VIDEOTEX: UN DEFI A L'ACCESSIBILITE A L'INFORMATION

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## ABSTRACT

Videotex, from one perspective, is a new technology delivering new services to potentially new users. Videotex, from another perspective, is just another information service - open to the same opportunities temptations, and barriers as the others. This paper examines videotex from both perspectives, exploring why videotex is a challenge, indicating how the challenge can be met, and why it must be.

## RESUME

Vidéotex, d'une part, est une nouvelle technologie permettant la diffusion de nouveaux services à une nouvelle clientèle possible. Vidéotex, d'autre part, est seulement un autre service d'information - ouvert aux mêmes possibilités, aux mêmes pièges et aux mêmes barrières que tous les autres. L'auteur examine le vidéotex sous ces deux perspectives, se demandant pourquoi le vidéotex est un défi, signalant comment ce défi peut être relevé et pourquoi il doit en être ainsi.

Videotex can be an aid or a barrier to public access to information. Of course, it can also be both, or neither. Regardless, at least in the next few years, it is going to be a challenge.

In reality the challenge comes in answering four questions:

- 1. What's available?
- 2. Who has access?
- 3. Who pays?
- 4. Who controls it?

Of course these questions, along with many others, are interdependent, one with the others. Artificially we will provide separate answers to the four questions, while realistically we know everything is all mixed up.

It should be stated here that this paper assumes videotex is going to happen - so it is not a question of "if", but rather "when". And since prophets are seldom recognized in their own country I will not tempt fate. It should also be noted that this paper disregards videotex's other major services (such as transactions and electronic messaging), concentrating solely on information retrieval.

## 1. WHAT'S AVAILABLE?

This question refers not to the system, but to the content. This is the big challenge. If videotex does not make available what user wants then videotex as an information retrieval service will be stillborn.

So, a major challenge is to create videotex data bases which (potential) users will use. Since videotex is a new display/ transmission/storage service no one knows what (potential) users want. So we are into rather large "experiments", in several European countries as well as in North and South America. No one knows for sure what should be in a videotex data base. What is happening now in 1980 with videotex bears some similarity to what happened five hundred years ago with printing when "..." most early printers and publishers simply duplicated somewhat indiscriminately whatever manuscript materials were already being circulated by stationers and scribes. They also began to put together their own collections..." (Eisenstein, 1979).

There are only three sources of content:

the commercial (profit-oriented) sector,

- . the government sector,
- the non-profit oriented, non-governmental public interest sector.

The actual videotex user cares little who provides what, so long as the data base provides him/her with what s/he wants. Whoever is creating content needs 4 resources:

- knowlege of and sensitivity to the public's information needs,
- expertise in data base structure,
- . expertise in page creation,
- dollars for people and equipment.

"What's available?" will be as good as these four resources are. It is difficult for "public" groups to obtain these four resources. Sometimes "public" groups can beg or borrow or buy some of these resources. And since you know why you don't watch your local cable TV productions, you will know why you will not access "public" created videotex data bases. In a recent examination of videotex the former federal minister of communications. David MacDonald, voiced several concerns, one specifically about the probability that content which is socially valuable but commercially marginal will not be created (MacDonald, 1981). The challenge to "public access" in the "What's available" question is to ensure that "public", in this sense, the non-profit making, non-governmental, public interest groups have an opportunity to create videotex data bases. This is quite a challenge.

#### 2. WHO HAS ACCESS?

This question refers to users, and also to content-creators. If videotex becomes de facto only accessible by the richer, then the challenge to "public access" is lost.

When Computer Assisted Learning (CAL) broke upon the academic scene in the '60s' all the computers were big ones. Everyone had to be tied into the big main frame - whether in Illinois, California, New York, or wherever. This approach is dying. Now there are small, self-contained systems (30-50 users) as well as micros, standing alone. It is possible the videotex world will see a similar, but faster evolution. Already the Open University has broken with Prestel and begun a "smaller" system. In Canada Telemart Ltd. of Toronto is a small entrepreneurial company attempting to penetrate/create a market for specialized (small) private videotex systems. So too is Systemhouse. This evolution could have a major impact on who has access.

Is the telephone a luxury? Does cross-subsidization help keep down the monthly telephone bills of rural users? Do these questions and answers have any relevance to the evolving videotex services? Do you know how the West got telephones?

Should market forces alone determine who has access to videotex? Do market forces alone determine who receives TV in Canada? Who is evolving the strategy and the policy to give the public access? Who is implementing it? The challenge here to public access is to find the right questions and then discover who should be answering them.

## 3. WHO PAYS?

This simple question has no real, simple answer. Perhaps this question cannot be answered until the forth question is answered? Regardless, before we try we should identify what it is that has to be paid. There are five basic cost elements:

- computer hardware and software,
- telecommunications,
- content (collection, production, input, update),
- user equipment,
- operations

with videotex the user can be charged in a variety of
ways:

- . flat fee,
- amount of connect time,
- amount of telecommunications time,
- . distance covered,
- number of pages accessed,
- types of pages accessed,
- any combination of the above.

There is a little hard information on real costs in videotex/
teletext world. Much of the work being done now is still
experimental, developmental, or exploratory. How many terminals
can a PDP 11/70 or a VAX 11/780 handle? What will be average and
peak usages? How long will users wait for pages, whether

broadcast, or retrieved? What will real datapac charges be? How much will mass-produced modified TV sets cost? Which type and speed of modem is the best? What "extra" features will users pay for in their user terminals? The technology is evolving too quickly, the system is too young, the experience too limited to provide real cost figures. Even the British are having difficulty identifying actual costs. Ask Bell how much it costs them to handle an average telephone user per month. The answer depends upon your assumptions.

