters 8, 9, and 10 'translated' into elements of a consumer policy concerning the use of electronic media for neutral consumer information, advertising, and selling (traditional television advertising excluded).

The Working Paper is a self-contained summary of the main report. In the summary, we have focussed on the descriptive sections of the report but include also the proposal for a Nordic consumer policy relating to consumer information in the electronic media, which closes the main report.

The material on which Chapters 2-6 in the main report relies, is a comprehensive review of literature and about 50 personal interviews in the UK, West Germany, and the Nordic countries. A list of the persons interviewed is found on page 39. We want to thank our informants for generously sharing with us their time and their knowledge.
Though no specific sources are referred to in the summary presented here, we believe that it might be useful for the interested reader to have access to the list of references cited in the main report. The list is found on pp. 41-56.
1. BACKGROUND

The aim of the project, 'Consumer Information in the Electronic Media', has been to define the problems, advantages and disadvantages for the consumer in connection with the electronic dissemination of information. The intention is to provide consumer organisations and authorities with the background information needed to determine whether - and possibly how - information activities and consumer policies can or should be adapted to suit developments in information technology.

The aim of the project was thus

1) to ascertain which organisational, economic and technical means of electronic transfer of consumer information are available today,

2) to try to determine which types are likely to be developed,

3) to outline the advantages and disadvantages associated with various types of electronic information transfer, and

4) to create a basis for the formulation of consumer policies in relation to the use of the electronic media in sales, advertising and neutral consumer information.

To provide some guidance for politicians, authorities and organisations in their decision-making, sections 2-6 of this chapter describe the current state of the electronic media and their use for consumer information.

Section 7 suggests certain general standards for consumer information and for the media that will disseminate this information.
Taking as our point of departure the combination of these ideal requirements and the description of current reality, we outline in section 8 a draft consumer policy relating to consumer information in the electronic media.

Throughout the report we distinguish between electronic data media and electronic visual media. Visual media can transfer living pictures of television quality. Data media cannot. They can provide only text and simple graphics.

We use the term consumer information as a general concept covering all information directed at citizens in their capacity as consumers, regardless of the source of this information. Neutral consumer education is consumer information provided by consumer organisations and authorities. Advertising is consumer information generated by commercial enterprises wishing to promote sales of the product or service dealt with in the information.
Teletext

Teletext is a technique by which special text pages are transmitted to the normal household TV screen along with the ordinary TV picture, giving the viewer the choice between a television programme or text on the screen.

A TV signal consists of 625 lines. Twenty-five of these lines are not used in the creation of TV pictures. These are the lines which can carry the information that makes up teletext. The user has no contact with the computer that controls the system but by remote-control unit can choose between the pages that are continuously transmitted in a specific running order. In order to be able to receive teletext, the TV set must be equipped with a so-called decoder. Teletext is relatively inexpensive to produce, the decoder fairly cheap, and the use free of charge. The medium is easy to use: a page is chosen from the menu and its number is keyed into the remote-control unit. The greatest concentration of teletext services is in Sweden and the United Kingdom where approx. 15% of all households had teletext at the beginning of 1986.

Kulabok (1983) summarised the studies available in 1983 concerning the use of teletext in Europe as follows: 50-60% of users are between 20-40 years of age; they have above-average education and income; 83-90% of users are male; users primarily seek sports results, news and weather forecasts. In Holland and West Germany the consumer information pages are among the most used.

Most written sources and almost everyone we have interviewed about teletext said that simplicity and low cost are important advantages of teletext, the primary disadvantages being the lack of interaction, limited information capacity and lengthy
waiting time. The problems of waiting time and limited capacity are probably only temporary. Initially, it was possible only to use two free lines. Today, ITV's Oracle uses six. And the BBC and Sweden's national network expect to move to six lines, first and foremost in order to reduce waiting time.

Prototypes of TV sets do exist with memories capable of storing several teletext pages at once. If several pages are ordered at the same time, waiting time for the second and subsequent pages is eliminated. In the early 1990s it will be technically possible to market TV sets with a memory which, when the set is switched on, can store teletext magazines with a very large number of pages which can then be brought on to the screen instantly.

Videotex

Since the mid 1960s every description of the society of the future has included a 'home video terminal' (the television set) from which it would be possible to work, shop, retrieve information and make payments. This has actually been a reality for a number of years in the shape of videotex (viewdata in the UK).

Videotex is an information and communication system. Via the telephone the user can contact one or more databases and retrieve information on to a screen. The screen can be a computer monitor but was originally planned to be the household TV set. The set must be equipped with a decoder corresponding to that used for teletext and must also be linked to a so-called modem. At present, these additions to a TV set considerably increase the cost of the set. The user communicates with the database via the TV's remote-control unit or an alpha-numeric keyboard. The desired information is found by using a search system or a key word. A videotex system
can give the user access to (1) information retrieval, (2) transaction services (e.g. purchase and payment), (3) calculation facilities and (4) electronic mail.

