

**INFORMATION TECHNOLOGY:**  
A CALL FOR A NATIONAL DIALOGUE  
ON THE EMERGING INFORMATION SOCIETY

A position paper of the  
Social Impacts Subcommittee  
of the  
Canadian Videotex Consultative Committee

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Social Impacts Subcommittee  
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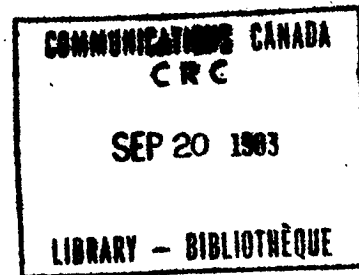
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### Summary

The three-year history of the Social Impacts Subcommittee of the Canadian Videotex Consultative Committee is outlined. Its progress is analyzed. The current position of the Subcommittee with reference to the emergence of a new information society is described. Finally, a proposal is made for the creation of a national commission on the transition to an information society.



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## I. INTRODUCTION

The end of a three-year term is an appropriate point at which to review the actions and examine the utility or effectiveness of an organization. This paper provides a record of what the Social Impacts Subcommittee of the Canadian Videotex Consultative Committee has accomplished, and what has been learned over time. In our view, the analysis which follows will be a useful guide for those concerned with examining present and future applications of new information technologies in Canadian homes, offices, and factories.

## II. ORIGINS AND DEVELOPMENT OF THE SOCIAL IMPACTS SUBCOMMITTEE

In 1979, the federal Department of Communications established an advisory group, the Canadian Videotex Consultative Committee (CVCC), to steer the implementation of Telidon in Canada. Out of that group developed the Social Impacts Subcommittee whose terms of reference are as follows:

In view of the fact that the use of Videotex systems may in time become as commonplace as telephone usage, the Subcommittee seeks to anticipate the impact of this developing technology on Canadians. Specifically, our concerns are broadly based to include social, cultural, political, economic and other factors. The Subcommittee will seek to identify as they emerge philosophical and moral issues fundamental to the development of this technology and encourage an integrative approach to the solution of problems which are identified, for the benefit of all Canadians.

In particular, the Subcommittee anticipates that among others the following issues will require its consideration:

1. the need to facilitate and be responsive to public comment on developing issues in order to ensure that the introduction of videotex proceeds in a manner which is both acceptable and desirable to the public.
2. the development of videotex systems which have the capacity to be truly interactive and can provide an opportunity for participation by Canadians in all walks of life. To do otherwise could increase the widespread alienation already experienced by members of our society.

3. the technology must be developed so that the interests, needs and skills of differing age groups are satisfied. In addition the needs of other specific user groups (such as the handicapped) must be recognized.
4. the development of techniques which will effectively safeguard the privacy of individuals. Privacy must be considered paramount even when weighed against considerations of economic efficiency.
5. the impact on quality and quantity of employment. The introduction of videotex systems will affect work in a variety of ways. Attention must be given to displacement of workers, retraining, education and perhaps even to a reappraisal of the nature of work itself.
6. the issue of equity. Lack of access to videotex systems could create a new form of poverty.
7. the provision of adequate safeguards to offset the potentially centralizing tendencies of this new technology. Techniques should be developed to facilitate the use of the system by individuals as information providers.
8. the need for sufficient untied funds from commercial information providers, as well as government to support data bases of specific community interest.
9. the adequacy of data bases so that overall homogenization of society is not exacerbated. Systems that are developed must be responsive to geographical needs and sensitive to the social and cultural diversity of Canada.

Even though our original terms of reference go beyond videotex technology itself, in light of three years' experience it is apparent that the task is even more comprehensive than we had originally thought. To examine one specific information technology in isolation from other related technologies, or to consider computer-mediated communications separately from the economic, social, and political contexts in which they are embedded does only part of the job. Consequently, the Subcommittee prepared a paper to illustrate the complexity of the problem. This paper, Information Technology and Social Change, emphasizes the importance of communications

in the Canadian context. Privacy is identified as an issue of increasing concern, and the need for public involvement is underscored. It describes an ideal and fully interactive videotex system which would be more clearly of social benefit than the present configuration of Telidon.

1. A Chronology of Subcommittee Activities. The first actions of the Subcommittee involved the creation of terms of reference and the establishment of an independent and decentralized secretariat (at a cost of \$17,000 to the Department of Communications for the first year). Since a knowledge-base was required upon which to make policy recommendations to the Department, a series of questions were posed by the Subcommittee to the Canadian research community. This research, at a cost of \$60,000 was paid for by the Department of Communications.

The research questions involved such issues as equity of access from the point of view of both the user and the information provider. Dornan & Wells (1981) in Videotex Availability to Users call for continued government involvement in the development of videotex services in Canada. King, Podmore, & Pearson (1981) explore a variety of possible scenarios in Videotex: Opportunities for Information Providers.