Table 1 shows who pays for some existing goods and services. Would you care to predict who will pay (users, advertisers, or government?) for videotex services? The answer will take some time to evolve. Various experiments will permit operators to explore the market. Various mixes will evolve. The "public" pays, one way or the another depending upon how the service evolves, how the market is created/developed, how much advertisers move in.

TABLE 1: WHO PAYS?

	(An ap	proximation)	
GOODS	Advertiser	Taxpayer	User
Books	0	little	most
Magazines	most	little	little
Newspapers	most	little	little
SERVICES			
Education	0	most	little
Highways	0	most	little
Libraries	0	all	0
Movies	0	little	most
Post Office	0	little	most
Radio (private)	all	0	0
Radio (public)	0	all	0
TV (private)	all	0	0
TV (public)	little	most	0
Telephone	0	0	al1
Travel	0	little	most
/ IDEOTEX	?	?	?

SUMMARY	All/Most	Little/nothing
Advertiser pays Taxpayer pays	4 5	10 9
User pays	5	9

The challenge here to public access (related of course to who has access and who controls it) is to decide

- if videotex should be "owned" by the government, like telephones are in Saskatchewan,
- if videotex should be supported by the government, like oil development is in Alberta,
- if videotex should be subsidized/controlled by advertiser, like commercial TV is in Canada.

The other challenge is obtaining enough information to permit you to make any decisions.

## 4. WHO CONTROLS IT?

This is a tricky question, in the sense that your answer depends upon your perspective. For example, who controls private TV programming -- CRTC? TV station owners? Ratings? Multinational advertisers? It all depends.

Who should control Videotex,

- A Profit-motivated System operator? This could be a phone company, a cable company, a company like Infomart, or even a crown corporation.
- A Public utility?
- Advertisers? Just like, in a way, advertisers "control" present private TV programming, so too advertisers also "control" many magazines. Is this type of "control" acceptable?

There is a strong argument that only large institutions can operate/ control videotex systems. This argument states that since videotex costs are highly volume sensitive what videotex needs to succeed is the low unit costs of volume operations. This approach is based upon classic market analysis/penetration of the commodity-intensive society. The videotex operator must have many dollars - all up front, in order to get the system mounted. Only later, (hopefully not too much later) will revenues begin to cover operational and developmental costs.

Another approach, being gently voiced, approaches the solution from another perspective. Several universities and colleges (Athabaska, Guelph, Victoria, Loyalist, SAIT) are considering this approach. This approach tries to unplug the user from the market, from consumption. It stresses "research by people". The difference may seem slight, the effect may not be.

If those interested can build and share "by multiple forms of mutual reciprocity" (Illich, 1981) then perhaps systems and networks can be built which support the public utility/use-value oriented activites approach. The commodity-intensive market economy, fed by the growth of the nation state may give way, just a little, to a new type of information subsistence economy. old economics is based on scarcity (what is not scarce cannot be economically controlled). In the new society, information is not/cannot be scarce (power increases by sharing, not by witholding information). Scarcity of information in an information subsistence economy is a contradiction. Maybe Paul Feyerabend's definition of a free society as "a society in which all traditions have equal rights and equal access to the centres of power" can be applied here? (Feyerabend, 1978). Perhaps experiments will be tried which show this approach has a validity. Then "who controls it?" may have several answers instead of just one or two. The challenge to public access is clear -- ask the Kent Commission (Godfrey, 1981).

### CONCLUSION

The challenge to public access to information continues, with or without videotex. Some governments are trying to charge for requests for information (under Freedom of Information (FOI) legislation), even when these same governments are spending hundreds of millions on press releases and so-called "information services". Whether or not we are considering videotex, or any other information service the same four questions surface:

- 1. What's available?
- 2. Who has access?
- 3. Who pays?
- 4. Who controls it?

The challenge to public access to information continues. Because videotex is one of the new information services, because it offers computer power to the people, because it's going to influence present services, the public access challenge must be responded to by many, in many different ways. Dedicated information professionals have their work cut out for them:

- to influence those in charge to produce and make available access tools, communication links, and information, all cheaply;
- to interpret the needs of citizens to those in charge;
- to help citizens gain access to information they need.

Society needs nothing less.

#### REFERENCES

- EISENSTEIN, Elizabeth L. The Printing Press as an Agent of Change. Cambridge, Cambridge University Press, 1979. p. 509.
- FEYERABEND, Paul. Science in a Free Society. London, NLB, 1978. p. 9.
- GODFRY, Dave. Electronic Newspapers and Economic Censorship:
  Some thoughts for the Kent Commission. January 20, 1981.
  (draft) 19 pages. Available from Creative Writing
  Department, University of Victoria, P.O. Box 1700,
  Victoria, B.C., V8W 2Y2.
- ILLICH, Ivan. Shadow Work. Boston/London, Marion Boyars, 1981. p. 66.
- MACDONALD, Donald. "Rude Awakenings": Problems and Potential in Canadian Videotex and Home Video. Address by the Honourable David MacDonald, P.C., to the Canadian Bar Association Conference, "Great Expectations". March 27-28, 1981. Bayshore Inn, Vancouver, B.C. 17 pages. Available from The Institute for Research on Public Policy, 60 Queen Street, 12th Floor, Ottawa, Ontario, K1P 577.