There are many prognoses relating to the spread of videotex for ordinary household use but all have hitherto proved to be grossly exaggerated in both the USA and Europe. Since 1985, expectations concerning the use of videotex have been lowered considerably.

It is now generally accepted in all western countries - with the possible exception of France - that, at any rate in the short term, videotex is unlikely to prove a mass-population medium. Consequently, efforts are being concentrated on selling videotex as a business medium in the hope that it will gradually make its way into private homes.

After the closure in March 1986 of the only two operative videotex companies in the USA (which had been backed by major media companies) no videotex service is available to US homes. In West Germany, the UK, Sweden and Denmark there are only small numbers of private users. Although there is nothing to indicate an imminent breakthrough for videotex as a medium for ordinary consumers, it is obvious that neither the national PTTs in Europe nor powerful financial interests in the United States have completely abandoned the idea of videotex as a household medium. Governments in most western countries are also interested in cultivating the medium as part of the process of developing the information technology sector; the large investments made in France are the most striking example of this.

Clearly, the very nature of the medium, its transaction potential and the commensurability between the contents and the users' needs are factors decisive to future development. The current situation is based on specific technology, specific content and a specific economic framework. All of
these factors can be changed. At the time of writing, the development of videotex has been based on the technically possible and the economically profitable rather than the socially desirable. The establishment of videotex has been a goal in itself. This, too, can be changed - the medium might be developed as a tool designed to cater for important needs which it can satisfy on a competitive basis.

**Cabletext**

In discussing cable services, it is usually the practice to employ the following categories: (1) homes passed by cable (but not necessarily connected), (2) homes connected to 'basic cable', i.e. free channels, (3) homes which subscribe to pay-TV channels.

A distinction is also made between (1) a cable network that is not addressable, which means that the cable operator can only transmit via the cable without knowing who is receiving the signal (as is the case with broadcast TV), (2) a one-way addressable cable network that enables households to order a programme by telephone or mail, which programme can be received only by those households that have ordered it, (3) a two-way addressable network in which households, with the help of the remote-control unit, can use the cable network to order a specific programme, usually right up to transmission time.

Inspired by McIntyre (1984), we have decided to classify cabletext as follows:

1. Cycling pages with text - e.g. from existing teletext. The text pages are transmitted as pictures.

2. Edited, possibly locally adapted, versions of (1).
Both (1) and (2) consist of still pictures and the consumer has no influence upon their running order. To transmit these requires the use of a whole channel.

3. Teletext channels transmitted only on local cable networks. This makes it possible to use 16 lines for teletext (as distinct from the 4, 6 or 8 used on today's broadcast TV).

4. Full-channel teletext, which means that all 625 picture lines are used for teletext - which can thus contain 5-10,000 pages without exceeding the current waiting time.

5. Interactive services which provide access to things like transaction facilities and information in the same way as videotex systems.

By December 1985, 64.4 million US homes (or 74.8% of all homes with TV) were passed by cable; 45% of all TV homes were connected to 'basic cable'; 25% of all TV homes subscribed to pay TV. Of all TV homes in the USA, 7.6 million (8.8%) were connected to one-way addressable cable networks. A total of 610,000 (0.7%) of TV homes were connected to two-way addressable cable networks.

Many cable networks in the USA have a sufficiently large capacity to find room for cabletext without any problem. Many media companies have invested large sums on experiments with full-channel teletext but none has yet used it commercially. In the cable field, the USA is best known for experiments with interactive services in two-way addressable networks. These experiments have all been terminated. Interactive technology is currently used only for limited 'pay-per-view' activities. There are no plans for reviving more serious interactive services. There was and is no market for them.
The level of cable coverage varies greatly throughout Europe. It is high in the Nordic countries and - particularly - in the Benelux countries (40-60% of homes are passed by cable). The coverage rate is lower in Britain, West Germany and France, while it is practically non-existent in southern Europe. In 1985 8.5% of all European homes were connected to a cable network for the distribution of TV. Only 2.7% of homes were connected to networks offering channels other than those available without cable. By 1995 these figures are expected to have increased to 16% and 13% respectively. A further 7% of households are expected to subscribe to pay-TV channels.

In Europe, Britain in particular is considering cable networks for purposes other than the distribution of TV. However, it is not expected that there will be more than two or three two-way addressable (interactive) cable systems before the end of the century. Full-channel teletext is expected within the next 5-10 years. Fastest growth is expected on level 3 in the above classification of cabletext.

In West Germany there is virtually no cabletext (including simple cycling pages). The same holds true for Denmark. The Norwegian Jevnaker project and Swedish local TV tests have been aimed at developing simple text services. Finnish cable networks have permanent cycling text. In Helsinki there are plans for an electronic newspaper using full-channel teletext.