A workshop on privacy was conducted in Vancouver. The issues addressed were: privacy and the individual, and gathering, processing, storing, and disseminating private information (Booth, 1981). The needs of special groups such as elderly, low-income, and handicapped people were reported in Sindell & Metzener's (1981) Videotex and Special Needs Groups: A Report on Workshops in Montreal and Toronto. While enthusiasm was expressed by workshop participants regarding the potentials of the technology, concerns related to privacy, social isolation, and accessibility were voiced. A call was made for advisory



bodies at local and national levels to monitor developments and anticipate problems.

A set of social impacts questionnaire items for use in field-trial evaluations was designed (Gurstein, 1981). The committee had asked that the questions sample broadly from the wide range of potential social issues implicated: Autonomy, social integration and social roles, diversity, and vulnerability were all probed along with the potentials of videotex to contribute to such service activities as education, health care, and political participation.

In our second year (1981), the Subcommittee realized that while the types of questions we were asking were important, a full programme of work was necessary if we were fully to meet our goals. Accordingly, a two-day committee meeting was held specifically directed at the development of a fully integrated programme of research and public awareness activities related to the Telidon programme. It was becoming apparent that limitations on field-trial successes were in some part due to the scant attention being paid to socially innovative uses of videotex. The Subcommittee outlined an agenda of research and community projects and called for fuller interactivity for Telidon as described in our paper. We commissioned a report on public participation: Public Involvement in Communications Policies (Starrs, 1981). Unfortunately, resources were not available to support the increasingly large task at hand. Subcommittee support that year involved continuation of the secretariate and travel at \$35,000.

In 1982, two successful public awareness events were organized by the Subcommittee: one meeting in Vancouver and a cluster of related meetings in Manitoba (Brandon, Elie/St. Eustache, and Winnipeg). A report of these meetings is available (Hogan-Finlay, 1983). This report highlights the

need for broad-ranging public discussions in diverse settings across the country. Finally, a new paper, Recommendations for Social Issues Research in Information Technology (1983) was prepared. Funding for these activities was the same as the previous year's.

2. Some Frustrations. Each year, the accomplishments of the Subcommittee fell short of the goals set. As outlined above, the task was far greater than could have been accomplished. The Subcommittee continued to broaden its scope of intended activities as it comprehended the magnitude of the task at hand. The mismatch between what was required and what was possible as defined by the institutional framework only became apparent as time passed. The financial resources required, especially as the need for an integrated programme of work became apparent were much greater than the amounts available. There was a structural inconsistency in the operation of a social impact evaluation group that received its legitimacy and funding from the very organization involved in the promotion of the technology. Also, the contrast was disheartening between the Canadian context and that of other countries, especially some in western Europe where extensive public awareness programmes are in place. With all this in mind, we agreed that a new approach was required.

### III. NEEDED: AN ASSESSMENT OF INFORMATION TECHNOLOGY

It has become commonplace to remark that Canada, along with rest of the industrialized world, is on the threshold of the "Information Age". But when one tries to look ahead to the year 2000 the social and economic landscape is shrouded in mystery and occupied by many apparently strange and contradictory shapes. There is great optimism in some quarters that the new high technologies, especially those of communications and micro-electronics, will provide the basis for unprecedented prosperity and

individual freedom. Others hold that the outcome may be just the opposite - massive unemployment and increased social control.

While the visions and opinions of knowledgeable observers can hardly be more diverse, there are some features of the future that many agree upon, and which serve as a guide to understanding and influencing development for the benefit of all. Virtually everyone agrees that the new technologies will result in increased productivity. In fact it is this productivity, the ability to produce more with less human labour, which is at the root of our technological dilemma. Increased productivity can be used to maintain material standards, lead to the creation of new income distribution mechanisms, and can release time and energy for other pursuits. However, if the benefits are shared inequitably, the reduced need for labour would decrease wages, thus lowering purchasing power and raising the spectre of an overall economic decline. A second feature about which there is little disagreement is the increased capabilities inherent in information technology to monitor and control individuals in their daily lives: both at home and on the job.

Another generally shared view is that information technology like the automobile, the steam engine, or electricity itself is transformative in nature. Fundamental change will occur over the next 20-30 years for large segments of the Canadian population in nearly all spheres of activity. What are some of these changes? The auto workers in particular and other manufacturing workers in general are now and will continue to be affected by the introduction of robots. Office work at all levels will be changed by the introduction of office automation systems, of which word processing is barely the beginning. The post office will go through a gradual decline as

electronic mail replaces the more expensive paper alternative. Electronic funds transfer systems will allow for banking from the home. It is clear that by the year 2000 we won't require the current 23,000 full-time letter carriers to move paper based correspondence.