Other means of accessing databases

Both teletext and videotex give the user access to databases. Teletext does not allow for interaction with the database. Both videotex and 'other means of accessing databases' do however. We have distinguished between the two because (1) videotex was originally considered to be a home version of 'other means of accessing databases', (2) videotex is now
regarded as an independent medium, (3) videotex has better graphics and colours, (4) the TV screen can be used, whereas other means of access call for a computer and a monitor.

As a household medium, 'other means of accessing databases' is a purely US phenomenon. In 1986 the two most consumer-oriented systems in the USA were 'CompuServe' with 250,000 subscribers and 'The Source' with 60,000, the total being equal to 0.4% of U.S. homes.

The futu-

It has not been our goal to forecast developments in the field of electronic media. But an evaluation of their development is necessary in order to provide support for our recommendations for consumer policies which entertain the use of electronic media for consumer information.

Past experience, however, is discouraging. The introduction of each new data medium has been heralded by claims that the new medium would be a certain success which would change peoples' lives within a few years. But time and again events have proved that predictions were far too optimistic. To a great extent this has been because marketing has taken pride of place over common sense and because enthusiasm for things technical has tended to push economic and behavioural restraints into the background.

It is tempting to interpret the developments of the past five years as meaning that such concepts as videotex and teleshopping are failures with no future. But if for a moment we ignore promotion and examine developments in relation to normal criteria for the speed of penetration of innovations, we see nothing unusual in the speed at which services like teletext and videotex are currently making their way into homes. Nor would it be reasonable to write off the long-term
prospects for these media on the basis of developments to date.

On the basis of our interviews and review of literature we have arrived at the following evaluation of the prospects for the media and services covered by our report:

Within a short period of years TV sets will improve their picture and sound capability. And remote control of TV, radio and video cassette recorders will be commonplace. Connection to one-way cable networks, the number of TV channels available to individual households and the use of video cassette recorders will increase considerably during the next 10 years - and may even have reached saturation point by 1995.

During this period teletext (including the simplest types of cabletext) will grow steadily and will reach saturation point in the late 1990s. Saturation point for cabletext is probably no higher than 25-50% while in the case of teletext it will be 50-75% of homes.

Videotex and other means of accessing databases in the home probably won't start making their presence felt until some time after 1990 and it is unlikely that there will be any widespread use during this century. We do not feel that a reliable prediction can be made as to what will happen after the turn of the century. The spread of interactive cabletext will probably also have to wait until after year 2000.
3. THE USE OF ELECTRONIC DATA MEDIA FOR NEUTRAL CONSUMER INFORMATION

Teletext

There is no neutral consumer information in either the British or the Nordic teletext services. Stiftung Warentest in West Germany supplies comparative product-testing results to West German teletext in an abbreviated form, 'Kompass', which is also used by many German daily newspapers. This comparative product-testing information is among the most popular features on German teletext.

Videotex

Those consumer organisations that attempted to use videotex as a medium for disseminating information to the individual consumer probably believed that videotex would quickly become a mass medium - or they regarded videotex as the theoretically perfect medium for consumer information and for this reason became involved in its development. As section 2 shows, representatives of the first group in particular have by now been given ample reason to adopt another opinion, and there is considerably less interest in continued work on videotex. And even though several of the organisations still feel that it was right to get involved when they did in order to avoid being left behind, none of the ones we have talked to currently sees any future for videotex as a consumer-education medium.

Many experts still hold the belief that videotex, suitably adapted, is an excellent medium for certain types of consumer

1. Researchers such as Maynes (1982), Grunert and Kuhlmann (interviews, 1985) and representatives of consumer organisations such as Mitchell and Conn & Geiss (interviews, 1985).
education if it is brought into the home. Others doubt the suitability of the medium for consumer information - and not only because of the small number of subscribers. It is first and foremost the cost of producing relevant information, transforming it into videotex pictures and keeping it up to date that has proved to be considerably greater than initially expected. In addition, in the case of consumer organisations which earn a living from selling information, videotex may compete with other important sources of income, particularly magazines, etc., published by the organisations. Both generally and specifically as a medium for consumer information, videotex also possesses a number of strictly technical weaknesses, which have become more obvious after several years of testing.

Opinions among individuals and organisations we talked to are divided as to whether they should get out of the videotex system completely or go into 'hibernation'. But none of those we talked to felt that consumer organisations/authorities in the Nordic countries had at present any reason for getting involved in the development of programmes for videotex. It is universally felt that there is sufficient - and reasonably well-documented - experience available from experiments in other European countries. The present, clear indication is that there is little point in any further experiments with the medium. If the spread and impact of the medium should change radically enough in the future to encourage the consideration of new Nordic initiatives, the results already obtained in tests in other countries can easily be transferred and adapted to suit Nordic conditions.

Neutral consumer information in the data media
- some conclusions

Many factors appear to hinder the spread of neutral consumer information via electronic data media.

The availability of neutral consumer information depends on both demand and supply. Although the operators of videotex systems were interested in including some non-commercial material during the start-up phase, there is little indication that in the long term they would be willing to assume responsibility for providing an all-round, non-commercial content. So the availability of neutral consumer information depends totally on either a sufficiently large group of households willing to pay the full price of production and distribution of the information or the presence of a consumer organisation able to offer the information free of charge or at a reduced price. From the information at our disposal there are few signs either of these requirements can be satisfied. Whether free or heavily subsidised neutral consumer information becomes a regular component of videotex is - when all is said and done - a political decision. Whatever happens, it will be a long time before this source of consumer information is the most economic form. Consequently, it is probable that for a long time into the future public funds earmarked for neutral consumer information will be channelled into other media.

As regards the most prevalent data medium today, teletext, and its spread into cabletext, its content of neutral consumer information is perhaps less directly dependent on consumer demand and willingness to pay. With teletext and cabletext, neutral consumer information is part of a larger package of services which the consumer can choose to receive or not. The system operators are often public TV companies bound by traditional commitments to perform a public service. So the decision is usually an editorial one left to the ind-
individual broadcasting company. However, neutral consumer information seems not to be placed anywhere near the top of the list when it comes to choosing between different types of programme material.

As far as TV and cable channels are concerned, it is conceivable, at least in principle, that legislation or other public rules could be introduced stipulating that different kinds of public service programming must be shown on the channels. Neutral consumer information could be one of these. As regards videotex and other databases, it is more difficult to imagine how such demands could be implemented. Should videotex at some point prove to be a home medium it will, however, become necessary to find some method of ensuring neutral information to supplement and balance the commercial information that would otherwise dominate the medium.

In any event, we must accept the fact that information generated by consumer organisations and authorities will never be more than a small part of the information package, and the bulk of consumer information will be presented in the shape of advertising and other sales activities. Neutral consumer information will only have a corrective function. In our view the conclusion is fairly obvious: greater priority must be given in the field of consumer policy to rules, standards and limitations for commercial consumer information.
4. INTERNAL USE OF ELECTRONIC DATA MEDIA BY CONSUMER ORGANISATIONS

This section does not deal with the use of data media by the consumer organisation for purely administrative purposes but with their use as aids in contacts between consumer advisers and individual consumers and for communication between central and regional/local sections of the consumer organisations and authorities.

Information retrieval on the part of local offices and advisers could be accomplished through access to a central database which could be regularly updated. Information might include market surveys and test results, legal information and retrieval of documents in the files of the central authorities/organisations. Calculations and other types of data processing necessary for certain types of counselling - the compilation of household budgets, comparisons of different ways of financing purchases, estimates of nutritive value, etc. - the most obvious solution would seem to be home or personal computers for the local offices.

Our studies have indicated that this application of electronic data media is still rather rare in Western Europe. Sweden is probably the country that has done most in the development of data aids for local consumer offices and advisers. This applies in particular to financial advice with the help of local computers. In the use of central databases, Sweden, too, is largely at the experimental stage.

There are probably so many differences in the structure of the electronic media (videotex, other data transmission systems) in various countries, including the Nordic countries, that we cannot be certain that the technical solutions being pursued by the Swedes will necessarily be the most suitable in other countries. The content of consumer counselling varies greatly from country to country. Complaints/claims
dominate in some of the Nordic countries while pre-purchase counselling is the most common category in others. There are also very definite national differences in the type of products for which pre-purchase counselling is given. These facts can also make it difficult to decide which databases should be developed first.

It seems clear, however, that in the long term it will be both practically and economically possible to computerise some of the transmission of material from central consumer authorities and organisations to regional and local offices.
5. THE USE OF ELECTRONIC DATA MEDIA IN ADVERTISING AND SELLING

Many observers believe that the use of the new electronic data media for advertising and selling is a prerequisite for the media's continued existence and growth. Many writers describe how the media can develop in that direction, working in conjunction with other changes in distribution and payment systems. Many of these descriptions are prepared by the industry itself and must therefore often be taken with a pinch of salt - this applies to both information about the media's actual penetration and plans for continued development. Very few neutral studies describe and evaluate the new data media's actual use and efficiency when it comes to advertising and selling.

Teletext

In principle, advertising can be used in teletext in the following ways: (1) full advertising page (to which the viewer is referred from either a contents page or a page with editorial material ('ad flash'); (2) full page in a cycle of pages which the consumer is forced to 'leaf' through in a predetermined order (e.g. an advertising page can be inserted as page 2 and page 4 in a five-page cycle showing the TV listings for the day); (3) parts of text pages which otherwise have editorial content.

In Europe, teletext with advertising is available only in the United Kingdom and Switzerland. The most successful advertisers in Oracle, British ITV's teletext service, have been travel operators, food manufacturers (who can, for example, have advertising inserted under the heading, 'Recipe of the Month') and banks. In all of these cases, the advertising message is typically one requiring regular updating and/or one in which there is a need for the rapid replacement of
information. There is also classified - and in the case of regional teletext programmes, local - advertising.