Shopping, banking, attending school, and even getting medical attention can be done over wires using computer intermediaries in the home and at central facilities. The service people, the bricks and mortar establishments required to house them, and the travel back and forth will all be reduced. The list of those likely to be affected, either directly or indirectly by the introduction of new technologies could be much longer - it will certainly include farmers, miners, lawyers, teachers, bank tellers, secretaries, clerks, students, the aged, draughtsmen, hospital workers, architects, doctors - in other words, cutting across all employment sectors, all age groups and all status levels of society.

The fact that many people are going to be affected is clear. What is not so clear is exactly how they will be affected. This depends not so much on the nature of the technologies involved, but rather on the social and economic contexts in which they are developed and used. Though technologies do contain inherent constraints and biases, the new technologies that underlie the information society are relatively free of built-in ideological limitations. The context within which they are introduced will determine how they are used and developed. It is only when we examine the emergence of new technologies within one social context or another that we can hope to understand the dynamics of technological change and resolve the paradox of why there is so much fear and uncertainty in the face of such clear promise for human betterment. When we do this, when we look at prevailing

economic, social and political conditions in Canada, we see indeed that there are grounds for concern, that the prognosis appears to be for severe dislocation and disruption rather than a smooth transition to an information society.

IV. A CALL FOR A NATIONAL DIALOGUE ON THE EMERGING INFORMATION SOCIETY

What is clearly needed is a coordinated national approach based on consensus and understanding. While nearly all industrialized countries have studied or are presently studying the new information technologies to determine how best to guide their development in the national interest, Canada has yet to develop such a mechanism to achieve national decision and consensus.

We therefore propose the creation of just such a mechanism: A national commission on the transition to an information society. While it is not our intention to prepare the definitive terms of reference for such a commission, it is clear that it must be prepared:

- . to encourage public debate, dialogue, and discussion
- . to integrate, conduct research, and make recommendations on major policy issues.

The commission should be organized in such a way as to deal with the effects of information technology in the short, medium, and long term; the time frame for analysis should be to the year 2000. Technology in general, and information technology in particular should be treated not as deterministic, but rather as a force that can be shaped and directed by human intention.

In keeping with our view of the openness needed in an information society, the new commission must make explicit its view of the values and

underlying assumptions of the prevailing social context. It goes without saying that alternative assumptions and scenarios are necessary so as to prepare the most comprehensive set of recommendations for action. It is our view that many of the major Canadian political and economic institutions are viewed with suspicion and distrust. The new commission will have to conduct its affairs in an open and exemplary fashion so that it can earn and maintain the trust of all Canadians.

Structurally, we think that the commission should be established in the following way:

- . that it report annually to Parliament.
- . that a budget be committed for no less than five years and that such funds be independent from all government departments.
- . that the commission be sufficiently large to represent the diversity of Canada. It should contain at least thirty members and have a secretariat of no less than ten.
- . that its affairs be conducted in an open way with public participation encouraged wherever possible.
- . that support be provided for briefs and presentations so that, as much as possible, all Canadians have equal access to the commission.

#### V. CONCLUSION

This paper briefly describes our activities, our experiences, and what we have learned over three years of operation. As successful as have been any of the research projects sponsored, or papers written, the process of meeting, learning and sharing information has yielded greater rewards. And the establishment of a national commission on the transition to an information society would perhaps be the greatest reward and sign of success of this Subcommittee.

### References

- Booth, P. J. Privacy in Videotex. Report of a workshop conducted March 12, 1981, Vancouver, B. C.; reported to the Department of Communications, March 1981.
- Dornan, C. & Wells, D. Videotex Availability to Users. Research report submitted to the Department of Communications, Ottawa, March 1981.
- Gurstein, M. Social Impact Questionnaire Items. Report submitted to the Department of Communications, Ottawa, March 1981.
- Hogan-Finlay, M. Report on Manitoba Public Meetings with Social Impacts Subcommittee of the Canadian Videotex Consultative Committee, Fredericton, N. B.: March 1983. (Available from C. A. Cameron, Psychology Department, University of New Brunswick).
- King, A. J. C., Podmore, C., & Pearson, M. Videotex: Opportunities for Information Providers. Report submitted to the Department of Communications, Ottawa, October 1981.
- Sindell, P. S. & Metzener, M. Videotex and Special Needs Groups: A Report on Workshops in Montreal and Toronto. Submitted to the Department of Communications, Ottawa, March 1981.
- Social Impacts Subcommittee. Information technology and Social Change. Fredericton, N. B.: April 1982. (Available from C. A. Cameron, Psychology Department, University of New Brunswick).
- Social Impacts Subcommittee. Recommendations for Social Issues Research in Information Technology. Fredericton, N. B.: January 1983. (Available from C. A. Cameron, Psychology Department, University of New Brunswick).
- Starrs, C. J. Public Involvement in Communications Policies. Report submitted to the Department of Communications, Ottawa, September 1981.

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