Direct sales activities are also becoming more common on Oracle. Several mail-order companies use a number of teletext pages for presenting 'today's prices' and special offers - giving a telephone number through which viewers can order any of the advertised products.

Consumers are not just directed to the advertisements on teletext via the table of contents. Advertisers can buy referral spots (strap lines) on pages viewed regularly (weather, news) and they also use other media, including TV advertising, to point out that Oracle pages carry additional information.

Like other electronic media, teletext also spills across international boundaries wherever over-the-air broadcasting, satellite TV or cable enable viewers to receive another country's TV and teletext channels. This is therefore another medium in which consumers will encounter transnational advertising and selling in the future.

**Videotex**

Unlike teletext, videotex enables the consumer both to see advertising and place orders through the same medium. To many observers it is this ability that makes videotex such a potentially attractive medium.

Existing or abandoned videotex systems which we have investigated in the USA and Western Europe have not included the sale of products or there have not been enough subscribers to judge whether the system has a potential for electronic selling or there has been no information about how the system is used for the selling of products.
We shall therefore concentrate on the experience of the European company that has probably invested most in the development of videotex as a sales medium: Quelle, the largest mail-order company in West Germany.

Quelle no longer believes in the rapid spread of videotex for household use or, as a result, in sales through this medium. At present, orders through videotex account for less than 0.1% of turnover, and videotex is in no way regarded as a potential replacement for the company's printed catalogue. People miss the pictures and the possibility of leafing through the pages. Videotex will be most suitable for well-known products with few product dimensions, products whose appearance is of little importance and which cost less than DM 100.

Quelle sees a conceivable market segment consisting of affluent, very busy people who might benefit from videotex but these people are definitely not mail-order customers, and it is doubtful that the segment is large enough to justify the preparation of contents designed specifically for them.

Quelle intends continuing to supply information to videotex as the bulk of the necessary investment has already been made and the company has excess computer capacity. The company representative is sceptical about the future of videotex as a household medium but does not rule out the possibility of positive developments in the future.

Cabletext

US interactive cabletext services such as INDAX and QUBE have been used to test the sale of products through TV advertising. With the help of their remote-control unit, viewers

1. Regenberg (interview, 1985).
could order the advertised product right after the commercial. The tests were soon abandoned, however, because too many people regretted their decision and cancelled their orders or refused to pay on delivery. People said there must have been some mistake, that there must be something wrong with the computer, that one of the children had placed the order - some even went so far as to say that the dog had stepped on the button. It therefore became necessary to confirm orders by phone, and the tests were later abandoned.

In Europe, cabletext in the form of cycling pages is used as an advertising medium in Britain and Finland.

Other databases

The US database, CompuServe, was mentioned in section 2. The most highly developed electronic selling system (greatest product range, most customers) is currently the part of CompuServe entitled 'The Electronic Mall'. The system does not have the colours and graphics of videotex.

Factors which influence the development of advertising and selling in the electronic data media

Now that the first flush of technological enthusiasm has waned, people have tended to look more critically at the potential of advertising and selling through electronic data media.

The business community has discovered just how difficult it is to turn the new media into vital tools for advertising and selling. In the light of past experience, there has been a growing realisation that it is economic and psychological - rather than technological - hurdles which will slow down or impede the adoption and use of data media by households.
A summary is given below of the consumer and supplier factors likely to hasten or delay (even halt) the use of electronic media for advertising and selling. In the interest of clarity, we have ignored national differences in both consumer and supplier make-up.

**FACTORS THAT MAY PROMOTE THE RAPID GROWTH OF ELECTRONIC ADVERTISING AND SELLING**

**FACTORS THAT MAY HINDER THE RAPID GROWTH OF ELECTRONIC ADVERTISING AND SELLING**

**From the consumer's point of view**

### Advertising

**Consumers prefer to seek out advertising themselves, something which is facilitated by these media**

Advertising can be presented in a more coherent and well-planned manner in these media.

The advertising is available around the clock and can be examined without pressure.

The advertising can be available for a longer period of time.

Retail stores are cutting back on staff or lowering their standards; consumers are, therefore, to an increasing degree, obliged to accept impersonal information.

Advertising is expected to be more factual and less image oriented in the electronic data media.

### Advertising

Seeking and using advertising in the electronic media places greater demands on the user—time, mental effort—than the more random, passive exposure to other types of advertising and sales promotion.

Consumers are not used to having to pay for access to advertising.

Electronic advertising does not have the visual elements or the colours that are necessary in order to create a good impression of the product.
FACTORS THAT MAY PROMOTE THE RAPID GROWTH OF ELECTRONIC ADVERTISING AND SELLING

FACTORS THAT MAY HINDER THE RAPID GROWTH OF ELECTRONIC ADVERTISING AND SELLING

From the consumer's point of view

Selling

With the rising level and diversity of education, particularly among the young, the fear of electronic equipment is diminishing.

With more family members working outside the home, less time is available for shopping.

A growing number of people live alone, unable to enjoy the assistance of other family members for shopping.

The cost of transportation to and from shops is growing.

To an increasing degree, normal shopping activities are already carried out without personal contact with sales staff.

Mail-order shopping is on the increase in most countries, which indicates an acceptance of 'long-distance shopping'.

Selling

Many people are afraid of using 'computerlike' media.

Many surveys point to lack of consumer interest in the development of electronic shopping facilities.

The consumer wants to see and handle the product before buying (these products are unlikely to be part of an electronic shopping assortment).

The consumer doesn't want to lose the social stimulus that is part of shopping.

The consumer experiences delivery costs more directly and, therefore, regards them as higher than the cost of getting to and from the shop.

It is difficult to arrange for the delivery of the product (no one at home which can mean an extra trip to the collection point).

The subsidised home-delivery systems available in countries such as Sweden aren't widely used.

The consumer feels a threat to his/her privacy (companies can make records of shopping habits, etc.)

The consumer doesn't feel that the methods of payment that are part of electronic media are foolproof.
FACTORS THAT MAY PROMOTE THE RAPID GROWTH OF ELECTRONIC ADVERTISING AND SELLING

From the supplier's point of view

Advertising
Always possible to present the very latest offers
The cost of advertising in electronic data media is less than in other media because the message concentrates purely on factual information
There is 'self-segmentation' of consumers because they are selective about the information they want

Selling
Can be part of a 'computerisation programme' for the whole distribution and storage system
Can be co-ordinated with electronic payment systems

FACTORS THAT MAY HINDER THE RAPID GROWTH OF ELECTRONIC ADVERTISING AND SELLING

Advertising
The information has to be constantly updated
Too few consumers seek out advertising on their own initiative
It is more difficult to 'browse' so there is less impulse buying
More difficult to make use of image-oriented advertising

Selling
Higher distribution costs are not usually offset by reduced storage costs
It is not possible to personally influence consumers
On the face of it, there would seem to be more factors indicating consumer interest in the advertising aspect of text media than factors telling against. It is important to note, however, that most of the points in that part of the table are based on the assumption that the consumer wants access to advertising in great amounts, in a form different from that available at present, and in response to purposeful searching (which in addition costs money). This can by no means be taken for granted; many consumers have not the slightest wish to 'consult' more advertising of any kind, others prefer random exposure. In addition, several of the 'plus points' assume that advertising is presented in an orderly manner - in blocks - and that it is of a factual, informative nature; if these requirements are not satisfied, the plus points could easily become minus points. Consumers might also prefer neutral consumer information (rather than advertising), if it were also to be available as part of the medium.

The table contains many factors whose relative significance is not known. So it is difficult to predict what the long-term development will be. But most experts seem to agree that there is unlikely to be any great change in distribution patterns or consumer buying-habits in the foreseeable future.
6. THE USE OF ELECTRONIC VISUAL MEDIA IN ADVERTISING AND SELLING

When we decided to study the importance of information technology to the product and service information available to consumers, we assumed that the report would deal only with the data media. But, even though we ignored traditional TV advertising, it soon became obvious that the effect of information technology on consumer information will be faster and will have greater impact through the visual media than through data media.

Several new types of television advertising have emerged, and owing to the increasing internationalisation of the TV medium they will almost certainly find their way to the Nordic countries. They are a response to the diminishing effect of TV commercials (a result of developments in information-technology) and an attempt on the part of the advertising industry to use the same technology for new types of advertising. The result as far as the consumer is concerned is: (a) TV advertising becomes more intrusive, (b) it contains less and less information of relevance to the consumer and (c) there are various attempts at mixing advertising and programming.

Another innovation is 'direct response television' or direct selling via television. The idea is to present an offer immediately following the commercial. The consumer can then place an order by calling a toll-free telephone number. In order to put pressure on viewers, offers often have a time limit - the price being lowest for the fastest response. There are now also a number of new programmes and TV channels whose only object is to advertise and sell. In other words, new forms of 'distance selling' are developing via the electronic visual media, with consumers - often under pressure - buying products they know only from the supplier's description.
The visual media also include an innovation that has appeared in the USA over the past few years: a 'shopping machine'. Occupying only a few square metres of space, the electronic shopping machine consists of a colour monitor, a touch-sensitive screen, a credit-card reader, a microcomputer and a video disc player. By means of the touch-sensitive screen, product information can be retrieved on to the screen. The product can be ordered, the buyer's address is keyed in and payment is handled by a credit card. A shopping machine can enable a store to increase the depth and breadth of its product assortment. It can also be used to create product turnover outside of the retail trade.

None of our interviewees knew of any shopping machines in Western Europe but a press release in Danish newspapers at the beginning of 1986 told of a company that was planning to introduce electronic shopping machines in Denmark.
7. GENERAL STANDARDS FOR CONSUMER INFORMATION

In order - on the basis of the current situation - to propose consumer-policy measures, we draw up in this section a number of general standards for the content and structure of consumer information.

The first set of requirements deals with the effect of information on consumers as a collective. One of the basic principles behind the formulation of these requirements is that new types of consumer information should not be introduced if they place weak consumers in an even weaker position - no matter how positive an effect they may have for other groups of consumers. In this context, 'weak consumers' are first and foremost the physically and mentally handicapped, the economically and educationally disadvantaged, immigrants and other groups who have difficulty speaking, reading and writing the language concerned.

On this basis, we have arrived at the following collective standards (criteria) which should be considered in any evaluation of new types or systems of consumer information:

Requirement 1: In principle, an information system should be useful and accessible to all consumers.

Requirement 2: A new information system should in particular improve the conditions of disadvantaged, already poorly-informed consumers.

Requirement 3: A new information system should not imply any negative effect on people who do not wish to or cannot use the system.

Requirement 4: The information contained in the system should be available to everyone in return for a
reasonable investment of money, time or effort.

Requirement 5: Adoption of the system should not result in indirect costs which are passed on to consumers collectively in some disguised form nor should it lead to other undesirable, indirect effects.

Requirement 6: Consumers as a group should be given the opportunity to influence the design of the system (preferably before it has been introduced) and then at regular intervals.

Requirement 7: There must be an opportunity for consumers as a group to take action in the event of erroneous or inadequate information.

We have to some extent based the information requirements of the individual consumer on a theory of the use of information. It distinguishes between 'active' and 'passive' exposure to information and between the 'immediate' and 'delayed' utility of information. Immediate utility is determined by the positive and negative feelings associated with exposure to the information, i.e., with the use of the media as such. Delayed utility is the benefit the consumer derives from the information in the long run (as it is experienced subjectively). We have assumed that information has a greater effect on individuals if they seek it out themselves (active exposure) and that unintentional, passive exposure is basically undesirable for this and other reasons. As to the quality of information and costs arising from the use of information, a number of requirements can be defined with the object of optimising the delayed utility.
Requirement 8: The consumer should be exposed only to that information which he or she seeks out.

Requirement 9: It is in the interest of the consumer that information elements which generate negative immediate utility be minimised.

Requirement 10: It is in the interest of the consumer that information elements which generate positive immediate utility be present to a sufficiently high degree.

Requirement 11: The customer has a right to full information, provided that this requirement does not obviously clash with other - more important - information requirements.

Requirement 12: With regard to the quality of the information, the consumer must insist on the following standards:

- clearness; comprehensibility; comprehensiveness; identifiability; impartiality; veracity; reliability; topicality; it should offer the possibility of two-way communication; standardisation; flexibility; easy to register, store and transfer.

Requirement 13: With regard to the cost of using the information, the consumer must insist on the following standards:

The information should be reasonably priced and in certain circumstances should be available free of charge. It should take as little time as possible to obtain the information. Procuring the information should require a
minimum of physical and mental effort. Information should not be designed to encourage the consumer to make a hasty decision. The information should be a component of media normally used by the consumer. The use of the information (and the user's own provision of data in connection with this use) must in no way jeopardise personal integrity; for this, strong data protection is needed.
8. PROPOSAL FOR A CONSUMER POLICY

As a basis for discussion, we present in this section - without details, qualifications or reservations - eight elements of a consumer policy for the Nordic countries as regards consumer information in the electronic media.

1) Nordic consumer organisations and authorities should spend neither intellectual nor material resources on the development of electronic data media for impersonal consumer information aimed at the individual consumer for at least 10-15 years.

The main reasons for this are: (a) poor electronic data media coverage in homes, (b) the unsuitability of electronic data media for the communication of neutral consumer information, (c) that if (a) and (b) are wrong, developments will proceed so slowly that it will be easy to gain access to experiences already made in other countries, primarily West Germany, Britain and Denmark. One possible exception from the main recommendation is teletext (see point 6 below).

2) Nordic consumer organisations should set aside resources for the preparation and presentation of a code of standards for the use of data media for advertising and selling, preferably arriving first at a joint Nordic standpoint, for which support can then be sought among similar international agencies and organisations.

We put forward this proposal despite the fact that we do not expect any major development in the use of electronic data media for advertising and selling during the next 10 years. Our reasoning is partly that teletext could well prove the exception, partly that by acting upon this recommendation consumer organisations will - right from the outset - be able to influence any possible use of data media for advertising and selling.
We suggest the following as the basis for a discussion of what such a list of requirements should include:

* Advertising in the electronic media is of interest to the consumer only on the all-important condition that users of these media can be exposed to advertising only by choice, which means that they must seek out the advertising.

* All advertising must be clearly identified as advertising by its form or in some other manner. This applies not only to the actual page of advertising but also to tables of contents, indices and other types of page reference.

* The substance of the advertisement must satisfy general requirements 9, 10, 11, 12 and 13 as outlined in section 7.

* All advertising pages must indicate the most recent update.

* It is a consequence of the first requirement that electronic 'mail boxes' can be used only to send advertising that has been ordered.

* The advertising pages must be planned in accordance with the users' information needs. This means, for example, that data technology must be harnessed to place all suppliers of a particular product category on the same page (in relation to a specific product characteristic).

* The consumer must be able to reach an order page only after having been exposed to information on certain conditions of sale.
* A purchaser must have the right, within a certain period of time, to cancel any purchase made with the help of electronic data media.

* The system operator must indemnify users against all types of irregularities inside or outside the technical system.

* In the event of any dispute arising with regard to the contents of an agreement, the burden of proof shall rest with the seller/advertiser.

* Data-protection legislation must be improved with reference to electronic data media to make it - as far as possible - technically impossible and unnecessary to gather information about system users.

3) **Within the framework of the present project, the most urgent and important consumer problem in relation to electronic media is likely developments in the use of visual media for advertising and selling.**

We recommend that the Nordic consumer organisations and authorities, individually and in a Nordic and international context:

* Keep a close watch on the development of new types of TV advertising;

* Actively support the non-commercial use of electronic visual media;

* Formulate minimum requirements for the commercial use of the visual media, e.g. in connection with the volume, nature, placing and identification of advertisements;

* Work for a ban on all types of sponsorship;
Work for a ban on direct-sale TV advertising - alternatively, secure consumers the right of cancellation in connection with such purchases.

4) 'Electronic shopping machines' are less of a problem but it is our assessment that a large number of consumers will become acquainted with these sooner than with data media.

We recommend that consumer organisations and authorities - in order to prepare for possible developments - formulate the following minimum requirements as early as possible:

* The contents of the advertisement must satisfy general requirements 9, 10, 11, 12 and 13 as outlined in section 7.

* The consumer must be able to reach an order page only after having been exposed to information on certain conditions of sale.

* A purchaser must have the right, within a certain period of time, to cancel any purchase made with the help of electronic shopping machines.

* The system operator must indemnify users against all types of irregularities inside or outside the technical system.

* In the event of any dispute arising with regard to the contents of an agreement, the burden of proof shall rest with the seller/advertiser.

* 'Electric shopping machines' must not be used to gather information about users.
5) We believe that to some extent teletext will prove an exception to expectations of a slow spread of data media into homes. We recommend the Nordic consumer organisations and authorities to conduct research and practical development activities aimed at investigating the possibility of using teletext for neutral consumer information.

6) We recommend the Nordic consumer organisations and authorities to make a detailed study of all consumer-related legislation with a view to having it adjusted as necessary, primarily in the light of expected developments in the field of visual media and, secondarily as regards data media.

7) We recommend the Nordic consumer organisations and authorities to arrange a co-ordinated research and development programme to study what is referred to in this report as the internal use of data media by consumer organisations.

8) In view of the international range of both electronic data media and electronic visual media, we recommend that the Nordic consumer organisations and authorities investigate the possibility of a joint Nordic initiative to stimulate international co-operation concerning the consumer policy elements proposed in this report.
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David Wood, Ogilvy & Mather, London
LIST OF REFERENCES


technologies. In: P.N. Bloom (red.), Consumerism and
beyond: Research perspectives on the future social environ-

and consumer behavior specialists. In: T.C. Kinnear (red.),
Advances in Consumer Research, Vol. 11, s. 514-518. Provo,
UT: Association for Consumer Research.

in Sweden. Proceedings of Videotex International, s. 73-76.

materialservice. Stockholm: Konsumentverket, Allmänna by-
rån. Dnr. 83/K3351.

medel för det kommunala konsumentarbetet. Stockholm: Konsu-
mentverket, Allmänna byrån. PM 1986-04-08.

Educational Technology.

me für den Verbraucher? I: G. Theuer & W. Schiebel (red.),
Tele-Selling, s. 191-207. Landsberg: Verlag Moderne Indu-
stri.

Karlsson, H. (1981). Elektronisk betalingsförmedling och kon-
sumentskyddet. Stockholm: Stockholms Universitet, Juridiska
Institutionen, Institutet för Rättsinformatik. IRI-rapport

Mediegruppen. PM 12.2.1986.

network for videotex services. Proceedings of Videotex
International, s. 61-72. Pinner, UK: Online Publications.

of interactive systems - A review of Club 403, a research
project into residential interactive viewdata. I: Broaden-
ing the uses of research, Proceedings of the 38th ESOMAR
Congress, s. 49-66. Amsterdam: ESOMAR.


Whitten, P. (1984). Lessons that could have been foreseen. Cable & Satellite Europe, No. 11, s. 22-23.


1985

No 1 Flemming Hansen & Folke Olander:

1986

No 2 Preben Sepstrup:
The Electronic Dilemma of TV Advertising. - Documentation - The Reactions of Business - Cultural Consequences and Consumer Implications.

No 3 John Kjeldsen: