

THE EMERGENCE OF VIDEOTEX JOURNALISM

A Cloud as Small as a Man's Hand

by

Barbara Chance  
and  
Henry Overduin

School of Journalism  
University of Western Ontario

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WESTEX NEWS: AN EXPERIMENT IN NORTH AMERICAN VIDEOTEX  
JOURNALISM

For three years a small group of journalists working out of the Graduate School of Journalism at the University of Western Ontario, London, Canada, produced a daily agricultural news service for farmers more than 1,000 miles away.

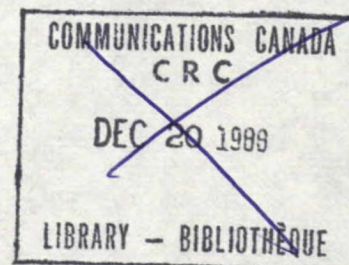
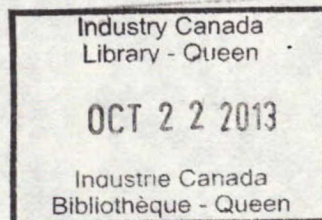
*videotex* It was called Westex News and was the first, professionally-produced news service in Canada. As Westex pioneered the application of journalistic techniques to the new medium of videotex, they began to ask questions about their craft, the new medium, their colleagues in the same experimental field and their "readers".

Westex News: An Experiment in North American Videotex Journalism (Third Eye Press, London, Ont., 1986) reports the evolution of this news service, its questions, challenges and conundrums. But the book goes beyond navel-gazing to ask profound philosophical questions about the essence of all journalistic activity and the nature of the human community.

In addition, the book reports on an exhaustive survey of videotex journalism in North America, with reports on 16 such videotex and teletext newsrooms in Canada and the United States. As such, the book supplements Weaver's pioneering work on European videotex journalism ventures.

The book also reports the results of a detailed survey of its readers, subscribers to the first commercial videotex venture in North America, Grassroots. The survey focussed on the implication of the new medium for news. The results, while tentative, lead to some disturbing questions about the future of newspapers.

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## CHAPTER 1

### An Experiment in Journalism

From its inception, Westex News was an experiment in videotex journalism, an attempt to apply, study and assess the potential of videotex for journalists.

The idea for Westex News originated with Peter Desbarats, the newly-appointed dean of the School of Journalism at The University of Western Ontario. Desbarats came to his post in July, 1981, after completing a major research assignment on new technology in the newspaper business for the Kent Royal Commission.(1)

This research had carried Desbarats into the just-emerging videotex/teletext field, especially Canadian Telidon developments, the CEEFAX and PRESTEL systems in the United Kingdom, and French and German developments in the field. It was through Desbarats' connections with people at Infomart, a leading Canadian videotex firm, jointly owned by Torstar and Southam Inc., that the idea of Westex News was born and eventually implemented.

Infomart, during 1981, was gearing up to launch its Grassroots commercial videotex service in Manitoba. Designed to serve the needs of the agribusiness community, Grassroots was a fully interactive videotex system using the Telidon protocol. While its information providers included many organizations and businesses serving the farm community, it lacked a news service aimed specifically at farmer needs and concerns. Even though Grassroots was planning to include the Broadcast News wire service, formatted for videotex delivery, as part of its system, that service was not custom-made for the agribusiness community. So, Desbarats and Martin Lane, then director of videotex services for Infomart, agreed that a specially-produced news service for Grassroots would be a desirable component of that system and, if the School could produce it, a unique opportunity for the School, its faculty and students.

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1. The results of Desbarats' research have been published as a subsidiary volume of the Royal Commission, called Newspapers and Computers: An Industry in Transition, Volume 8, Royal Commission on Newspapers, Supply and Services Canada, 1981.

The new dean discussed his idea with faculty and students at the School, and with the support of Professors Andrew MacFarlane, Mack Laing, Peter Snow and the technical assistance of David Mills, applied for an Academic Development Fund grant to finance the project. In the application for the ADF support, the Dean argued for the Westex News proposal as follows:(2)

If the service can be started and maintained, the benefits to the School will be enormous.

It will be the first videotex news service of any kind in Canada.

The School of Journalism will be the first such school in Canada and, as far as is known, in North America to establish a working videotex unit.

The School will produce the first journalism students anywhere who will be familiar with this new medium.

The School's faculty will have an unrivalled opportunity to develop research projects in a new field of journalism, presumably with funding eventually from government and industry.

Using existing newsroom-type terminals in the School and by juggling existing personnel, the School can launch a limited news service early in 1982. ADF funds would provide for regular operation for a two-year period and for Telidon equipment that would enable the students to work directly in the new medium rather than using makeshift equipment that would severely limit the usefulness of the service for teaching and research.

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2. School of Journalism, "Grant Application Form Academic Development Fund," Dec. 18, 1981.

The total amount of funding requested was \$100,800, of which the School was eventually granted \$80,900, with the suggestion that the purchase of Telidon hardware be carefully studied, given the rapid developments in computer hardware systems.

Even while waiting for the ADF decision, Desbarats engaged the services of the authors of this report to turn his ideas into reality. Work began on Jan. 4, 1982.

In addition to remodelling a room in Middlesex College to house the Westex News project, the exploratory work for the news service included such standard journalistic preparation as a study of the potential audience and the communities in which Grassroots was available. To that end, a broad analysis of the weekly newspapers serving the small Manitoba agricultural communities was carried out with special attention paid to the weekly farm press on the Prairies. In addition, a list of the usual agricultural and community news sources was drawn up, from local government to farm and community organizations. The initial mailing list of about 500 potential news-making businesses, organizations, institutions and government agencies was prepared and letters sent out by the end of January requesting that Westex News be placed on their media mailing list. Response to this letter was favorable and by the end of February, the Westex News mail was beginning to come in, from government press releases to reports from community organizations.

A survey showed that the Manitoba Co-operator and The Western Producer were among the most-used and highest-rated information sources for the intended audience.(3) Those weekly newspapers, therefore, were given special attention. Two points emerged. First, judged on the basis of news reports in those papers, Prairie farmers were interested in foreign agricultural news, and especially concerned about U.S. agricultural news. Their information sources for those two areas were the U.S. department of agriculture and the Reuter service. Accordingly, Westex News approached the USDA and was placed on the mailing list of most U.S. government agricultural agencies and departments on an exchange basis. For the first few months of Westex News, this USDA connection proved to be a major source of information, though it was always late because of mail delays.(4)

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3. David Godfrey and Ernest Chang, eds., The Telidon Book, Press Porcepic Ltd., Toronto and Victoria, 1981, pp. 53 - 56.

4. These delays were later overcome through use of the AGNET service from the University of Nebraska.

The Reuter commodity wire is not normally available to news agencies, as attempts to secure that service for Westex News revealed. The Reuter service in the weekly farm press in Manitoba and Saskatchewan was possible only because the Wheat Pools which published those papers already subscribed to the Reuter commodity wire. Other commodity news wires, such as the Knight-Ridder commodity wire, while potentially available, would not permit retransmission of content and, at any rate, lacked the wide international scope of the Reuter service.

While access to specific commodity wires did not turn out to be practical, Westex News was able to reach an agreement with the Canadian Press for use of its wire services. This agreement provided that Westex News would get access to (CP) wires at cost with some stipulations. Among them was a stipulation that Westex News share the results of its operations and any farm news it originated with (CP). In addition, the agreement was conditional on Grassroots continuing any (CP) service it then carried.(5) Because of this agreement, the Canadian Press wires have provided the bulk of the news content for Westex News.

The (CP) copy was supplemented by stories originating from the U.S. department of agriculture, press releases from provincial agriculture departments and initiative reporting. The (CP) wires used on Westex News included the A and B wires, for the national and international news, as well as the Prairie regional wire, for local and regional coverage of the Prairies and British Columbia. (6)

Having secured a steady flow of incoming information of potential interest to Prairie farmers, the Grassroots audience, the design of the Westex News data base was another main preparatory step. This work was carried out with the assistance of Infomart specialists, specifically Haras Mytykyn, who developed the software, and Janet Hurley, who helped in designing the pages. Central to this work was a decision to create content using standard newspaper ASCII terminals with software for conversion to Telidon to be within the host computer at Winnipeg. The ASCII terminals - Delta 7300s - were already available in the School and their use dispensed with the need to obtain Telidon page-creation terminals which were too expensive, given the resources available. This decision necessitated graphic simplicity in page design and ruled out any attempt to exploit the graphic capabilities of Telidon. But that was felt to be no major loss since users had already told us that they were often

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5. Keith Kincaid, "Letter to Peter Desbarats," March 5, 1982.

6. See APPENDIX I for a breakdown of Sources for Westex News content.

impatient with the length of time required to generate graphics.

In designing the news data base, the first problem posed by the new medium for journalists was encountered and addressed. In videotex news information is presented on demand and the medium does not offer much scope for sensationalism or browsing. How could a data base be designed to retain as much as possible of these traditional journalistic techniques to get people to read the news? That was, and to a great extent still is, a critical problem for videotex journalism and journalists.

For Westex News, a guiding idea in planning the data base was the pioneer newspaper of the late 18th and early 19th century. Those papers were generally four-page sheets with few or no headlines, i.e. like Westex News those papers did not have the usual "sensational" typographical features that became part of news paper design during the Yellow Press era. Accordingly, the basic design involved a general "front page" menu of top stories to be found within each of four categories, the WORLD, NATIONAL, PROVINCIAL and LOCAL categories. (7)

To encourage browsing, the data base routing choices were designed to permit the user to move from any one page in the data base to the main menu, submenu, next-story, or next-page. The total number of pages was set at 96 pages, in a simple three-level, tree-structured data base. This limit was dictated by the capacity of menu items that could be listed per page. It ranged from 0 to 9 at the time the Westex News system was developed.(8) As Grassroots expanded into other provinces, the title of the sub-menu pages were changed to reflect this change. By December, 1983, they were called WORLD, ONTARIO, NATIONAL and PRAIRIES.

With the logic of the data base encouraging browsing through the news, the menu pages were set up as headline pages in Westex News and headline writing became a major aspect of the videotex journalist's writing craft. The ordering of the items on the menu page represented a relative news judgment as to importance. For example, a story numbered '1' was rated to be newsier than the story number '2' or higher, with the least-important story at the bottom of the list.(9)

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7. See APPENDIX II for sample pages of each category headline page, as well as the title page.

8. This limit permitted up to 36 different news stories per day, an adequate number.



By making the menu pages headline pages, each page in the data base carried information, so that users would not be wasting computer time looking at 'label' menu pages. The first page of Westex News listed the headline of the top story in each category, along with the appropriate menu choice. That initial choice first took the user to the intermediate menu page, where the same menu choice would produce the text of the desired story.

In designing the data base, consideration was given to the problem of story length. The Infomart orthodoxy at the time - based on the Prestel and Ceefax experience - was that news stories should be brief, limited to one screen, or two at most. This limitation of stories to a maximum of about 150 words was felt to be too restrictive, so provision was made to allow for stories of up to four pages in length within each category. Three such stories per category were permitted. In other words, journalists working on Westex News had up to four pages available for each of 12 stories out of a possible total of 36 stories per day. This permitted stories ranging up to 300 words in length, and represented a feature of the data base that was often used.(10)

While the just-described features of the Westex data base design attempted to approximate a notion of an "electronic newspaper" for Prairie farmers, the data base did not allow for updating of specific stories. To update one story, the entire data base had to be replaced. This failure to exploit the immediacy of videotex was not based on an oversight, but represented a compromise between the desire to provide a daily, unified news package and a desire to provide the latest information on any story. While the users of Grassroots tended to emphasize the importance of timely, business-related information for their decision-making, it was felt that the proper journalistic task within a videotex data base was to provide general information that would supply material for coffee-break discussion and help to promote a sense of community.

This concern for the community aspect of journalism was expressed early in the Westex News experiment:(11)

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9. The bottom-line story was often reserved for human interest items, not always directly related to agriculture. The reasoning for this was that a chuckle is good anytime.
  10. For a discussion of this point, see Chapter IV, and comments of editors/reporters surveyed in Chapter XX.

While farming itself may be a specialized business, farmers share all the interests and concerns of people in general. Westex News thus addresses the concerns of the agricultural community as a community of people as well as a community of highly-technical, food-producing specialists. There is room for announcements of blood donor clinics as well as the Crow debate and the latest prices from the Wheat Board.

Other areas of concern during the setting-up period for Westex News were the educational and research opportunities offered by the School's entry into the videotex field.

From the outset, it was decided that Westex News should be a professional news service, using students only when their participation would be part of their course of study. Under no circumstances would students become "cheap labor" to man the system. As a result, student participation has been restricted to those taking the videotex journalism course or taking the videotex option in the print journalism course. The day-to-day operation of Westex News is carried out by paid professionals. During the first summer, for example, Westex News employed three full-time journalists, their salaries paid by the Academic Development Fund and a Canada Summer Works grant. The potential benefits to students participating in courses related to videotex and the Westex News project were outlined in a report to Dean Desbarats. (12)

First, writing for videotex would develop students writing skills which would be useful even if they did not get a job in videotex; second, videotex writing requires headline writing, a useful skill for any journalist; third,

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11. Henry Overduin, "Westex News: An Experiment in Videotex Journalism," mimeographed research paper, University of Western Ontario School of Journalism, June, 1982.

12. H. Overduin, "Westex Progress Report No. 2," January 22, 1982.

writing for Westex News would provide first-hand experience in systematic news gathering with an eye on the whole news package of the day; fourth, because students would not be involved in the day-to-day, on deadline production schedule, the Westex News experience would provide additional scope for enterprise reporting; fifth, the videotex experience would yield exposure to using data bases as a source for news; sixth, because of the major government role in agriculture and its development, the participation in Westex News would provide welcome exposure to government documents and enable students to digest them and turn those documents into news, and seventh, the participation in Westex News would lead to increased appreciation of the importance of agriculture in the news business, a field traditionally under-reported by the urban-suburban oriented mass media.(13)

Reflection on the research potential of the School's entry into the videotex field soon disclosed that there was no theoretical framework for conducting such research. Developing such a framework remains one of the primary goals of the School's activities in videotex and is a task barely begun. As the discussion of the literature makes plain, there simply are no theoretical works at hand in this area.

The research that could be done included the compilation of a videotex journalism bibliography, using traditional journalistic sources, such as the Columbia Journalism Review as well as trade publications, such as Editor Publisher and presstime. Also, contact was made with nearly all other Telidon field trials in progress at the time, with particular emphasis on those which included a news service. U.S. field trials were also contacted and reports obtained on such operations as "Green Thumb", the Knight-Ridder Viewtron trial in Coral Gables, and the Dow Jones news retrieval service. Efforts along these lines led to the development of the Newsdat project, funded separately in December, 1982, with a Canada Community Development Program grant of \$28,000, and the use of data bases such as AGNET, at the University of Nebraska as a source of news. (More on Newsdat in Chapter III)

This general research also contributed to the development of a graduate level, one-term course in videotex journalism, one of the first such courses anywhere. In addition, graduate students were encouraged in their

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 13. While this report does not attempt to gauge the success of these general educational goals of Westex News, it can be reported that students who did participate generally valued the experience, citing the "tight writing", headline writing and exposure to agricultural news as being most meaningful to them.

efforts to write major term papers on aspects of electronic journalism. During its first year of operation, five students in the MA program did such papers.(14)

The School also became an associate member of the Videotex Information Providers Association of Canada (VISPAC) and participated in its deliberations. Contact was also established with the CBC's IRIS teletext project and information shared. If this project becomes the nation-wide, regionalized teletext news service that is being envisioned, it will most likely be the first main employer of journalists with videotex training.

Last and often foremost during the planning stages was the problem of sponsorship, the way in which most information providers try to recoup their costs in providing their information. As had been noted by the Dean in his application for an Academic Development Fund grant, obtaining commercial revenue from the service seemed a likely possibility. Potential sponsors were, at first, approached by Infomart and later directly by the School. No sponsor was found for Westex News during its first two years. This phenomenon was not unique to Westex News and will be discussed in greater detail in the next chapter.

After two months of preparatory work, the first trials of Westex News took place early in March and the service went on line on March 30, 1982. Initially, the news content was relayed via Infomart's Toronto computer to Winnipeg, but by the end of April Westex was transmitting directly from the ASCII terminal to the host in Winnipeg, using a 1,200-baud modem. Once connected to the Winnipeg computer, software was activated to translate the ASCII Westex file into the Telidon format. For the first half-year, transmissions were troubled by breaks, garbles and software problems. While these experiences were frustrating to the staff, a daily edition was prepared on schedule, transmission problems or no. The number of pages transmitted varied from 50 to over 80 per day.

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 14. The papers included: Steve Brunt, "VideoPress Survey"; Pat Chapman, "Government Regulation of Videotex"; Eric Reguly, "High-Tech Communications and Future of Newspaper"; Genevieve Wolski, "Social Implications of Videotex"; and Jacqui Barron, "Information Theory, Information Transmission Systems and Journalistic Text".

## CHAPTER II

### A Costly Flop or Valid Probe?

In describing the concept of the Westex News experiment, it was noted that without a theoretical framework, the venture was a leap into unknown territory. The only guide was the "rear view mirror," the sum total of journalistic intuitions and past experience. While McLuhan's insight that the content of every new technology is the one it replaced helped to suggest the design of the data base - the four-page pioneer "paper" - the real significance of his remarks only began to emerge as the project developed, a theme to be discussed later in Chapter IV.

In this chapter, however, we will attempt to assess the "success" of Westex News in a qualitative and traditional way, leaving the discussion of the statistics generated during nearly two years of operation to the next chapter. Here we address the question: Was Westex News a "success"? And if so, or if not, by what standards?

At least one critical notice of the experiment appeared in print and it will be instructive to consider the criticism. It came from the pen of Jim Romahn, the

respected agricultural writer for the Kitchener-Waterloo Record. He called the experiment a "costly flop," and expressed the hope that "somebody has the courage to kill this technological money-guzzling infant before it grows up into the likes of a Canfarm or a Canadair."(1)

Romahn's criticism concerned the cost of Westex News, its limited readership, its failure to attract commercial sponsorship, and its indirect involvement in the Telidon concept of videotex. Though each of those criticisms has some measure of relevance, the immediate point of his criticism disappears once it is recognized that Romahn ignored the experimental and research orientation of the project. As Dean Desbarats pointed out in a letter to Romahn:(2)

"The Westex News service was never designed to be a profitable operation....We have learned a great deal about videotex news in the past year - how journalists write it, how consumers use it, how advertisers view it - and because we are a univeristy, all this information has been made freely available to people such as yourself who might be interested.

...The conclusion of your column, that Westex should be killed...seems to confirm my own impression that you have confused academic activity with private enterprise....

The dean's reply takes much of the sting out of Romahn's criticism, but did not address the general issue implicit in Romahn's criticism: Can videotex be used to produce a viable news service? Or, in other words, is videotex journalism possible? And it must be granted that Romahn's criteria of readership support and the ability to attract advertising revenue are the traditional measures par excellence of a news medium's viability in the marketplace. Without readership support and without advertising revenue, a news medium as it is traditionally understood, is doomed; it goes broke. And, measured strictly by those traditional

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1. Jim Romahn, "Westex News a costly flop," Kitchener-Waterloo Record, June 17, 1983.

2. Peter Desbarats, "Letter to Jim Romahn," Sept. 21, 1983.

standards, Westex News deserved to go broke, as Romahn rightly pointed out.

To justify the Westex experiment, therefore, will require going beyond those traditional measures to overriding reasons that will validate the experiment in spite of failure to attract a high readership or advertising support. But this search for overriding reasons will have meaning only if it can be shown that (a) the traditional measures of media "success" have not been ignored, and (b) those traditional measures can be shown to be inapplicable. Without such a traditional analysis, the industrial relevance of the Westex News experiment - even if only a 'costly flop' - will pass unappreciated.

During the course of the experiment, the competitive worth of Westex News was assessed through a detailed comparison with the highest-rated competition, the weekly farm press in Manitoba and Saskatchewan, hit list data were obtained and studied, and the possibility of gaining advertising support was vigorously pursued and the failure to attract any investigated.

As was noted in Chapter I, a survey of Prairie farm media sources listed the Manitoba Co-operator and Western Producer as the most-used information sources for farmers.(3) Not only did that information assist in the planning of Westex News content, it also provided a measure of the competition. If Westex News could provide Grassroots subscribers with information normally obtained from their farm press, but do it faster, then Westex News could be said to be providing a useful service.

The content comparison between the The Producer and Westex News was carried out by a graduate student and covered the month of June, 1982. The comparison was between Westex News and the first five pages of The Producer, its main news pages.(4) A total of 48 news stories in The Producer were considered, 39 of them staff-written, the other nine from Reuter. Westex News did not carry 20 of those stories, most of which were of local interest only or interpretative background articles. Four of those 20 stories were wire items. In other words, it is doubtful if Westex News would have carried those stories even if they had been available, with the exception of the wire items.

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3. It should be remembered, as one Manitoba agricultural representative reminded us, that "most-used" is not the same as "most useful."

4. Paul Milton, "A Comparison of the Western Producer with the Westex News Sked," fall, 1982. The news skeds produced at that time consisted of a one- or two-sentence summary of each story carried by Westex News, as well as listing its location in the data base.

Among the stories not carried by Westex News, for example, were staff-written items dealing with a proposed grain terminal at Prince Rupert, delays in rail traffic at a B.C. bridge, an interpretative article on Soviet credit requirements, delays in the Gilson report on the Crow rate, an advance story on the World Farmers Congress, and an interpretative story on the relationship between government and co-operatives, to mention a few.

More important than the stories found exclusively in The Producer was the fact that of the 28 stories carried by both the paper and Westex, five appeared on the same day in both, while the other 23 items appeared earlier on Westex News. In short, for nearly all the important agricultural stories, Westex News was first. During that month, those stories included important developments on the Crow proposals, world grain production statistics, credit arrangements with the Soviet Union for grain purchases, farm machinery sales, farm bankruptcies, and snow storm compensation for Saskatchewan farmers. The source for most of those items on Westex News was the Canadian Press.

Westex also tried to compete with radio, at least in the beginning when its delivery deadline was noon, Manitoba time. The last story to be entered in the daily edition was a market summary, giving details of previous day closing prices and an up-to-date noon market report on eastern markets, with opening quotes from the Winnipeg and Chicago markets. But, this kind of competition was discarded after Westex moved to a late afternoon deadline in the fall of 1982. Also, this competitive feature of the Westex service lost much of its usefulness when Grassroots started to carry more direct market reports of its own and included the Canadian Press Business Information Wire.

Several attempts were made to assess readers' reaction to Westex News. Staff members visited Manitoba in the summer of 1982 and again in the late fall. Through discussion with Grassroots subscribers, some sense of their interests was obtained. But, from a journalistic point of view, that information did not prove directly helpful. What subscribers told Westex News staffers was that they wanted business-oriented information, i.e. information which would help them to make decisions, generally with respect to marketing, buying futures or hedging. There appeared to be little interest in the general farm news service Westex did in fact provide.

Though the issue was discussed among staff, the general opinion was, and still is, that providing the kind of specialized information - and advice - users of Grassroots seemed to demand, was not the kind of business journalists ought to be in. Also, it was argued that the entire Grassroots concept - with different specialized information providers, including market analysts and advisors - served



that general purpose. To encapsulate all that technical information into just one news service seemed illogical as well as fundamentally misguided. Instead the readers' opinions were a clue that Westex News had to sell itself as a journalistic product, worth reading on a daily basis, but to be read in the way a newspaper is read.

Such a self-promotion job was attempted twice during the period under consideration in this report. A letter outlining the purposes and content of Westex News was sent to all subscribers in the regular Grassroots mailing during the month of January, 1983, and again in October. (Appendix XI) Hit list results were not available to assess the impact of the January mailing, but the hit lists for November, December, 1983, and January, 1984, show a marked increase. It is too early to tell if this increase will be maintained. (5)

Indeed, as our user survey makes plain, the need for continued self-promotion is obvious. Grassroots user reported time and again that they were not aware of the existence of Westex News. Infomart's own literature never promoted Westex News, concentrating instead on the news services provided through the Canadian Press' Broadcast News and Business Information wires. (6)

Thus, two reasons for the low hit list figures suggested themselves: (a) users were not aware of the existence of Westex News, and (b) even if they were aware of it, the news service, as a general journalistic product, did not meet their expectations. They demanded of a generalized, news/information data base the kind of specialization and detailed market information available elsewhere in the Grassroots system and not within the purview of a general agricultural news service. The best Westex could do, should it choose, would be to quote various experts. (7)

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5. The remarkable increase noted for January, 1984, could also be due to increased awareness among many Grassroots subscribers, some 300 of whom were asked to participate in our user survey.

6. This is not surprising, given that Infomart pays Press News Ltd., the (CP) subsidiary providing those wires. It should be noted that Infomart officials were at all times ready to help Westex' efforts at self-promotion, either on the Grassroots system or through their regular mailings.

7. It was agreed among Westex staff that a useful "news" service within Grassroots would be to treat other IPs as news sources and thus to report, in effect, on the Grassroots system itself. That option, however, along with plans to advertise Westex more aggressively, were not carried out because of budget limitations.

In addition to personal contact with Grassroots users and discussions with Infomart marketing people in Winnipeg, an attempt to assess the usefulness of Westex News through a survey of Manitoba's provincial agricultural representatives was carried out early in 1983.(8) The provincial ag reps had played a central role in the initial promotion for Grassroots, with demonstration terminals located in their various offices. The survey (Appendix VII) was mailed to the ag reps along with a letter telling them that they would be contacted later by phone for their response to the various questions. While the results of this questionnaire are ambiguous and, to a degree, self-serving (9), there did seem to be a general consensus that a general agricultural news service within Grassroots served a useful purpose. The ag reps too, however, noted that user awareness of the existence of Westex News was low. Only half of the agricultural representatives reported using the Westex News service themselves, and those who did suggested that Westex News carry more research news and interpretative material.

Compared to other services within Grassroots, two-thirds of the ag reps rated Westex News as only marginally useful, while the other third said it was "quite useful." In general, however, the agricultural representatives' comments tended to deal more with the overall Grassroots concept than with Westex News as such, and so the survey did not provide any insights that suggested changing the format or the content of Westex News.(10)

It should also be noted that Grassroots is, perhaps, not the most logical type of data base for a news service, even a specialized news service. That is so because Grassroots is marketed primarily as a tax-deductible, business tool for the larger operators among Prairie farmers and agribusinesses. A survey carried out for Infomart by the CanWest Survey Research Corporation, showed that market-related information was the reason most often cited by Grassroots users for acquiring the system in the first

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8. Bruno Leps, Gary Enns, and Lee Sigurdson of Infomart's Winnipeg office, gave much useful advice and encouragement.

9. At the time, the ag reps were engaged in a campaign to retain the Grassroots terminals in their offices at government expense.(They succeeded.)

10. The survey was carried out by Kathryn May, now the agricultural reporter for the Ottawa Citizen and a graduate student at the School at the time; survey results were compiled by Richard Hoffman, and a final report drafted by Mark Dailey, July 5, 1983, both graduate students. Financial assistance from the School's graduate research assistantship program is hereby gratefully acknowledged.

place.(11)

Infomart's own surveys indicated that the greatest demand was for more farm management programs, again emphasizing the immediate utility expected of the overall system but not likely to be found within a news service.

(12) The CanWest survey showed that the Broadcast News service ranked seventh, with 67 per cent of the survey respondents saying they used it, and 86 per cent saying they found it useful. Other news services (not further identified) were ranked 11th in terms of actual use, 15th in terms of perceived usefulness. The most highly rated services on Grassroots were weather forecasts by crop district; commodity street prices, commodity futures, general weather, special crops, games and speciality newsletters. Games, especially, rated fifth overall. (13)

We will look at the detailed hit list statistics for Westex News in the next chapter. What we have tried to indicate here is that, for all intents and purposes, Westex News did not make much of an impact on Grassroots users who, for the most part, seemed to have remained ignorant of its existence. Still, there must have been a relatively loyal following of some sort for the monthly hit lists remained fairly constant (slightly below 3,000) most of the time, even as Grassroots was expanding.(See Appendix III) As a journalistic product, Westex News aimed to be an electronic daily farm newspaper, giving an account of the "world" of agriculture that would be of interest to Prairie farmers because it is their world, affecting their income, their thoughts and their way of life.

Having considered the competitive worth and general reader response to Westex News, the problem of obtaining advertising revenue and cost of production remain to be discussed. In considering the problem of videotex advertising, it will be useful to begin by considering what has been learned about it rather than give a disappointment-by-disappointment account of Westex' own failure to attract a sponsor. Production costs will be discussed in Chapter III.

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11. CanWest Survey Research Corp., "The Evaluation of the Grassroots System: An Executive Summary," December, 1982, p. 2.

12. These surveys were conducted using the Grassroots system itself and results were reported in Grassroots newsletters.

13. CanWest Survey Corp., op.cit. This extent of "playful" use of the Grassroots system may be a feature of the novelty of the medium. It will be interesting to see if this heavy use of games will continue as the system matures.

About all that was known about videotex advertising when Westex News came on line early in 1982 was what Infomart's Grassroots project had discovered. It was the first fully commercial videotex system operating in North America. Most of the revenue-producing advertising consisted of "sponsorship," i.e. advertisers sponsored certain data bases within the system. For example, the Royal Bank sponsored the weather pages; the Bank of Montreal, Dow Chemical Canada, Esso and Engro various cattle and commodity price data bases, while still other IPs paid for their own pages of information.

The general format of sponsorship advertising consists of either several lines along the bottom of a page, or along the side, with a company logo or trademark, usually including a page reference to advertiser information elsewhere in the data base. The basic message or logo, however, is to be found on every page sponsored by the advertiser. While the content of the complete advertising message pages can be changed quite easily, the sponsorship identification lines are a relatively permanent part of a data base, which would be relatively costly to change, the cost depending in part on the number of pages involved.

When the financing of Westex News was being discussed, the idea was that Infomart would try to find a sponsor with revenue to be split between the School of Journalism and Infomart. Infomart did, at one point, have a strong contender: An agricultural chemical company was interested in sponsoring Westex News at about \$30,000 per year. But this deal fell through when the company involved objected to having its name on pages with so-called "bad news," not necessarily bad news about agricultural chemicals, but any bad news, such as fires, plane crashes and earthquakes.

Subsequent to this failure in obtaining advertising revenue, Dean Desbarats launched a blitz among Canada's 100 largest companies, seeking their sponsorship. In soliciting their support, the Dean emphasized that while this videotex "advertising" would hardly reach a mass audience, participation with Westex News would permit the company to learn a great deal about the potential of such advertising at a cost considerably below what consultants might charge. In short, the appeal for advertising support was primarily based on experimental and goodwill considerations. In the recession times of 1982, those reasons were just not good enough.

To make a long story short, the closest that Westex News itself came to "selling" sponsorship was when it demonstrated specially-made pages of its data base to VIA Rail. The officials were impressed, but...like everyone else, cited general economic conditions for not proceeding with sponsorship. The idea of providing free advertising for community organizations, such as the Red Cross or United

Way, was also considered. The rationale was that if people could see the Westex News data base used for advertising, the concept might catch on and some paid advertising generated. But the idea was not pursued further. It seemed somewhat ludicrous to ask the Red Cross to "sponsor" the news of the latest disasters or dispatches on the Crow debate.

The absence of sound economic reasons for advertising on videotex must be considered as a primary cause for Westex' failure to obtain sponsorship support. At the height of the Westex appeal for advertising support, Grassroots boasted some 500 user-terminals in the field, not all of them paid subscribers. Hardly a mass audience, or even a sizeable target audience.

Yet, the problem of videotex advertising goes beyond the prima facie difficulty of association - the daily juxtaposition of news, a lot of it bad, with the advertiser's corporate logo or message. Jean Lancee, one of the speakers at the Videotex Journalism Conference sponsored early in 1984 by the School of Journalism, analyzed the problem succinctly:(14)

Videotex sponsorship has turned out to be one of the hardest advertising sells in history, because advertisers know that sponsorship is not a very effective technique for stimulating demand. Sponsorship is more appropriate for promoting an image by association - a very indirect route to demand itself - and to do so the association must be of unquestionable identity and laden with particular value. These are the qualities of an opera gala, the Winter Olympics or the Ed Sullivan Show; they are not the qualities of 100 words of variable information in a data base slot....

This is why the news business as a partnership of news and advertising doesn't own the bottom line in videotex. With advertisers not getting from the news what they need - namely audience and influence - they can't be expected to pay for the news....

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14. Jean Lancee, "What's The Bottom Line? Videotex and the News Business," Videotex Journalism Conference, Toronto, Ont., Jan. 21, 1984.

For Lancee, videotex represents the potential final divorce between printed informational advertising and the news business, the former eventually ending up within videotex systems, leaving newspapers without their traditional revenue source. Because of the failure of the sponsorship advertising concept, she also saw no immediate role for news on videotex systems. "With no major revenue source for the news business in videotex, news concerns have little attraction to enter and less to invest in developing a finely crafted product that is uniquely appropriate to the medium," she said, arguing that the opportunity for journalism is in the old medium, the newspapers, which, she added, "will surely become thinner," "possibly become less frequent" and "produce smaller revenues." (15)

Other analysts, our own research and experience confirm Lancee's rather pessimistic outlook for advertising on videotex news systems. First, videotex news services do not have much to offer to advertisers, an essential point in "selling" not only the advertising but the new medium itself. Watson S. James, senior vice president, video technology and programming, Doyle, Dane Bernbach, a believer in the strengths of videotex advertising, had sobering words for system operators at Videotex '83 in New York. He emphasized videotex and teletext had a major selling job to do before getting accepted. He said that "...the greatest disservice I could do the videotex industry would be to stand up here and tell you that Madison Avenue is waiting for you with open arms. It isn't." (16) And James was talking about non-news videotex advertising.

The peculiarities of news data bases pose special problems for videotex advertising, as Lancee has pointed out. Even a comprehensive, book-length treatment such as Christopher Lockhart's Videotex: The Advertiser's Place in the Evolution of Videotex, does not specifically mention news data bases and the special problems they pose for advertisers. (17) His 15 "Golden Rules" for videotex advertising, alas, contain not a one that might help the information provider with a news service. !

A School of Journalism survey of the largest 130 advertising agencies in Canada and the United States showed

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15. Jean Lancee, op.cit.

16. Watson S. James, "The Use of Videotex as an Advertising Medium," in Videotex '83, London Online Inc., 1983, p. 90.

17. M. C. Lockhart, The Advertiser's Place in the Evolution of Videotex, BL Associates, Inc., Hoffman Estates, Ill., 1983. For the "Golden Rules" of videotex advertising see pp. 213-29.

that only 10 per cent of those agencies had recommended to clients that they try videotex advertising. They reported that lack of random access, dilution of target audience appeal, and possible negative effects of placing advertisements next to "bad news" or "opinion" articles were special reasons for not advertising on videotex news systems.(18)

With respect to advertising on teletext - a genuine mass medium in Great Britain, and potentially so elsewhere in the near future - results of preliminary studies done on advertising on the Canadian Broadcasting Corporation's IRIS teletext system focussed on consumer acceptance, not advertiser satisfaction. Still, the consumer reaction is relevant, if only because it would appear to be the only research of this kind done to date. The CBC research indicates that graphics and animation play a major role in viewer reaction. The more interesting the display, the more likely is the ad going to be watched. In addition, the CBC research office reported:(19)

Teletext users are probably most enthusiastic of all about advertisements that leave them with something more than just basic descriptive information about an advertiser or product. They very much want advertisements to give them practical information that they can use in their day-to-day lives or that simply adds to their general knowledge. Advertising of this type is seen more or less as an extension of the informational function of the teletext service itself. As such they expect it to be frequently changed or updated.

Westex News, however, does not have the resources or prestige of the CBC. While it did offer potential advertisers the opportunity of experimenting with the new

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18. David Climie and H. Overduin, "Videotex News and Advertising: A Survey of Leading Agencies," mimeographed, School of Journalism, University of Western Ontario, 1984.  
19. CBC Research, "Project IRIS: Reactions to Advertising on Teletext," mimeograph, 2 pages, Ottawa, September, 1983.

medium, using its daily updating capability and target audience appeal, there were no takers.

What we have tried to indicate above is that there are sound business reasons in general as well as specific videotex considerations that argue against advertising on a videotex news data base, even by highly innovative and experimental firms. By its very nature, videotex news is inappropriate for the usual type of advertising messages. And so to expect commercial advertising revenue to pay for the cost of operating Westex News is unreasonable; it is particularly unreasonable given the relatively low penetration of the Grassroots system among the agribusiness community at this time.

To conclude this chapter on the "success" or lack of it of Westex News, it seems that traditional measures of performance do not apply. That does not, however, entail that Westex News was a "costly flop" as Romahn asserted. On the contrary, we think that it was a valid probe into a new medium, potentially a mass medium, that will profoundly affect the way we will get our news but for which viable criteria have not yet been established. The Westex experiment disclosed just where the problem areas are located: measuring "circulation" and selling "advertising". The experiment also revealed areas where other news operators might profit from our failures: self promotion and data base design utilizing the instantaneous updating potential of videotex but without sacrificing the character of the overall news data base.

The just-mentioned findings are consistent with the findings reported in our survey of videotex journalists and editors (see Chapter VI), and in our poll of Grassroots subscribers. But, even when measured by traditional means, the Westex News experiment did not only yield negative insights. The quantitative data Westex generated tell a story too. That story is the subject of the next chapter.



### CHAPTER III

#### The Data's Story: A Challenge for the Press

Most of the data generated during the first 18 months of Westex News dealt with three main areas: costs, content and number of pages accessed by users, called hits. The data tell a story which, though unconfirmed, suggest that videotex news is relatively inexpensive to produce and a valued feature of most videotex systems. In addition, the data suggest that videotex news presents a challenge to traditional media, especially newspapers, and that "videotex journalism" as it is currently practised raises deep and difficult questions for journalists and their profession.

Our discussion of the statistics, furthermore, indicates that hit list evidence alone is insufficient to judge the worth of a news data base, or any data base for that matter. We will suggest an "objective" measure - the Content Index - as a more reliable indicator of comparative data base worth and guide to system operators and advertisers. We will argue that hit list data alone are like "press run" statistics and not at all equivalent to "paid circulation" figures. Hit list data plus the Content Index, however, will provide a fair estimation of data base use and content value to the system's subscribers.(1)

Looking at the overall cost-production figures for Westex News, we get the following: A sum of \$93,794.36 was spent in the period, Jan. 4, 1982 to Dec. 31, 1983, during which time 30,282 Telidon pages of content were produced,

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1. It was primarily to counter the false impressions created by press run-based circulation claims that the Audit Bureau of Circulation instituted its auditing system to establish paid circulation.

resulting in 48,032 hits.(2) The cost figure is obtained as follows:

Run-up period to April 30/82:	\$12,893.52
May 1/82 to April 30/83:	57,914.84
April 30/83 to Dec. 31/83:	22,886.00
Total:	93,794.36

As was indicated in a previous chapter, this expenditure was financed with an Academic Development Fund grant of \$80,000, a Summer Works grant of \$2,500 and School of Journalism departmental funds. (Not included in these totals are Infomart's share of first-year transmission costs, about \$7,000.)

Broken down to per-page cost and per-hit value, we find that the average cost of producing a page of Westex News was \$3.10, and the average value of a hit \$1.95. As far as production costs go, this would appear to be relatively inexpensive. Infomart estimates that the cost of producing a text-only page of information is between \$40 and \$50. The rate card of Videopress, a London, Ont. mall-based videotex advertising system - closed down at the end of 1983 - set page production costs at \$5 per page for text, and \$25 per page for graphics. (3)

It should be noted that software-driven wire feeds, such as the Grassroots Broadcast News (BN) and Business Information Wire (BIW) supplied by Canadian Press, have even lower per-page production costs. For example, given that the annual cost to Grassroots of the BN wire feed is about \$50,000 and the total number of pages produced in a year is approximately 730,000, this results in a page creation cost of about seven cents per page. At that price, however, the system contains many thousands of meaningless pages, consisting of slug lines only. Also, there is no way the system operator can be certain that libelous, obscene or seditious material is removed. Responsible use of a wire feed, we submit, will require at least the service of an

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2. See Appendices I and III for the total number of pages and hit list data.

3. Costs given are cited in Robert E. Widing II and W. Wayne Talarzyk, Videotex Project Reviews II, College of Administrative Science, The Ohio State University, April, 1983, p. 38, and Videopress rate card, December, 1982.

editor. In defence of (CP), it should be noted that the news agency is only following industry practice in this regard. Still, a case can be made that software-driven wire feeds present potential legal problems for system operators who, technically, are not responsible for content. But the fact remains that purchasing a straight wire feed will be the cheapest way for videotex system operators to provide an up-to-date news service for their users.

The meaning of the per-page value can be assessed by noting that if Westex News had been a pay-per-hit system, it would have had to charge \$1.95 per page accessed to break even, more if a profit was to be realized. A U.S. edition of Westex News, called Candat and online with the AgriData Network operating out of Milwaukee, Wis. charges 31 cents per hit. But note that, at 31 cents a page, the break-even hit rate would have to be around 18,000 hits per month. Assuming that videotex will some day become a mass medium, such a hit list projection is far from unreasonable. Indeed, a system with 18,000 users - and there are even larger systems now - would require only that each subscriber look at one page per month at 31 cents per page to make the news service self-supporting. And that hardly seems an impossible goal.

There are good reasons, however, to reject the pay-per-hit scheme, as we will discuss later. The point here is to show how relatively easy it would be to make a news service self-supporting through a nominal page-access fee. To get some approximate idea of what hit list figures really mean, it will be instructive to compare the Westex News hit list with the reported hit list of Broadcast News. On average, the BN monthly hit list has been approximately 45,000, or roughly 15 times the number of hits registered by Westex News.

Looking at a three-month period, we have the following data on the BN and BIW hit list:(4)

	<u>BN and BIW Hits</u>		
	Dec./83	Jan./84	Feb./84
BN	44,304	87,192	57,861
BIW	5,517	6,662	8,368

4. The Broadcast News hit list figures were provided by Press News Ltd. General Executive Don Angus. Note that for these three months the hit list results are above average.

Westex                    3,139                    5,341                    4,505

The anomaly presented by this hit list data is that it appears a general news service outdraws a specially-created and formatted agricultural news service. If we rule out an ad hoc explanation in terms of bizarre news tastes of the Grassroots audience, we are left with a puzzle, a puzzle that only begins to make sense once the total number of pages in the BN data base are brought into the picture.

The number of pages created in the BN database is approximately 60,000 per month, compared to the average of 1,413 pages created by Westex. As was noted, not all of those BN pages have information content. The index pages, for example, often just list the slugs of stories, providing little or no clue as to content. There are also many updates and summaries, useful for the radio station newsrooms for which the wire is intended, but not necessarily of significance to the audience of the system. Still, it seems plausible to suggest that as the number of pages in a data base increases, so should the number of hits. Given that the number of pages is roughly 40 times the number of pages created by Westex News, we could have expected a hit list up to 40 times the Westex hit list. Yet, the actual number of hits is 15 times that of Westex, strongly suggesting that more than just the number of pages are involved. Clearly, the content needs to be considered as well.

But how can content be brought into the picture? We would like to offer the following suggestions. First, let us consider the hits per page produced ratio as a possible clue to the estimated content value. We will make the comparison between Westex and the BN wire for the months for which the hit list data are indicated above. So we get:

HITS-PER-PAGE RATIOS

	Dec./84	Jan./84	Feb./84
BN	.74	1.5	.96
Westex	3.6	5.3	4.7

which confirms the intuitive idea that a specially-created

agricultural news service should outdraw a general news wire feed. The hits-per-page ratio, however, is not a satisfactory, overall measure of data base worth because it ignores certain other important variables, such as user awareness of the data base and the number of terminals that has access to the service. For an individual IP, however, the cumulative hits-per-page record can give an estimate of the usefulness of his information. If the hits-per-page ratio is dropping, his data base is in trouble, especially when the system itself keeps growing. Such a declining hits-per-page ratio suggests either that a promotion campaign is in order or that the content is no longer up to user expectations. (We are assuming the system itself continues to grow.)

Our second suggested measure of content worth is based on the observation that total data base use is a function of the following variables: number of terminals in use, number of pages, user awareness and content. Given that is the case, we postulate:

Hit List data (D) varies directly with number  
of pages (P), number of terminals in place  
(T) and relative user awareness (A). (1)

The just given variables can be readily quantified and measured. The hit list is usually given by the system operator, number of pages can be counted by information provider and number of terminals in place by the system operator. Relative user awareness can be expressed as a percentage, or probability. For example, our user survey (see Chapter VI) showed that approximately 25% of the people surveyed did not know of Westex News. This suggests a .75 value for A. The variable which cannot be quantified so readily is the content, or content worth. Let us call this the Content Index, or C.

There is no easy way to quantify this index, although there are some tests to which any suggested measure can be put. For example, the Content indices of various data bases must reflect relative popularity ratings and so we would expect the Content Index of the weather data base to be higher than the C-value associated with a general news service.

We proceed now as follows: Given that

$$D = k(P.T.A) \quad (\text{from 1})$$

we get

$$k = D/(P.T.A) \quad (2)$$

where k is the mathematical constant associated with the data base variables.

We suggest that k is a plausible measure for C, the comparative content worth of a data base. There is no absolute measure for C, but that does not exclude its objectivity as a function of data base use. An example may help here, using the comparative hit list data for Westex News and the BN wire, during the months of December, 1983, and the first two months of 1984, given above. For the purpose of calculations we have set the number of terminals in use for that period at 1,500, and the respective awareness figures at .9 for BN (because of its promotion by Infomart) and at .75 for Westex. The appropriate substitutions produce the following:

	<u>Comparative Cs for BN and Westex News</u>		
	<u>Dec./83</u>	<u>Jan./84</u>	<u>Feb./84</u>
C(bn)	.001	.001	.001
C(westex)	.003	.005	.004

which again supports our intuitions that the worth of a news service specifically created for Grassroots has greater value than a general news wire.(5)

We can confirm this intuitive test by taking the weather data base, and making some assumptions about its use: Let us say that all Grassroots subscribers access at least five weather pages per day, and that the total number of weather pages is approximately 1,250 per month. Assuming, furthermore, that there is a 100 per cent

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5. The potential counter-intuitive results that would obtain if user awareness were arbitrarily underestimated suggests that great care be taken before assigning a value to that variable.

awareness of the weather data base, we get  $C(\text{weather})=.072$ .

Still a further plausibility test of our suggested measure is to imagine the perfect data base, one that has every page accessed at least once by all of the users on the system every day of the week. The C-value of such a data base would be unity because D in that case equals P<sub>x</sub>T, and A=1. Thus, we get:

$$C = P_x T / P_x T x 1 = 1$$

(A possible example of the "perfect" data base would be the time-of-day data base, where the "hit" in effect creates the page.)

We can now also use the C-value to provide a basis for intra-systemic data base worth comparison, because it seems evident that the overall worth of a data base is the sum of the worth of its constituent data bases. Average videotex system worth can be calculated simply by adding measures of its individual data bases and dividing by the total number of information providers (IPs). Such a measure of system worth will be of interest to advertisers or agencies considering more than one system as a potential advertising medium.

We will leave this relatively abstract realm of content indices with the observation that the C-values of various data bases also provide a ground for comparison of IPs. As such, the measure will be useful to system operators who, in the end, will be best situated to determine the values of the various variables. Also, by taking the values over a sufficiently long period, a rating scheme could be devised which could be used to assist in the setting of advertising rates, or to encourage IPs to improve their product.

Lastly, it should be emphasized that the C-value measure suggested here is just that: a suggestion. By itself, it provides no objective test of a data base usefulness, but, taken together with hit list data will yield a fair approximation of how users of the system value a particular data base. As such, we suggest it comes much closer to the "paid circulation" criteria the Audit Bureau of Circulation uses to assist advertisers when dealing with the newspaper market.

In considering the monthly hit list figures for Westex News, a major qualification must be made at the outset. The monthly aggregate hit counts provide only a clue as to user interest in various topic areas. Because of the daily changes in content, there is no way of relating page hits to specific content, except for four pages, the index pages.

And even there, the intermittent delivery of hit data from Infomart, plus the fact that the World News headlines were "buried" behind another category for the period March 1983 to October 1983, the evidence can, at best, be said to point to a high user interest in world news.(6)

Calculated as a percentage of total menu page hits, excluding the main menu page, the following picture emerges:

WESTEX HIT LIST DATA

MONTH	WORLD	SECOND PLACE
March, 1982	29.0%	Local 28.0%
April	30.6	Manitoba 26.5
June	32.7	National 31.0
July	35.9	Local 25.1
August	48.4	National 22.4
October	35.9	Local 24.6
November	36.2	Manitoba 32.9
December	33.8	Manitoba 30.1
November, 1983	31.3	National 28.1

During December, 1983, the picture changed, with the prairie news category becoming number one in terms of hits; followed by world news. This was again the case for January, 1984, but reverted to the old pattern with world news leading the way in February.

The picture of user news preference that emerges from these hit lists is confirmed by our user survey, where the response to the question "Which news category have you accessed most frequently or are most interested in?" as follows:

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6. By "burying" the world headlines we mean that those headlines no longer had a separate index page, but followed headlines on one of the other news index pages. For example, on days that there were only a few national stories, the world news headlines were put on that index page. On other days it might be any one of the other index pages. See Appendix III for details.



37% said "world news"  
 25% said "prairie news"  
 22% said "Manitoba news"  
 11% said "national news"

These findings confirm the results of a major newspaper readership study conducted for the Kent Royal Commission on Newspapers. That study found that while Canadians prefer television to newspapers as a source of world news by a ratio of 55% to 30%, a total of 66% of Canada's newspaper readers want more world news.(7)

On the other hand, the Westex News findings noted above seem to conflict with the findings of another major study of news service on a data base, the RMH Research Inc. report detailing the use of newspapers and the Associated Press wire on CompuServe, a large, general information data base with headquarters in Columbus, Ohio. That research noted that CompuServe users were accessing their local newspapers on the grounds that their interests were in "hometown paper/local news."(8)

But a more interesting result is that the Associated Press wire service accounted for nearly half (44%) the hits in the newspaper component of CompuServe's data base. It seems to us that that fact, not commented on in the RMH study, is of far greater significance to journalists than the hit list data obtained on the various newspapers participating in the CompuServe study. It shows, we think, that the users of databases have a definite non-local orientation toward news, and also parallels the heavy use of the BN service in the Grassroots system. We will return to this point in the next chapter.

Still one other important point should be noted about news on videotex systems such as Grassroots. It concerns the impact of videotex on traditional information sources for an audience that has become familiar with videotex. As was indicated in the first chapter, a survey of potential users of the Grassroots system placed the weekly farm press, specifically the Western Producer and Manitoba Co-operator, at or near the top of their major information sources. The Manitoba Telephone System survey of the potential videotex audience found:(9)

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 7. Leonard Kubas et al, Newspapers and their Readers, Research studies on the newspaper industry, vol. 1, Royal Commission on Newspapers, Ottawa, 1981, tables 19 and 60.  
 8. RMH Research Inc., Report of Findings, September, 1982, p. 48. Access of local papers declined, however, as the novelty of the service wore off.

PRE-VIDEOTEX INFORMATION SOURCE RATINGS  
 Most Important      Second      Third

Radio	39%	21%	12%
Farm press	26	31	31
Experts	19	23	28
Television	9	14	10

Farmers rated their various information sources, in order of usage, as follows:

1. Manitoba Co-operator
2. TV weather/farm specials
3. local grain elevator
4. Country Guide
5. neighbors
6. "Not CBC radio"
7. the local agricultural representative
8. CBC Radio Noon
9. The Wheat Board

Among users of Grassroots, there is a major shift in this ranking of information sources. The CanWest survey, cited previously, lists the new ranking of information sources as follows, giving pride of place to Grassroots itself:(10)

POST-VIDEOTEX RANKING OF INFORMATION SOURCES  
 1st/2nd      3rd/4th      5th/6th

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9. David Godfrey and Ernest Chang, The Telidon Book, Toronto and Victoria, 1982, p.55.
  10. CanWest Survey Research Corp., "The Evaluation of the Grassroots System: An Executive Summary," December, 1982, table 3.

Magazine	29%	43%	29%
Newspaper	40	48	11
TV	17	36	48
Radio	23	35	42
Grassroots	58	24	18
Brochure	34	20	46

What the above results indicate is that the addition of a videotex system to the information environment causes readjustments in the ranking of traditional information sources. The most significant results here seems to be the first-place rating given to Grassroots itself.

The Westex survey of Grassroots users reveals only a slightly different pattern with respect to the specific topic of news, with users giving top rating there to radio, followed by Grassroots and the newspapers. The Western Producer is at the bottom of the list. The Westex survey first place ratings for news were distributed as follows:

- 35% said "radio"
- 24% said "Grassroots"
- 14% said "newspapers"
- 11% said "commodity/farm magazines"
- 9% said "Department of agriculture newsletters/publications"
- 9% said "television"
- 1% said "Western Producer"

What these statistics seems to indicate is that once videotex has established itself as a major information medium for farmers its use is at the expense of the farm press, the other major "printed" source of information.

Newspapers will ignore such results, tentative though they may be, at their peril. It is not so much that videotex news and information systems are direct competitors, rather, they appear to produce information consumers with different expectations and orientations toward information and news. As such, the new technology challenges the very concepts of information and news, as well as the traditional channels thereof - press, radio and television. But this threat would seem to be of greatest relevance to the press, the "other" print medium.

In attempting to account for this, it should be noted that one of the peculiar characteristics of videotex news is its indexation. What layout is to a newspaper, the index is to the news data base. The index, in fact, is one of the few features of a news data base that give it a "character" at all, but it should be evident that the "character" of a headline index is no substitute for the newspaper. An index, even a headline index as in Westex News, exists as "one damn thing after the other" and lacks context.

True, there is the context of the general videotex system - Grassroots - providing a "target audience" and specific geographical areas. Westex tried to exploit these latter features by creating "character" to its data base by "humanizing" its information content through the use of bylines on some of its stories, special notices of stories on its index pages and the addition of humorous items. Still, the resulting news "service" appears alien, especially to print journalists.

What is lacking, as the next chapter will try to demonstrate, is a community context. Without such a community context, journalistic news judgment operates in a vacuum, or becomes parasitic on judgments made elsewhere, producing a fragmented and artificial picture of reality. Those are serious challenges to journalists seeking to make the videotex medium their own.

Before moving on to consider these challenges to the very concepts of news and information in the next chapter, it will be pertinent here to discuss briefly the various statistics generated concerning content and sources for the news on Westex News. The statistics, given in Appendix I and plotted in the graphs, Figures A and B below, reflect the increasing general news content of Westex during its first few months and the results of steps taken to correct this trend. During its first half year, more than half of Westex content was general news.

A deliberate policy change to get more agricultural news on Westex News was initiated during September, with the result that the percentage of agricultural news on Westex has steadily increased from then on. At the same time, greater efforts were made to increase the proportion of staff-generated items for Westex News, a trend illustrated

FIGURE 'A'

SOURCES

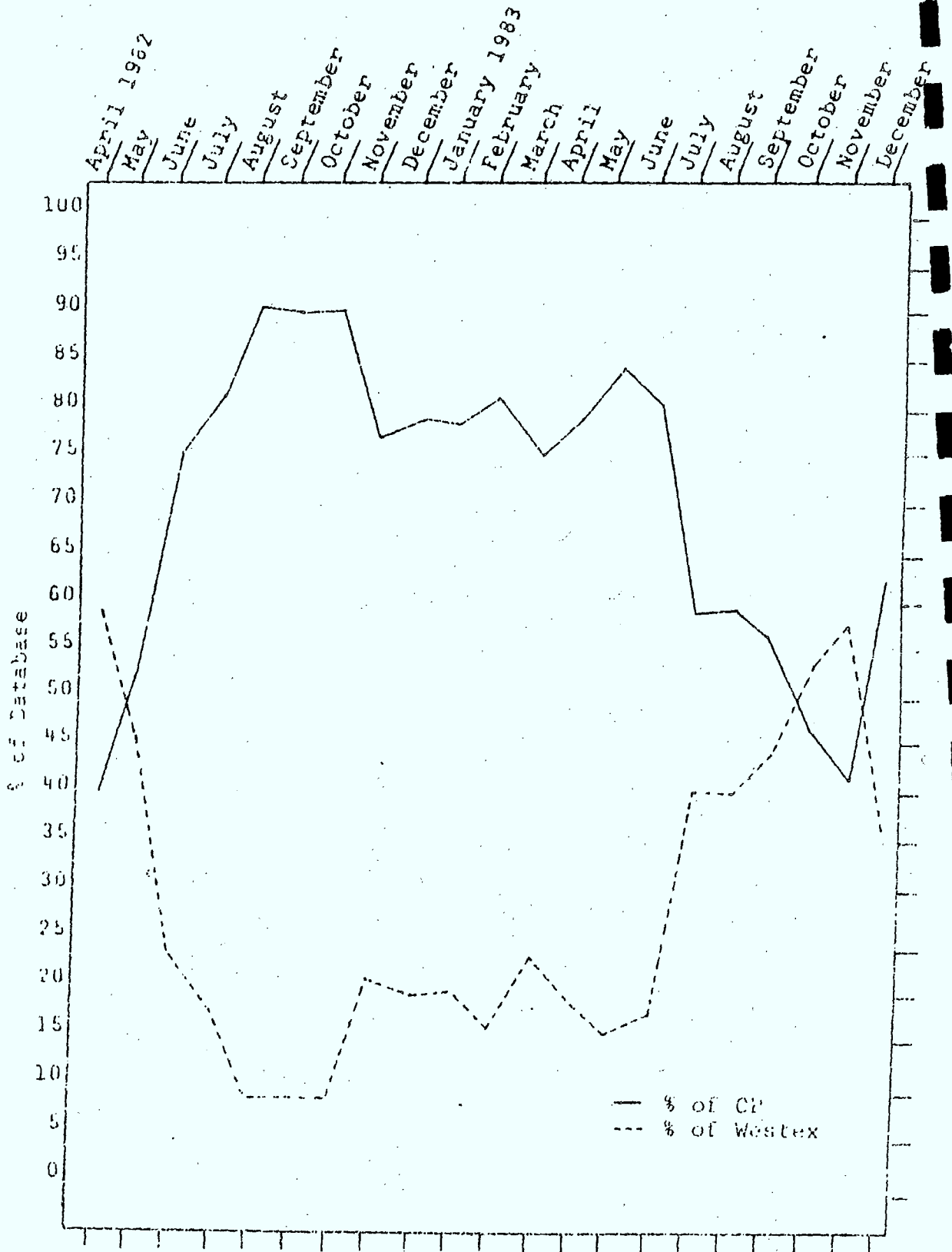
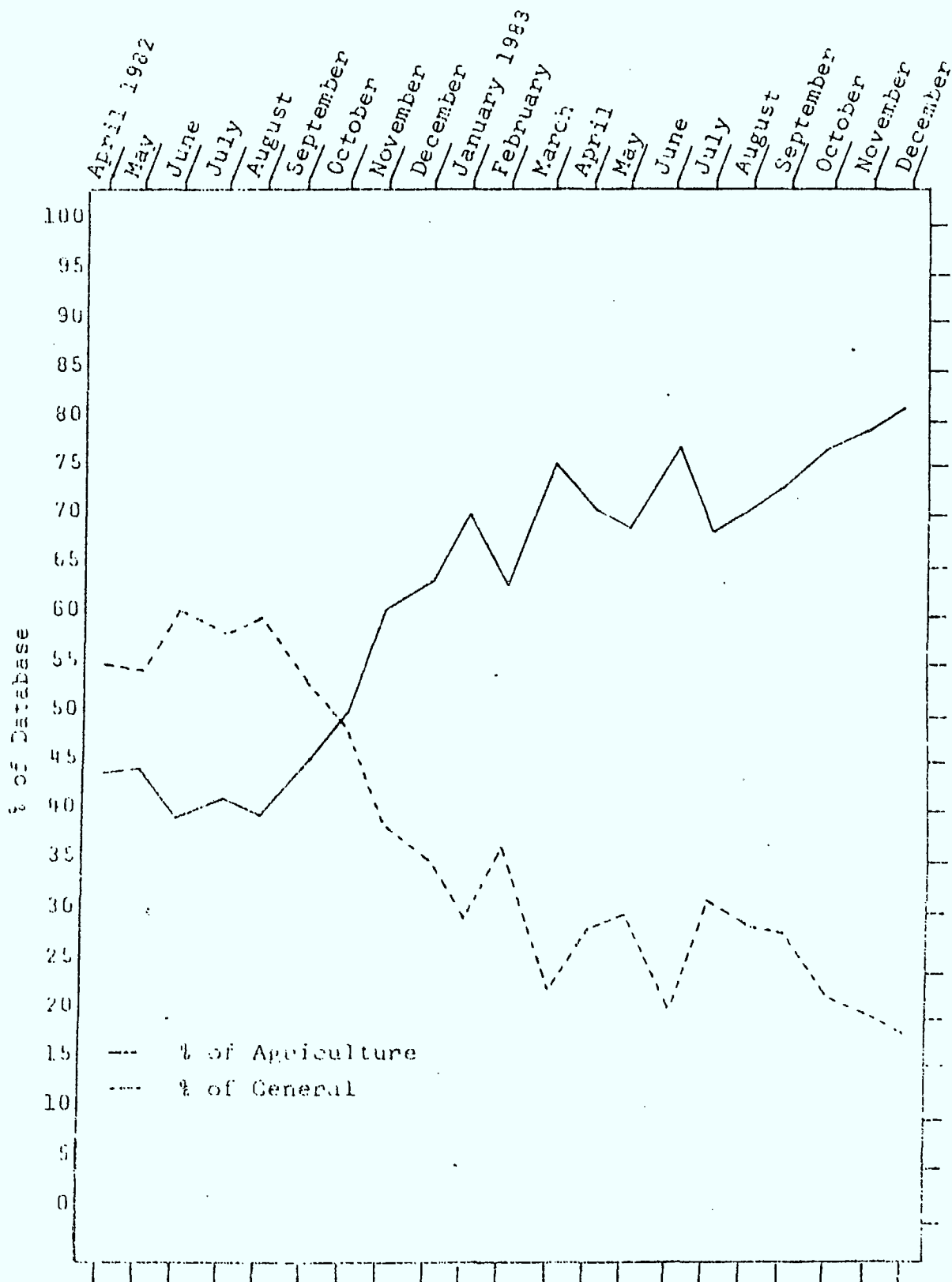


FIGURE 'B'

CONTENT



by Figure B. The drastic shift to greater Westex News content beginning in May, 1983, reflects the loss of two Canadian Press wires, the A and B wires with national and international news. Those wires were discontinued because of budget constraints. To a degree, the loss of those wires was made up by re-writing stories with an agricultural angle from the daily press, a makeshift substitute. Wire copy originated from the CP Prairie regional wire, while the Westex copy came from press releases, Newsdat (see below) and initiative reporting, including some contributions from graduate students in the print program and students from the Journalism School at the University of Regina.

The Newsdat connection to Westex News deserves special mention here because of its unique role in the School's overall videotex research. Funded through a Canada Community Development Program grant and Westex News, Newsdat operated for 12 months with a staff of two journalists. Their specific duties were to investigate the usefulness of publicly accessible data banks for journalists in general, and for the Westex News project. While funds to exploit the results learned from Newsdat were lacking, Westex News benefitted indirectly through the manpower and through accessing such databanks as AGNET, out of the University of Nebraska, and Agri\*Star, later the AgriData Network, a commercial agricultural information data base operated out of Milwaukee, Wis.

Through Newsdat, information was obtained and data bases signed up providing access to other wire services, such as United Press International, Associated Press, the Interlink-Inter Press service, Tass and the Commodity News Service (CNS), to mention a few. As was noted, funds were lacking to exploit these alternative sources of information, but enough was learned to establish that, with a relatively small budget, a videotex news operation could enjoy more wire services and have access to more specialized information resources than are available in many Canadian newspapers. (Of course, Westex News had "read only" access to most of those wire services. The material is copyrighted and cannot be retransmitted without permission. Wire services, generally, charge a substantial "availability fee" before granting such permission, if at all. Westex News had such an arrangement only with Canadian Press, as discussed in Chapter I.)

The Newsdat experience also resulted in staff becoming familiar with other videotex systems and in producing an awareness of other opportunities for news services on data banks. For example, an offshoot of Westex News, Candat, is now on line with the AgriData Network, and a specialized Native Peoples news service is being planned.

To summarize, the Westex News results reported in this chapter raise deep questions about the nature of journalism

and the journalist's craft. Our videotex editor/reporter survey deals with professional attitudes in more detail and supports our intuitions that videotex news poses special problems and challenges. To deal with them will require more than knee-jerk reactions, deeper thought than talk about videotex news as "printed radio" or "electronic newspaper." Above all, the subject demands more research, research with a journalistic focus, instead of the usual market orientation.

The emergence of videotex journalism, and the special problems it poses, can serve as an opportunity for reflection on the nature of the profession in a general way. Videotex journalism "writes large" the essential philosophical problem of all journalism: news judgment. The next chapter will explore these questions in more detail and place videotex in the general mass media spectrum.



## CHAPTER IV

### Videotex Journalism and the Community Conundrum

In this chapter we will try to locate videotex journalism among the traditional journalistic mass media: television, radio, newspapers, magazines and books. The discussion will be concentrated on a comparison of videotex with newspapers and print journalism news "values". Not only does this approach fit our own preconceptions and prejudices with respect to the primacy of print journalism when it comes to news "values", but it also reflects the general trend in the scholarly as well as professional and trade literature. Last, but not least, it accords fully with the intuitions of common sense.

Our chief argument aims to establish that the market "values" of videotex journalism are antithetical to anything remotely related to what has traditionally and professionally been regarded as "good" journalism. A second-level thesis that will be defended is that videotex journalism - good, bad or indifferent - deserves to be taken seriously because it provides a badly-needed and useful focus on some of the most troublesome philosophical questions of journalism. Elucidation of those questions is important because - given time - videotex journalism may well be the only print journalism left and, as such, be the main beneficiary of one of mankind's profoundest legacies of reflective rationality: print.(1)

We have no doubt that the ambitious goals of this chapter will, at best, be only partially achieved. We think, however, that a useful lesson can be learned from the

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1. We owe this insight to Marshall McLuhan, who, in a different context suggested print as an antidote to television. Cf. his Understanding Media, New York, Toronto, London, 1964, p. 178.

attempt itself. That lesson is that journalists - if they are ever to free themselves from the professional limitations imposed on them by the economic constraints and objectives of the media organizations and conglomerates - become ready to ground and anchor their news judgments in an independent philosophical orientation that allows a critical perspective on the bias of communication.

We return to the matter at hand, placing videotex within the mass media spectrum. Following a quick overview of that spectrum from a common sense point of view, we will consider the discussion of videotex journalism in scholarly and trade publications, concentrating on the alleged advantages of videotex over traditional print media - its timeliness, selectivity and interactive properties - submitting them to criticism from a number of perspectives.

Beginning then, with common sense, it should be clear that videotex news - such as Westex News - is hardly an alternative to books. The brevity of the news items, for starters, are sufficient to rule out any further comparison with books on the grounds that it would be comparing gnats and elephants. Which does not mean, of course, that books cannot be published on videotex. They can and will. But any connection with journalism, in our view, is too far-fetched to pursue here.

The idea that videotex is some sort of electronic "magazine" has surfaced in the literature and in our own survey of videotex/teletext journalists. For example, Ian Morton-Smith, who helped set up the British CEEFAX teletext service speaks of it as a "teletext magazine" and used the same phrase when discussing the KEYCOM teletext system in Chicago.(2)

When we asked videotex journalists to compare their product to various hybrid descriptions, the response was as follows:

Printed Radio	17.8%(n=28)
Broadcast newspaper	17.8
Electronic magazine	14.3
None of these	50.0

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 2.Ian Morton-Smith, "Publishing Printed Radio: A Paper for the Indiana University School of Journalism," October, 1982, mimeograph.

And those who did respond indicated qualifications. (3)

Superficially, the similarities to a "magazine" are the importance of the "first page," or "cover of the book", the large number of "pages", the use of illustrations, and its target audience appeal. But those similarities are misleading, to say the least. At any rate, conceptually there is not much insight to be gained by comparing videotex news services to a magazine, except for one characteristic: the parasitic nature of its news. Just as most magazines do not generate their own news content, but take it from elsewhere and build on it, so too most videotex news services do not originate news content. Their main job appears to be reformatting wire copy. That was true in Westex News, and most other news services.

Any comparison to television news seems far-fetched as well. While, presumably, videotex or teletext could supplement television news - the medium preferred by most people for national and international news - the computerized media have none of the drama of film, none of the unity and character provided through the newscaster's personality, and none of the emotional impact.

"Printed radio," on the other hand has some plausibility as a descriptive term for videotex journalism. There is no doubt that the writing styles are similar, as is the ability to respond quickly to timely developments in news events. But if "electronic magazine" overdescribes what videotex journalism is all about, surely "printed radio" understates the matter. The "printed radio" comparison fails to capture several of the essential elements of videotex, such as its selectivity, organizational structure and interactive nature. Thus, rather than providing us with an insight into videotex, the term "printed radio" obfuscates the nature of the new medium.

In defence of those using the phrase "printed radio," it should be admitted that they worked primarily for teletext systems, the one-way videotex system. And "printed radio" does approximate the nature of that service. The term also describes the writing style employed. But it does not describe the medium. Part of the confusion can be put down to the general looseness in which the terms "videotex" and "teletext" are being used. But here we are talking about videotex as the two-way, interactive service. And for that, we submit, the term "printed radio" at best refers to a writing style, and even there, not without some major

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 3. Indeed, the confusion is such that at only three of 11 videotex services where two or more people were interviewed, did those persons apply the same label to their service. For details see Chapter VI.

qualifications, because, in principle, there is no reason why videotex news stories cannot be long, in the sense of stories being allowed to run for what they are worth. That is seldom if ever the case with radio writing.

John Woolley, one of the earliest videotex editors in North America, compared teletext and viewdata - his word for videotex - to bad and good journalism. He referred, partly in jest but not without a serious undertone, to the "two warring camps" of the "good system" - videotex - and the "natural enemy of all that is good in journalism...the broadcast journalist." (4) He described his Viewtron system as "The Electronic Newspaper" and said: "There will not be good, well-rounded electronic newspapers until newspapers recognize them for what they can be: An opportunity to offer people the immediacy of TV with the depth of print."(5)

Woolley's view of videotex as an "electronic newspaper" should not be confused with a "newspaper delivered electronically," which is what the AP/CompuServe test was all about. Videotex is not just a delivery system. If it were just that, and sometimes promotional schemes represent the matter as such, there would be no point to this study, and videotex would be a concern of circulation managers, not editors and journalists. Still, whatever else videotex might be, it is also a delivery system. So a brief discussion of "electronically-delivered" newspapers is warranted in our context.

Some of the respondents in our survey commented on the electronically-delivered paper concept, and emphasized the difference with videotex journalism.

"The term electronic newspaper is really limited. When you hear it, you picture the New York Times flashing on a screen," said one. And another commented: "Electronic newspaper is not a good term - it's more complex than that. Videotex takes journalism one step further. You become a facilitator that makes it possible for other people's information to be made readily available."

The respondents stressed the importance of an editor's role in the process of making the information from newspapers and wire services available on videotex. Others, however, believed in the potential of putting entire newspapers and full wire services directly on line to their subscribers.

While there is no agreement on the point among editors and journalists working on videotex systems, the majority

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4. John Woolley in his speech to the videotex journalism conference sponsored by the University of Western Ontario, Jan. 21, 1984.

5. Ibid.

opinion opted for an enhanced role of the editor in the videotex news process. "People don't have time to sit and scroll through 1,000 AP stories," said one manager. "The editor must organize it, make it readable." And another pointed out that an editor is needed "to make order out of the mass of data that is available from wire services. People would be lost without someone to put something in order and grade the news." And yet another stressed that the editor is needed to "set a pattern, otherwise information overload. The editor will be the backbone of these (videotex news) systems that choose to retain the human value of the journalist's judgment rather than allow the news service to be software driven by a cold machine."

Others stressed that the editor's role would change, become more like the role of a librarian in providing indexing, cross-references and illustrations.

In Canada, the one newspaper that is put on line daily is the Globe and Mail, the electronic version of which is marketed by InfoGlobe. The Globe went on line in 1977, a world pioneer in data base publishing. But costs of accessing the online version are high. In the early 1980s, other newspapers went on line, such as the New York Times. One of the major experiments in electronic newspaper publishing was initiated by the Associated Press and used the resources of the CompuServe database. In announcing the start of the experiment, Associated Press President and General Manager Keith Fuller said:(5)

The AP believes that any information retrieval system must revolve around the newspaper in the community. We believe our member newspapers, radio and television stations are in the best position to be the successful information processors.

Our board has heard two views: One that electronic delivery is the future knocking at the door, and the other that electronic delivery to the home is a disaster hunting a victim. We intend to find out which is the case.

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5. Quoted by Ray Laakaniemi, "The Computer Connection: America's First Computer-Delivered Newspaper," Newspaper Research Journal, Vol. 2, No. 4, July, 1981, p. 64.

Fuller's discussion of the experiment in terms of electronic delivery of already-existing content is obvious. The results of the AP/CompuServe experiment, however, are ambiguous with respect to the use of the daily newspapers participating. The data show that, once the novelty wore off, people stopped accessing the newspapers, and so the conclusion that emerged was that while newspapers may play an important role in selling a computerized information retrieval system, news alone won't keep it sold. Indeed, it was found during the study that 44% of all news accesses were directly to the AP wire, not the newspapers. (6)

While we think that the basic aim of the AP/CompuServe experiment, if construed as an experiment in videotex journalism, is misguided, we concur with Fuller's claim that it is because of their community base that newspapers are in a natural position to become, not mere information processors, as he would have it, but information providers in a new, non-parasitic way. We will return to this point shortly, but for now wish to insist, perhaps rather dogmatically, that videotex journalism is fundamentally misunderstood if it is regarded primarily as a new delivery vehicle. So understood, the only "journalistic" problem that remains would be the problem of payment for material stored in databanks, a problem best left on the bargaining table for resolution by the Newspaper Guild and the newspapers.(7)

If videotex journalism, then, is not to be equated with merely dumping newspapers or wire service on line to some data base, what is its content, and how does it differ, uniquely or otherwise, from what is available in the traditional print mass medium, the newspaper? Again, turning to our own survey, we find that in the 16 videotex/teletext news services surveyed up to 90 per cent of all content derived from wire services, local newspapers and parent news organizations. There is very little original reporting on any of the systems surveyed.

Now, if we accept MacDougall's dictum that "All good journalism is reporting,"(8)

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6.RMH Research, "Report of Findings: Synthesis of Findings for AP/Newspapers/CompuServe Program of Marketing Research," September, 1982, pp. 83-95.

7. The Washington-based Newspaper Guild has, indeed, begun to consider this problem. At the time of writing, however, the issue has not yet been resolved in any contract.

8. Curtis D. MacDougall, whose Interpretive Reporting, now in its eighth edition and a journalism textbook classic since 1938, has emphasized the reporting function as the essence of journalism.

it follows that videotex journalism is not true journalism. In other words, the various phrases used to describe the editorial functions in a videotex/teletext news service - words like "information processor", "information facilitator" or "information enhancer" (the term used at the Globe) - correctly indicate the absence of a genuine journalistic function.

When it comes to original reporting, we already noted that up to 20% of the Westex News content came from Westex-originated material. But that is probably an overstatement, since much of the Westex-originated material actually came from data banks, press releases, and the University of Regina, where students did the reporting. In our survey, seven videotex systems reported that they do phone reporting, deriving from one to 10 per cent of their content in that manner. Six services reported they obtain from one to 20 per cent of their content from on-the-street reporting, but not necessarily by their own staff. Only two of all the systems surveyed included staff with specific reporting responsibilities. There was no agreement among the journalists surveyed on whether or not this absence of original reporting should be rectified. Some thought it should, others believed there was no need for original reporting.

Our findings on this matter were similar to those of Professor David Weaver, whose pioneering Videotex Journalism has already been mentioned. Weaver found that the European videotex/teletext journalists did no, or very little reporting. (9)

His conclusion, which we think is valid and justified by our own findings on videotex/teletext journalism in North America, is as follows:(10)

In short, teletext and viewdata are not yet really new media, nor are they satisfactory substitutes for some of the older media. Rather, they are caught somewhere in technological limbo as they strive to carve out a niche for themselves in the existing economic and media order. The fairly

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9. Weaver, op cit, p. 53ff.

10. Ibid., p. 109.

minor effects they have had thus far on journalistic work are not encouraging for those interested in higher quality journalism, although they do provide more speed, convenience, and viewer choice than some previous media have, if not better news coverage. But for those who take seriously the exhortation of the Hutchins Commission that the press provide "a truthful, comprehensive and intelligent account of the day's events in a context which gives them meaning," teletext and viewdata thus far are disappointments, and they may remain so for a long time to come because of economic and technological constraints.

Weaver did not stop at this negative assessment of the matter, however, because he takes seriously the possibility that videotex systems will, in time, become major news providers. We agree with Weaver that this is not only a real possibility but a genuine probability, and therefore endorse Weaver's recommendations to improve the quality of videotex journalism. Heading that list is the advice that videotex journalists do more reporting. (11)

We think, however, that the ills of videotex "journalism" - both as we experienced them through Westex News and learned of them through our own research and that of others - betray a much deeper malaise, one that goes to the heart of all contemporary journalism. That malaise concerns the very nature of news judgment. The symptoms of this malaise - writ large in videotex journalism but present in the other mass media as well - are (1) a misguided tendency to equate news and information without further qualification, and (2) an incredible naivety with respect to the bias of mass communication, which generally tends to ignore not only the role of the various community establishments in news judgment, but the very concept of community itself. At best, the community role is recognized and admitted as a kind of afterthought. Its centrality in the very process of news judgment is ignored. If dealt with at all, it is usually by media critics from the outside, who, all too often, appear to have ideological axes to grind thereby effectively prejudicing their case where it counts, with working journalists.

Weaver, admittedly, touches on both of these concerns. For example, with respect to the tendency to equate news

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11. Ibid., pp. 114-115.



with information, Weaver cites Rex Winsbury's two-year study of the Prestel videotex system in Britain, as follows: (12)

Winsbury thinks it is "a total mistake to regard videotex as some sort of 'electronic clone' of the newspaper," because this attitude produces, "stiff, dull pages that do not exploit the characteristics of videotex and, in a broader sense, narrows the mind about what can be done and said in the medium."....Another very important point made by Winsbury is that "the idea of a social and political role is central to newspapers, foreign to computers," and it is not clear at this time that either teletext or viewdata systems will be any more than storehouses of, "rather neutral reference information (typically, train and airline timetables, cinema listings, economic statistics) of a relatively stable nature and little, if any, controversial content."

In a similar vein, Weaver quotes Philip Meyer, of Knight-Ridder Newspapers, speaking at Videotex '81 in Toronto. Meyer said that newspapers deliver information and influence, and questioned whether videotex systems can do the same. Said Meyer: "Prestel's role is more that of neutral broker of information than maintainer of community beliefs and values."(13)

In his conclusion and recommendations, Weaver argues for the inclusion of general news in videotex systems on the grounds that such news is needed "for preserving a sense of community needed for democratic government." (14) To support the point, he writes: "As Richard Gray, Jay Blumler, and others have pointed out so well, there must be

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12. Rex Winsbury, The Electronic Bookstall: Push-Button Publishing on Videotex, London, 1979, pp. 61-62, quoted in Weaver, op cit, p.28.

13. Ibid., p. 28.

14. Ibid, p. 111.

a sense of community as well as a sense of individuality within a democracy. If teletext and viewdata technology is to contribute to better journalism, as well as to better democratic forms of government, there must be an emphasis on general news as well as on specialized information." (15)

But in Weaver's discussion of the nature of news, there is no such linking to the community, suggesting that for Weaver the benefits to democracy and sense of community are a consequence of general news. We will stress a contrary view: A sense of community must be in place - consciously or unconsciously - for there to be any news judgment at all. Without this community context, news judgment operates in the never-never land of the Kantian world-as-it-is-in-itself, a nebulous realm of "objectivity" long since discredited as a fantasy.

Thus, for us, the absence of general news is not only a possible disservice to democracy, but makes mockery of the essence of journalism: news judgment, taking it out of its community context and severing its ethical roots. To make our case, we will begin by criticizing the two features of videotex news generally cited as its major advantages: timeliness and selectivity.

With respect to timeliness, we note its glorification by Morton-Smith, of KEYCOM Electronic Publishing:(16)

Teletext's main advantage over the traditional media is the speed with which it can disseminate information....Presently, at KEYFAX, we publish a 100-page teletext 'magazine' which receives, on average 2,000 updates a day. Some have claimed that teletext is limited because of its 80-words-per-page format. But they forget that, during the course of a news day, we may write as many as 20 versions of one story - adding new news as it becomes available and summarizing preceding events. The single basic aim of my newsroom is to provide the latest available information on any story - whether it be news, sports, business or the weather - at any given hour of the day.

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15. Ibid.

16. Morton-Smith, op cit, pp.5-6.

Note, first, the virtual identification of news with information, timely information. Even on major news stories, the wire services do not provide that many updates. And so it seems fair to question this emphasis on timeliness. It suggests a preoccupation with the trivial, updating for its own sake. As one critic of the alleged timeliness virtue noted:(17)

Teletext seems to be gambling its success on the public's need for immediate information. This is a risky assumption. I question whether news is any more valuable for having it sooner....If value has to be assigned to a news story, it is probably not in its immediacy of delivery but in the explanation, analysis and interpretation that a newsroom team does when it steps back from the event an hour or two, or a day or two later to put the event into perspective for the reader.

We could not agree more, and though we do not want to diminish the general importance of timeliness as a news value, its virtual elevation into the supreme news value seems to us to be a fundamental mistake. It ignores other news values, equally if not more important, values such as the significance of an event to the community, its scope and consequences and general interest, to mention a few.

The emphasis on timeliness distorts the general news picture of the day with its "one damn thing after the other" event orientation (18) and ignores the deeper processes that affect our lives.

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17. Sandra K. Hall, "Answering the Challenge of Teletext, Viewdata Systems and Other Fast Growing Communications, such as Home Computers," Eric Clearinghouse on Reading and Communication Skills, Urbana, Ill., 1980, p. 4.

18. Cf. Malcolm Muggeridge, Chronicles of Wasted Time, Vol. 1, The Green Stick, London, 1972, p. 179: "In a civilization dropping to pieces, news takes some of the sting out of happenings. So, more and more of it; all day long, and often all night long, too. A sort of Newzak, corresponding to Muzak; instead of a melange of drooling tunes endlessly played, a melange of drooling news...."

The fragmented picture of reality produced by this one-sided emphasis on the timeliness of events is compounded by the very structure of the data base itself - which provides access to only one story at a time - and the selectivity or choice afforded by the medium. While it is true, as Hall asserts, that the newspaper also offers selectivity to the reader, the selectivity afforded by videotex and teletext is qualitatively different. It is not necessary, in videotex, to choose from among different items. In videotex you choose only what you want. There are no disturbing headlines announcing the latest disasters, famines, wars and rumors of war. Again, Morton-Smith puts the point well: "With teletext, the power to choose your own information diet is suddenly put into the hands (literally) of the viewer....Viewer choice means that if you find 'things financial' puzzling you need never demand the business pages. The choice is yours." (19)

Another writer on videotex, approaching the subject from the reader's perspective, hailed the selectivity afforded by the new medium: "...the electronic newspaper is - in principle - completely individualized." (20)

We submit that this "complete individualization" of the news of the day spells doom for any journalistic contribution to that sense of community without which democracy cannot function. It also spells doom for the ethical journalist who, under the concept of the journalist as facilitator of the individualized information diet, finds himself uneasily close to the company of men like Adolf Eichmann. Eichmann, in professing his innocence in the Holocaust, argued that he only looked after transportation!

Divorced from a community connection, the journalist is reduced to becoming a transporter of information, from the wire to the data bank. There is, perhaps, the data base community of subscribers. That rather elusive notion points, however, in a direction of revolutionary change that widespread acceptance of the new media will produce. We will not pursue the point here, except to refer back to our findings reported in the previous chapter: Users of videotex systems change in their expectations and demands on news. What we do want to pursue further here, however, and already hinted at above, is the uncritical blending of the concepts of news and information.

There appears to be a conviction among some writers about information that information is somehow "objective" in a non-problematic way, or, "neutral". It seems to be

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19. Morton-Smith, op cit, p.7.

20. David M. Dozier, "Rival Theories of Newsreading in the Electronic Newspaper Arena," Eric Clearinghouse on Reading and Communication Skills, Urbana, Ill., 1982, p. 16.

assumed that all the problems of subjectivity associated with the news selection process disappear when we talk about information. Tetsuro Tomita, for example, suggests that information flow be measured using the word as a basic yardstick. He then proposes to measure the volume of information as words times distance (word-kilometer) and determines its cost as a function of yen per word-kilometer. Objective measures for an objective entity! (21) A similar assumption operates in Harlan Cleveland's paper, "Information as a Resource," in which information is defined as being "the ore, the sum total of all the facts and ideas that are available to be known by somebody at a given moment in time." (22)

And Cleveland does not improve matters when he further defines his terminology: "Knowledge is the result of somebody applying the refiner's fire to the mass of facts and ideas, selecting and organizing what is useful to somebody. Most knowledge is expertness - in a field, a subject, a process, a way of thinking, a science, a 'technology,' a system of values, a form of social organization and authority. Wisdom is integrated knowledge - information made super-useful by creating theory rooted in disciplined knowledge but crossing disciplinary barriers to weave into an integrated whole something more than the sum of its parts."(23)

Views such as Cleveland's make evident the assumption that information is the epistemological bedrock, the foundation, of man's knowledge about the world. But nothing could be further from the truth. Not information, but experience - the physical process of man interacting with the world around him - is the foundation of our "expertness" in getting around in the world. The "knowledge" that comes from our experience derives only following our encoding of the physical stimuli that make up our experience. And this encoding aims, for the most part, at the communicability of our experiential expertise. As such, this knowledge is bound by community rules and conventions. This relationship between epistemology and communication is only beginning to be explored by contemporary philosophers, though its importance has long been recognized.(24)

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21. Tetsuro Tomita, "The New Electronic Media and their Place in the Information Market of the Future," in Newspapers and Democracy, Anthony Smith, ed., Cambridge, Mass. and London, 1980, p. 51.

22. The Futurist, December, 1982.

23. Ibid. His italics.

Only when we recognize that news is not just an assortment of bit of information, but a special kind of information, can we begin to appreciate the critical problem of videotex journalism. It is a problem that cannot be dealt with descriptively, but one that requires analysis. Weaver glimpsed the significance of the problem, having arrived at it via Meyer's argument that newspapers - unlike videotex systems - deliver "influence along with the information." Commented Weaver:(25)

In short, getting more into the "information business" with videotex systems and less into the "news business" may mean that fewer critical controversial news stories and editorials will be available through these systems than through the more traditional printed and broadcast media. Journalistic values may take even more of a back seat to commercial interests in videotex systems than they do in many present-day media.

The just-given representation of the problem, however, focusses on its consequences, not its nature. To articulate that aspect will mean making a clear, conceptual distinction between "information" and "news" and analysing the same. It may be, for example, that news is "information + influence" but saying so does not explain why that is the case, nor does it reveal the connection because "information" in that equation is still regarded as somehow non-problematic. As it stands, of course, the "information + influence" formula can be refuted at will simply by citing news stories that carry no influence, which is probably the bulk of them.

Our proposal, which is indebted to Dretske's work (See note 24 above), defines news as information with a high

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 24. Among continental philosophers, Karl Jaspers has, perhaps, been most outspoken on the point. On this continent, writers such as Thomas Kuhn (The Structure of Scientific Revolutions) have drawn attention to the philosophical problems associated with epistemology and communication. Fred Dretske, of MIT, is another philosopher who has explored the relationship and whose Knowledge and the Flow of Information (Cambridge, Mass., 1981) is of fundamental importance, and to which our account is deeply indebted.

25. Weaver, op cit. p. 104.

surprisal value, but relativizes this surprisal value in terms of community expectations and common sense. And by information here we understand the actual physical processes: the moving air masses that constitute sound when they strike our ear drums, the streams of photons that impinge on our retina, etc. We believe that this materialistic notion of information, will help to clarify some of the theoretical problems that have troubled journalists. Here we will only illustrate some of the key points. Elsewhere, these considerations have been spelled out in more detail. (26)

By applying some information-theoretic notions, the intrinsic plausibility of the "news=information with high surprisal value" equation can be demonstrated and its necessary link to the community articulated. Note that this community link will become a matter of logic now, a conceptual aspect of news judgment, not just a matter of fact, or utility, or political expediency. The community link is essential to news judgment; without such a link news judgment is without foundation. Indeed, it is this logical connection to the community that enables us to insist on distinguishing objectively between the quality of news judgment as it is found, for example, in the Globe and Mail and the National Enquirer.

Using information theory, we can quantify the amount of information - or surprisal value - associated with an event [I(e)] as follows:

$$I(e) = -\log_2 pr[e],$$

where  $pr[e]$  is the probability associated with the event. While it is sometimes the case that this probability of an event taking place can be predicted with some certainty - as in the case of picking a game winner, or in a horse race - and so  $pr[e]$  could be set using common sense "odds" or betting criteria, this is not always the case. But for our purposes the interpretation of probability here is not crucial. A purely subjective theory of probability is acceptable, at least from a logical point of view. If one's expectations are unreasonable from a common sense point of view - i.e. a person bets badly - then it stands to reason that the events with high surprisal value for such a person will likewise be unreasonable from a common sense point of view. The sense of "news" will be odd, because the "odds"

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 26. H. Overduin, "Videotex, Information and Journalism: An Exploration in the Epistemology of News," mimeograph, University of Western Ontario, London, Ont., 1983.

are out of whack.

But, sometimes, common sense is wrong. E.g. take Copernicus's expectation that the world revolved around the sun. When the facts bore him out, he was not surprised, it was not news to him; but to the rest of the world it was news that shook the foundations of their world view.

At any rate, our equation need not rest on a particular theory of probability. We will use the objectivist theory of probability in what follows if only because it is that objective theory which has become entrenched in common sense. The objective theory of probability interprets probability to mean probability in the long run. Thus, the probability of throwing a five with a fair die is one-sixth, i.e. given a "long run" of throws, a five will appear every six throws.

Given the equation (1) above, we get the information associated with an event measured in bits. For example, the information associated with an event that has a probability of  $1/8$  is three bits, because  $-\log(2)1/8=3$ ,  $-\log(2)1/16=4$ ,  $-\log(2)1/32=5$  and so forth. Newsworthiness can now be measured in terms of bits of information associated with various events. The early primary victories of U.S. Senator Hart were big news, i.e. had a lot of information associated with them, because their surprisal value was high; he was not expected to do well.

To give a Canadian example, we will look at the Alberta provincial election of 1982. In that election, Premier Lougheed won re-election handily, getting 75 out of 79 seats. This was not surprising. News reports, polls and expert opinion had all stated and predicted a Lougheed victory. For that reason, the election outcome carried little surprisal value and did not make a big splash in the newspapers. Suppose, however, that Gordon Kessler, of the separatist Western Canada Concept party had won, or Nick Taylor, the provincial Liberal leader. The information that either of those men won would have been a surprise indeed. The equation (1) reflects those intuitions, as follows:

For the sake of argument, let us say that the chance of Lougheed winning - a sure bet - was  $9/10$ , and the chance of either Taylor or Kessler winning at  $1/20$ . Then, the information associated with each of the outcomes is as follows:

$$I(\text{"Lougheed wins"}) = -\log(2)pr[9/10] = .15 \text{ bits}$$

$$I(\text{"Taylor wins" or "Kessler wins"}) = -\log(2)pr[1/20] = 4.2 \text{ bits}$$



which means that a Taylor or Kessler victory would have carried 28 times the information associated with the Lougheed win. Now, of course, it can be argued that a Kessler win would have been newsier still, because he was a separatist. We need only recall the surprise associated with Levesque's Parti Quebecois victory in Quebec in 1976 to remember the headlines. In other words, common sense suggests that it would have been newsier if a Western separatist had won than if a Western Liberal had won. That is true, and, we suggest, argues for our scheme. For, if we take that into consideration the initial probability assigned to a Kessler victory would not have equalled that of a Taylor win. In other words, it would have made more sense to have assigned the probability of a Taylor win as roughly ten times that of a Kessler win. Say, for example, that the chance of Kessler winning was 1/100, then the information associated with a Kessler win would have been:

$$I(\text{"Kessler wins"}) = -\log_2 \text{pr}[1/100] = 8.4 \text{ bits,}$$

carrying twice the wallop associated with a Taylor victory, and 56 times the information associated with what actually took place, the Lougheed win.

A lot more needs to be said about this information-theoretic approach to news judgment, but we hope we have given enough here to indicate its plausibility and potential for elucidating the otherwise complex relationship between information and news. In addition, the necessity of assigning probabilities to events - consciously or otherwise - establishes an essential connection to the community. The connection obtains because those probability assignments derive - logically and practically - from the communally prescribed conventions for the encoding of information, especially information intended for mass consumption. The encoding process uses, for example, a common sense categorical framework yielding the common sense expectations and generalizations of ordinary life, political savvy, scientific and non-scientific opinion polls, knowledge of life and just plain intuition. (Bookies, in some cases, may be the most convenient guides to expected outcomes, and hence, potential news value.)

Often, news is totally unexpected, and as such has a high surprisal value which translates into the event being big news. Clearly, however, what is involved is the surprisal value to the community, not specific individuals in it. What is a predictable scientific result may yet be a surprise to the community, and thus be regarded as news. One of the saddest fates to befall a journalist is to lose the ability to be surprised, through either insensitivity to

the concerns of the community or cynicism.

Our account of the nature of news also elucidates another well-known phenomenon: what is news to some people isn't necessarily news to others. Specialized sub-communities, e.g. professional associations, are often annoyed at what they believe to be the "sensational" treatment in the press of information concerning their affairs. To them, the specific event may have been a matter of common knowledge, hence had no surprisal value associated with it, while to the community at large the event did have a lot of surprisal value, hence was big news. Thus, the newsworthiness of an event is relative to a particular community. In the case of general news, the criteria of newsworthiness are based on the journalist's evaluation of the prior knowledge, interests, expectations and the like of the community his publication serves.

We do not want to belabor the obvious, so return to the videotex news services discussed above. What is the relevance of this information-theoretic account of news judgment to those systems?

First, we think our account of news judgment establishes the necessary connection between such judgments and the community. Therefore, in so far as videotex news services are based almost exclusively on wire service material - either reformatted or software driven - those news services are likely to be estranged from their community base. As such, they are not likely to become viable features of such systems, nor will the simple reformatting of such wire news represent a genuine journalistic activity.

Second, we think our account of newsworthiness succeeds in making a distinction between news as information with a high surprisal value and information as mere facticity. We think, furthermore, that this distinction suffices to differentiate the "news business" from the "information business" and invalidates any attempt to equate the two.

Third, we think our account points the way toward responsible journalism for videotex systems as well as more traditional media. Hitherto, attempts to "ground" journalism ethics have been unsuccessful and journalism ethics in general represents an area where "the media would rather punt than play," as one critic succinctly put it. (27) Our account permits the "grounding" of journalism ethics in news judgment itself through its necessary link to the community, its values, knowledge, expectations and linguistic conventions. "Good" news judgments accurately

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 27. Hodding Carter III in his Foreword to Clifford G. Christians et al, Media Ethics: Cases and Moral Reasoning, New York and London, 1983.

reflect the "surprisal values" attached to events by the community.

We are aware that this naturalist approach to journalism ethics is not without problems, but this report is not the place to discuss them. At any rate, we think that videotex journalism - as it is now practised - is outside the possibility of professional ethical constraint. By divorcing news judgment from community considerations, by treating news as information per se, it is beyond the pale of ethics.

The foregoing demands an articulation of the concept of community. In the case of newspapers, this notion is relatively simple to explicate in terms of geography, political-economic considerations, and nationality, i.e. the articulation proceeds by establishing boundaries along fairly non-controversial lines. Which raises the question: How can the boundaries of the data base community be described? Or is this at all a correct way to approach the problem?

Common sense, indeed, might suggest that the "community" of data base subscribers is just a subset of the general community, so what's the fuss? Or, another tack might be to note that the data base community is a targeted subgroup of the general community, such as the Grassroots agribusiness community. Again, on the face of it, nothing distinguishes such a subgroup from a journalistic point of view, the surprisal values for the subgroup and the general community can be expected to be the same, except for the area of specialization in question. So again, what's the fuss? If the BN wire is good for the goose, why isn't it good for the gander.

We admit that, without a clear articulation of the notion of community, our case for a genuine, full-fledged journalistic news service for videotex systems is a weak one. That weakness is, however, not a point against taking the suggestion seriously as a subject for exploration. That is so particularly if we postulate - as many writers have - that videotex systems will, eventually, replace or seriously weaken newspapers. If and when that happens, one of the first services to suffer will be the foreign news services, i.e. the co-operative and commercial international news agency giants will suffer budget cuts and reduce their coverage of the news. If those news services deteriorate, then so will videotex news services, which, at the moment, could well be called the leeches of the Fourth and Fifth Estates.

Also, and perhaps more significantly, our account has logically led to the notion of community - as a descriptive problem - and from there, quite naturally, leads to a deeper, qualitative problem: What kind of community do we want the data base community to be? Will it lead to

Madden's fictional Brain Firsters versus the Humanity Firsters? (28) Will the data base community become the upper class in the Global Village, the information rich? (29)

To sum up our discussion of videotex news system and journalism, we think we have shown that such "journalism" is defective in several ways, but especially in its emphasis on the timeliness factor, its naive identification of news and information, and its remoteness from the community. We have also tried to lay the groundwork for an information-theoretic analysis of news judgment, which emphasizes the community connection in the news-making process and may provide a naturalistic basis for journalistic ethics in general, and one that is particularly relevant to the current videotex journalism phenomenon. Lastly, our discussion led, quite naturally, to a consideration of deeper, qualitative problems of a more humanistic nature: What kind of community do we want?

Together, we think that our points provide the kind of theoretical and qualitative framework within which the discussion of videotex journalism and the development of videotex news systems should proceed if this new technology is to become viable alternative to existing mass media.

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28. John Madden, "Julia's Dilemma," in David Godfrey and Douglas Parkhill, eds., Gutenberg Two, sec. edition, Toronto and Victoria, 1980, pp. 13-38.

29. Cf. Richard Larratt in The Telidon Book, Toronto and Victoria, 1981, where he offers a humanistic insight into the impact of Telidon (videotex): "McLuhan saw the return of Dionysian tribalism....McLuhan imagined he saw the melt down of data classification into pattern recognition: the triumph of the Dionysian. Too busy with the TV's, he did not notice the less numerous, but more significant computers. So he did not see the new logical programming literacy growing out of the same soil. The old Dionysian-Apollonian tension has been transferred to the new age and the new media, the electronic. And the new literacy, Apollonian and rational, may be the main event of century close." (p. 9)

CHAPTER V  
Revolution or Rewrite?

The concerns expressed in the previous two chapters and detailed in the chapters to come were the subject of a two-day conference during January, 1984, in Toronto. This first international conference on videotex journalism focussed on the general theme: "Videotex Journalism: Revolution or Rewrite?" Speakers from Canada, the United States and Europe gave their views in panels organized around subthemes, "Videotex and the News Business: The Bottom Line," "Videotex and News Values: Is There Room for Story Telling?" and "Videotex and News Writing: The Long and Short of It."

In addition, participants visited videotex operations at Infomart, Canadian Press, InfoGlobe and the teletext centre of the CBC.

The conference attracted 50 participants, most of them from Canada and the U.S. and including videotex journalists, system operators and academics. In addition, about 20 students from community college journalism programs and the School's own graduate program in journalism took part in the proceedings.

No consensus emerged during the conference, but a wide variety of different points of view were articulated and discussed. While this report is not the place to give a detailed summary of the various presentations, some of the general issues that emerged deserve singling out, especially those raised during the first two panels. The third panel, while highly relevant to the practice of videotex journalism, did not address the more fundamental questions which the other panelists had raised and debated, and which form the subject of this report.

Professor Vincent Mosco, of Temple University, and

author of Pushbutton Fantasies (1) saw videotex as part of the "Payper" revolution, where users pay per page of information accessed, secretaries get paid per keystroke, telephone users get charged per call, pay television lets consumers pay per program watched and so forth. Having located videotex in this general Payper Revolution concerning the information commodity, Mosco drew particular attention to three general potential consequence for society: one, the growing gap between information-rich and information-poor, not only between nations but also between groups in a society; second, the effect of the payper revolution on the workplace and the workforce, and third, the growing threat to individual privacy.

With respect to journalism, Mosco quoted Harold Evans, former editor of The Times to the effect that the real challenge for newspapers is not so much to stay in business, but to "stay in journalism."

Jean Lancee, of DMR Associates, Toronto, sounded a similar note when she said that the opportunity for journalism in the videotex age is with the traditional newspapers. "The good news is pressure for quality," she said, "the bad news is decreasing quantity. As a reader, I look forward to it. As individual journalists, you're facing a tough challenge to surviving in the future in your chosen profession." She predicted there would be fewer and thinner newspapers in the future.

Lancee's remarks about the role of advertising in videotex have already been discussed above (Chapter III) and need not be repeated here, except, perhaps to reiterate her conclusion: Videotex shifts the "bottom line" in the news business away from advertisers to system operators, the owners of the "new economic distribution channels." This shift, she said, will profoundly affect newspapers as an industry, and, by extension, journalism as a profession.

Other speakers in the first panel on the videotex and the news business included Don Angus, general executive of Canadian Press, and David Schnaider, senior editor of CBS's videotex trial, Venture One. Angus described (CP)'s various videotex ventures and outlined the role of (CP) in the new videotex age. He emphasized that the Canadian Press already participating in various trials and commercial systems and ready to take part in future opportunities as they occur. But, he added, (CP) has no resources to develop its own videotex system; it sells the news it already has.

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 1. Pushbutton Fantasies: Critical Perspectives on Videotex and Information Technology, Ablex Publishing Corporation, Norwood, N.J., 1982.

He emphasized (CP)'s experience in producing specialized news reports, the kind of news reports that videotex services seem to require as well. "We're there to provide the news in the format as required," he said. "It doesn't fit perfectly, but it fits."

Angus predicted that the future of the news business lay in specialization. He said that he did not think the videotex phenomenon would put the newspapers and journalism out of business. He quoted presstime to the effect that the survival of computerized information systems was not certain, while the survival of newspapers is illustrated by such publishing ventures as USA Today.

Schnaider's slide presentation was designed to illustrate "in living color" the various points made by the speakers in the first panel. He stressed the power of the consumer in the interactive videotex environment and the unequalled opportunity for advertisers and direct sales. His presentation focussed on a typical family in the CBS trial, showing how that family used the videotex system.

He said the challenge to journalists was to package the information for videotex in a way that would make it useful to people and stressed the popularity of direct and interactive advertising on the Venture One trial. For consumers, videotex means convenience; for advertisers, a target audience; for merchandisers, increased sales, Schnaider said, concluding that all those features add up to make videotex a powerful communication medium.

Graham Clayton, editor of CEEFAX, counting himself among the "revolutionaries", described the BBC's teletext system, which, he said, has an estimated audience of six million. He emphasized its low costs of production.

"The most expensive TV we've produced is those high-class BBC dramas you may have seen, and at that time they worked out at around \$200,000 per hour. Radio, as you know, is a pretty cheap medium - \$1,000 to \$2,000 an hour. CEEFAX is \$50 per hour," he said. Clayton quoted a letter he received from one of his viewers:

Dear Sir: I wanted to tell you how delighted I am with the CEEFAX service. I can get the latest news anytime I want it. I get the football results at the end of the match. I can see what's on TV this evening without bothering to look for the paper. The service is so impressive, I've cancelled my paper. However, there is a problem. I now have nothing in which to wrap my vegetable peelings.

Clayton cautioned against trying to relate teletext to newspapers, emphasizing that teletext is much closer to "printed radio." He explained that the BBC does a lot of its own reporting for CEEFAX, sending reporters to sports events, for example, with a portable microcomputer that enable them to link up directly with the main computer and enter their stories from the scene.

He said CEEFAX employs 22 journalists, and of those 22 five are able to write computer programs which are used to simplify the reporting of news, for example, in handling the statistics related to sports events.

John Woolley, speaking during the panel on videotex news writing, took issue with Clayton's espousal of teletext journalism, as did Henry Overduin, one of the authors of this report. Woolley argued that "breadth of reporting" must be the hallmark of videotex journalism, not the "nothing more than two screens" approach of teletext.

Overduin argued that if teletext journalism meant writing computer programs, journalism was finished. Until such time that videotex journalism, including teletext journalism, can provide scope for the best journalism - work recognized by Pulitzer prizes or National Newspaper Awards - there was not much to be said in favor of videotex journalism.

Woolley made a similar point, saying that, at present, videotex journalism represents but one octave on the scale. "But it is a start," he said. "And it will get better."

Laszlo Bastyovanszky, of the Canadian Broadcasting Corporation's teletext project IRIS, said teletext journalism was a "no frills journalism."

"In teletext, everything depends on selection and compression. The challenge is to pick out the essential minimum number of important points and put them into the minimum number of words. That means choosing the right points and the correct words. There is no space for theory - just stick to the facts and get to the focus of the story," he said. Bastyovanszky compared videotex journalism to "broadcast print," and stressed that policies governing it would have to be developed, "based on journalistic principles regarding accuracy, integrity, fairness and thoroughness."

Professor David Weaver's views have already been mentioned several times in this report and it would be redundant to repeat them here. At the conference he gave a brief summary of his book and related his findings to the topic of news reporting. His conclusion: "I believe that the systems should meet the needs of high quality journalists, rather than vice versa."

Judith Pratt, news editor of Westex News, described the operation of Westex News and discussed the writing style. Active mood, present tense, concrete nouns, delayed



attribution, short paragraphs and bright headlines were some of the points she stressed.

David Skoloda, vice-president editorial, AgriData Resources, Inc., of Wilwaukee, Wis., described the AgriData Network serving the farm community and outlined some its services. He emphasized the importance, for his system, of information that "will have some impact on the bottom line of those we serve with the system.

"For example, when the KAL flight 007 was shot down, our first analytical look was from the standpoint of whether it would have an impact on grain trade with the Soviet Union," he said.

"We encourage writers to think in terms of blocks of information on a subject. Thus, a main idea could be included as one story, with supporting information in accompanying pieces. Keywords searching and menu display allow the user to take as much information as is needed....

"What this approach requires is attention to key words and system organization. Thus the system editor assumes many of the responsibilities of the newspaper headline writer, page editor and layout artist.

"Using the notion of information blocks or segments, almost any kind of journalism is possible in our electronic medium. But the principle of selectivity must be honored. The reader must be able to intelligently build his or her own information system.

"With that principle established, editors should be able to attack investigative pieces, in-depth analysis, even human interest material and features in addition to hard news. Data reporting needs an editor's touch too. In this respect the editor is more of a facilitator than a traditional journalist, but the role is no less significant," Skoloda said.

While the conference did not yield any answers to problems, the many points of view that emerged revealed a lively interest in the challenges of the new medium for journalists. In fact, the one thing that did emerge unequivocally was that conferences of this sort were helpful and necessary. A survey of participants at the conference showed that most favored a similar conference in the near future and that publication of the proceedings would be helpful.

Specifically, the conference participants were asked to evaluate the proceedings and to indicate their interest in attending a similar conference in the future. A total of 80% of those surveyed rated the conference as very good or better. (4 and 5 on the scale.) And 77% of those surveyed were definitely interested in attending a similar conference in the future; 20% undecided, and one person opposed. The person who replied negatively to the idea of a future conference suggested, however, that such future conferences

should have more criticism of on-line services, less theory. A total of 57% of the people surveyed said they favored publishing the proceedings of the conference.

The total number of 48 paid participants included two Europeans, 18 Americans and 28 Canadians, with the majority of those attending being either active journalists or academics with an interest in videotex journalism. In addition some 14 students attended the second day of the conference. A total of 30 people filled in the questionnaire, for a response of 67%. Of those who filled in the form, 14 identified themselves as journalists and 16 as academics.

#### RATINGS

5 (Excellent)	3(A)	0(J)
4 (Very good)	10(A)	11(J)
3 (Good)	3(A)	2(J)
2 (Fair)	0	1(J)
1 (Poor)	0	0
0 (Bust)	0	0

In other words, 24 of the participants who responded rated the conference as very good or better, i.e. 80% of those surveyed.

Among the academics, 12 said they would be interested in attending a similar conference one or two years down the road. Four said they might be interested, while 11 of the journalists said they would definitely be interested. Of the latter, two said "maybe" and one said "no" to the question of a similar future conference.

Suggestions for future conferences included:

"More focus on product; less on the differences."

"Some 'bugs' need to be worked out of the tour, i.e. transportation and timing."

"This conference lacked an enemy of videotex, or at least a critic for balance. Too much boosterism, sales talk."

"I missed much informal dialogue because of poor sound."

"More of everything!"

"Some 'State of the Art' address by a credible person to open the conference."

"More future. Less business."

"Less obvious promotional presentations. Reception time at the end of conference."

"More mingle time."

"Need knowledgeable critic; to separate wheat from chaff for those of us less knowledgeable."

"Have speakers, at least some, use on-line demonstrations."

"Have speakers' papers available at end of conference."

"More input from Europe."

"More time for discussion."

"Tours timed differently to allow more time for in-depth questioning."

Ten of the academics responding favored making the proceedings of the conference available in print. Six responded negatively to that suggestion.

Among the journalists, seven favored publication of proceedings; six were opposed, and one did not answer the question. In percentage terms, this means that 57% favored publishing the proceedings of the conference.

Panelists and resource people included:

From the U.S.A.: Professor David Weaver, Bureau of Media Research, Indian University School of Journalism; Professor Vincent Mosco, Associate Professor of Communications, Temple University; David Shnaider, CBS Venture One, Fairlawn, N.J.; David Skoloda, vice-president editorial services, Agridata Resources Inc., Milwaukee, Wis.; and John Woolley, managing editor, Viewtron, Coral Gables, Florida.

From Europe: Graham Clayton, editor CEEFAX, BBC Television Service, London, U.K., and Niels Barfod, Ritzaus, Copenhagen, Denmark.

From Canada: Peter Desbarats, Dean, School of Journalism, University of Western Ontario; Don Angus, general executive, Canadian Press, Toronto; Jean Lancee, videotex consultant, DMR Associates, Toronto; Henry Overduin, Senior Editor, Westex News, University of Western Ontario School of Journalism; Laszlo Bastyovanszky, Managing Editor, Iris Project, CBC, Toronto, and Judith Pratt, director of Newsdat and editor of Westex News.

The conference was organized by the School of Journalism with the assistance of the Faculty of Part-time and Continuing Education at the University of Western Ontario. Financial support was provided by the Bank of Montreal and the federal department of communications.

CHAPTER VI  
EDITOR AND JOURNALIST SURVEY:  
Looking for Videotex Niche

Introduction

The growth of electronic home information delivery over the past decade has raised many concerns about its potential effects on society. Because news has played an important role in most of the videotex and teletext systems that have emerged, and because a good deal of the editorial content on the systems is being produced by journalists, much of that concern has centred on the possible impact of electronic information delivery on the traditional news media, the role of the journalist and, ultimately, journalism itself.

There are some who say such concerns are misguided because videotex and teletext are not primarily "news" media - news is only one part (and sometimes only a small part) of their total information product. And because it is not known how quickly the public will accept the new technology or how dependent they will become on it as a source of news.

While it is true that videotex and teletext are not catching on in the marketplace as rapidly as some industry specialists had projected, they are not without the potential to become mass media at some point in the future. Nor are they without the potential to become, economically, a more favored means of delivering news and information than the printed media. Thus, although videotex and teletext may not, essentially, be "journalistic" media, they may become increasingly important to the public as a source of news, merely by default.

Regardless of what the future holds (and who's to say the printed media won't continue to prosper against all economic odds?) it seems worthwhile to take a look at what shape and form news is taking on videotex and teletext now, and at what effects the media are having on the journalists who work in them. Although it's still too early in the life of most North American videotex and teletext services to form a clear picture of what videotex journalism is, or will be in the future, at this point in the development of the new media, any picture at all is of value.

### Review of the Literature

In the decade or so since videotex and teletext were first developed in Great Britain, much has been written about the electronic delivery of information into the home. Much of the literature, however, has focussed on the technology and marketing of the new technology, rather than the journalistic implications with which this report is concerned.

A large body of writing, particularly in the popular press and trade literature, has concerned itself with the potential impact of the new technology on the other media, particularly newspapers. This involves both discussions of newspapers' involvement in videotext (1) and of the effects videotext may have on them. (2)

Often referring to videotex and teletext as an "electronic newspaper," some authors have described the new

- 
1. See, for example: Margaret Genovese, "Newspapers Keep Marching to Videotex," in presstime, July, 1982, p. 17; Donald F. Wright, "Electronic Publishing: How to Use it and Why," in presstime, February, 1982, p. 25; Patricia Bellew, "Publishers Probe the Realm of Electronic Newspaper," in The Miami Herald, Nov. 17, 1982, p. 7D; Anonymous, "Editors told to Employ Outsiders for Videotex," in Editor Publishers, Aug. 28, 1982, p.7; and American Newspaper Publishers Association and the Newspaper Advertising Bureau, Inc., Survey of Newspaper Involvement in New Telecommunications Modes, June, 1983; R.C. Morse, "Videotex in America: The Birth of Electronic Newspapering," in Editor Publisher, June 26, 1982, p. 41.
2. See, for example, Anthony Smith, Goodbye Gutenberg, Toronto: University Press, 1980; Peter Desbarats, Newspapers and Computers: An Industry in Transition, Royal Commission on Newspapers, Volume 8, Ottawa: Canadian Government Publishing Centre, 1981; Kenneth Edwards, "Delivering Information to the Home Electronically," in Readings in Mass Communications, M. Emery and T.C. Smythe eds., Dubuque, Iowa: Wm. C. Brown Co., 1980, p. 268; The Associated Press Managing Editors Media Competition Committee, Electronic Publishing: The Newspaper of the Future? November, 1980; Terry Maguire, Videotex and the Newspaper Business, a speech presented at the Wembley Conference Centre, London, England, March, 1980; Byron Scott, "American Journalism in the '80s: Caught Between the Industrial and the Information Revolution," in Today, August, 1983, p. 20; and a collection of articles by various authors in The Bulletin of the American Society of Newspaper Editors, No. 647, December/January, 1982.

media as a "threat" to newspaper readership and newspaper advertising revenues - a threat that could eventually mean either the decline of newspapers or their extinction, or could at least cause them to make some fundamental changes in their operation. Others have concluded that there is no "threat," or that if there is, it is not a fatal one.

Historically, the emergence of a new medium has caused some displacement of another medium's audience. There is some evidence that the amount of money the public spends on the mass media as a whole is relatively inelastic - there is, in effect, only one pie, and each of the media must struggle to get and keep a piece of it. (3) Because of the relatively infant stage of development of the new media, however, it is much too soon to tell how deeply they will cut into the newspaper's pie, or if they will cut into it at all.

In Europe, where the new technology has had its longest run, it appears to have had no noticeable impact on the other media as yet. In a survey of European teletext journalists, Weaver found that nearly all of the executives and journalists involved in the field agreed that their systems "were highly unlikely to cause the demise of other printed or broadcast media in the foreseeable future." (4) There was some speculation that "electronic information delivery could lead to longer, more in-depth articles in newspapers and magazines - and less emphasis on brief news bulletins and tabular material - but there appears to be no evidence to indicate that such changes are happening now." (5)

Because of videotex's and teletext's infancy, much of what has been written about them and their impact on the other media has been highly speculative in nature. There seems to be little empirical research aimed at determining how the new media might affect newspaper readership, for example, and what there is, also tends to be speculative.

Butler and Kent surveyed a sample of householders in Gainesville, Fla. and found that a majority of the respondents would be willing to pay a monthly fee for videotex or teletext services and that nearly a third "might give up newspapers if they could receive the same contents over a TV screen." (6)

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3. Maxwell E. McCombs, "Mass Media in the Marketplace," in Journalism Monographs, No. 24, August, 1972.

4. David Weaver, Videotex Journalism, Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1983, p. 95.

5. Ibid, p. 95.

From these findings, the authors suggested that the new technology will form a threat to newspaper readership and that "the newspaper publishing industry has cause for concern." (7)

This conclusion is, however, based largely on respondents' speculations about an action they might take in the future, namely, whether they would stop buying a newspaper if they could get the same contents on a TV screen. Although speculation does have some value as an indicator of public opinion, it is questionable how much weight can be given to it in this study, especially in light of the fact that only 40 per cent of the respondents had actually heard of videotex or teletext before they were surveyed about their potential use of it.

Butler and Kent also noted, however, that more than half of the 18-to-25-year-olds surveyed said they would give up reading a newspaper. Even given the speculative nature of the survey, that finding does make sense in terms of the increasing familiarity of young people with computers and electronic news, and may indeed be some cause for concern within the newspaper industry.

A similar finding was made by Tillinghast and Visvanathan when they surveyed university students in an attempt to build a profile of potential videotext users. (8) Their results showed that two out of five students, if given the choice, would prefer to receive their news and information electronically. The same number also said they believe computerized data banks will eventually displace newspapers. The authors suggested that although the students were not representative of all newspaper readers, the fact that two-fifths of them said they were "willing to desert their newspapers for an electronic version" is "unsettling for the newspaper industry," particularly in light of the fact that "the market segment represented by the students - affluent and well-educated - has traditionally been seen as including the best prospects for the next generation of newspaper readers." (9)

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6. Jacalyn Klein Butler and Kurt E.M. Kent, "Potential Impact of Videotext on Newspapers," in Newspaper Research Journal, Fall, 1983, p. 3.

7. Ibid, p. 9.

8. Diana Stover Tillinghast and Nalini Visvanathan, The Electronic Newspaper: Building a Profile of Potential Users, a paper presented to the Mass Communication and Society Division, Association for Education in Journalism and Mass Communication annual convention, Oregon State University, August, 1983.

9. Ibid, p. 22.

Although there are numerous videotex and teletext trials and full-scale operations under way in North America, and all have carried out some form of user or marketing research, they have offered limited insights into the potential impact of the new technology on the other media. That is due, in some part, to the newness of the media, but also to the fact that much of the research is marketing-oriented and many of the findings have not been made publicly available.

One study that did attempt, among other things, to assess the impact of an "electronic newspaper" on the readership of traditional newspapers, was the Associated Press's experiment with CompuServe, which gave users of the videotex service access to the full text of 11 daily newspapers and the AP newswire. (10) This study found that newspapers on CompuServe accounted for only five per cent of the total usage of the service's database (the AP wire was accessed the most) and that usage of the newspapers showed strong decline during the course of the experiment. A test group of users, who were provided with free access to CompuServe, said they preferred to read a printed newspaper over an electronic one.

From the study, it was concluded that "in its current form, CompuServe usage does not seem to affect traditional-newspaper readership" and that "cannibalization of traditional newspapers by 'electronic editions' does not appear to be a major concern." (11) Because the newspapers' content was not tailored specifically for electronic delivery of information, it was also concluded that "from the newspaper perspective, the market potential for providing a traditional newspaper on a CompuServe-type system appears limited." (12)

The study did note, however, that if penetration of an electronic edition achieved sizable proportions in a local market, "there would be a resulting interaction between the electronic and print versions of a newspaper. A disproportionate number of local-area residents access their 'hometown' newspaper through CompuServe and cite local news as their reason for doing so." (13)

The study found, further, that radio usage was unaffected by CompuServe usage, but that television viewing

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 10. RMH Research Inc., Report of findings: Synthesis of Findings for AP/Newspaper/CompuServe Program of Marketing Research, September, 1982.

11. Ibid, p. xvi.

12. Ibid, p. 17.

13. Ibid, p. xvi.



did decrease. And it was suggested that magazine readership might be adversely affected by videotex usage in the future.

Although available research by other videotex and teletext services does not seem to specifically assess their potential impact on the other media, they do offer some information about the usage of their news. Generally, they report that news is one of the four most-accessed categories, along with sports, weather and games.

Shortly before the Associated Press embarked on its CompuServe experiment, it had begun participating in the Knight-Ridder Viewtron project in Florida, providing stories that were specially tailored for the medium by a videotex editorial staff - most items ran from 250 to 500 words. The other news stories offered on Viewtron were primarily full text. AP found that over the six-month trial, news from various sources accounted for one-quarter of the total usage of the database, and that AP stories accounted for slightly more than half of the total use of news, excluding news indexes. (14) This study also showed that usage of both total news and AP news dropped from the start of the experiment to the end. But AP items never accounted for less than 50 per cent of all news screens accessed.

Another major videotex trial, the Times Mirror Gateway project in California, was conducted in 1982, and although the available results do not indicate the exact usage of news, they do report that news was one of the most heavily used content categories. (15) More than half of the service's users said videotex was a great source for late-breaking news and Gateway was their third most frequently mentioned source for such news. "There were times during the trial when access to the news was greater than any other program, such as during the Falkland Islands crisis and the November elections." (16)

Sixty-six per cent of the users felt there was not too much news on Gateway (more than 3,000 pages of news stories were available daily, from the AP videotex wire and the Los Angeles Times), 71 per cent felt the news was current and 66 per cent wanted Gateway to keep them abreast of community news. Overall, "Gateway was perceived as a comprehensive

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14. Keith Fuller, Report on AP's Participation in Knight-Ridder Viewtron Project, Associated Press, Fall, 1981.

15. Robert E. Widing and W. Wayne Talarzyk, Videotex Project Reviews, Columbus, Ohio: College of Administrative Science, Ohio State University, April, 1983.

16. Anonymous, "Times-Mirror Releases Test Results," in Viewtext, April, 1983, p. 2.

home information service, not just an electronic newspaper or purely an entertainment form." (17)

Although discussions of the impact of the new technology on both the future and the content of the traditional media predominate in the literature, concerns about how the growth of videotex as a news medium will affect the quality of journalism, the public who uses it, and the journalists who produce it, loom large as well. Besides asking whether newspapers will survive if videotex and teletext become popular news media, some authors question whether journalism and journalists as we know them, and even democracy, will survive as well. (18)

The questions of what form journalism will take on videotex and teletext, and how it will affect the journalists who produce it, are of prime interest to the present study, but there has been little research aimed at finding some answers. There is some literature available about the videotex and teletext news services now in operation, usually originating with the services themselves. It often describes their set-up, the content and style of their news, the role of their staff, and some of the problems involved in writing for the media. Some of it is promotional in nature, but it does offer at least some picture of videotex/teletext journalism in practice. (19)

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17. Widing and Talarzyk, Op. cit., p. 64.

18. See, for example: Ron Powers, "They Surely Won't Throw this Newspaper on Your Doorstep," in Panorama, November, 1980, p. 52; George P. Kennedy, "Information Could be Demarcation of Future for 'Haves,' 'Have-nots'," in presstime, January, 1981, p. 22; Henry Petroski, "The Electronic Newspaper: An Easy Route to 1984?" in The Futurist, August, 1982, p. 59; Anthony Smith, "From a Bright Past to an Uncertain Future," in The Bulletin of the ASNE, No. 647, December/January, 1982, p. 10; Jon Roe, "Usher in the Night Riders," in The Wichitan, March, 1983, p. 28; and John W. Ahlhauser, ed., Electronic Home News Delivery: Journalistic and Public Policy Implications, Bloomington, Indiana: School of Journalism, Center for New Communications, Indiana University, June, 1981.

From these writings, and those of other authors who have offered some analysis of what writing for videotex entails in terms of style and skills, (20) have arisen some questions about what impact videotex/teletext will have on the most basic skill of journalism - writing. Because of the restrictive size of a videotex or teletext screen, and the fact that it is generally assumed that most people do not want to read long, detailed, or analytical stories from a screen, most services have opted for short, tightly edited items, aimed at giving the reader little more than the basic facts. This has led one author to ask: "Could it be that electronic publishing will take us back to those days when newspapers were report mills that crammed the facts down into an inverted pyramid with no concern for good writing?" (21)

Historian Anthony Smith, for one, believes that writing won't be an important skill in videotex and teletext. He suggests the skills required in the new text service "lie not so much in handling text and graphics on the page as in the organizing of whole subjects or areas of data in such a way as to reduce search time and prevent reader confusion." He notes that when skilled journalists were first brought into the new medium, "many became frustrated at the scant use made of their skills; librarians or computer specialists are sometimes better at the task (if they also

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 19. See, for example: Richard J. Levine, Dow Jones and the New World of Electronic Publishing, a speech presented at the 53rd annual press institute of the Georgia Press Association, Athens, Ga., Feb. 19, 1981; Ian Morton-Smith, Publishing Printed Radio, a paper presented at the Indiana University School of Journalism, October, 1982; Henry Overduin, The First Six Months of Westex News, School of Journalism, University of Western Ontario, London, Ont., October, 1982; Byron Scott, "A Day at Viewdata: The Immediacy of Broadcast with the Permanence of Print," in Today, August, 1983, p. 20; John Woolley, "Viewdata from the Inside," in The Bulletin of the ASNE, No. 647, December/January, 1982, p. 27; Ray Laakaniemi, "Electronic Newspaper Part Two: Computer Retrieval Comes to the Small Daily," in Newspaper Research Journal, Vol. 3, No. 4, July, 1982, p. 36; and David Helwig, "Cutting Edge of Journalism Found Dull," in The Globe and Mail, March 28, 1983, p. 8A.

20. See, in particular, Jerome Aumente, "Room at the Bottom: Nobody Knows the Talents They'll Need," in The Quill, April, 1983, p. 9 and Laurence Zuckerman, "Hi-tech News: The State of the Art," in Columbia Journalism Review, March/April, 1983, p. 41.

22. Roe, Op. cit., p. 57.

have a natural aptitude of communication) of organizing logic-trees attractively and entertainingly." (22)

Whether librarians will, in fact, become the journalists of the future remains to be seen, but for now, that and many other questions about videotex/teletext journalism remain within the realm of speculation - not just because of the infancy of the medium, but because of the infancy of research in the field.

In 1981, Zaradich surveyed 35 electronic news delivery projects (videotex, teletext and cable), creating a profile of these systems that included information about their editorial product and staff. (23) More recently, Hendrickson surveyed videotex operators in the U.S. and Canada, soliciting information about the content of their services as well as their opinions about the potential of videotex journalism, and other related issues. (24)

But the only major study to date that has made a systematic effort to determine the impact of videotext on journalists and their work, on the flow and nature of news, and on other media, is that of David Weaver. (25) Weaver's findings, and his subsequent recommendations for the future development of videotex and teletext as news media, are based largely on observation of and interviews with journalists in the new media in England and the Netherlands.

His conclusions about the world's longest running videotex/teletext systems were: (1) They do not provide much new information previously unavailable from existing media; (2) the choice and volume of news are quite limited as compared to newspapers; (3) journalists working for videotext do very little original reporting; (4) the news that is carried on these systems tends to be superficial and event-oriented; (5) the systems themselves are not dramatically new in their appeal to different senses; (6) they have not had significant impact on other media in Britain and the Netherlands; (7) they are more difficult and expensive to use for casual reading than printed media; (8) and they are not diffusing among the public nearly as

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22. Anthony Smith, "From a Bright Past to an Uncertain Future," in The Bulletin, Op. cit., p. 12.

23. Linda Zaradich, Electronic News Delivery: A Survey of 35 Projects, School of Journalism and Center for New Communications, Indian University, Bloomington, Indiana, October, 1981.

24. Richard D. Hendrickson, Questions and Answers on Videotex Journalism in the United States and Canada, School of Journalism, Bowling Green State University, Bowling Green, Ohio, December, 1983.

25. Weaver, Op. cit.

quickly as many had predicted they would. (26)

For the development of videotex and teletext as news media, Weaver recommended that: (1) Videotex/teletext journalists should be hired to report news as well as to handle news gathered by others; (2) videotex/teletext journalists should not be isolated from other journalists in their parent organizations; (3) audience surveys of videotex/teletext users should be shared with journalists as well as managers; (4) experienced editors and reporters, as well as those relatively inexperienced, should be hired as videotex/teletext journalists; (5) news stories generally should be allowed to run as long as they need to on videotex systems, if not on teletext. (6) in teletext, references to more detailed accounts of news stories in other media should be made wherever possible; (7) in both teletext and videotex, news content should be prominently featured in all guides and indexes; (8) videotex/teletext systems should be equipped with a "Next" button that allows viewers to browse through frames; (9) the cost of such services should be kept as low as possible; and (10) there should be government legislation to prevent those who own the telephone lines and the cables from controlling the content of videotex systems. (27)

There is undoubtedly some amount of research on videotex/teletext journalism now in progress in North America, and perhaps some already completed that the authors were not made aware of during this study. But because of the lack of currently available and relevant research on videotex/teletext journalism, other than Weaver's study, there was little theoretical framework upon which to base the current study.

The current research was, in part, an attempt to continue some of the investigation begun by Weaver, relocating it to the North American scene. Some of the questions used in this survey were, in fact, taken directly or adapted from Weaver's survey to allow for some meaningful comparisons. Nevertheless, this study was exploratory in nature; it began with no hypotheses, although the authors were not without some intuitions about what the results might reveal, based on their own experiences in videotex.

#### Methodology

Based on a review of the literature, and the authors' experience in videotex, a two-part questionnaire on

- 26. Ibid, p. 109.  
 27. Ibid, p. 114.

videotext journalism was created; Part A for the managers or managing editors of videotex and teletext services; and Part B for the reporters/editors/writers working on those services. Some items used in the questionnaire were taken directly or adapted from the survey used by Weaver in his study of European videotex/teletext journalists.

The initial version of Part A of the survey was administered in person to the manager of a Canadian teletext service to determine if any questions were inappropriate, unclear or misleading. On the basis of the pilot test of the questionnaire, some items were added or deleted, and others were changed.

From the available literature, about 20 videotex and teletext services in the U.S. were selected as possible participants in this survey. Managers or managing editors of the services were contacted by telephone to determine the nature and status of their operations, and their willingness to participate in the survey. Through this contact, the managers of 16 services were eventually identified as potential respondents. Some agreed to participate in the survey on initial contact and set up phone interview appointments at that time; others asked to see the questionnaire before making a decision.

The managers were also asked, either on initial contact or in a follow-up letter, whether a member of their editorial staff could be surveyed as well. This request was either denied or proved to be inapplicable in several cases. (In one case, for example, it was against company policy to allow staff members to be interviewed or surveyed; in another, a manager felt staff were too busy to respond to the survey). A total of twelve reporters/editors/writers at eleven services eventually participated in Part B of the survey.

After phone contact, a follow-up letter and copies of both questionnaires were mailed to the managers. A week or two later, they were contacted again by phone to make sure the questionnaires had been received, to set up or reconfirm appointments, and to learn whether those who had not agreed to participate would, in fact, do so.

All 16 of the managers contacted eventually agreed to answer at least part of the questionnaire, although several said they preferred to respond by mail rather than over the phone, because of its length. (28) Four of the 16 managers did ultimately respond by mail, but the responses of two of those were also supplemented by a phone interview.

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28. For a list of the managers and journalists who participated in this survey, see the acknowledgements in the introduction to this report.

One manager, who initially said he would not answer the survey because the information requested was proprietary, eventually agreed to answer Section IV of the survey by mail. Although he did not complete the rest of the survey, a certain amount of that information was obtained by other means. The editor of the service in question attended a videotex conference sponsored by the University of Western Ontario, and he was able to supply some information about the staff and content of his news service. In addition, some general information about the service was obtained from literature supplied by the manager.

Several other managers were also unable to complete all questionnaire items. Sometimes the information requested was considered proprietary, and sometimes the questions proved to be inapplicable. In one case, much of Section I, II and III was inapplicable because of the nature of the service. Because not everyone was able to answer all of the questions, the numbers used in discussing the results of this survey vary. For some items, the number of responses was quite small, rendering them potentially unreliable and uninformative.

To simplify discussion of the following survey results, we will refer to the respondents of Part A of the questionnaire as "managers," and to respondents of Part B as "journalists." This is not to suggest that the managers surveyed were not journalists, because most of them were. Rather, it is an attempt to avoid possible confusion due to the fact that most of the respondents of Part B were actually "editors," rather than "reporters" or "writers." In addition, for the purposes of this discussion, the term "videotex" will be used to refer to a two-way interactive electronic system, "teletext" to a one-way system, and "videotext" will be used as a generic term to describe both videotex and teletext in general.

### Results

The discussion of the results of this survey begins with a general description of the services surveyed, including information about their users and staff. This is followed by a detailed discussion of some specific journalistic aspects of videotex and teletext - the skills required by journalists working in the field, their job satisfaction, and the content and style of videotext news. Finally, the discussion returns to more general issues - the potential of videotext as a news medium and its impact on the other media.

### The News Services

The 16 videotex and teletext services surveyed had been in operation anywhere from a few months to almost 10 years, with most coming online - either commercially or on a trial basis - in 1981 and 1982.

While many of the services began as trials, only four of the 16 were still operating on that basis at the time of the survey. Of those four, two were in operation and two were not. The two that were not operating had both completed trials in the previous year; one was scheduled to begin a commercial service in June 1984, and the other was evaluating its trial results and waiting for an executive decision on its future. Of the two trials that were operating, one was a two-year project that has since been extended, and the second was a combined teletext/videotex service that was ending its teletext trial and planning to replace its current videotex system with another. Of the 12 services that were fully operational, all but one was commercial.

Nine of the services surveyed were affiliated with a newspaper; four were broadcast-based. Of the three others, two were independent and one was a newswire. Of the fourteen services associated with a print or broadcast news organization, half were physically located near or within the newsroom of their affiliated organization. Five of these services were affiliated with a newspaper, one with a newswire and one with a broadcast news organization.

At half of the services surveyed, "news" was only one part - and sometimes a small part - of what was produced by the staff. These services were typically self-contained, so the staff were also responsible for the "information" content of their services, which, on teletext, could be as much as 90 per cent of the entire package. Five of the services were actually part of a larger videotex system, for which they produced the news content. Two of the services were publishing full-text news as part of a self-contained, newspaper-based system, and one was a newswire, providing news to other videotex systems.

Fourteen of the services updated their news product seven days a week; one updated six days a week; and one, five days a week. Staff were on duty to update the content anywhere from 10 to 24 hours a day, with 10 of the services updating at least 18 hours a day.

Only four of the services were catering to a specific audience - three to agriculture, and one to business.

Not all of the services surveyed would reveal how many users they had, but of those that did, the numbers showed a wide range - from less than 40 to about 120,000 for the videotex services, and from "none to speak of" to 400 for the teletext services. The dearth of teletext users was



blamed on the fact that the decoders needed to access the services were in short supply. Two major American teletext services reported they had little more than an inhouse audience because decoders were either unavailable or just coming on the market. A third U.S. teletext service, with an audience of 400 households at the end of 1983, reported it had decoders coming on the market, and that it expected to sell 100,000 of them in 1984.

The cost of using the services also ranged widely. Some videotex services charged by the month, some by the hour, and some by the minute. Some charged a flat monthly fee, ranging from \$5 to \$20 for unlimited access, while others charged a flat fee plus access charges. Some charged by the hour or minute - as much as \$1.20 a minute - depending on the time of day and the kind of information being accessed. These costs, of course, were in addition to the cost of renting or buying a terminal or decoder. For teletext, there is no access cost, only the cost of purchasing or renting a decoder, but when decoders are available, their purchase cost is expected to be high.

For many of the services surveyed, accessing a screen of news or information was a two-or three-step process for the user. Six of the videotex services offered keyword access, allowing users to obtain items of interest in just one step. And four of those services also allowed users to program the system as a customized clipping service - they could simply tell the computer what they wanted to see each day, and in what order, and with a single keystroke, the requested information would appear.

Most of the services allowed users to browse through categories of news and information without returning to a main menu. Four of the services automatically scrolled through the categories chosen by the user at a rate of 10 to 30 seconds per page, depending on the service. The others usually required users to push a Next or Browse button, or the carriage return, to move from one page of a story to the next, and from one story to the next.

On a few services, users also had the option of downloading information into their personal computer or directly into a printer, allowing them to browse through the information after they had disconnected from the host computer.

### Users

Finding out who your audience is, and what it wants, is a major concern of any news or information medium, but for videotex and teletext, it's been an all-consuming passion, particularly during trials. Users have been surveyed by mail and phone, interviewed in person, videotaped in focus

groups, and observed through two-way mirrors. Some have been asked to keep daily logs of their videotex/teletext use.

Videotex systems, in addition, have the ability to monitor usage of their services by computer, recording each page access. This gives them an accurate picture of what information and services are being accessed, how often, at what time of day, and so on, without having to rely on the user's memory in an interview or survey.

User information is important to videotext not only because it's a new, developing medium, but because one of its biggest advantages over the other media is its ability to react quickly to user response. Because of the importance of this information, many services are reluctant to make public what they've learned. Although most of the services surveyed were willing to offer some information about their users, it was limited in some cases because of its proprietary nature.

Among the services that were able to provide a profile of their users, a fairly uniform picture appeared: Predominantly male, professional, college-educated, in their late 30s to 40s. And they tended to be financially "upscale," earning between \$25,000 and \$50,000 a year.

Although the order of preference varied from one service to the next, the most frequently accessed items were news, weather, sports and games. On the four services catering primarily to a business or agricultural audience, stock quotes and commodities were also top priority items. Several services reported that weather was the most frequently accessed page. On videotex, electronic mail and transactional services such as shopping and banking were also among the most popular features.

Typically, what users said they liked about the services was the timeliness, convenience and selectivity of the information they offered, the interactive capabilities, and the quantity of information not available anywhere else. What they disliked about the services was usually related to technology rather than content - they complained about access problems, slow-building graphics and the lack of portability. Although most of the videotex services surveyed said their users had few complaints about the access costs, they also said most users would prefer to pay a flat monthly fee. From users who were not within local calling distance of their host system, there were also complaints about long-distance phone bills.

In terms of content, most services said their users were satisfied with the depth and variety of the news and information offered. Only one reported some user dissatisfaction with the depth of news coverage.

What would users like to see added to their service? "They would like to see more advertising, more shopping,

more stocks," said one videotex manager. "More, more, more of everything."

Users accessing videotex services with a dumb terminal also said they wished it could serve as a personal computer as well.

In addition to solicited user information, most of the services surveyed had also received some feedback in the form of letters and phone calls from users. This feedback was largely positive, according to the managers, with one describing it as "75 per cent positive, 25 per cent negative and 100 per cent constructive."

Because of the nature of the videotex and teletext media, the services have been able to respond readily to user feedback with changes to their format and content. They've dropped items that weren't popular, put more emphasis on those that were, and added items that users said they'd like.

One videotex service, for example, took a look at what items were most frequently accessed and then rearranged its indexes so that those items were on top, making it easier for users to find them. Another identified which items users access first thing in the morning, and then concentrated on updating that information early in the day. That same service also expanded its hours on Friday nights and Saturdays to give its users more sports coverage. A third service, learning that its users tend to read business and market news during the day, and sports at night, now beefs up its business package during the day and cuts it back at night, replacing it with sports.

### Staff

The number of editorial staff at the services surveyed ranged from 3 1/2 to 30. In some cases, this figure included artists, database co-ordinators, advertising co-ordinators, clerks, etc. Half of the services had nine or less editorial staff members and half had 12 or more.

Although the names of the positions varied from one operation to another, the larger services usually had at least two senior level editors (managing editor, editorial director, editor-in-chief, assistant managing editor, senior editor, etc.), plus several intermediate-level editors (news editor, sports editor, feature editor, business editor, etc.). The smaller services generally had no intermediate-level positions.

The number of staff in lower-level positions (whose titles included copy editor, writer, teletext agent, page composer, staff editor) ranged from 2 to 15. Only two of the services surveyed actually had "reporters" on staff.

The staff responsibilities varied at the services surveyed, but as the job titles would indicate, reporting was not a major part of them. Editing, rewriting, or reformatting text, and selection of news were the major responsibilities, although others included page creation, layout and graphics. One teletext manager said it was "hard to categorize" what his staff did, but that their functions were basically "not journalistic."

Most of the people staffing the services did, however, have journalism training (many with graduate degrees) or experience. Of those that did not have a journalism background, most had a university degree (usually in English), or at least some kind of writing experience.

The level of journalism experience varied from "not much" (recent college graduates) to more than 30 years. Journalism experience was usually demanded for senior level positions, but many entry level positions were filled with recent journalism graduates. Of the 12 journalists surveyed, three had no previous professional news experience (but had journalism or English degrees), four had a year or less of experience, and five had five or more years of experience.

When asked if they had any preference for inexperienced staff when hiring, four of the sixteen managers said yes, fourteen, no. One videotex manager with a preference for inexperienced staff commented: "There is so much to learn that it seems preferable to hire a fresh journalist and not someone who must be 'untrained' first."

The managers who said they preferred experienced journalists didn't necessarily demand a lot of it. As one manager noted: "Experience isn't really necessary, but I look for a little." Other managers preferred at least a year's experience in another news medium. "People who have worked for a year have become more disciplined, and they're not out to win a Pulitzer."

As David Weaver found in his study of European teletext journalists, U.S. videotex journalists tend to be young. Many managers described their staff as "pretty young," and although there was often a wide spread of ages at individual services, all reported the average age of their staff members to be between 25 and 30. The average age of the journalists surveyed was 29.

Of the sixteen managers surveyed, half said they actually had a preference for young staff (under 30) when hiring. Two said their preference was primarily based on economics - they couldn't afford to pay older or more experienced staff. But they, along with the other managers, also noted that young staff have less to unlearn, are more adaptable and are more willing to take a gamble on a new, untried medium.

Some comments: "Right off the block, we hired young people on purpose because they have no biases or prejudices. They're also more creative and innovative and willing to take a risk;" "Older journalists have usually gotten into habits and are less likely to adapt to computers;" "Things change so quickly in this business that people must be flexible, quick learners."

One manager reported she had not had a preference for young staff when she first began hiring for her service, but had changed her mind during job interviews. When told they'd be required to condense wire stories to three pages, older applicants typically replied: "It can't be done." Younger applicants "didn't have such preconceived notions," she said, and in addition, they were more willing to accept the fact that videotext journalism offers few, if any, bylines.

Although eight managers said they had no actual preference for younger staff, several of them noted that their staff were, nevertheless, younger. "We've had phenomenal success with young people," said one. But despite the youth of their staff, all but three of the sixteen managers disagreed with the statement that "the quality of videotext journalism suffers because of the predominance of young, inexperienced reporters in this field." Said one manager: "They may be young, but they're damn good."

Of those staff who had previous news experience, it was predominantly print - daily and weekly newspapers, magazines, newswires. Their previous positions included reporter, feature writer, copy editor, sports editor, news editor, city editor, and managing editor (of a weekly). Although some services were staffed exclusively by print journalists, others (especially the larger ones) had a mix of print and broadcast (mostly radio) journalists. The manager of one service reported that almost half of his 11-person editorial staff had broadcast backgrounds, but in most cases, less than 25 per cent of newsroom staff members had broadcast backgrounds. At two of the services surveyed, there were actually staff who had previous experience in videotex or teletext.

Of the 12 journalists surveyed, only one had previous broadcast news experience, one had a degree in broadcast journalism, and the remainder had print backgrounds, either professional or academic.

Although print journalists predominate in videotex and teletext, only six of the managers surveyed actually indicated they had a preference for print journalists when hiring. One manager reported a preference for broadcast journalists and nine said they had no preference either way.

Some of the managers with a preference for print backgrounds said it was a personal prejudice based on their

own print experience and the fact that they believe print journalists are better trained. One manager said videotex is a text medium that requires "text people," and people who are familiar with in-depth reports. He also said print journalists tend to be more familiar with computerized editing processes. Another manager said he preferred print journalists because "broadcast is too far removed from our writing style."

In contrast, the one editor who preferred broadcast journalists said she did so because "radio people think short but still use the same news judgment as print people, who tend to be more journalistic types."

The eight managers who said they had no preference generally noted that print and broadcast backgrounds both have certain advantages for journalists working in videotext: "Print people have a bit of an advantage because they're used to writing for people to read rather than hear. But broadcast journalists...are more fluid;" "People with a broadcast background take to it (writing for videotext) a little more quickly while print experience gives you some depth and reporting ability;" "Broadcast people have it a little bit easier because they're used to writing shorter stories, but print people are more familiar with punctuation, layout and writing in depth."

Several managers said they were looking for a variety of backgrounds to complement each other when they hired their staff.

The backgrounds of the managers themselves were predominantly print as well. Eleven had backgrounds that were exclusively print - newspapers, newswires and magazines - and three had backgrounds that included both print and broadcast. One manager, who was actually a technical rather than editorial manager, had 13 years experience as a newspaper electrical engineer. And one manager had an administrative rather than journalism background.

How much training is required to write for videotext? All of the managers said anyone with previous journalism experience could be trained to work in videotex and teletext in anywhere from a couple of weeks to six months; more than half said two or three months. And almost all said anyone with previous journalism training, but not much experience, could be trained in anywhere from a few weeks to a year. Only one manager said such a person could not be trained to be a videotext journalist.

Most of the managers said someone without journalism training or experience could be trained to be a videotext journalist within six months to a year but often qualified their responses by saying they wouldn't actually hire such a person, or that he would only be eligible for entry level positions. Said one manager: "You don't have to have a tremendous amount of experience at entry level. If you show

rather than the "story" in a reporting assignment.

"The ability to give people a sense of the personalities and atmosphere involved in an event" was rated as "not particularly important" by 58 per cent of the journalists, but "quite important" or "very important" by 33 per cent. Several of those who rated this skill as important, however, also noted that it was something their services didn't do well. Consistently rated as "not particularly important" by the journalists was "the ability to gather information from different sources quickly."

As for personal attributes needed to work in videotext, three emerged as the most important: Flexibility, enthusiasm, and the ability to be a team player.

Flexibility was considered particularly vital because of the newness of the medium and the uncertainty of its future: "You can't tell people what they're going to be doing six months from now so they have to be very flexible;" "You must be willing to take a risk, a gamble, because it's not a nice, comfy, union-scale type of job;" "You have to be flexible because we're setting the rules as we go along."

Other attributes considered important for the videotext journalist included creativity, adaptability, a willingness to learn, drive and patience.

Do the skills and attributes needed by someone working in videotext differ from those of a traditional journalist? Although none of the thirteen managers responding to this question said there was a huge difference in the skills needed by both groups of journalists, only three actually said there was no difference at all.

Some comments: "Videotex journalists are less text-oriented than your regular journalist. And they don't need to have done any reporting because it's not a reporter's medium;" "They have to be more disciplined because they're restricted by the size of the screen they're working on;" "Newspaper editors don't have to cut to the core like we do in videotex;" "Speed is more important;" "In TV, you have to get ready for two deadlines, at six and eleven and in newspapers, there's only one. But here, there's an every-minute deadline;" "Videotex editors often function in isolation and must be less dependent on a standard peer group or public feedback."

The journalists with previous news experience were asked to compare the skills they required in videotext with those required in other news jobs. Of the nine people responding to this question, four said the skills required were "similar" or "basically the same," but only one said unequivocally that there was no difference in the skills and personality needed by videotex and traditional journalists. That response came from the only one of the videotext journalists surveyed who was actually a reporter.

The experienced journalists were also asked how they felt working in videotext has affected their journalistic skills. Many said their reporting and interviewing skills, and in some cases, their writing skills, were not being used to full capacity in the new media, and were likely deteriorating as a result. But most said working in videotext had improved both their writing and editing skills, as well as their news judgment.

"I used to be a very flowery writer," said one journalist. "Now I can get a point across much more quickly and clearly."

### Reporting

As Weaver found in his study of European teletext journalists, most North American videotext journalists spend most, if not all, of their working day in the office. Eleven managers reported that their staff spend 100 per cent of their time in the office, three said they spend "almost all" of their time there, and only one reported any significant staff time spent outside the office reporting.

Eight of the twelve journalists surveyed said they spend 100 per cent of their time in the office and three said they spend 85 to 95 per cent of their time there. But of those three, only one said his time outside the office involved reporting; the others were involved in marketing or public relations. The only "reporter" among the journalists surveyed said he spends 50 per cent of his time in the office, and 50 per cent outside reporting.

In the office, the journalists said they spend from one-third to 100 per cent of their time at a computer terminal, with the majority spending more than 75 per cent of their time in this manner. Only six journalists said they spend any time on the telephone, and of those, three said only five per cent of their time was spent in this manner, and usually involved phoning information providers or wire services for more information, or making police checks, rather than originating stories. The other three journalists reported they spend from 15 per cent to one-third of their time on the phone reporting.

These findings duplicate those of Weaver who found that most of the European teletext journalists he surveyed spent 80 to 90 per cent of their time at a terminal, about 10 per cent of their time on the telephone reporting, and almost no time at all outside the office reporting.

In videotex and teletext, the lack of original reporting is often attributed to the need for constantly updating news content, and to tight budgets that limit the amount of staff and resources. Indeed, many of the managers surveyed said they were hampered by lack of manpower and



money, but when asked if they would like to see more original reporting on their services, given the resources, only two (out of 13 responding to the question) gave an unqualified yes. Said one: "We're journalists, we're writers, there's nothing to say we can't do what newspapers do. Why should we ask our users to accept less than the best we can do - and that includes original reporting."

Several other managers said there would be a place for more original reporting - especially for local news - after videotext is better accepted by the public, but for now, at least, most would echo this comment by one manager: "If I had the resources, reporting staff would be a low priority." For him, and most of the other managers surveyed, a higher priority would be acquiring additional editing staff to allow better, heavier editing of wire copy, more proofreading, more updating, and a larger volume of news.

"We don't need a huge reporting staff when other services are already making the information available," said one manager. "Since our job is to get the facts updated quickly, it makes sense to have others get the information." Another manager concurred: "We have to maximize our efforts and reporting takes a lot of time. We can't compete with UPI on a national basis - it's easier just to take wire copy and turn it into the electronic publishing format." And another: "The power of videotex lies in the way it presents and organizes information for people. As long as you have access to wires you can trust, you wouldn't need a great deal of original reporting, except for the very, very local news that no one else is covering." And besides, he added, "even TV is hardly a medium of original reporting. They're often just reading back to you wire copy with pictures."

### Job Satisfaction

In his survey of European teletext journalists, Weaver found that their general level of job satisfaction was not as high as that of U.S. print and broadcast journalists. That finding was not replicated in the present study. In fact, as Table 1 shows, U.S. videotex and teletext journalists reported their job satisfaction to be significantly higher than both the European teletext journalists and U.S. print and broadcast journalists surveyed by Johnstone et al in 1971 (29) and Hess in 1978. (30)

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29. John Johnstone, Edward Slawski and William Bowman, The News People, cited in Weaver, op. cit., p. 61.

Two-thirds of the videotext journalists said they were "very satisfied" with their jobs and one-third said they were "fairly satisfied," and unlike the respondents in the earlier surveys, none said they were dissatisfied with their jobs.

----- INSERT TABLE 1 HERE -----

There is no simple explanation why the U.S. videotext journalists reported much greater satisfaction with their jobs.

One factor that may have affected their responses was that most of the journalists surveyed were intermediate-level, or even senior-level staff who had responsibilities beyond rewriting or reformatting wire copy. Many respondents said a major satisfaction of their job was the responsibility they had and the fact that they had attained a position of responsibility much sooner in videotext than they would have in a traditional news medium. Some suggested they would find their work more tedious and frustrating if their only responsibility was editing, rewriting or reformatting wire copy.

Besides this factor, there is also a possibility that because this was a phone survey, and therefore not anonymous, the journalists were less willing to report any dissatisfaction with their jobs. And it's possible that the managers, who selected the journalists for this survey, were predisposed to selecting staff members who were enthusiastic about their work.

Of course, it's also possible that U.S. videotext journalists are actually more satisfied with their jobs than both their European counterparts and their fellow American journalists. So rather than speculate further about the possible bias in their responses, it might be more useful to examine some factors identified by Weaver as being likely to affect and reflect job satisfaction and consider how they apply to U.S. videotext journalists, and to outline the major satisfactions and frustrations these journalists reportedly found in their work.

According to the European teletext journalists interviewed by Weaver, "many journalists working for more conventional media are openly scornful of those working for teletext and viewdata, calling them 'hack rewriters.'" (31) Weaver suggested that this "lack of respect" for videotext journalists was not helped by the fact that they were

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30. Stephen Hess, The Washington Reporters, cited in Weaver, op. cit., p. 56.

31. Weaver, Op. cit., p. 56.

TABLE 1  
JOB SATISFACTION

SATISFACTION RATINGS	JOHNSTONE'S <sup>1</sup> U.S. JOURNALISTS (n=1313)	HESS'S <sup>2</sup> WASHINGTON JOURNALISTS (n=192)	WEAVER'S <sup>3</sup> TELETEXT JOURNALISTS (n=18)	U.S. VIDEOTEK JOURNALISTS (n=12)
Very Satisfied	48.5%	40.1%	44.4%	66.6%
Fairly Satisfied	38.6	44.3	38.9	33.3
Somewhat Dissatisfied	11.7	13.5	5.6	0
Very Dissatisfied	1.2	2.1	11.1	0

<sup>1</sup>From a 1971 survey of practising U.S. journalists by John Johnstone, Edward Slawski and William Bowman, cited in David Weaver, Videotex Journalism, Hillsdale, N.J.: Lawrence Erlbaum Associates, 1983, p. 61

<sup>2</sup>From a 1978 survey of Washington, D.C. reporters by Stephen Hess, cited in Weaver, ibid, p. 61.

<sup>3</sup>From a 1981 survey of European teletext journalist by David Weaver, ibid, p. 61.

relatively isolated from their more conventional counterparts. The European videotext newsrooms visited by Weaver were widely separated from other broadcast and newspaper newsrooms, and contact between videotext and other journalists was rare. Several of the journalists surveyed by Weaver said "they wished their newsrooms were 'in a corner' of the regular newsrooms so they could interact more easily with the other journalists." (32)

Most of the North American videotext journalists and managers surveyed similarly reported that their counterparts in the more conventional media were "skeptical" of videotext, or felt "threatened" by it, particularly when it first began.

The manager of one newspaper-owned and based videotex service said his operation was called "The Toy Department" by other journalists at the paper. "They come around to see what's our latest computer toy." At another newspaper where a videotex service was located, "we were considered outsiders at first," said a journalist. "They (other journalists) thought the money spent (on videotex) could have been used to make the paper better instead." Some conventional journalists were also afraid videotex might put them out of a job, said several respondents.

Many of the managers and journalists who worked at newspapers before moving into videotext said their colleagues were puzzled why they would "take all this risk, hang out on this limb" to work in a new, untried medium. "People thought I was crazy," said one manager.

Many respondents blamed these attitudes on a lack of understanding of videotex and teletext, and said that as awareness of the media and their potential has grown, so has acceptance of them by other journalists. Some respondents reported, in fact, that other journalists are "very interested" in videotext, "excited" about its possibilities, and even "envious" of their involvement in it. "They'd love to sign up," said one journalist. And a manager: "When I first came here, they (other journalists) laughed, said it was a one-way trip to Siberia. Now they would like to work for us."

More typically, however, respondents said acceptance of videotext by conventional journalists has been a slow "mellowing" process - aided by the fact that they have all become increasingly involved with computers on the job - and that the process is still far from complete. As one journalist described it: "At first people felt threatened by videotex. Then they thought it was kind of hokey...it was the dirty socks, the black sheep (of journalism). They still don't take it seriously, but they see its potential."

Perhaps one of the factors helping to ease the acceptance of videotext by more conventional journalists in North America is the fact that, unlike the European experience, the videotext services are often located near or within a regular print or broadcast newsroom. Seven of the services surveyed - five newspaper-based, one broadcast-based and one newswire-based - were located in or near their affiliated newsroom. One, for example, had "a space in the floor between editorial and composing."

Although not all of the managers of these seven services considered it an advantage to be located near or within a regular newsroom, most said it allowed for better communication between videotex and other journalists. This, in turn, "produces a source of ideas and everyone learns from each other," said one manager. And it "makes everyone feel like part of the whole family," said another. It may also help the more conventional journalist better understand what videotext is all about. As the manager whose service is known as "The Toy Department" noted, "They (other journalists) have started to take us more seriously now because they can see that we're not just messing around."

This contact between videotext and other journalists in North America is not only found at services that are located in or near a regular newsroom. In fact, all but three of the sixteen managers surveyed said their staff had regular, professional contact with other journalists.

Weaver also suggested that the lower job satisfaction of European teletext journalists may have been partly due to the fact that they were limited in their choice of stories to publish because of their dependence on what others report. Almost one-fourth of the journalists he surveyed agreed that there were stories they should be covering but were not. And almost one-sixth perceived of their news organization as doing a "poor job" of informing the public.

While almost 60 per cent of the U.S. journalists surveyed said there were stories (particularly local stories) that they should be covering, and all of them said their service "could be doing more than it is," none of them actually perceived of their news organization as doing a "poor job" of informing the public - in fact, 66 per cent of them rated their service's performance as "very good" or "outstanding." In comparison, 40 per cent of Weaver's journalists, and 53 per cent of the U.S. journalists studied by Johnstone et al rated their organization as "very good" or "outstanding."

The videotext managers surveyed were also asked to rate their organization's performance in informing the public, and although none indicated their service was doing a "poor" job, only 43 per cent gave it a "very good" or "outstanding" rating. This may indicate that the managers surveyed do not have quite as high an opinion of their news organizations as

the journalists who work for them, although it doesn't necessarily mean they are less satisfied with their work.

The managers were not specifically asked to rate their job satisfaction in this survey, but they (along with the journalists) were asked whether their enthusiasm for videotext had grown or decreased since they entered the field and whether they wanted to be working in the field five years from now. As seen in Tables 2 and 3, almost 75 per cent of the managers said their enthusiasm for videotext had increased and more than 60 per cent said they hoped to be working in the medium in five years. Only one of the sixteen managers definitely did not hope to be working in videotext, and planned to return to newspapers instead.

----- INSERT TABLE 2 HERE -----

Of the journalists, almost 60 per cent said they were more enthusiastic about videotext than when they first became involved in the medium, and two-thirds said they hoped to be working in videotext in five years. None said they definitely did not want to be working in this field in the future.

Typically, those respondents whose enthusiasm had increased said it was because they understand videotext and its potential better than when they first became involved. And because, in some cases, they've begun to see that potential realized. Many said they knew little about videotext when they first entered the field and were somewhat skeptical about its future. But now they've seen the possibilities and are convinced there is a future - even if it means floating until the market is ready. "No one who understands the potential in this field could fail to be enthusiastic," said a journalist.

----- INSERT TABLE 3 HERE -----

Twenty-two per cent of the respondents said their enthusiasm for videotext was "the same" as when they first entered the field, and of those, several said that they were, in fact, both more and less enthusiastic about videotext - more because of the potential, but less because of how long it's taking for the potential to be realized. A typical comment: "In the short term, I think videotex will take much longer to establish than I once thought. Therefore, I'm less enthusiastic. But in the long term, I'm more enthusiastic than ever."

Only one of the journalists, and two of the managers surveyed said they were less enthusiastic about videotex and teletext. One manager said her enthusiasm was less "only because of the equipment problems," a reference to the shortage of teletext decoders in the U.S. But a second

TABLE 2  
ENTHUSIASM

	MANAGERS	JOURNALISTS	ALL
More Enthusiastic	77.3%	58.3%	66.6%
Less Enthusiastic	13.3	8.3	11.1
About The Same	13.3	33.3	22.2

TABLE 3

DO YOU WANT TO BE WORKING IN VIDEOTEXT FIVE YEARS FROM NOW?

	MANAGERS	JOURNALISTS	ALL
YES	62.5%	66.6%	64.2%
NO	6.2	0	3.5
DON'T KNOW	31.2	33.3	28.5

manager said his initial excitement at "being able to provide more news to those who want it has been tempered by the realization that too few people want it." The one journalist said he had been "very enthusiastic" about the new medium at first, "but the more I see of videotex, the more I'm convinced it's not really a reader's medium. It's very difficult to get away from the tree structure in videotex but people don't look for information in a logical way - they browse. It's really tough for us to put that ill-fitting harness onto the reader."

Despite the generally high level of job satisfaction and enthusiasm among North American videotext journalists, they're the first to admit that working in the medium can be less than rewarding at times. Asked what they disliked about working in videotex, many of the journalists mentioned frustrations of the technology, such as "computer down time" and "slow equipment." It's particularly frustrating when the equipment breaks down, said one journalist, because "you're breaking your neck and no one sees it (your work)."

A number of journalists said they felt isolated from their audience - only about half of all surveyed said they had access to user surveys or feedback. "We don't get a lot of direct feedback," said one journalist. "I don't know what my audience is...I don't know what shape and form they come in. I know they're there but I don't know who they are."

Even worse is not having much of an audience at all, as is the case at some of the teletext and smaller videotex services. "It's frustrating to be producing a publication that doesn't have a sizable audience," said a teletext journalist. D@

Many of the journalists also said they disliked the constant deadline pressure of working in videotex. A typical comment: "There's much more pressure on a continuing basis than at a newspaper and more potential for burn-out."

There's also more stress in videotex "because there's less of an outlet for your creativity," said another journalist. "You have to accept the tedium of rewriting other people's copy." The "lack of creativity" and "tedium" of videotex were cited as dislikes by several respondents. Noted one: "It's not a writer's medium, it's mostly rewriting and condensing - the writer has no chance to create. It can be very frustrating."

Although some of the managers surveyed agreed that working in videotex was more stressful than working in another medium, and said they made a point of giving their staff some flexibility and variety on the job to ease the stress, others said videotex was actually "no more stressful than any other media job." One, in fact, said it



was "far less stressful" than working for a newspaper because "although you always have a deadline, it's not going into print." And in contrast to the many respondents who said videotext was more stressful because of the "constant" deadlines, one manager said the medium actually has no deadlines at all. The news must be updated constantly, he said, but not on the same now-or-never basis as in newspapers, radio and TV.

Other miscellaneous dislikes about working in videotext: The instability of the job market, the frustration of waiting for the market to catch up to the technology, and the stress of working on VDTs.

Both the journalists and managers surveyed who had previous news experience were asked what they missed about those other jobs now that they were working in videotext. Most said they missed the reporting and writing - "I miss the creative process of gathering information and creating a story;" "I miss being on the scene of the action;" "I miss covering stories...I miss the hunt." Similarly, many said they missed "the people contact" they had as reporters, and some said they felt isolated from the outside world now that such contact was gone.

Many also said they missed having something tangible at the end of the day to see what they've done and to show to others: "You get used to going home with a paper tucked under your arm. Not being able to do that has diminished the sense of accomplishment;" "I'm an old writer, I like to see the product. Here there's nothing you can feel and touch;" "You can't go home and show your family what you do - unless you have a computer;" "There's no byline to be proud of, to cut out and paste up for others to see;" "I don't get to see people reading my stuff on the bus anymore."

The fact that, despite these drawbacks, most of the journalists and managers surveyed said they hoped to be working in videotext five years from now suggests that the frustrations of working in the medium are outweighed by the rewards. For managers and journalists alike, one of the biggest rewards of working in videotext is its immediacy.

"As quickly as it (a story) is written, it goes on the system," noted a manager. And if the story changes five minutes after it goes out, "we can change it. There's enormous energy and a high in doing that, something you don't get in the other media."

"I get a big kick out of the immediacy of delivering the product and the impact," said a journalist. "A lot of stories are missed by the morning papers. The marine bombing in Beirut, for example, happened first thing Sunday morning, too late for the papers. And when the Korean jet went down, the only information the morning papers had was that the plane was missing. We had our highest readership

that day. It makes you feel it's an important task."

And another journalist: "It's the most exciting thing I've ever done. It's more challenging, more of what I've been trained to do - to get information out as quickly and as accurately as possible."

In addition to the challenge of providing fresh news constantly, most of the respondents said they simply enjoyed being on top of the news: "There's a tremendous rush you get when you can stay on top of the news all day." They also liked their exposure to a large volume and variety of news and felt that, because of it, they were better informed, more in touch with what was happening in the world. "I'm more aware of national and international events than when I was a local reporter," said a journalist.

Another big plus for all of the respondents: The excitement of being a pioneer in a brand-new medium, of "being in on the ground floor."

"Whatever form it ends up being successful in - and it will be successful - there's nothing more exciting than being a pioneer, making decisions that will affect the future," said one manager. And another: "I think we're working on the future and that's a challenge. Where else could I go at my age (mid-30s) and have such an impact on the whole way the industry is shaped?" And a journalist: "Being a pioneer is what keeps me going when the job gets monotonous." Many respondents said it was the "excitement" of videotext that originally attracted them to working in the medium.

Although videotext offers little opportunity for creativity in writing, many of the journalists surveyed said they found it challenging to rewrite, edit and condense wire copy - "I enjoy taking a two or three-hundred word story, extracting the important information, boiling it down, and getting in on the system as quickly as possible. It's very challenging, and it's the only writing satisfaction you get;" "It's a challenge to say a whole lot in a short space."

Many of the journalists said the newness of videotext and teletext offers a chance to be creative in other ways than writing - structuring databases, thinking up new page concepts, playing with ideas, making up the rules, "creating something out of nothing." Because the medium is new, "we have the freedom to explore and develop," said a journalist. "There are fewer constraints...it's not such a defined structure as an established media job."

The newness of the medium has also given many of the videotext journalists a chance to get ahead faster career-wise than they would in a more traditional news medium. Many have moved into positions of responsibility in a relatively short period of time, simply because as more people have been hired to work in videotext, those who

started out at the bottom had nowhere to go but up. As a result, the opportunities for career advancement have become a big plus for those working in the field.

"At the newspaper where I worked," said one journalist, "I would never have been better than average - I wouldn't have been at the top of my field. But there's a chance to be here."

Even in entry-level videotext jobs, especially at the smaller services, the degree of responsibility is often higher than a traditional medium would permit. Many of these journalists are given a chance to use their news judgment in selecting stories and deciding how they should be edited and played. "In this job, there's a lot more decision-making on my part than in a strictly newspaper or magazine job," said a journalist.

Along with the responsibility, the journalists reported they had more independence as well. All of the journalists surveyed said they had either "total" or "almost total" autonomy on the job, and most said they reported on only "a casual basis" to their superiors.

Salary-wise, working in videotext can be less rewarding than working in the other media, but 85 per cent of the journalists surveyed said they felt they were being paid on a scale with other journalists with their training and experience.

It is impossible to know whether the high job satisfaction reported by the videotext journalists surveyed here is an accurate reflection of the entire North American videotext experience. Perhaps taking a closer look at these and other journalists on the job, as Weaver did in Europe, would help provide a clearer picture. On the basis of this survey, however, it appears that journalists have found both rewards and frustrations in videotext, and that so far, the rewards are winning out. Whether they will continue to do so, especially in light of the fact that many of them are linked to the "newness" of the medium, will be a question for future studies to examine.

### Content

The primary content of all but four of the news services surveyed was edited text of newswires and/or newspapers. Of the four, one contained about 10-per-cent edited text and the others were all full-text. Some of the videotex systems offered both an edited-text service and a separate full-text section in their database. Teletext does not have the space to offer news full text.

The average length of individual news stories on the edited-text services ranged from half a page or a paragraph on teletext to three on videotex, although most services ran

feature stories a bit longer - three to five screens. The maximum number of pages these services would allow a hard news story to run ranged from one to eight; for feature stories, it ranged from four to "unlimited." On the full-text services, story length averaged between seven and 10 screens with no maximum lengths on either hard news or features.

The question of which is better-suited for videotex, edited or full-text, has been a source of much debate, usually hinging on the question of how long reader interest in a story can be sustained on a videotext screen.

Only a few of the services surveyed were able to provide information on their users' readership patterns. Three said their users tended to lose interest in a story after three pages. One of the three, a videotex operation, had originally used longer stories on its service, but cut them back on the basis of user findings. These services also reported that few news categories were read all the way through. A few managers said that although they didn't actually know the readership patterns of their users, they were operating on the assumption that users tend to lose interest in a story after the first page or two. Some suggested that this tendency was not unique to videotext users. Newspaper readership "doesn't go very deep" either, said one manager. "Many people don't read much more than the lead paragraph."

All of the managers were asked what they felt was the potential of a full-text service on videotext. The responses ranged from "little" to "terrific," with the latter coming, not surprisingly, from the manager of a full-text service. Only a few managers said unequivocally that edited text was better. One said it was "pointless" not to adapt the news product to the videotext format, while another said "it's better to edit because full-text is hard to read." Still another noted that "people are intimidated by the full newswire," and that "it takes too long to get to wire news," a major concern for users, considering the cost involved.

One manager said full-text news had some potential, "but people don't just want more of everything. They need some direction." Several other managers suggested that although "edited is more important," and that a full-text service "won't succeed to maximum," there is a place for both types of news on videotex. And one manager, whose service was rewriting text at the time of the survey, said, "we might try full-text...I'm not convinced that editing is needed."

Several managers, most notably those at full-text services, said unedited text had a great deal of potential. One manager noted that "once you get the higher baud rate and high quality presentations, length won't be a problem

for readers."

Another manager said he didn't think short was necessarily better on videotex. As in any medium, the news should be concise, he said, but it doesn't have to be brief: "It doesn't matter how long a story is, so long as wherever you are in that story you can get out of there and go to the next thing that you want to look at," he said. "If the story is written correctly in pyramid style, you should be able to leave at any point." Being able to browse through a story "as far as you want to go" more closely reflects the average person's reading habits, he said.

Although this manager noted that readership of his service's news had a high drop-off rate after about six pages, he said that wasn't reason enough to cut back on story length. Only if videotex had a limited newshole, he said, would the drop-off rate warrant such cuts.

His service's philosophy of "keeping it long" is partly a matter of economics: "We find that in the space of time that it would take to boil something down to two screens, we can move six or eight full-length stories by not cutting them." Since the "hallmark of videotex will be the breadth of items available, it makes more sense to move as much information as possible." Besides, he added, all the news his service publishes is already rigorously edited at its newspaper or newswire source. "We can't improve on the copy desk of the New York Times."

On the videotext services surveyed, wire copy - whether edited, rewritten or untouched - constituted anywhere from 45 per cent to 100 per cent of the news content, with a majority of the services drawing upwards from 70 per cent from this source. Adding in the copy drawn from other local media and parent news organizations accounts for close to 90 per cent of all the news content on all the services surveyed.

Press releases accounted for another three per cent of the services' combined content, phone reporting for 3.6 per cent, on-the-street reporting for about three per cent, and "other sources" (mostly columnists), less than two per cent. Seven services reported they did phone reporting, deriving from one per cent to 10 per cent of their content in this manner. And six services reported they obtained from one per cent to 20 per cent of their content from on-the-street reporting, although not necessarily by their own staff - several used stringers and freelancers.

Only two of the services actually had staff whose formal responsibilities included reporting. Of those, one obtained 10 per cent of its content from phone reporting and 20 per cent from on-the-street reporting, and the other obtained only about one per cent of its total content in this manner.

The 12 journalists surveyed were asked how often their stories involved newsgathering from more than one source. One (the only "reporter" surveyed) said "most," seven said "sometimes," three said "rarely," and one said "never." However, those who responded "sometimes" typically meant their stories were derived from two or more wire sources, not from phone or on-the-street reporting.

The question of whether or not original reporting content should be increased on videotext elicited varied responses from the journalists. Two said they would definitely like to see their service do more original reporting and a third said his service could use "a little more...although it's not so much of a reporting medium." Three said original reporting may have a place in videotex and teletext eventually, when the media are better accepted; one said it may have a place in a local service, but not a national one; and one said it definitely had no place at all.

One journalist said there was not really a need for her service to do original reporting because its parent news organization was already a large newsgathering operation, while a journalist at another service said he did see a need for separate videotex reporters because the parent news organization of his service, from which it obtained about 30 per cent of its news content, "does not do a good job of covering local news."

The type of news content offered by the services surveyed was a fairly standard mix of world, national, regional and local news, sports and weather, plus such various categories as business, agriculture, entertainment, science, politics, analysis and features. Several of the services were nationally-based, and therefore excluded local news.

Most of the managers reported their news content consisted of about 80 per cent hard news and 20 per cent soft. Most of the services included features in their news package, and more than half included analysis and backgrounders, although usually "not our own." One manager said his service "can include backgrounders if necessary, but we usually leave them to the newspapers." Less than half of the services reported they used editorials, and only 25 per cent said they ran letters to the editor.

All of the journalists and managers surveyed were asked if they thought there was a place for in-depth or investigative journalism on videotext. About half of the 27 people responding to this question said "yes," eight said "no," three said "not on teletext but maybe on videotex," one said "in-depth, yes, but investigative, no," and two said they didn't know.

Several of the "yes" respondents said that in-depth and investigative journalism should play a role in any news

medium, but added that it's "not a question of journalism, it's a question of technology - "How do you present lengthy, in-depth information on a videotex screen and keep people interested in it?" "If videotex/teletext can expand its display formats in the future, there'll be room (for in-depth journalism). If, however, we're doomed to our present formats and technology, in-depth reporting will be shunned."

In addition to the technology, it's also a question of getting people used to the medium and changing their reading habits, some respondents said.

Potentially, videotex could be well-suited for in-depth or investigative pieces, said several respondents, because there is no limit on length, the reader can stop at any point in the story, graphics can be used, and the speed allows a service to follow a story from moment to moment as it develops. Few of these respondents suggested, however, that the in-depth or investigative reports should be gathered by a separate team of videotext journalists.

The respondents who said in-depth or investigative reporting has no place on videotext said it wouldn't work well because "readers are too impatient," "people don't want long, involved stories," "it's not easy to read off a screen," and "videotex is not a good text medium - it's a medium of impressions, rather than extended information." Noted one respondent: "A lot of stories we run are the result of in-depth reporting, but it's hard to imagine anyone sitting down and reading features from a screen."

Several respondents said there was some room for storytelling in videotext, but that the medium should concentrate on taking advantage of its strengths - hard news and timely information. "Story-telling is not particularly salable. It's a question of where to direct your resources (based on the medium's strengths) and that would seem to be short stories."

In terms of deciding what news items to run on videotext, only four of the services reported they were catering to a particular audience - either farm or business - whose interests formed a large basis of the news selection process. At the other services, many of the managers said the news judgment their staff used in selecting stories was "basically the same" as in any other medium, but that they made a point of taking advantage of videotext's strong points.

Some comments: "This medium offers selectibility and timeliness, so you hold that yardstick against what you put on the system;" "We want information that is perishable, interesting and provides viewers with something they can't get anywhere else easily;" "Stories with immediacy are top choice. And hard news. We can't have long, in-depth analysis - it doesn't suit the medium."

Many of the managers suggested the medium lends itself particularly well to local and community news, but not all of them were capitalizing on that at present: "As of now, we're better off with national stories, but once the marketplace is established, there'll be more local - people will need it. We stand to profit from local news down the road."

Content-wise, several managers suggested it was also important for their services to have "something besides news." Noted one manager: "We're not an electronic newspaper. We have to develop a style based on the market by using business sense, by asking 'what's the medium good for.' In our case, it's stocks and commodities."

Although most of the managers said they used much the same news judgment as the other news media, one teletext manager did suggest that the nature of videotext does demand a "different sort" of news judgment at times: "We're akin to a headline service, so we have two rules (for selecting a news item). It has to be immediately practical - some information a person can use - or so interesting that it makes you want to read it. It's not a passive medium...if you lose someone with a story that you've used because you think it's required, not because it's interesting, they'll be gone."

"You have to choose stories that are fairly riveting. It's a different sort of news judgment - you don't want to be sensational, but you want to be punchy." For example, he said, if his service had already run several stories on the fighting in Lebanon on a particular day, they might want to put some other item on, perhaps a story about herpes, that a lot of people would be interested in. "The newspapers would think the Lebanon story is more important, but they're only running it once."

The number of news stories offered on the videotex services each day ranged widely, from less than 30 to more than 600, with the full-text services running as many as 6,000 screens of news a day. "The software just moves it along," said the manager of one full-text service that published 2,000 to 2,500 pages each day. The videotex services publishing less than 50 news stories a day were also running hundreds of other items as part of a total information package.

On the teletext services, news was typically a very small portion of the entire package, sometimes as little as 10 per cent.

Most of the services said their news stories included references to where a reader could get more information about a subject, either on their system, or in another medium, although only about half of the services offered a separate package of background information themselves. One news service cross-referenced readers to an



encyclopedia in its database.

More than half of the services surveyed said they updated their news constantly throughout the day. Most added stories to the news package continuously as they were written, but others updated in groups of stories or by category. Of the services not updating constantly, one was updating four to six times a day, one "several times a day," one two or three times a day, and one, twice a day. The latter two were both teletext services that did not have an audience at the time of the survey, and both planned to do more updating once decoders were more widely available. One full-text videotex service reported that it updated 25 per cent of its content daily or more frequently, and 75 per cent on demand. Almost all of the services said they felt their system of updating was the best for their medium.

The maximum amount of time most of the services would leave a hard news story online without updating was 24 hours, although most said they preferred not to leave a story on that long. The maximum length of time they would allow a feature story to run was generally from 24 hours to two weeks, with one service reporting it left financial and business features on for 90 days.

When asked if they felt a videotex news service could be successful if it was updated only once a day (as Westex News is), 11 of the 14 managers responding to this question said no, one said yes, and two said don't know. Some comments: "If you only update once a day, then what's the difference between your service and a newspaper?" "Users expect immediacy from this medium and once the immediacy is gone, they won't use it;" "I don't think a videotex service can update just once a day, not if it's pretending to be timely. But then, there's no accounting for taste." Only the manager of the videotex service that updated only 25 per cent of its content daily or more frequently said a service could be successful if it updates only once a day - "Updates are not the forte of videotex - depth is."

With the quantity of information available on videotex, clear, effective indexing of the content is vital, especially on videotex, where time wasted looking for an item of interest is money lost. The services surveyed used a variety of methods to lead users in and out of their news, but typically they offered a main menu or headline page that either listed the top stories of the day or led them into a "highlights" section that did. From there users were led into the individual news categories - on some systems, with keywords. Most of the services ranked their stories in order of importance in each category.

To alert readers to a particularly important story, most of the videotex services used an alert or bulletin page that viewers would see automatically when they logged on. One agricultural videotex service had the capacity to alert

specific users to a particular story of interest to them, based on user demographics. The four teletext services used a variety of methods to signify an important story: Bulletins, prompts, graphics, a flashing master index, and a Newsflash that cut a box into the TV video and led viewers into the story.

Although most of the services surveyed used graphics, they didn't use them often in their news content - only two managers reported that more than 10 per cent of their news stories were accompanied by a graphic and many said less than two per cent. One manager said his service "wanted to use more, but it slowed things down. We use a lot in other areas, but in news, we have traded off story-telling graphics for timely information." Another manager said her service had tried using graphics during its initial trial, but "they didn't go over big."

Few of the services actually had a policy about when and how to use graphics, but most would agree with the manager of one service who commented: "We use them judiciously, not gratuitously - not just for the sake of using them."

Sixty per cent of the services surveyed used color on their news pages.

Asked to rate the importance of color and graphics in videotext news content on a scale from one to five, the managers' responses ran the full range, with an average of 2.8. Several managers suggested that in videotext in general, color and graphics are important, especially on advertising, but not specifically on news. One manager said the use of color and graphics is not important now, but "is going to be a four," while another said just the opposite: "Right now, it's perceived to be a four, but in the long term, it's going to be a two." And a third said: "In my opinion, it's a two, but according to (the parent news organization of the service) it's a four or five."

### Style

Almost all of the services surveyed have developed a style guide for writing for videotext - only those who run a full-text service have not. Half of those style guides were developed before the services got under way, and half have evolved on the basis of trial and error.

Few of the managers were willing to supply a copy of their style guide because they considered them to be proprietary. Three style guides were eventually obtained by the authors, not enough to make any meaningful comparisons. From the managers' and journalists' verbal and written descriptions of their style guidelines, however, there appears to be much agreement on the generalities of writing

for videotext and some disagreement on the specifics - just as there is from one newspaper to the next.

Everyone stressed the need for brevity and clarity, getting to the point as quickly as possible, and getting as much information as possible on each page. That's important not only because of space restrictions (the edited-text services averaged about two pages or screens per story, 75 words per page), but because videotex users are often paying by the minute for what they read.

Most respondents said it was important to keep sentences and paragraphs short and simple, and to avoid dependent clauses, especially in the lead. The services surveyed often limited paragraphs to one sentence, and usually used only two or three paragraphs per page. Many respondents also said an inverted pyramid style works best in videotext because there's just not enough room for a rambling, feature type of lead. And because readers don't want to invest time or money in a page that never gets around to telling them what a story is about.

For an edited-text service, turning an 800-word wire story into an 150-word videotext item often entails a major rewrite, but at the very least requires editing and formatting and some gentle or not-so-gentle massage. Videotext editors not only have to make that story fit onto two 32-character by 16-character screens, they have to make it fit right - many of the services made it a policy never to continue a sentence over a page.

Making every word count is important for any writer, but for videotex and teletext writers, it's important to make every letter and space count as well. The style guide of one videotex service notes: "Sometimes a single character makes the difference between a paragraph that fits a videotex page and one that is a line too long." Making a paragraph fit is sometimes just a matter of using a short word instead of a long one. Like need, instead of requirement. And group, instead of organization. As the style guide cited above notes: "Like a poet who must wrack his brain for words that rhyme, a videotex writer must think up words that are short." To work in videotext, it helps to have a thesaurus-like brain.

Many of the services surveyed also save space by using less punctuation and more abbreviations than a newspaper would. And some save even more space by leaving the periods out of abbreviations: "We use periods only at the end of sentences. You can save three or four characters by leaving out the periods in abbreviations such as USDA."

This preoccupation with not wasting space finds different venues from one service to another. Some services eliminate "unnecessary specifics" such as titles and full names of people on first reference. Reagan, instead of President Reagan, for example. Others avoid direct quotes

when they're wordy and use partial quotes or paraphrase instead. One service saves on words by not repeating information provided by the headline in the lead. To do that, writers incorporate leads into headlines as much as possible. And another service cuts wordage by using attribution "only when you have to."

Although respondents described their writing style as "terse," "disciplined" and, in one case, "pretty bland," most also said they strive to be bright and upbeat - as readable as possible. Several characterized their style as conversational or breezy, but stressed they don't overdo it or try to be flippant. Others said they shun the breezy style found on radio and TV. Many services, however, do make a point of writing in the present tense - "Because it's a current medium" - and of using active verbs.

Asked whether their writing style is closer to broadcast or print, the respondents' answers were varied and inconclusive: "It leans more to print style," "It's more of a print style, but we're doing a bit of both," "It's halfway between print and broadcast," "It's neither print nor broadcast style," "It's more like broadcast style," "It's grammatical radio," "It's a blend of wire service and radio writing." The videotex style guide cited earlier suggests that neither the conversational style of broadcast nor the narrative style of print are well-suited to the medium. It recommends that writers and editors "try to preserve the grammatic structure of print writing but avoid its embellishments. The resulting hybrid might best be described as literate radio style." One manager said his service was a distinct hybrid of print and broadcast - during the week, the service offered hard news and news briefs that were closer to broadcast style than print. Then on the weekends, it offered longer, in-depth, print-style features that remained on all weekend.

The differing opinions about whether videotext writing style leans more towards broadcast or print surfaced again when the managers and journalists were specifically asked: "Which of the following phrases best describes your service - printed radio, broadcast newspaper, electronic magazine, or none of these? The most common response - given by half the respondents - was "none of these." Five said "printed radio," five said "broadcast newspaper" and four said "electronic magazine." Of these 14, however, six said the phrase they had selected was the "closest" of the descriptions offered, not an exact one, and offered alternative phrases they considered more appropriate.

One manager dismissed the phrases printed radio, broadcast newspaper and electronic magazine outright, saying it was a mistake to describe videotext in relation to the traditional news media because "that limits people's imaginations." He preferred the term "information system"

because "we don't report anything that isn't reported somewhere else." Other alternative phrases used to describe the services included: "Home news service," "Electronic publishing," "Interactive communication," "Electronic news source," "Electronic information service," "Assembler of news," "Information retrieval," "Electronic information network," and "Electronic news and information service."

Four respondents - three reporters and one manager - described their service as an "electronic newspaper," a phrase that has often been used to describe videotext. In contrast, however, nine of the managers and journalists surveyed stressed that their services were NOT electronic newspapers, and that it was a mistake to use that term. Their comments: "Electronic newspaper is not a good term for videotex. People then think of it as a newspaper and they've missed the whole point of electronic publishing;" "It's not an electronic newspaper - it's just different. It may be better or it may be worse, but it's not a newspaper;" "The term electronic newspaper is really limited. When you hear it, you picture the New York Times flashing up on a screen;" "Electronic newspaper is not a good term - it's more complex than that. Videotex takes journalism one step further. You become a facilitator that makes it possible for other people's information to be made readily available."

This disagreement on the concept of videotext as an electronic newspaper existed not only among the services, but within them as well. The managers of the three services which were described as electronic newspapers by the journalists working there all rejected the use of that label.

Actually, such disagreement over terms was not unusual among managers and their staff - at only three of the 11 services where at least two people were surveyed did both persons apply the same label to their service. In one case, for example, a manager described her service as being "absolutely" printed radio, while the journalist described it as an electronic magazine.

Of the 14 managers and journalists who said none of the suggested phrases described their service, four would offer no alternative phrase. One said there was no way to categorize videotex and that it was a mistake to do so. A manager and a journalist of one service both described videotext as "a hybrid" of the other media, but said it was a new media form different from all the others.

#### Advantages and Disadvantages as a News Medium

Although there was little agreement over the terms used to describe their services, the managers did agree about the

primary advantages their services have over other news media - selectivity, convenience and speed.

A typical comment: "Videotex blends the immediacy of radio and TV with the completeness of newspapers, plus it offers information on demand." That means users can have what they want when they want it - they're not dependent on newscasters who are locked into time slots and don't have to wait for a newspaper to land at their door.

Because of its updatability, one of videotex's biggest strengths lies in its ability to provide coverage of fast-breaking news, said the managers. When a big story happens, radio and TV have to clear air time, and newspapers have to wait to go to press, but videotex can publish almost as soon as the story comes over the wire - "We had one recent story out 13 minutes before radio and TV had it," noted a manager.

On a big story, both videotex and teletext can also devote much more space than newspapers, TV and radio can. Videotex can devote an entire section of its news database to the story, and although teletext services have a limited number of pages to minimize access time, each page has the capacity to hold up to 250 rolling pages.

Another key advantage that videotex alone has over the other news media is its interactivity, said many of the managers - "It's much more human than the other media because you can talk back and have the service respond."

Videotex subscribers can help shape the news product with their feedback - the services that have changed their hours, their content and their story length because of user response are testimony to that. And the changes can be made relatively quickly. Subscribers can also help create the news product - a number of services said they encourage their readers to contribute columns. One videotex manager said the subscriber-columnists at his service were actually "more dependable than our own newsroom," and described how one man faithfully sent in his column even while he was out of town on vacation.

This ability to get people involved in the news, "the fact that we can reach out and touch someone," is not only a major strength of the medium, it's essential to its success, said many of the managers: "If you neglect to do that, you are giving up one of the cornerstones of success. You can't succeed if people perceive there's just a machine on the other end. Without high touch, high tech will never survive. People have to perceive that it loves them;" "Without the human quality, no one would use videotex."

Another advantage of videotex, said several managers, is its ability to offer greater customizing for special readers - "We can provide depth in fairly obscure areas that newspapers couldn't devote space to, stories of interest to only a few people."

Asked what they they felt were the major disadvantages of videotext, compared to the other news media, many of the managers said brevity. "It doesn't have the depth of newspapers," and "doesn't lend itself to broad, reflective analysis," were typical comments. But other managers countered that the lack of depth was NOT really a disadvantage or a problem, "because that's not what the medium is for."

Many managers also said videotext was at a disadvantage, when compared to newspapers, because of its lack of portability. But, again, other managers rejected this as a problem, saying most people are used to sitting in front of a TV set to obtain information and entertainment.

Compared to television news, however, the managers agreed videotext was at a disadvantage because it lacks the visuals, the sound, and the sense of drama. It also has the drawback of being an active medium that demands more of its users than radio and television. "TV viewers can zombie-out in front of the screen for seven hours a day," said one manager, "but videotex won't allow the user to passively enjoy it." Nor will it allow users to listen to the news at the same time that they're busy with other things, as radio or TV will.

Of course, one of the major drawbacks of videotext - but one that can conceivably be overcome - is the lack of user acceptance and awareness, and the fact that old reading habits die hard. "Readers have to get used to the technology and have to get used to reading from a screen, but it's hard to get people past the technology;" "The biggest challenge of this medium is getting people to change their reading habits."

Other disadvantages cited by managers: The cost; the lack of market research about what people want on videotext and are willing to pay; the difficulty of finding material in databases and of browsing, and the fact that only a limited amount of information can be placed on a screen.

Although some of the disadvantages of videotext can never be eliminated, many are expected to be overcome in time, said the managers. In fact, many of the problems associated with videotext use are already perceived as being less serious than they were a few years ago. In 1979, when videotext was in an early stage of development, Ahlhauser asked a sample of U.S. newspaper managing editors to rate the seriousness of a number of suggested problems for users of electronic news delivery systems. The videotext managers in the present survey were asked to rate the same problems.

As Table 4 shows, almost all of the problems were rated as less serious by the videotext managers than by the newspaper managing editors. Only one problem, the fact that readers must position themselves at a TV set, was rated almost identically by the two groups. That problem was also

perceived by the videotext managers to be the most serious of those listed. The two problems considered to be the most serious by the newspaper managing editors - the fact that videotext offers few photographs and that readers can't keep clippings of stories - were rated the least serious by the videotext managers. The problem of "no clippings" was rated especially low because, as many managers pointed out, readers who wanted to keep a hard copy of an item could use a printer.

-----INSERT TABLE 4 HERE-----

Several of the videotext managers also said many of the problems listed were somewhat of a problem NOW, but would not be in the future, once people got used to videotext. And some suggested that one of the problems listed - that videotext requires too much button-pushing - was actually an advantage for the medium. "It's our greatest asset," said one manager. "People love to push buttons. People go wild over buttons."

#### Potential as a News Medium

Almost all of the managers and journalists surveyed said videotex and teletext have tremendous potential, but as information media, rather than news media. Some comments: "News alone will not run videotex and teletext. News will not be the leader in this medium, it will just be part of the mix;" "Teletext is an information source, not a newspaper. News is only a small part of it. The strength of teletext isn't news but its ability to touch the viewer in ways that affect his life;" "To grow and prosper, videotex must be more than a news medium. Banking, shopping, electronic mail AND news retrieval is the mix that will be required to give videotex a shot at success."

And how important will news be in that mix? Some respondents said it would become increasingly important and some said it would become much less so, but everyone said news would have a place: "It's like a three-legged table. The medium can't stand without news, but news can't stand alone;" "On videotex, news will be as important as shopping, games, and electronic mail, but not any more important. They'll all be part of a total service package."

If any part of the package is going to dominate over the others in videotex, it will be the transactional services and interactive functions, many of the respondents said.

Some suggested that news may be the basic commodity many services start off with (after all, most of them are run by news organizations) and it may be the commodity that



TABLE 4

## EDITOR'S RANKINGS OF PROBLEMS POSED FOR READERS OF VIDEOTEXT

	AHLHAUSER'S <sup>1</sup> U.S. MANAGING EDITORS (n=258)	U.S./CANADIAN VIDEOTEXT MANAGERS (n=16)
No photographs	4.38*	2.38
Can't keep clippings	4.1	1.6
Articles harder to find	4.0	2.5
Difficult to see and read type on screen	4.0	2.9
Successive pages may not sustain interest	3.9	2.8
Readers must position themselves at TV set	3.6	3.5
Too much button- pushing	3.4	2.6
Can't see stories together on same page	3.3	2.5
Readers may want to hold paper in hands	3.2	2.4

\*1 = no problem  
5 = big problem

<sup>1</sup>Taken from a report by John W. Ahlhauser, The Electronic Newspaper: U.S. Editor's Reaction to Teletext, University of Indiana, 1979.

initially attracts subscribers, but it's information and transactions that will become far more important. As one manager put it: "News will be the tail that wagged the dog." At many of the services surveyed, especially the teletext services, hard news was already just a small part of the mix. The hard news content of the teletext services surveyed was as low as 10 per cent.

All of the managers and journalists were asked how they think videotext will evolve as a news medium, but since none of them considered videotext to be strictly a news medium, their responses tended to encompass the evolution of videotext as a whole. Many respondents said it will take "longer than we originally thought" for videotext to evolve into a mass medium, but they were optimistic about its potential nonetheless. They noted several factors that will enhance that potential over the next decade: The proliferation of home computers; the emphasis on computer education in schools; the fact that videotex technology will become more sophisticated and user friendly over the next decade, making it a lot easier to use; and the fact that videotex technology will become cheaper as the cost of printed news and information grows.

Estimates on when videotext will become successful ranged from the late 1980s to the turn of the century. Several respondents suggested that a key to that eventual success lies in vertical markets - supplying specialized news and information to specific target audiences: "The medium is good for specific audiences such as farmers - it can meet more of their needs."

Some managers and journalists did have some thoughts about the evolution of videotext specifically as a news medium. One respondent suggested that it will become "an accepted standard alternative - just one more way that people will access the news. Another said it has "a great potential to draw people into the news process, to allow them to react and to allow them to seek information - personalized information." Other comments: "It's a fresh approach, providing more news that relates to your life - specialized news, in areas that people want to know about;" "At the local level, we will have a chance to stretch the normal definition of news and do something brand new;" "It will offer a chance to cover the obscured or ignored things going on in the world."

When asked what could keep videotext from reaching its potential, the number one response from the sixteen managers was "cost" - both the cost of equipment and the cost of delivering the information. All the managers agreed with the statement: "Videotex will never become popular as a news medium until the cost comes down." Other factors that individual managers felt would hurt the potential of videotext included: Slow technology that has resulted in

hardware not being available; the sheer complexity of the data network; too little foresight and too many newspapers thinking of their involvement in videotext as a way of protecting their interests; public apathy, disillusionment (information sickness), and fears of invasion of privacy; government regulations; and shoddy, hard-to-use systems produced by some companies in haste to capitalize on the medium. Because of these and other factors, videotex is "a product in search of a market," said one manager. "There's no public clamor for it right now."

When asked which they believed had more potential as a news medium, videotex or teletext, seven managers said videotex, two said teletext, three said they both had the same potential, one said they had "entirely different potentials," and two said they didn't know. Of the other three managers replying to this question, one said videotex had more potential in the short term, while teletext had more potential "down the road," the second said just the opposite, and the third said trying to compare the potential of videotex and teletext was "like comparing apples and oranges."

Those who said videotex had more potential did so primarily because of its interactive capabilities. And those who chose teletext did so primarily because it was "easier to access," "cheaper than videotex," and "has mass appeal." Noted one manager: "Teletext is for the common man. Videotex is primarily suited for business, not the home." Most of the managers agreed, however, that videotex and teletext can co-exist, that there's room for both. And they agreed that how well either medium does will depend on the cost and the marketplace, and how quickly the public becomes technologically-attuned.

It will also depend, in large part, to how quickly advertisers become attuned to the new technology. All but one of the managers surveyed said videotext news will likely be financed by a combination of users and advertisers, with a heavier emphasis on users until the medium obtains more advertising support. Teletext will have to rely more on advertising than videotex because once a user has a decoder, he is free to access any of the available information at any time. Only one manager, whose service contained no advertising and did not plan to, said users alone will have to pay for videotex news.

Eleven of the services surveyed contained advertising - ranging from some non-commercial in-house ads, to a full offering of logos, classified and display ads. Although advertising plays a limited role in most videotext services today, it is expected to become increasingly important as advertisers learn its potential.

Most of the managers said advertising on videotex will evolve into an interactive service, taking advantage of the

technology of the medium: "Videotex may start out by trying to imitate present-day advertising, but it will find that it can't compete with TV and print ads, that instead its future is in transactional services - ads that lead into teleshopping;" "Transactional services will eliminate the need for ads as we now think of them. Revenues will derive from 'pay-per-response,' not charges for time and space." Many managers suggested advertising will evolve as infomercials, information-packed commercials.

Although some of the services included advertising logos on news pages, several managers said there should be no advertising on news pages and no forcing of ads on users - "That's why users will have to pay because advertisers won't be happy." One manager suggested videotext will have to structure the rates for advertisers based on usage, and "it will be our job to catch the user's eye." But, as another manager noted, "from our test, we found people enjoy looking at ads, so there shouldn't be any problem getting them to look at them."

The eventual growth of advertising on videotext, particularly of infomercials, raises some concern about the blur of advertising and news on the medium.

"The public has a tendency to take information at face value," said one manager. "We have to be very alert and have to be mindful of (the blur) at all times and must come up with news ways to handle it." Most of the managers agreed, however, that as long as advertising is clearly identified as such, the blur will not become a big problem, and will not hurt the credibility of videotext journalists. One manager said his service made "quite clear what was advertising and what wasn't," and that when users were asked if they could tell the difference, "they could." And another suggested that although the blur is a concern, "it's a problem for all journalists, all media, not just this one."

Other potential concerns for videotext journalists as the medium evolves are the issues of regulation and control. Should videotext be subject to any of the regulations now applied to the broadcast media? Almost all of the managers said no. Who should control the videotext system news is published on? Six of the 12 managers responding to this question said newspapers or news organizations should control the systems, and four said they'd prefer that newspapers had control, but many agreed that economically, that may not always be possible.

"It depends on who's willing to make the investment," said one manager. "If (newspapers) are not willing to take a risk, then they lose all rights to control." Another manager said he "would like to see a publisher have control, but no company has all the services and skills to do it alone - we're all going to have to work together. We'll

lose in certain areas and gain in others."

Two of the managers surveyed said "it doesn't matter" who owns the system, as long as it's someone responsible, and, hopefully, not a monopoly. "Ownership is not important. The important thing is that there be outlets for respectable conscientious news dissemination."

### Impact of Videotext

When videotext first debuted, many media watchers predicted the death of newspapers was soon to follow. The fact that videotext was a potential alternative to newspapers who were suffering the effects of soaring production costs and an antiquated delivery system, was enough to send shivers of fear and paranoia throughout the newspaper industry. The paranoia was fueled by articles in both the popular press and academic literature by authors who called videotext an "electronic newspaper" and invariably asked: "Is the end of the printed newspaper near?"

Well, a few years have passed since then and the paranoia has dimmed. And few people are asking that question anymore.

None of the managers or journalists surveyed predicted that videotex or teletext would replace newspapers or any other news medium, at least not in this century. Instead, more than 80 per cent of the respondents said videotext will complement the other media, becoming just one more part of the information mix. Each of the media has its own advantages and disadvantages, they said, and each will find its own niche based on its strengths.

"Videotex is going to be important because of its immediacy and flexibility but it won't be the only source of information, it'll be an add-on;" "We're in the information age. People will want more and more information and we'll all be able to co-exist." Some respondents suggested newspapers might find their niche in in-depth journalism, "doing more of the thing they do best."

A few respondents did predict that videotext would eventually be a serious competitor for the other media and variously suggested that it might cut into newspaper-reading time or TV-viewing time, or might hurt the circulation of magazines, weekly newspapers and small dailies. One manager predicted that "because of papers costs and because of the immediacy of this medium, we will eventually start to see newspapers disappear. Their production costs will continue to rise while ours will go down." And a journalist suggested that because of the current microcomputer revolution, the emphasis on computer education in schools and the fact that "newspapers gobble up resources in a way

that an environmentally-informed public is becoming impatient with...I believe that by the end of the decade, videotex will be in strong competition with traditional news providers." There is even "potential for videotex to overtake newspapers" some day, she added, although "I don't see videotex replacing TV or radio news sources."

By far, however, the majority of respondents said videotex would not be "in battle" with the other media. Videotex won't supplant TV "with its pretty pictures and passive nature," and it's "not much of a threat to newspapers because you still need newspapers to line your bird cage and take to the bathroom" and "to read on the way to work."

Other comments: "We won't be fighting each other because lots of people still like things in black and white and like to hold a newspaper in their hands;" "People seem to imagine that there's only one source of information with a capital I. But newspapers will still have horoscopes, etc., even if videotex and teletext do. We're not coming to take over, we're not going to kill off the other media. We're not meant to go in-depth;" "Should newspapers die, it will be because of economics, poor distribution methods and an inherent lack of flexibility, not because of videotex and teletext ."

One manager said videotext will actually increase usage of the other media. "People will get their information in a brief way and this will titillate them to go to other sources." And another suggested that "if there is going to be competition, it will be between videotex and teletext."

When asked specifically whether they felt the growth of electronic news delivery would benefit, hurt or have no effect on newspaper owners and management, 75 per cent of the managers surveyed said newspapers would benefit. But most qualified their answers by saying newspapers would benefit only "if they get involved," "if they control the systems," or "if they're intelligent about it." Twenty-five per cent of the managers said newspapers would be unaffected.

All of the managers said the public would benefit from the growth of videotext, typically adding that "any time another information medium opens, the public benefits." The news and information offered by the medium may be much the same as what's already available to the public from other sources, several managers noted, but it is more timely and accessible. Besides benefitting from what they get out of videotext, the public can also benefit from what they put in, said one manager, whose service runs regular columns contributed by subscribers.

Advertisers will also benefit, said most of the managers, because it's another outlet for them, and will create more competition for their advertising dollars. In

addition, videotex has the ability to target audiences for advertisers better than any other medium.

Half of the sixteen managers said reporting journalists would benefit from the growth of videotext, seven said they would be unaffected, and one said they would be harmed. One manager noted that although most of the news on videotext comes from wire services, "you still need someone to report the news for the wire." Almost all of the managers said editing journalists would benefit from videotext because it will make more jobs available for them.

Although it is likely that videotext will provide more jobs for editing journalists, there is some question about what the role of the editor in videotext will be. Will the key role of indexing on videotext turn editors into little more than librarians? Will the fact that videotext allows viewers to select the news they want to read and even gives them the option of programming their own news package diminish the role of the editor as gatekeeper and agenda setter?

When asked whether they thought the role of the editor was diminished in videotex, 11 of the managers surveyed said no and four said yes. Most of the managers said the role of the editor in videotex is just as important as in any other medium, and some said it was even more so.

"The editor must design the daily framework and make order out of the mass of data that is available from wire services. People would be lost without someone to put things in order and grade the news. It's a great journalistic contribution. In the past, the editor has been able to control the entire product, but on videotex he can't. He has to find ways to prevent user tunnel vision - that's even more challenging."

"The editor needs to set a pattern, to avoid information overload. The editor will be the backbone of those systems that choose to retain the human value of journalist's judgment rather than allow it to be software-driven by a cold machine."

"You still need an editor - people don't have time to sit and scroll through 1,000 AP stories. An editor must organize the news and make it readable."

"The editor will play the same role (as in the other media) but different editorial skills must be developed to organize all that information. Users can only be their own editors to the extent that someone else has organized it for them. On our service, we never left a reader wondering what to do at the end of a page. Every page had written guidelines to do something else, or told them what was on the next page, or told them about a related story. This makes the editor's job even more important."

"With a personal portfolio, people can decide for themselves what they want to read each day, but someone has

to assemble the news that goes onto the system. And there still has to be a way to alert people to something that is coming up. On videotex the editor has a heavy responsibility over a broader range of information than in a newspaper."

"The editor has to reformat stories, write headlines and code stories. That can't be done with the push of a button, you need a journalist to make judgment calls. We're learning every day how important the journalist is. We started off assuming that we could do it all technologically, but you need journalists."

Only one of the managers surveyed suggested that "the primary duties of the editor on videotext - selection, coding, illustrating and cross-referencing - are far more related to a librarian's than those of a news director."

### Videotext Journalism

In January 1984, the University of Western Ontario sponsored a conference called Videotex Journalism: Revolution or Rewrite? In conjunction with that conference, most of the managers and journalists surveyed here were asked which they believed videotext journalism to be - a revolution or a rewrite? The responses to the question were varied, reflecting, as many of these survey results have, that at this stage in the development of videotext, there are few certainties about the role journalism should play in this medium.

Some people said videotext journalism was definitely a revolution, some said it was a rewrite, and some said it was neither. According to one journalist, "It's an evolution."

A common response was that videotext journalism is, in fact, both a rewrite and a revolution - a rewrite in terms of the journalistic product, but a revolution in terms of its delivery.

"Just news, it's predominantly a rewrite," said one manager, "but we're not just talking about just news. The whole medium is a revolution in communication, not just what we traditionally call news. All these things (messaging, transactions, etc.) are thrown into the pie - you have to look at the whole spectrum." This opinion was echoed by another manager who questioned the value of even asking whether videotext journalism is a revolution or a rewrite in the first place - "That's a classic J-school question, typical of the journalist's way of looking at things from his own perspective. It's a very myopic way of looking at a new information medium."

The emphasis that many respondents placed on the fact that videotext is predominantly an "information" medium rather than a "news" medium raises a question of whether



what is being published on videotext and what is being produced by the services surveyed, can be called journalism. Although the question was not part of the original survey, during interviews a number of managers and journalists were asked: "Is what you're doing really journalism?"

Many, like the following journalist, said it definitely was: "Other journalists ask me all the time if this is journalism. I say: 'What were you trained to do as a journalist? To get out as much information as you can as accurately as possible. What better way to do it than in videotex?'"

But that opinion was not a universal one, as these comments by a manager indicate: "So far in this medium, journalism doesn't come into play so much - it's mostly market prices, weather news, market analysis, ads, news briefs, columns. We're not in the journalism trenches. We don't get into issues where we're a gatekeeper, we just churn back what a wire service gives us. It's a sanitized information product - I'm not real proud of that.

"(As a study by the American Newspaper Publishers Association has said:) There's not much commitment to journalism in videotex, just a commitment to money. Newspapers aren't in it to produce better journalism, but because they see an opportunity, they see a threat.

"If people buy us, it has nothing to do with out journalistic quality - it's because we have more timely information, volumes of information, electronic mail, teleshopping. I don't think it's having access to the New York Times that is selling videotex."

### Conclusions

From the results of this survey, it is apparent that there are both converging and diverging trends in the practice and theory of videotext news in North America - hardly a surprising finding, in light of the infancy of the medium.

Content-wise, the services tend to rely heavily on news wires and newspapers for their news content. While the amount of original reporting content varies, on the whole less than seven per cent originates with the services themselves. There is, therefore, little news available on North American videotext that is not available somewhere else. Opinions about whether original reporting content should be increased are somewhat mixed, but in general, respondents feel either that it should not be increased, or that it should not be increased until some point later in the development of the medium. Opinions on whether videotext should offer in-depth and investigative journalism are similarly mixed, without about half of respondents

saying that it should.

The majority of services offer edited-text, as opposed to full-text news, but there is no universal agreement that edited text is better suited for the medium. Among the edited-text services, however, style guidelines for the news product are fairly consistent.

The staff working on videotext services tend to be young and relatively inexperienced as journalists, but most do have some journalism experience or training. They do very little original reporting; their roles primarily involve editing and rewriting, and, in some cases, database and graphic design. Accordingly, editing and writing are considered to be the most important skills for a videotext journalist and reporting is rarely mentioned as a necessary skill.

Despite a number of drawbacks to working in videotext, the journalists tend to be very satisfied with their jobs, largely because of the newness and uniqueness of the medium. Both the journalists and managers surveyed are more enthusiastic about the medium than when they first got involved in it, and would like to be working in videotext five years from now.

In general, the managers surveyed believe videotext is primarily an "information" medium rather than a "news" medium and that news will only be one part of the information mix. The growth of videotex is expected to hinge on its interactive capabilities, rather than its news or information content.

Although some of the respondents believe videotext could give the other news media, particularly newspapers, some serious competition eventually, in general, they expect the media to complement each other, rather than to do battle. They also think videotext will benefit newspaper management (if they get involved), the public, advertisers and editing journalists, and expect the role of the editor on videotext to be just as important, if not more so, than the role of the editor in the traditional media.

CHAPTER VII  
THE USER SURVEY:  
Is Anybody Out There Reading Westex News?

Introduction

In the more than two years since Westex News began as an experiment in videotex journalism at the School of Journalism, those who have worked on the project have, for the most part, been isolated from the audience their news is intended to reach.

Unlike many of the other videotex and teletext news services in operation in North America, Westex has had little direct feedback from its users. There have been no phone calls or letters to the editor (angry or otherwise), no user focus groups, and only one survey - of Manitoba agricultural representatives who access Grassroots.

In large part, this lack of feedback has been due to the physical distance that exists between the Westex newsroom in London, Ontario and Grassroots subscribers in Western Canada. This physical isolation is exacerbated by the fact that Westex is only one of many "faceless" information providers on the Grassroots system.

Throughout the duration of this project, Westex did have access to "hit lists," computerized records that indicate the number of times each page of news is accessed by users. From these it was learned, for instance, that World News is the most frequently-accessed category on Westex and that index pages were used more often than documentation pages. But the hit lists were incomplete and offered little insight into the actual number, nature, opinions and preferences of Westex users.

The primary purpose of this exploratory study, then, was to broaden that insight - to learn how many users Westex has, who they are, what they read, and what they think of the service. As a corollary to that, the study also aimed to learn more about the Grassroots subscribers who DON'T use Westex News, and to compare the two groups of users.

The information obtained from this study, besides providing Westex staff with some long-overdue feedback on their news product, will give some indication of the impact of Westex News to date and offer some guidelines for its future development.

The secondary purpose of this study was not related specifically to Westex News, but to videotex news in general. Because the respondents of this survey are among

the first people in Canada to use videotex on a regular basis, it offered an opportunity to learn more about the potential of publishing news on this medium, and to learn what effect, if any, use of videotex has on usage of the other media.

### Review of the Literature

Although users of videotex and teletext services have been surveyed with some regularity since the earliest stages of the media's development, there are actually few research findings that are both available and pertinent to the present study. Much of the research carried out to date has not been made public by the services involved, and in many cases, has been marketing-oriented.

Although most of the videotex services surveyed for this report did not provide documented research findings, they did provide some verbal information about their users, primarily in terms of demographics - typical users are male, in their 30s to 40s, college-educated and upscale - and the most frequently accessed services - news, weather, games and sports.

These demographic characteristics of a videotex user have been a fairly standard finding of user research, particularly in its earliest stages. In a 1982 survey of CompuServe subscribers, for example, the profile that emerged was of a young (30 to 40), college-educated male with a household income well above average who owned and used a personal computer. (1) Similarly, in a study aimed at building a profile of potential users of an electronic newspaper, Tillinghast and Visvanathan found that young, affluent, well-educated male university students, with experience in computers, were the most likely to turn to videotex for news and information, perhaps even to the exclusion of a printed newspaper. (2) They also suggested that electronic newspapers will have the most appeal for active information seekers.

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1. RMH Research Inc., Synthesis of Findings for AP/Newspaper/CompuServe Program of Marketing Research, September, 1982.

2. Diana Stover Tillinghast and Nalini Visvanathan, The Electronic Newspaper: Building a Profile of Potential Users, a paper presented to the Mass Communication and Society Division, Association for Education in Journalism and Mass Communication annual convention, Oregon State University, August, 1983.

Although much of the literature written about the growth of videotext has centred on its potential impact on the use of the other media, particularly newspaper readership, there is actually little research available that has attempted to measure that impact. Because of the newness of the videotext media, some studies have merely speculated about their impact by asking subjects if they would give up reading newspapers if they could get the same information on videotext, (3) but such speculation is of limited value.

One study that did attempt to specifically examine the effect of videotex use on newspaper readership, as well as use of radio and TV, was the Associated Press's experiment with CompuServe, which gave users of the videotex service access to the full text of 11 daily newspapers and the AP newswire. (4)

The study found that after two years of access to the full-text services, 84 per cent of CompuServe users said they were spending the same amount of time with newspapers as compared to before they started using videotex, and only 10 per cent said they were spending less time. (5) About 83 per cent of users said they were spending the same amount of time with radio, while nine per cent said they were spending less time, (6) and 67% said they were spending the same amount of time with TV, while 28% said they were spending less. (7) The researchers concluded that CompuServe usage does not seem to affect traditional-newspaper readership or radio usage, but does seem to cause a decline in television viewing.

To date, there has been no similar research aimed at determining the impact of videotex use on Grassroots subscribers' use of the other media. Nor has there been any attempt to specifically examine their use of, or attitudes towards, news on Grassroots. Any research that has been carried out has been marketing-oriented, or aimed at obtaining a picture of attitudes towards the service in

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3. See, for example, Tillinghast and Visvanathan, op. cit. and Jacalyn Klein Butler and Kurt E.M. Kent, "Potential Impact of Videotext on Newspapers," in Newspaper Research Journal, Fall, 1983.

4. RMH Research Inc., op. cit.

5. RMH Research Inc., op. cit., p. 47

6. Ibid., p. 49.

7. Ibid., p. 50.

general.

In one such survey, carried out in 1982, CanWest Survey Research Corp. interviewed 94 Grassroots users. (8) Demographically, 96 per cent of the CanWest respondents were male, 51 per cent were farmers (37 per cent were agribusiness dealers and 12 per cent were in other businesses) and the three most important crops to the farmers were board grains, off-board grains and specialty crops. About 30 per cent of the farmers viewed themselves as being in the top 10 per cent of gross farm incomes when compared to other Manitoba farmers.

The respondents, among other things, were asked what types of information they had used on the service and how useful they found them. The most frequently used types of information were "local forecast" and "grain company street prices," both of which were used by 96 per cent of respondents. The most useful types of information were future prices and street prices (97 per cent of respondents.) The three information packages named most often as being the most helpful were those dealing with market/exchange information, weather and newsletters.

Some 67 per cent of respondents indicated they had used Broadcast News and 86 per cent described it as useful. Two other categories of news, whose source is not clearly identified in the CanWest report, were used by 55 per cent and 45 per cent of respondents, and described as useful by 77 per cent and 71 per cent, respectively. As a source of product information, Grassroots was ranked as either first or second most important source by 58 per cent of respondents, newspapers by 40 per cent, brochures by 34 per cent, magazines by 29 per cent, radio by 23 per cent and television by 17 per cent.

The CanWest survey was, of course, aimed at obtaining a general picture of user attitudes towards Grassroots - the only attempt that has been made specifically to determine attitudes towards, and usage of, news on Grassroots has been a 1982 Westex News survey of Manitoba agricultural representatives. (9)

The 15 agricultural representatives, only one of whom had never heard of Westex, said they felt farmer awareness of Westex was low and that this lack of awareness was the

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8. CanWest Survey Research Corp., The Evaluation of the Grassroots System: An Executive Summary, report prepared for Infomart, December, 1982.

9. Mark Dailey, Survey of Manitoba Agricultural Representatives' Views on the Grassroots System, with Special Emphasis on Westex News., School of Journalism, University of Western Ontario, July, 1983.

biggest problem Westex had to overcome. They said radio was the number one source of agricultural news for Manitoba farmers, and that the Manitoba Co-operator was the second most important source. They ranked daily newspapers, Grassroots, farm publications and Westex as being of intermediate importance, and ranked government publications and television low. Some 66 per cent of the ag reps rated Westex News as being only marginally useful to farmers when compared with the other services on Grassroots.

### Methodology

Despite the CanWest and Westex News surveys, an understanding of videotex journalism and the impact of Westex News still suffered from a dearth of relevant information. A more current and comprehensive appraisal of the service seemed warranted and this need resulted in the Westex News Appraisal Survey.

The survey questionnaire was partially adapted from the 1983 Westex News survey of Manitoba agricultural representatives. An early version of the questionnaire was administered in person to five Ontario users of Grassroots to determine if any of the questions were unclear or unsuitable. On the basis of this pre-test, several modifications to the survey instrument were made.

The cover letter accompanying the questionnaire (10) was addressed to "Grassroots subscriber," printed on University of Western Ontario letterhead and signed by Peter Desbarats, Dean of the School of Journalism. It requested that the most frequent user of Grassroots in the household or business of the recipient fill out the survey, and gave a six-week deadline for returns.

Based on established research procedures, various techniques were used in this survey to maximize the rate of response. (11) These included: Use of stamps on outside envelopes rather than metred postage; inclusion of a business reply return envelope; inclusion of a return deadline; guarantees of anonymity and confidentiality of responses; and a follow-up postcard reminder.

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10. For a copy of both the survey and the cover letter, see the Appendix.

11. See, for example: Arnold S. Linsky, "Stimulating Responses to Mailed Questionnaires: A Review," in Public Opinion Quarterly, Vol. 39, 1975, p. 82, and Earl R. Babbie, Survey Research Methods, Belmont, California: Wadsworth Publishing Co., Inc., 1973.

The questionnaires were sent to a sample of 304 Grassroots users in Manitoba, Saskatchewan and Alberta, selected at random from a population of about 950 users by an Infomart computer in Winnipeg. The questionnaires were mailed in mid-January and returns were requested by the end of February, a deadline of six weeks. Approximately three weeks after the surveys were mailed, a postcard reminder notice was sent out to the entire sample, except for a few individuals who had identified themselves on their returned questionnaires.

## Results

### Respondent Demographics

A total of 94 persons completed and returned the Westex News Appraisal survey - a response rate of 30.9 per cent. This rate of response is less than desirable relative to typical survey standards and indicates that caution should be exercised in the interpretation of the data. Nevertheless, the information provided by the survey is still instructive.

Not all respondents answered each item on the questionnaire; the rate of non-response and/or non-usable responses ranged from 1.1 per cent to 47.9 per cent on individual items. Throughout the discussion of the results, items where the non-response rate was large will be noted, and possible explanations for the non-response offered.

Respondents to this questionnaire had been using Grassroots anywhere from one month to three years, with a mean, median and mode of about 12 months. Their weekly access rate of Grassroots ranged from one to 35, with an average of 7.7 times per week, but almost 60 per cent actually accessed it five times or less. More than 10 per cent of the responses to this item could not be included in the calculation of average access rate because a number of respondents gave a verbal, rather than numerical description of their Grassroots use.(12)

In addition, more than 90 per cent of respondents said they have demonstrated Grassroots to friends or visitors to their home.

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12. Such responses included: "seldom," "constantly on weekdays," and "one hour a day." For these and other unusable survey responses, see Appendix of Survey Responses.



The mean age of the respondents was 38.36, with a standard deviation of 10.08 years; the median age was 36.6. More than 90 per cent of respondents were male and slightly more than six per cent were female. Half of the respondents were full-time farmers and almost one-fourth worked in an agriculture-related business or profession. Almost 12 per cent worked in occupations unrelated to agriculture, and another 12.8 per cent did not describe their occupations in terms specific enough to determine whether or not they were ag-related. Of the respondents who reported that farming was not their full-time occupation, more than 25 per cent said it was their part-time occupation. Thus, the total number of respondents involved in farming, either on a full- or part-time basis, was 62.8%. More than 80 per cent of respondents were from the province of Manitoba; 10.6 per cent were from Alberta, and 7.4 per cent from Saskatchewan.

A majority of the farmers were involved in the production of board grains (87.9%), off-board grains (78.9%) and specialty crops (43.9%), and more than half reported average yearly gross farm sales of \$200,000 or more. The single most-frequently cited category of gross farm sales (25.5 per cent of the respondents) was \$100,000 to \$199,999. More than 40 per cent of the farmers viewed themselves as being in the top 50 per cent of gross farm incomes when compared to other farmers in their province, about 27 per cent saw themselves in the top 25 per cent, and about 18 per cent in the top ten per cent.

Farm size of the respondents ranged from 12 acres to 6010 acres with a median of 1200 acres, and both the average and median number of years the respondents had been involved in farming was about 14.

The respondent demographics of sex, occupation and crops were similar to those identified in the 1982 CanWest survey of Grassroots users, indicating that the respondents of the present survey were fairly representative of the population from which they were drawn, at least to the same extent that the CanWest respondents were representative.

More than three-fourths of the respondents were married, about 15 per cent were single, and about three per cent were divorced or separated. About 40 per cent of the respondents had no children living at home, and of those that did, more than half had two.

The education level of the respondents ranged from grade school to post-graduate, with more than 60 per cent having at least some college or university. About 36 per cent of respondents said they had a college or university degree and 8.5 per cent had done post-graduate work.

### General Use of Media

Through a series of questionnaire items, respondents' general use of news and information media was identified.

Respondents were given a list of the following publications: weekly newspaper, daily newspaper, the Western Producer, Grainews, Country Guide, Commodity group publication(s), Department of Agriculture newsletters/publications and Maclean's magazine, and were asked to indicate which publications they received at home, and how frequently they read each of the publications listed on a scale from one (never) to five (often).

Data obtained from this questionnaire item does not lend itself to any firm conclusions because more than 80 per cent of respondents failed to answer the question completely. Almost 10 per cent did not check off the publications received at home, and more than half did not indicate all the periodicals read - for the most part, they tended to rate only their use of those periodicals which they had indicated they received at home. Although it might be assumed that those periodicals not rated were never read, it would be unsafe to do so. In the pre-test of the questionnaire, this item had proved to be confusing and was subsequently modified, but apparently its meaning was still unclear.

Of those respondents who did indicate their use of individual publications, it was found that more than 75 per cent read a weekly newspaper and almost 70 per cent read a daily newspaper "quite regularly" or "often." Grainews was read "quite regularly" or "often" by 75 per cent of respondents, Country Guide by almost 70 per cent, commodity publications by 63 per cent, Agriculture Department newsletters/publications by 62 per cent, Maclean's magazine by almost 39 per cent, and the Western Producer by 18 per cent.

Respondents also were asked how many times in an average week they access Broadcast News, and listen to the news on the radio and television. For all three of these questions, there were a number of unusable answers (as many as seven per cent) from respondents who described their use of these media ver bally rather than numerically. (i.e. "constantly," "seldom," "occasionally.")

Usable answers indicated that more than 55 per cent of respondents indicated that they did not access Broadcast News. Of those that did, almost 60 per cent said they did so only once or twice a week, and only 12 per cent used it once a day or more.

Only eight per cent of respondents indicated they never listened to the news on the radio. Those that did listened to radio news an average of 10 times per week, with more than 60 per cent listening once a day or less. Almost 95 per cent of respondents reported they watch news on TV; their viewing averaged six times a week, with only about 10

per cent watching one a day or more.

Respondents were also asked to rank the various media according to their importance as a source of agricultural news and information. Unfortunately, many respondents did not rank all of the media listed. In some cases, respondents said they had not ranked some of the media because they simply never used them. Others ranked only newspapers, radio and TV in terms of their importance as a general news source, and left the other categories blank, saying they had no interest in agricultural news. As a result, individual media were left unranked by anywhere from 16 per cent to 42 per cent of respondents.

Of those respondents who did rank the media, 37.2 per cent said radio was their most important source of agricultural news and information and 29.1 per cent said Grassroots was. The disparity between radio and Grassroots became even smaller when respondents' rankings of "most important" source and "second most important" source were combined, as seen in Table 1. Radio was ranked as first and second most important source of agricultural news and information by 53.9 per cent of respondents and Grassroots, by 49.4 per cent. The least important sources of agricultural news and information were television, newsletters and the Western Producer, while newspapers and commodity magazines were ranked fairly equally as third or fourth most important source.

-----INSERT TABLE 1-----

Respondents were also asked to identify what source they would be most likely to turn to for several specific types of information. For weather information, more than 45 per cent of all respondents said they would turn to Grassroots, and almost 35 per cent said radio. Fourteen per cent said television, and only about two per cent said newspapers. For commodity information, Grassroots was an even more dominant choice - 84.7 per cent of respondents said they would turn to the videotex service, while only eight per cent said radio, and about two per cent said newspapers. Four per cent said they would turn to "other" sources, primarily industry contacts such as an elevator manager, commodity broker or trader.

Respondents were also asked where they would be most likely to turn for information about how a world event might affect them and the prices for their commodity, and for information about farm management techniques such as financial planning and herbicide use. For these two categories, almost 20 per cent of responses were unusable, with a number of respondents noting that they were not interested in this information because they don't farm.

TABLE 1

## RANKING OF MEDIA AS SOURCE OF AGRICULTURAL NEWS AND INFORMATION

	<u>1st/2nd</u>	<u>3rd/4th</u>	<u>5th,6th,7th</u>
Radio	53.9%	28.2%	17.9%
Television	20.9	20.9	58.3
Newspapers	33.4	34.6	32.0
Grassroots	49.4	35.5	15.2
The Western Producer	20.4	35.2	44.5
Farm/Commodity Magazines	38.6	38.6	22.9
Department of Agriculture newsletters	24.3	28.6	47.1

Of those who did respond, however, almost half (47.4%) said they turn to Grassroots for information about a world event, and almost equal numbers of the remainder said they would turn to radio (21.2%) and newspapers (19.7%); only four per cent said television, while almost eight per cent said "other." Again, "other" sources were primarily personal contacts in the industry.

For practical information about farm management techniques, more than half chose Grassroots as the source they would most likely turn to, but almost all of the remaining respondents (43%) said they would turn to "other" sources for such information. The two major "other" sources were publications - particularly those written by provincial or federal departments of agriculture - and personal contact with such industry specialists as agricultural representatives, agronomists and farm supply dealers.

A number of questionnaire items were aimed at identifying respondents' attitudes towards, and use of, news on videotex in general. When asked to give their opinion about the amount of news on Grassroots, about two-thirds said there was "about the right amount," almost 30 per cent said "not enough" or "somewhat too little" and only about six per cent said "somewhat too much" or "too much." On the question of whether a news service that offers news of particular interest to farmers (as opposed to just general news) is needed on Grassroots, an overwhelming majority (90%) said yes. On both of these questions, about 15 per cent of respondents did not answer, with some indicating they had no opinion.

Those respondents who agreed there was a need for an agricultural news service on Grassroots were then asked if they thought there was a need for Westex News in particular. Almost 30 per cent of respondents either gave no response or said they had no opinion because they don't use Westex. Of those who did respond, almost 80 per cent said there was a need for Westex.

Respondents also were asked whether they ever access Grassroots just to read the news. Responses were almost evenly split - 52.7 per cent said no, 47.3 said yes. But only about 22 per cent of respondents said they ever skip the news on radio or TV because they plan to watch it at a more convenient time on Grassroots.

At what time of day would Grassroots users be most likely to access the service to read the news? Because the agricultural representatives surveyed in 1983 by Westex News suggested that farmers' reading habits would be influenced by the season of the year, respondents were asked to indicate when they would be most likely to read news on videotex in both summer and winter. More than 20 per cent of respondents did not answer this question or gave unusable answers. It is unknown whether their lack of response meant

they wouldn't watch news on videotex at anytime, or that they had no opinion. Because of the large number of non-farmer respondents to this questionnaire, there were also those who indicated that their reading habits would be unaffected by the time of year.

Of those that did respond to this item, their preference for winter reading was fairly evenly split between the evening (28.4%), the afternoon (23%) and the morning (21.6%). About 15 per cent indicated they would watch anytime, or at two or more different times during the day, almost 11 per cent said they would read it at noon, and 1.4 per cent said they wouldn't read it at all.

For summer reading, however, evening emerged as the predominant preference, with almost half (48.6%) of respondents choosing that time. Another 20 per cent said they would read news on Grassroots in the morning, 10.8 per cent said they would read it in the afternoon, more than 13 per cent said they would read it anytime, or at two or more different times, less than three per cent said they would read it at noon, and more than four per cent said they wouldn't read it at all.

These findings are interesting in light of the fact that when Westex News first went online, it had a noon deadline, aimed at reaching a lunchtime audience. As the results of this survey indicate, however, only a limited number of users would actually read news at noon, preferring the evening, particularly in summer, or, to a lesser degree, mornings and afternoons. Less than six months after going online, Westex moved its deadline to late afternoon because of computer tie-ups in Winnipeg - a move that, unwittingly, was actually better suited to audience use.

In general, use of Grassroots appears to have had no large impact on respondents' use of the other media. As Table 2 shows, about three-fourths of respondents consistently said their present use of radio, television, newspapers and newsletters, as compared to before they started using Grassroots, was "about the same." Few respondents said they were spending more time on the other media than previously - about 25 per cent said they were spending "somewhat less time" or "much less time" on newspapers, about 23 per cent said they were spending less time on television and newsletters and 18 per cent said they were spending less time on radio.

-----INSERT TABLE 2 HERE-----

However, when compared to the findings of the 1981 CompuServe experiment, there does appear to be some decline in the use of newspapers and radio among Grassroots users. CompuServe users reported they were spending 10 per cent less time with newspapers and nine per cent less time with

TABLE 2

## USE OF OTHER MEDIA, COMPARED TO BEFORE BEGAN USING GRASSROOTS

	RADIO	TELEVISION	NEWSPAPERS	NEWSLETTERS
Much less time	3.2%	4.3%	8.5%	7.4%
Somewhat less time	13.8	17.0	16.0	14.9
About the same	74.5	72.3	71.3	72.3
Somewhat more time	5.3	2.1	3.2	0
Much more time	0	0	0	0
DNA	3.2	4.3	1.1	5.3

radio. Twenty-eight per cent of CompuServe users indicated they were spending less time with television, a finding similar to that of the present study. (13)

In the literature on videotex, a number of characteristics of the medium have been identified as deterrents to its growth as a popular news medium, when compared to newspapers. These include: The expense of videotex, its lack of portability, the active effort required to use it, the tediousness of reading from a screen, and the fact that readers are unable to keep clippings. In general, however, the respondents to this survey did not appear to find the above characteristics to be clearly disadvantageous. About half said the expense of videotex and the fact that it requires more work (i.e. sorting through indexes) were drawbacks when compared to newspapers, while only a third or less said the tediousness of reading from a screen and the lack of portability and clippings were disadvantages.

#### Use of Westex News

More than half of the respondents said they had accessed Westex News at least once, while 44.7 per cent reported they had never accessed it at all. Of the respondents who said they had never accessed Westex News, the majority (62.5%) said it was because they "didn't know it was there." This lack of awareness of Westex was unrelated to either how long a respondent had had his terminal or how often he accessed Grassroots.

Another 7.4 per cent said they have never accessed Westex because they "don't have time" and a similar number indicated they had "other" reasons. In at least two cases, the "other" reason was a financial one: "(Direct distance dialing) charges 50 cents a minute to access Grassroots so we use only commodity prices and farm market - not Westex News;" "At 40 cents per minute, we just access the services that we need." (Both of these respondents were from either Alberta or Saskatchewan, where Grassroots subscribers, unlike those in Manitoba, must pay for long-distance telephone access of the service.)

Three other respondents said they've never accessed Westex because they don't use Grassroots much, period. And two respondents said they didn't know what Westex offered. One who was not interested in agricultural news said he "didn't know (Westex) had non-agricultural information.

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13. RMH Research, Inc., op. cit.



Interestingly, another respondent who was interested in agricultural news commented later on in his survey that he "had a preconceived notion Westex was not agriculture," and suggested changing the name of Westex to "Agritex."

Of the respondents who had accessed Westex, more than 75 per cent said they had first done so while browsing through Grassroots. Another 14 per cent said they had begun accessing Westex after seeing it advertised on the Grassroots information page "What's New", and only six per cent said a mailed advertisement they had received about Westex spurred their initial access of the service. One respondent said he had accessed Westex after it was demonstrated to him. A respondent's initial access of Westex was also unrelated to the length of time he had had his terminal or how often he used Grassroots.

Although respondents were not asked specifically whether they ever browse through Grassroots, the fact that so many Westex users first accessed the service by browsing might mean that those respondents who were unaware of Westex tend to be non-browsers. In some cases, as respondents indicated, this tendency is linked to the expense of accessing Grassroots. For others, the tree-structure of videotex may discourage them from browsing, or they simply may not be curious enough to browse. Whatever their reason for not browsing, it is unrelated to how familiar they become with the medium over time.

One interesting hypothesis is suggested by the role of browsing. It may be that, short of any attempts to deliberately increase awareness of Westex through some form of advertising, awareness of the service has reached the saturation point among current Grassroots users, and will increase only in proportion to the number of new users who begin accessing Grassroots, and are willing to browse. And given that only 20 per cent of Westex users began accessing the service because of Grassroots or mailed advertising, it is possible that even increased advertising would fail to stir large numbers of non-browsers to access the service.

Of those respondents who have used Westex, one-third said they have accessed the service "several times, but never on a regular basis." Another 27.5 per cent said they have accessed Westex "only once or twice." Significantly, however, the third most frequent response (15.7%) was "two to four times a week." And cumulatively, almost 30 per cent of the respondents said they use Westex at least once a week, suggesting that there is a small core of fairly regular Westex readers.

Those respondents who indicated they had accessed Westex only once or twice were asked why they had never accessed it again. Only two of the 18 respondents to this question said they "didn't like" Westex, and both said they didn't like it because it offers much the same news that is

available on the other media. Two respondents said they had never accessed Westex again because they were "not interested in news," three said they "didn't have time" and four said the news on Westex "was available elsewhere on Grassroots." Six respondents gave "other" reasons for not accessing Westex again. Three said it was because their terminal was located at their place of business: "I don't have time for news at work," "Our unit is used mainly for grain prices," and, "(Westex) is not applicable to our business." Other individual responses included: "It's all agriculture and I don't farm," "It's the same news that you pick up in publications and reading off a screen is not the easiest for me," and, "I haven't made a habit of it yet."

Respondents who had accessed Westex several times or more were asked which of the news categories offered on Westex they had ever accessed, even if it was just once. More than 90 per cent of these respondents said they had accessed National News, 80.6 per cent had accessed Manitoba News, 77.8 per cent had accessed Prairie News, and 75 per cent had accessed World News. Saskatchewan News had been accessed by only 27.8 per cent of the respondents, Ontario News by 25 per cent, and Alberta News by 22.2 per cent.

When asked to indicate which three news categories they used most often (or were most interested in reading) and to rank them in descending order, World News came out on top - almost 40 per cent of the people responding to this question said it was the category they accessed most frequently. Prairie News was read most frequently by 26.5 per cent of the respondents, and Manitoba News, by 20 per cent. Top choice as the second most frequently accessed category was National News (more than 63 per cent of respondents), and as the third most frequently accessed category, Manitoba News (33.3 per cent of respondents).

Asked whether they ever browse through Westex News by pushing the Next button to lead from one story to the next, 85.7 of the people responding to this question said "yes." But when asked whether they prefer to browse, or to go straight to stories they think might be of interest, only 8.6 per cent said they prefer to browse. More than three-fourths said they prefer to go straight to stories of interest, and 14.3 per cent said they had no preference either way.

When asked to rate the usefulness and clarity of Westex headline pages on a scale from one to five, none of the respondents rated them as less than a "3" on either characteristic. Although more than half of the respondents chose a middle-of-the-road "3" ("moderately useful" and "reasonably clear") for both questions, the remainder all rated them higher. This questionnaire item was divided into part A and part B for separate ratings of the usefulness and clarity of headline pages, and in several cases, respondents

indicated a rating on only the scale in part A. It is uncertain whether they meant that single rating to apply to both characteristics, or whether they were confused by the wording of the question.

Middle-of-the-road responses were even more predominant when respondents were asked their opinion of story length on Westex News - almost 94 per cent said stories were "about the right length." The remaining respondents were split evenly between "too short" and "too long." It is unclear whether respondents chose the middle answer because that was actually their opinion, or because they had no opinion at all.

Respondents were also asked to rate Westex News compared to other services offered on Grassroots, in terms of usefulness and interest. Again, in both cases, a majority chose a "3" on the rating scale ("moderately useful" and "moderately interesting"). However, almost 80 per cent of respondents rated Westex usefulness as at least a "3", with 23.5 per cent rating it as a "4" and 5.9 per cent as a "5". And more than 80 per cent said Westex was at least "moderately interesting," with 26.7 per cent rating it as "quite interesting" and 10 per cent as "very interesting." Again, as in the question relating to Westex headline pages described above, a number of respondents rated only the usefulness of Westex News and left the second scale pertaining to Westex interest blank.

The rating of the usefulness of Westex is encouraging when compared to the response of Manitoba agricultural representatives to a similar question in the 1983 Westex survey. Two-thirds of those ag reps said Westex was only "marginally" useful, when compared to other Grassroots services.

Almost 60 per cent of respondents who had accessed Westex at least once had also accessed Broadcast News (BN) on Grassroots. And more than 80 per cent of those who had accessed Westex News several times or more had also accessed BN.

Those respondents who had accessed Westex several times or more were asked to compare Westex and BN in terms of seven characteristics: Frequency of updating, amount of general news, amount of agricultural news, variety of news categories, number of feature stories, organization of content and ease of reading. There was a high rate of non-response for this question - ranging from 31 per cent to 41 per cent on the seven individual characteristics. One possible explanation for this is that respondents did not feel they had used both services often enough to compare them. A few people did, in fact, indicate that that was the case, or said they had no opinion, but others simply left part or all of the question blank. In addition, a few respondents indicated they did not understand a term used in

the question (i.e. frequency of updating) by putting a question mark in the appropriate space instead of a check mark.

Of those who did respond to these items, their ratings of the two services were as follows: BN's frequency of updating (constantly throughout the day) was rated as superior by more than 40 per cent of those who compared the two services on this characteristic, but more than 30 per cent rated the once-a-day updating of Westex as superior, indicating no clear preference between the two. On this, and every other characteristic, about 10 per cent of respondents rated both services the same, and about 15 per cent said they had no opinion.

As might be expected, given that Westex is primarily an agricultural news service, almost 70 per cent of the respondents rated BN as superior on the amount of general news offered and more than 70 per cent rated Westex as superior on the amount of agricultural news offered. Congruently, a majority (59.1%) of respondents rated BN as superior on the variety of news categories it offered, but there were no clear differences in the ratings each service received on the number of feature stories offered and content organization. Almost 58 per cent of respondents, however, rated Westex as superior on the characteristic of reading ease.

In a separate question, respondents were asked how often they thought Westex News should be updated. Almost 45 per cent said "continuously during the day," 32 per cent said "once a day" and 23 per cent said "twice a day." More than half of the respondents who also accessed BN said Westex should be updated constantly, while two-thirds of the respondents who did not access BN said Westex should be updated only once a day. None of the latter group said Westex should be updated constantly. This suggests that a once-a-day update (equivalent to a daily newspaper) is acceptable to those who have never been exposed to more frequent updating, but is less acceptable to those who have.

Although Westex is primarily an agricultural news service, it has offered varying amounts of general news during its operation. Respondents were asked to indicate their opinion of the amount of general news on Westex on a scale from one to five, from "not enough" general news to "too much." This question had a non-response rate of 26 per cent, perhaps again because people felt they had not used the service enough to judge its content. Of those who did respond, half said Westex had "about the right amount" of general news while the remainder were split between "somewhat too little" general news (28.6%) and "somewhat too much" or "too much" (21.5%).

Those who had rated the amount of general news as "somewhat too much," or "too much" were asked why they

considered the general news content too high. They were offered four alternatives and asked to check all that applied. Although the small number of respondents to this question (eight) makes it impossible to form any firm conclusions, six of them said that "Grassroots is a business tool for farmers, not a newsmagazine or daily newspaper." Only slightly more than a third indicated that they considered the Westex general news content too high because "radio and newspapers provide the same service free of charge or at a small cost," or because "Broadcast News already provides enough general news on Grassroots."

About 65 per cent of Westex users said they have demonstrated the news service to friends or visitors to their home, considerably less than the number of respondents who have demonstrated Grassroots in general. But, considering the large number of services available on Grassroots, the fact that 65 per cent of Westex News users have shown it to others may be a hopeful sign in terms of increased general awareness of the service.

#### Westex Users Vs Non-Users

Demographically, the 51 respondents who had accessed Westex News were similar to the 43 who had not. The two groups were compared in terms of age, sex, occupation, education, province, marital status, number of children, length of time they had had their terminal, and their weekly Grassroots access rate, and there proved to be no significant differences between them. (Note: When "significant differences" are mentioned throughout this discussion, the .05 level of significance has been used. The test used to define significance was the Chi Square.)

Those respondents who were involved in farming, either on a full- or part-time basis, were also compared in terms of their type of farming operation, farm size, farm sales, where their income falls and length of time farming, and there proved to be no significant differences between Westex users and non-users here as well.

The two groups were also compared in terms of their use of other news media and information sources. There were no significant differences between them in terms of their use of the Western Producer, Grainews, Country Guide, Agriculture Department newsletters and publications or Maclean's magazine.

Westex users were more likely to receive a weekly newspaper at home than non-Westex users, and non-users were more likely to receive a daily newspaper, but neither group tended to read a weekly or a daily more regularly than the other. The only other periodicals whose use differed

between the two groups were commodity/farm magazines - more than half of the Westex users said they read such magazines "often" while less than 20 per cent of non-users said they did so.

More than 80 per cent of Westex users reported they had accessed BN, and the more regularly they used Westex, the more likely they were to have also accessed the newswire. In contrast, only 36 per cent of non-Westex users said they used BN. This seems to suggest that those who use (or don't use) either news service on Grassroots tend to do so universally, rather than to the exclusion of the other service.

Of those respondents in both groups who used BN, however, there was no significant difference in how often they did so. The average use of BN for both Westex users and non-users was three times a week, with well over half using it only once or twice a week. There were also no significant differences between the two groups in terms of their use of radio or television news.

Both similarities and differences between Westex users and non-users emerged when they were asked to describe their use of other media at the time of the survey, as compared to before they began accessing Grassroots.

As Tables 3 and 4 show, there were significant differences between the two groups in their comparable use of television and newsletters. More than 30 per cent of the Westex users reported they were spending "much less time" or "somewhat less time" on television, while only 10 per cent of the non-users said they were doing so. More than 30 per cent of Westex users were also spending less time on newsletters, compared to about 13 per cent of the non-users.

-----INSERT TABLES 3 AND 4 HERE-----

When asked to rank radio, television, newspapers, Grassroots, the Western Producer, commodity/farm magazines and Agriculture Department newsletters/publications according to their importance to the respondent as a source of agricultural news and information, Westex users and non-users ranked all of them similarly. Although it was not statistically significant, there was a slight tendency ( $p=.09$ ) for Westex users to rank television higher than non-Westex users, a surprising trend in light of the finding that Westex users were spending less time with TV, compared to when they first began accessing Grassroots.

Some differences between Westex users and non-users did surface when respondents were asked what source they were most likely to turn for four specific types of information. As Tables 5 and 6 show, Westex users tended to turn to Grassroots somewhat more than non-users for commodity information, and much more for information about how a world

event might affect commodity prices. Specifically, more than 95 per cent of Westex users said they would turn to Grassroots for commodity information, compared to 75 per cent of non-users, and more than 70 per cent of Westex users said they would turn to Grassroots for information about a world event, compared to 18.2 per cent of non-users.

-----INSERT TABLES 5 AND 6 HERE-----

For both information about the weather and farm management techniques, there were no significant differences between the groups in their preferred source.

On the more general questions about news on Grassroots, there were again both similarities and differences between Westex users and non-users in their responses. There was no significant difference in their opinion about the amount of news on Grassroots (in both cases, the majority said "about the right amount") or in their opinion about whether there's a need on Grassroots for a service that offers news of particular interest to farmers. Although it was not significant at the accepted criterion, Westex users did show more of a tendency ( $p=.07$ ) to say there was a need for an agriculturally-oriented news service than non-users.

On the question of whether Westex News in particular was needed on Grassroots, 83.3 per cent of Westex users said the service was needed, compared to 70.8% of non-users. But the difference was not significant, especially in light of the fact that almost 60 per cent of the non-users either did not answer this question or said they had "no opinion." The fact that there were no significant differences between Westex users and non-users on this question, when it might have been expected that non-users would be much less likely to agree there was a need for the service, might be suggesting that there is a potential audience for Westex among Grassroots users who are not already using the service. Alternatively, it may simply have been a case of respondents answering this question the way they thought the researchers would want them to.

Much clearer differences between Westex users and non-users emerged when they were asked if they ever access Grassroots to read the news and if they ever skip the news on radio or TV because they plan to read it on Grassroots at a more convenient time. More than 60 per cent of Westex users said they access Grassroots just to read the news, compared to 27.5 per cent of non-users. And more than 30 per cent of Westex users said they have skipped the news on radio or TV, compared to only 7.5 per cent of non-users.

In general, Westex users and non-users were fairly evenly matched in their opinions of the disadvantages of obtaining news from videotex, compared to newspapers. In both groups, about half of the respondents said the expense

TABLE 3  
 CROSS-TABULATION OF WESTEX USE  
 BY COMPARED USE OF TELEVISION

AMOUNT OF TIME SPENT WITH TELEVISION  
 AS COMPARED TO BEFORE BEGAN ACCESSING  
 GRASSROOTS

	MUCH LESS TIME	SOMEWHAT LESS TIME	ABOUT THE SAME	SOMEWHAT MORE TIME
RESPONDENTS WHO ACCESS WESTEX	8.2%	24.5%	67.3%	0
RESPONDENTS WHO DO NOT ACCESS WESTEX	0	10.0%	85.0%	5.0%



TABLE 4

CROSS-TABULATION OF WESTEX USE BY  
COMPARED USE OF NEWSLETTERS

AMOUNT OF TIME SPENT WITH NEWSLETTERS  
AS COMPARED TO BEFORE BEGAN ACCESSING  
GRASSROOTS

	MUCH LESS TIME	SOMEWHAT LESS TIME	ABOUT THE SAME
RESPONDENTS WHO ACCESS WESTEX	6.1%	24.5%	69.4%
RESPONDENTS WHO DO NOT ACCESS WESTEX	7.7%	5.1%	87.2%

TABLE 5

CROSS-TABULATION OF WESTEX USE BY  
SOURCE OF COMMODITY INFORMATION

	INFORMATION SOURCE			
	RADIO	DAILY, WEEKLY NEWSPAPERS	GRASSROOTS	OTHER
RESPONDENTS WHO ACCESS WESTEX	2.3%	2.3%	95.5%	0
RESPONDENTS WHO DO NOT ACCESS WESTEX	15.0%	0	75.0%	10.0%

TABLE 6

CROSS-TABULATION OF WESTEX USE BY  
SOURCE OF WORLD INFORMATION

	INFORMATION SOURCE				
	RADIO	TELEVISION	DAILY, WEEKLY NEWSPAPER	GRASSROOTS	OTHER
RESPONDENTS WHO ACCESS WESTEX	14.3%	2.4%	9.5%	71.4%	2.4%
RESPONDENTS WHO DO NOT ACCESS WESTEX	30.3%	6.1%	30.3%	18.2%	15.2%

of videotex and the effort involved in using it made it less attractive as a news source and a third or less said the tediousness of reading from a screen and videotex's lack of portability and clippings were deterrents to using the medium for news.

#### Impact of Videotex Use

To determine whether respondents' use of videotex is related to general media use, a number of media-related variables were cross-tabulated with both the length of time respondents had had their Grassroots terminal and the number of times per week that they accessed the videotex service. The length of time respondents had had their terminals ranged from one to 36 months, but for the purposes of the cross-tabulation, three compacted time periods were created - less than a year, from 12 months to 23 months, and 24 months or more. Similarly, for the weekly Grassroots access rate, which ranged from one to 35, three compacted access rates were also created - less than seven times a week, between seven and 13 times a week, and 14 or more times a week. Because there was an unequal distribution of respondents among the three categories for each variable, there was some potential for distortion, but the divisions made were felt to be the most appropriate.

There proved to be no significant relationship between the length of time a respondent had had a terminal and his use of Broadcast News, radio news or television news, his ranking of the importance of radio, television, newspapers, Grassroots, the Western Producer, or Agriculture Department newsletters and publications as a source of agricultural news and information, his choice of source for information about the weather, commodities, world events or practical farm management techniques, or his present use of television, radio, newspapers or newsletters, compared to before he started accessing Grassroots.

Although it was not statistically significant, there was a tendency ( $p=.06$ ) for those respondents who had had their terminals the longest turn to "other" sources such as publications and industry contacts for practical farm management information, while those who had had their terminals for less time were more likely to turn to Grassroots.

Although there were also no significant differences in terms of long-time and short-time users choice of weather information source, it is interesting to note that of those respondents who had had their terminal for two or more years, 78 said Grassroots was their primary source of weather information, compared to 40 per cent of those who had had their terminal for less than a year.

Respondents' frequency of Grassroots use was also unrelated to most of the media variables outlined above. There was, however, a significant relationship between Grassroots use and respondents' present use of newspapers, as compared to before they began accessing Grassroots. As Table 7 shows, 50 per cent of respondents who access Grassroots at least twice a day reported they spend "somewhat less" or "much less" time with newspapers, compared to 31.3 per cent of respondents who access Grassroots at least once a day (but less than twice a day), and 18.5 per cent of respondents who access Grassroots less than once a day.

-----INSERT TABLE 7-----

While the significance of this finding is limited somewhat by the fact that it involved respondents "reported" use of newspapers rather than an actual measurement, and by the use of compacted access rates, it does seem to suggest that the more frequently a person uses a videotex service, the more likely he is to spend less time with a newspaper. In addition, although it was not significant at the accepted criterion, it tended to be the case that the more often a respondent accessed Grassroots, the more likely he was to report that he spends less time with television ( $p=.08$ ) and the more likely he was to rate radio lower as a source of agricultural news and information.

The variable of Grassroots access rate was also cross-tabulated with occupation, and it was found that the most frequent users of Grassroots were those involved in agribusiness or agriculture-related professions. As Table 8 shows, 65 per cent of this group accessed Grassroots at least once a day, compared to 25.6 per cent of the respondents who were full-time farmers, 22.2 per cent of the respondents whose occupations were unrelated to agriculture, and 36.7 per cent of those for whom it was unknown whether or not their occupation was ag-related. Furthermore, 40 per cent of the agribusiness/agri-professional group accessed Grassroots at least twice a day, compared to 11.6 per cent of the full-time farmers.

-----INSERT TABLE 8 HERE-----

While there had been no significant differences between Westex users and non-users in terms of occupation, a number of respondents who were involved in agribusiness indicated that they didn't access Westex because their terminal was located at the office and they didn't have time to look at news during the day. Thus, the most frequent users of Grassroots are the least likely to use Westex News. On an encouraging note, however, some of these respondents did say

TABLE 7

CROSS-TABULATION OF GRASSROOTS ACCESS  
RATE BY COMPARED USE OF NEWSPAPERS

NUMBER OF TIMES ACCESS GRASSROOTS PER WEEK	AMOUNT OF TIME SPENT WITH NEWSPAPERS AS COMPARED TO BEFORE BEGAN ACCESSING GRASSROOTS				
	MUCH LESS TIME	SOMEWHAT LESS TIME	ABOUT THE SAME	SOMEWHAT MORE TIME	
1*	3.7%	14.8%	79.6%	1.9%	
2	12.5%	18.8%	56.3%	12.5%	
3	21.4%	28.6%	50.0%	0	

- \*1 = Less than seven times per week
- 2 = Seven to 13 times per week
- 3 = Fourteen or more times per week

TABLE 8  
 CROSS-TABULATION OF GRASSROOTS  
 ACCESS RATE BY OCCUPATION

		OCCUPATION			
		FARMER	AG-BUSINESS, PROFESSION	NOT AG- RELATED	NOT KNOWN IF AG-RELATED
	1*	60.4%	13.2%	13.2%	13.2%
NUMBER OF TIMES ACCESS GRASSROOTS PER WEEK	2	37.5%	31.1%	12.5%	18.8%
	3	35.7%	57.1%	0	7.1%

- \*1 = Less than seven times per week
- 2 = Seven to 13 times per week
- 3 = Fourteen or more times per week

they would be inclined to use Westex if they had a terminal at home.

### Conclusions

In answer to the question posed in the sub-title of this chapter - "Is anybody out there is reading Westex News" - yes, there is. That's good news to the staff of Westex News who've been virtually working in a vacuum since the service began. The not-so-good news is that most people aren't reading Westex very often, and that those who aren't reading it at all, aren't likely to start on their own.

As the results show, more than 60 per cent of the people who have accessed Westex have either done so "only once or twice" or "several times, but not on a regular basis." And more than 60 per cent of the people who have never accessed Westex "didn't know it was there," perhaps because they don't browse through Grassroots to see what's available on the system.

On a positive note, Westex does appear to have a small core of semi-regular users, and is not without some hope of obtaining more. In January, when this survey was mailed out, Westex News's "hit list" for the month soared. Perhaps some of the non-browsers who had never before ventured past the weather maps and commodity reports were stirred to do so. It would be useful to know if any of the Westex accesses inspired by this survey have lead to any regular usage. If they have, that would certainly warrant increased advertising of the service.

The primary purpose of this survey was to find out more about Westex users, and learn how they differ from people who don't use Westex. In terms of what Westex users like to read, the finding that World News was top choice was not surprising - it only confirmed what "hit lists" have indicated all along. In terms of what users think of the service, it was found that they generally considered Westex to be useful and interesting, its headline pages to be useful and clear, its stories to be "about the right length," and its general news content to be "about the right amount." They rated Westex as superior to BN on some characteristics (amount of agricultural news and ease of reading) and inferior on others (amount of general news and variety of news categories.)

How do Westex users differ from non-users? As noted in the results, the demographics for both groups are very much the same - the basic user profile of all respondents is male, relatively young (late 30s), married and fairly well-educated (although this may actually be more a characteristic of someone who responds to surveys, rather



than someone who uses Grassroots). Clearly, any difference between the two groups lies not in demographics, but in their particular needs and interests, and, to some extent, in their style of videotex use.

The finding that people who use Westex also tend to use Broadcast News suggests that people who are interested in news will get it from all sources available. They want to be well informed and whenever they come across another source of information, they use it. They may also tend to browse more, which means they'd be more likely to come across other sources of information in the first place. Non-Westex users may simply not be interested in news, or at least not interested in news that doesn't meet their specific needs. Such an attitude is clear in the comment of one non-Westex user: "News other than market news isn't so important that it has to be quickly accessed on Grassroots."

It appears that the Westex user is much more amenable to the idea of obtaining news from videotex than the non-user. Not only does he use BN more than non-Westex users, he's more likely to access Grassroots just to read the news, and to skip the news on the radio or TV to access it on Grassroots at a later time. He's also more likely to use television and newsletters less, now that he has access to videotex. The fact that he's not likely to use newspapers or radio less, however, suggests that his interest in news can not be satisfied by videotex alone.

On the question of the impact of videotex on use of the other media, among the respondents as a whole there has been some decline in the use of newspapers, radio and television since they began accessing Grassroots. And there was a particularly pronounced decline in newspaper usage among the most frequent users of Grassroots. Standing alone, these findings would seem to suggest the growth of videotex will hurt the other media, particularly newspapers. But when taken in conjunction with the finding that Westex users - people who are interested in news - are not using newspapers or radio any less, the potential for videotex to inhibit the use of traditional news media is tempered somewhat. On the other hand, the medium that both Westex users and non-users appear to be using less since they began using videotex is television. This suggests that the growth of videotex could cut into TV viewership, particularly if people are able to access videotex via their television rather than a terminal.

APPENDIX OF SURVEY RESPONSES

1. How long have you had your Grassroots terminal?

Mean = 12.398 months      Median = 11.826 months

2. About how many times in an average week do you access Grassroots?

Mean = 7.7 times      Median = 5.02 times      DNA = 10.6%

Unusable responses included: Seldom; constantly on weekdays; four hours per day, Monday to Friday; one hour a day; it varies - depends on student-teacher requirements; eight hours per day by School of Agriculture students; depending on season of year, spring and summer more; have hardly used it at all after the first month.

3. Do you ever demonstrate Grassroots to friends or visitors to your home?

Yes	91.5%
No	6.4
DNA	2.1

4. Have you ever accessed Westex News on Grassroots?

Yes	54.3%
No	44.7
DNA	1.1

If NO, what would you say is the principal reason you have never accessed Westex News?

Didn't know it was there	24.5%
Not interested in news	7.4
Don't have time	7.4
Other	7.4
DNA	7.4
Not applicable	53.2

5. If you HAVE accessed Westex News, how did you happen to access it the first time you did so?

Was browsing through Grassroots	40.4%
Saw Westex advertised on What's New	7.4
Received mailed advertisement about Westex	3.2
Other	2.1
DNA	2.1
Not applicable	44.7

6. How often do you access Westex?

Daily, Monday to Friday	2.1%
Two to four times a week	8.5
Once a week	5.3
One to three times a month	5.3
Have accessed it several times, but never on a regular basis	18.1
Have accessed it only once or twice	14.9
DNA	1.1
Not applicable	44.7

7. If you have accessed Westex News only once or twice, why have you never accessed it again?

Didn't like it	2.1%
Not interested in news	2.1
Don't have time	3.2
Same news is available elsewhere on Grassroots	4.3
Other	6.4
DNA	1.1
Not applicable	80.9

If you said (1) Didn't like it, please explain, if possible, what it is about Westex you don't like.

Only two respondents to this question. Both said they didn't like Westex because the same news was available on the other media.

8. During the past 20 months, Westex has offered a number of different news categories. Please check all of the categories that you have accessed, even if it was only once.

Category	Have accessed	Have not	DNA	N/A
World News	28.7%	9.6%	2.1%	59.6%
National	35.1	3.2	2.1	59.6
Manitoba	30.9	7.4	2.1	59.6
Alberta	8.5	29.8	2.1	59.6
Saskatchewan	10.6	27.7	2.1	59.6
Prairie	29.8	8.5	2.1	59.6
Ontario	9.6	28.7	2.1	59.6

- 9(a) Of the categories you have checked above, please choose the three you access most frequently and rank them at right according to how often you use them. If you have checked only one or two categories above, rank them accordingly.

1. Access most frequently

World news	13.8%
National news	4.3
Manitoba news	7.4
Saskatchewan news	1.1
Prairie news	9.6
Ontario news	-
DNA	3.2
Alberta news	-
Not applicable	60.6

2. Access second most frequently

World news	1.1%		
National news	20.2		
Manitoba news	5.3	DNA	4.3%
Alberta news	1.1	N/A	63.8
Saskatchewan news	-		
Prairie news	4.3		
Ontario news	-		

3. Third most frequently accessed

World news	6.4%
National	5.3
Manitoba	9.6
Saskatchewan	1.1
Alberta	-
Prairie	3.2
Ontario	3.2
DNA	4.3
N/A	67.0

9. (b) If you are uncertain which news categories you access most often, or feel you haven't used Westex News enough to have accessed one category more frequently than another, please choose the three categories of news that you are most interested in reading and rank them.

There was only respondent to this question, and s/he ranked Manitoba News, Prairie News and National News as the first, second and third categories s/he was most interested in reading.

10. Do you ever browse through Westex by pushing the Next button to take you through each story in a category?

Yes	31.9%
No	5.3
DNA	3.2
N/A	59.6

11. Which do you prefer, to browse through Westex or to go directly to stories listed on the headline pages that you think will be of interest?

Prefer to browse	3.2
Prefer to go straight to stories of interest	28.7
No preference	5.3
DNA	3.2
N/A	59.6

12. On both of the following scales, please circle the number that best describes your opinion of Westex headline pages.

a) Headline usefulness

Not at all useful	-
Somewhat useful	-
Moderately useful	19.1%
Quite useful	6.4
Very useful	10.6
DNA	4.3
N/A	59.6

b) Headline clarity

Very confusing	-
Somewhat confusing	-
Reasonably clear	17.0%
Quite clear	7.4
Very clear	6.4
DNA	9.6
N/A	59.6

13. On the following scale, please circle the number that best describes your opinion about the length of stories on Westex.

Too short	1.1%
Somewhat too short	-
About the right length	33.0
Somewhat too long	1.1
Too long	-
DNA	5.3
N/A	59.6

14. How many times a day do you think Westex News should be updated?

Once a day	11.7%
Twice a day	8.5
Continuously throughout the day	16.0
DNA	4.3
N/A	59.6

15. Do you ever access Broadcast News?

Yes	31.9%
No	6.4
DNA	2.1
N/A	59.6

16. If YES, please compare Broadcast News and Westex in terms of the characteristics listed below. Please indicate which service you consider superior in each of the following categories:

	Westex	BN	Same	N/O	DNA	N/A
1. Frequency of updating	6.4%	8.5%	2.1%	3.2%	13.8%	66.0%
2. Amount of general news	2.1	16.0	2.1	3.2	10.6	66.0
3. Amount of agriculture news	17.0	2.1	2.1	2.1	10.6	66.0
4. Variety of news categories	4.3	13.8	2.1	3.2	10.6	66.0
5. Number of feature stories	6.4	8.5	2.1	3.2	13.8	66.0
6. Organization of content	8.5	7.4	2.1	3.2	12.8	66.0
7. Ease of reading	11.7	3.2	2.1	3.2	13.8	66.0

17. About 50 per cent of Westex News content is not directly related to agriculture, but to the Manitoba, Saskatchewan and Alberta farm community in general. On the following scale, please circle the number that best describes your opinion about the amount of general news on Westex.

Not enough general news	-
Somewhat too little	8.5%
About the right amount	14.9
Somewhat too much	5.3
Too much	1.1
DNA	10.6
N/A	59.6

17. (cont'd)

If you think there's too much general news on Westex, why do you consider the general news content too high?

1. Grassroots is a business tool for farmers, not a newsmagazine or daily newspaper.

Yes	6.4%
No	2.1
DNA	3.2
N/A	88.3

2. Radio and newspapers provide the same service free of charge or at a small cost.

Yes	3.2%
No	5.3
DNA	3.2
N/A	88.3

3. Broadcast News already provides enough general news on Grassroots.

Yes	3.2%
No	5.3
DNA	3.2
N/A	88.3

4. Other

Yes	1.1%
No	7.4
DNA	3.2
N/A	88.3

18. Overall, how would you rate Westex News compared to the other services offered on Grassroots.

a) Usefulness

Not at all useful	1.1%
Somewhat useful	6.4
Moderately useful	18.1
Quite useful	8.5
Very useful	2.1
DNA	4.3
N/A	59.6



b) Interest

Not at all interesting	1.1%
Somewhat interesting	4.3
Moderately interesting	14.9
Quite interesting	8.5
Very interesting	3.2
DNA	8.5
N/A	59.6

19. Do you ever demonstrate Westex News to friends or visitors to your home?

Yes	22.3%
No	11.7
DNA	6.4
N/A	59.6

20. (a) Which of the following periodicals do you receive at home?

Periodical	Receive	Do not receive	DNA
Weekly newspaper	69.1%	17.0%	13.8%
Daily newspaper	52.1	34.0	13.8
The Western Producer	44.7	41.5	13.8
Grainews	55.3	30.9	13.8
Country Guide	56.4	29.8	13.8
Commodity group publication(s)	35.1	51.1	13.8
Department of Agriculture newsletters/publications	50.0	36.2	13.8
Maclean's magazine	26.6	59.6	13.8

23. Please rank the following according to their importance to you generally as a source of agricultural news and information.

1. Radio

First most important	30.9%
Second most important	13.8
Third most important	12.8
Fourth most important	10.6
Fifth most important	4.3
Sixth most important	7.4
Seventh most important	3.2
DNA	17.0

2. Television

First most important	4.3%
Second	10.6
Third	9.6
Fourth	5.3
Fifth	6.4
Sixth	20.2
Seventh	14.9
DNA	28.7

3. Newspapers

First most important	11.7%
Second	14.9
Third	20.2
Fourth	7.4
Fifth	16.0
Sixth	8.0
Seventh	3.2
DNA	20.2

4. Grassroots

First most important	24.5%
Second	17.0
Third	20.2
Fourth	9.6
Fifth	3.2
Sixth	5.3
Seventh	4.3
DNA	16.0

23. (cont'd)

5. The Western Producer

First most important	1.1%
Second	10.6
Third	5.3
Fourth	14.9
Fifth	7.4
Sixth	5.3
Seventh	12.8
DNA	42.6

6. Commodity/farm magazine

First most important	9.6%
Second	19.1
Third	7.4
Fourth	21.3
Fifth	8.5
Sixth	6.4
Seventh	2.1
DNA	25.5

7. Department of Agriculture newsletters/publications

First most important	9.6%
Second	8.5
Third	13.8
Fourth	7.4
Fifth	19.1
Sixth	7.4
Seventh	8.5
DNA	25.5

24. a) If you want to know what the weather is going to be tomorrow, what information source are you most likely to turn to?

Radio	33.0%
Television	13.8
Daily, weekly newspaper	2.1
Grassroots	44.7
Other	2.1
DNA	4.3

24. b) If you want to know the current market price of a commodity, what information source are you most likely to turn to?

Radio	7.4%
Television	-
Daily, weekly newspaper	2.1
Grassroots	76.6
Other	4.3
DNA	9.6

c) If you want to know how a world event (i.e. a grain embargo or an outbreak of hoof-and-mouth disease) could affect you and the price paid for your commodity, what information source are you most likely to turn to?

Radio	17.0%
Television	3.2
Daily, weekly newspaper	16.0
Grassroots	47.4
Other	6.4
DNA	19.1

d) If you want some practical information about farm management techniques (i.e. herbicide and chemical use, farm financial planning), what information source are you most likely to turn to?

Radio	-
Television	-
Daily, weekly newspaper	2.1%
Grassroots	45.7
Other	36.2
DNA	16.0

25. What is your opinion of the amount of news on Grassroots?

Not enough	7.4%
Somewhat too little	16.0
About the right amount	56.4
Somewhat too much	4.3
Too much	1.1
DNA	14.9

26. Do you think there's a need on Grassroots for a service such as Westex that offers news of particular interest to farmers rather than just general news?

Yes	76.6%
No	6.4
No opinion	2.1
DNA	14.9

26. (cont'd)

If YES, do you think there is a need on Grassroots for Westex News in particular?

Yes	56.4%
No	9.6
No opinion	5.3
DNA	24.5
Not applicable	4.3

27. Do you ever access Grassroots just to read the news?

Yes	45.7%
No	51.1
DNA	3.2

28. Do you ever skip the news on the radio or TV because you plan to read it at a more convenient time on Grassroots?

Yes	21.3%
No	76.6
DNA	2.1

29. At what time of day would you be most likely to read news on Grassroots?

a) In winter

Wouldn't watch it	1.1%
In the morning	17.0
At noon	8.5
In the afternoon	18.1
In the evening	22.3
Anytime/or two or more times given	11.7
DNA	21.2

b) In summer

Wouldn't watch it	3.2%
In the morning	16.0
At noon	2.1
In the afternoon	8.5
In the evening	38.3
Anytime/two or more times given	10.7
DNA	21.3

30. Since you began using Grassroots, your use of other media may have changed. How much time would you say you spend on other media NOW compared to before you started using Grassroots?

1. Television.

Much less time	4.3%
Somewhat less time	17.0
About the same amount of time	72.3
Somewhat more time	2.1
Much more time	-
DNA	4.3

2. Radio

Much less time	3.2%
Somewhat less time	13.8
About the same amount	74.5
Somewhat more time	5.3
Much more time	-
DNA	3.2

3. Newspapers

Much less time	8.5
Somewhat less time	16.0
About the same amount	71.3
Somewhat more time	3.2
Much more time	-
DNA	1.1

4. Newsletters

Much less time	7.4%
Somewhat less time	14.9
About the same amount	72.3
Somewhat more time	-
Much more time	-
DNA	5.3

31. Which of the following do you consider to be disadvantages of obtaining news from videotex rather than a newspaper?

a) Videotex is more expensive than a newspaper.

Yes	51.1%
No	47.9
DNA	1.1

31. (cont'd)

b) Videotex is less portable than a newspaper.

Yes	27.7%
No	71.3
DNA	1.1

c) Reading videotex news require more work (i.e. accessing by phone, sorting through indexes)

Yes	50.0%
No	48.9
DNA	1.1

d) Reading from a screen can become tedious.

Yes	33.0%
No	66.0
DNA	1.1

e) People can't take clippings from videotex like they can with a newspaper.

Yes	30.9%
No	68.1
DNA	1.1

f) Other

Yes	13.8%
No	85.1
DNA	1.1

32. What is your full-time occupation?

Farmer	50.0%
Involved in agri-business, or agri-profession	24.5%
Not related to agriculture	11.7
Unknown whether ag-related	12.8
DNA	1.1

33. If farming is not your full-time occupation, is it your part-time occupation?

Yes	12.8%
No	36.2
DNA	2.2
Not applicable	48.9

34. Please indicate the kind of farming operation you are involved in. Check as many as apply.

Operation	Involved	Not involved	DNA	N/A
Board grains	54.3%	7.4%	3.2%	36.2%
Off-board grains	47.9	12.8	3.2	36.2
Specialty crops	26.6	34.0	3.2	36.2
Beef	14.9	45.7	3.2	36.2
Hog	6.4	54.3	3.2	36.2
Poultry	4.3	56.4	3.2	36.2
Dairy	3.2	57.4	3.2	36.2
Other	13.8	46.8	3.2	36.2

35. What is the present size of your farm?

Not applicable = 36.2%

Of applicable responses, farm size ranged from 12 acres to 6010 acres.

36. How long have you been farming?

Not applicable = 36.2%

Of applicable responses, Mean = 14.67 years  
Median = 14.5 years

DNA = 8.5% Unusable responses included: Forever, life, all my life

37. What are your average yearly gross farm sales?

Less than \$49,999	5.3%
50,000 to 99,999	7.4
100,000 to 199,999	14.9
200,000 to 299,999	7.4
300,000 to 399,999	10.6
400,000 to 499,999	4.3
500,000 or-more	8.5
DNA	5.3
Not applicable	36.2



38. Compared to other farmers in your province, where would you say your gross farm income falls?

In the top 10 per cent	10.6%
In the top 25 per cent	16.0
In the top 50 per cent	25.5
In the bottom 50 per cent	6.4
DNA	5.3
Not applicable	36.2

39. Sex

Male	90.4%
Female	6.4
DNA	3.2

40. Province

Manitoba	80.9%
Saskatchewan	7.4
Alberta	10.6
DNA	1.1

41. Age

DNA = 5.4%

Mean = 38.36 years                      Median = 36.6 years

42. Marital status

Single	14.9%
Married	76.6
Divorced	2.1
Separated	1.1
Widowed	-
DNA	5.3

43. Children living at home.

None                      37.2%

Of remainder, Mean = 2.32 children, Median = 2.13 children

44. Education

Grade school	6.4%
Some high school	10.6
High school graduate	17.0
Some college, university	16.0
College, university grad	36.2
Post-graduate	8.5
DNA	5.3

## APPENDIX I

### Summary of Content/Sources

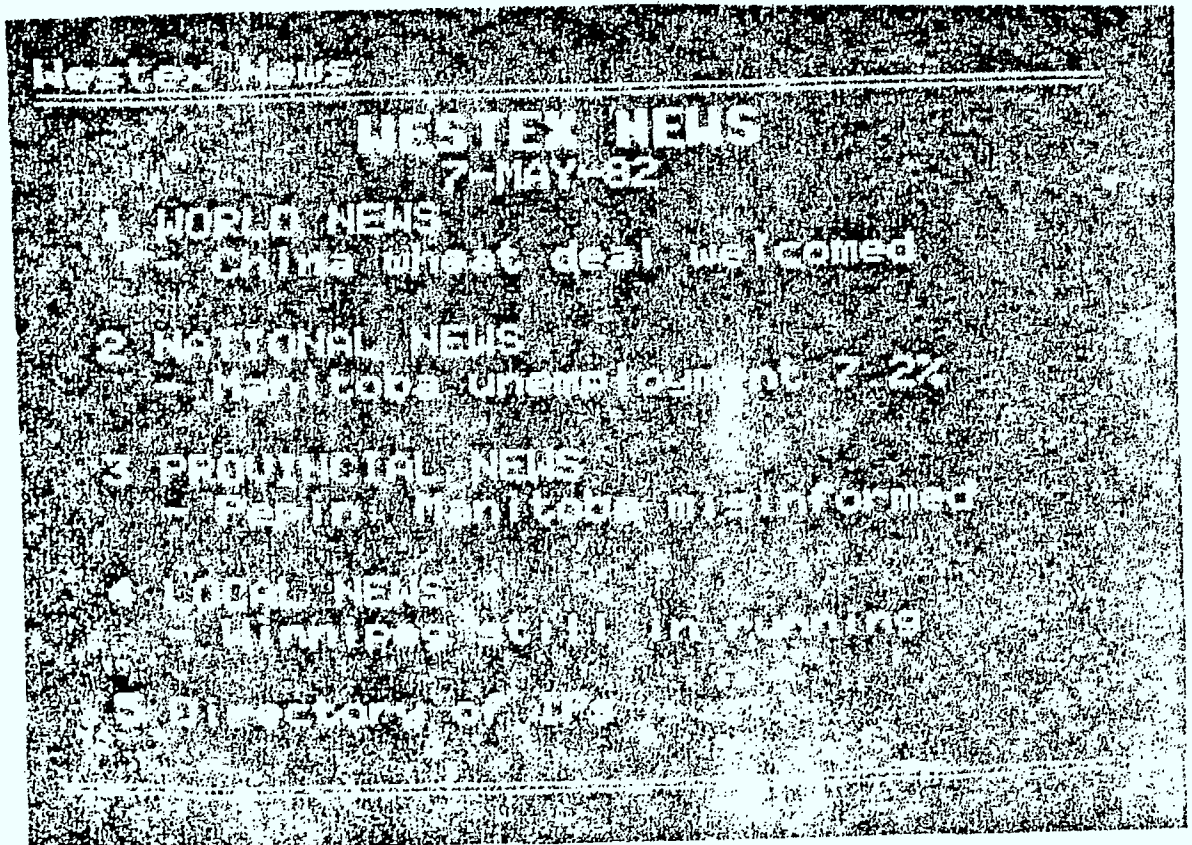
<u>Month</u>	<u>No. of Editions</u>	<u>No. of Stories</u>	<u>No. of Pages</u>	<u>% Agricult/ % General</u>	<u>% CP/ % Westex</u>
April/82	19	417	N/A	44.6/55.4	40.8/59.2
May	19	445	N/A	44.7/55.3	53.5/46.5
June	22	667	N/A	39.0/61.0	75.6/24.4
July	21	663	N/A	41.9/58.1	81.5/18.5
August	21	574	N/A	39.5/60.5	90.9/10.1
September	21	571	N/A	45.4/54.6	90.2/ 9.8
October	20	456	N/A *	50.7/49.3	90.8/ 9.2
November	22	508	1,364	60.8/39.2	77.8/22.2
December	22	461	1,328	64.4/35.6	79.6/20.4
January/83	21	506	1,402	70.0/30.0	79.2/20.8
February	20	507	1,380	64.1/35.9	82.8/17.2
March	25	675	1,854	75.6/24.4	75.7/24.3
April	20	603	1,589	70.7/29.3	79.9/19.1
May	21	593	1,546	69.8/30.2	84.5/16.4
June	22	532	1,476	76.3/21.6	81.9/18.1
July	20	525	1,484	68.8/31.2	59.8/40.2
August	21	542	1,526	70.3/29.7	59.8/40.2
September	21	446	1,396	72.1/28.9	56.0/44.0
October	20	450	1,309	76.9/23.1	46.1/53.9
November	20	388	1,273	79.4/20.6	42.3/57.7
December	<u>16</u>	<u>245</u>	<u>855</u>	81.6/18.4	63.7/36.3
TOTALS	434	10,774	19,782		

Average number of stories per edition: 24.8  
 Average number of Telidon pages per edition: 69.7  
 Average number of pages per story: 2.83

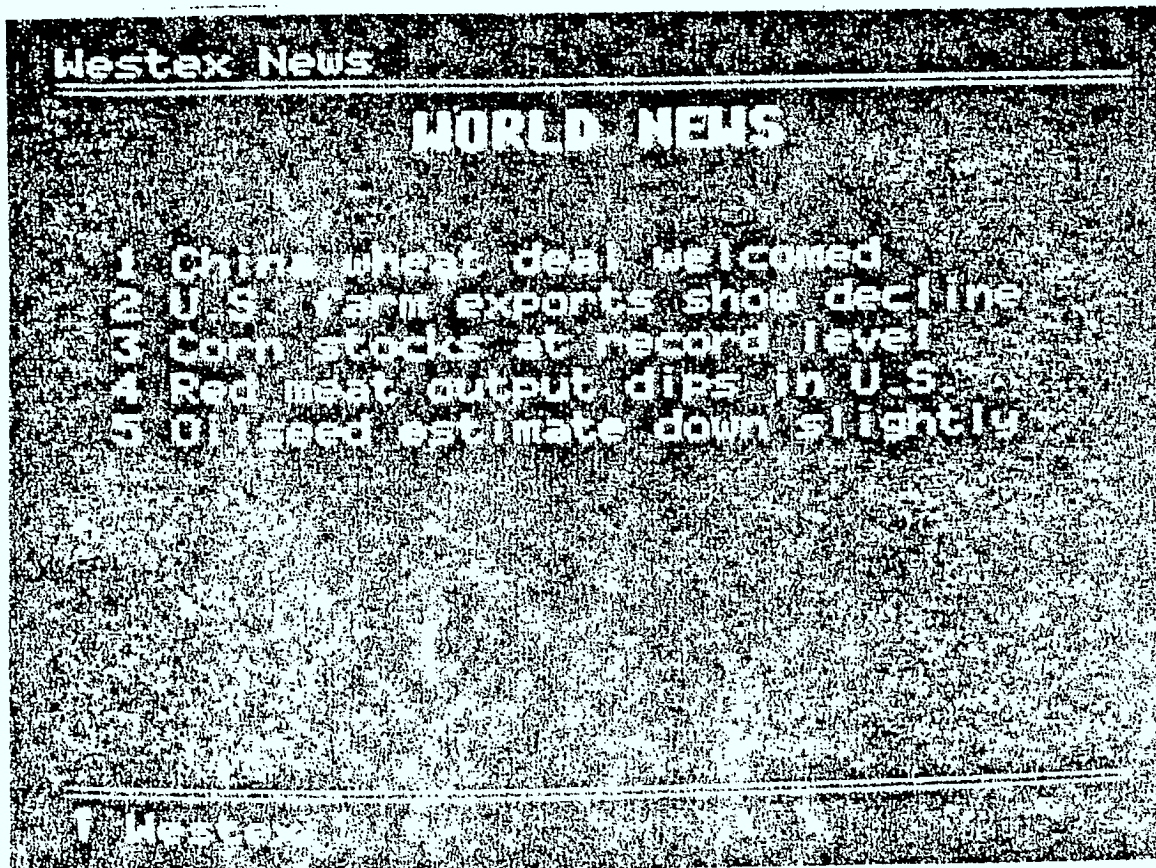
\* No page totals were recorded for the first seven months. Retroactively, the total number of pages can be estimated at about 10,500. This means total number of Telidon pages produced in the period April, 1982 - December, 1983, was 30,282.

## APPENDIX II

To illustrate the logic of the Westex News data base, the screen below is what the user saw upon pressing 2045 the Westex News data base number within Grassroots (which users access by phone), early in the experiment.



Pushing the indicated number produces the corresponding headline page. For example, if the user pushed "1" to get the world news, the following appeared on the screen:



Note that on May 7, 1982, there were only five stories entered in the world news category. The upward arrow with the word "Westex" indicates that by pushing the arrow button on the control pad, the general Westex News page would appear, allowing the user to move to another part of the data base. For example, by pushing "2" the national news headlines would appear as follows:

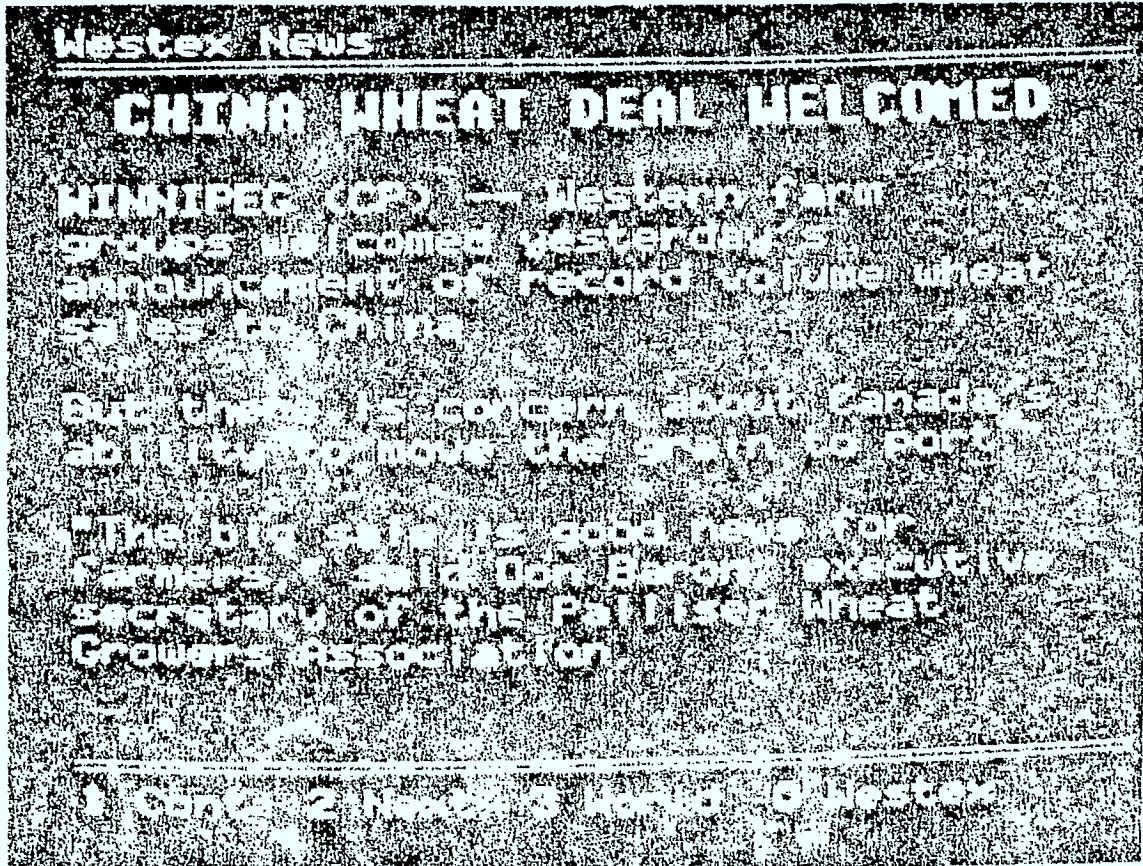
**Westex News**

**NATIONAL NEWS**

- 1 Manitoba unemployment 7.2%
- 2 Farm safety hurt by hard times
- 3 Separatist sentiment 7%
- 4 Agriculture researchers needed
- 5 Church president elected
- 6 Peace book Leacock dinner
- 7 The polluting plants closing
- 8 Animal cause won't fade
- 9 Lt. Col. Strachan, 69, dies

This time, the maximum number of nine stories is entered, and the user can get an overview of the national stories of import to the Western agricultural community at a glance. Only four of the nine stories have a direct agricultural angle, the other are of general interest and importance to the West. For the sake of completeness, the other two headline pages for this day are attached at the end of this appendix.

To move from the headline page to the document pages, or news stories proper, the user simply pushes the number beside the headline of the story that is of interest. For example, in the case of the World News, the top story was the China wheat deal reaction. By pushing "1" the user got:



The numbers below the bottom line instruct the user further. By pushing "1" again, for Cont or Continue, he will get the second page of the same story, namely:

Westex News

CHINA WHEAT SALE - (2)

"But it underlines the need for making sure we can get it to port," Baron added.

The sale to China involves between 10 and 12.6 million tonnes over the next three years.

George Parker, president of the National Farm Bureau, said the sale is a positive forecast that Canada will continue to be a major wheat exporter at 50 per cent of the end of the decade.

Page 2 News Canada 10 Westex

By pushing "1" again, the third page would appear, and so on, until the last page of that story was reached, as below:

Westex News

CHINA WHEAT SALE - (4)

Other comments on the wheat sale agreement pointed out that the sale will add impetus to the ongoing trade talks.

The sale is headed by Canada's largest farm group, the National Farm Bureau, which has a long record of wheat production. The sale will help farmers, railroads and the government.

Pushing the number "2" generates the next story within a particular category, "3" returns user to the index of the section he is in, and pushing a "0" while in document page mode produces the starting page. This procedure makes rapid browsing through the data base possible, an important feature since users pay for the time they access the data base at five cents per minute. A five-minute browse through Westex News costs 25 cents, or close to the price of a daily paper.



**APPENDIX III  
Hit Lists**

<u>Month</u>	<u>First Page</u>	<u>Menu Totals</u>	<u>World</u>	<u>National</u>	<u>Provincial (Manitoba)</u>	<u>Local (Manitoba)</u>	<u>Total</u>	<u>Total Text</u>
March	339	622	82	65	57	79	1,308	686
April	543	1,049	155	119	134	98	2,504	1,455
May	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
June	371	826	149	141	82	83	2,131	1,305
July	501	1,195	274	140	106	174	3,496	2,301
Aug.	321	887	249	127	91	99	2,842	1,955
Sept.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Oct.	403	965	202	132	90	138	2,427	1,462
								Total
<u>(Menu Changed)</u>			<u>World</u>	<u>National</u>	<u>Manitoba</u>	<u>Sask.</u>	<u>Total</u>	<u>Text</u>
Nov.	511	1,197	248	105	226	107	2,536	1,339
Dec.	404	1,008	204	139	183	78	2,222	1,214
Jan.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Feb. *	342	815	161	94	161	57	2,298	1,483
<u>(Menu Changed)</u>			<u>National</u>	<u>Manitoba</u>	<u>Sask.</u>	<u>Alta.</u>		
March	342	N/A	N/A	N/A	N/A	N/A	N/A	N/A
April	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
May	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
June	528	1,293	303	240	112	110	2,927	1,634
July	436	1,121	279	173	107	126	2,878	1,757
Aug.	720	1,379	273	191	114	81	2,870	1,491
Sept.	476	1,200	307	207	134	76	2,660	1,460
Oct.	334	1,010	220	206	107	143	2,652	1,642
<u>(Menu Changed)</u>			<u>World</u>	<u>National</u>	<u>Prairies</u>	<u>Ontario</u>		
Nov.	611	1,470	269	244	186	160	3,801	2,331
Dec.	458	1,149	187	145	214	145	3,139	1,990
Jan/84	890	2,094	332	286	404	182	5,341	3,247
<b>TOTALS</b>	<b>8,530</b>	<b>19,280</b>					<b>48,032</b>	<b>28,752</b>

APPENDIX IV

Western content by news category as a percentage of total number of stories	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
World	25	22	24	22	22	18	15	19	24	30	27	26	18	23	23	20	21	21	23	18	N/A	18
National	33	24	32	27	28	30	29	32	32	36	36	33	29	28	26	27	27	28	37	31	N/A	20
Provincial (Manitoba)	26	31	22	26	24	26	28	26	51	23	22	20	20	23	20	19	17	19	14	16	N/A	48
Local (Dis-continued Nov. 8/82)	16	24	22	25	26	25	28	23	0	0	0	0	0	0	0	0	0	0	0	0	N/A	0
Saskatchewan	0	0	0	0	0	0	0	0	14	12	16	21	17	13	14	16	15	12	9	15	N/A	40
Alberta	0	0	0	0	0	0	0	0	0	0	0	0	17	14	17	18	20	20	17	20	N/A	48
Ontario	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A	14
Agri-Business	28	25	27	42	44	40	43	31	36	29	30	20	12	37	43	56	54	50	48	53	N/A	49
Agri-Politics	27	13	16	13	14	15	32	38	34	36	39	46	56	31	25	19	18	20	21	21	N/A	21
Agri-Science	12	22	17	19	19	19	7	8	4	5	7	5	8	5	7	3	6	5	5	5	N/A	7
U.S. Agriculture	18	17	21	17	8	11	6	10	6	12	8	12	9	9	8	7	7	10	10	9	N/A	8
World Agriculture	16	23	20	9	15	15	12	13	21	13	17	17	15	18	17	15	14	14	15	12	N/A	25
General Economics	9	9	13	13	14	15	10	7	20	12	15	34	42	42	35	53	52	55	55	44	N/A	19
General Politics	28	14	18	22	18	18	25	28	27	25	29	25	23	30	37	35	34	13	12	22	N/A	7
Other General News	31	78	70	64	68	67	63	65	53	64	57	41	34	27	28	12	25	22	24	33	N/A	44



# The University of Western Ontario

School of Journalism  
Middlesex College  
London, Canada  
N6A 5B7

January, 1984

Dear Grassroots subscriber:

For the past 20 months, several of us at the School of Journalism in London, Ontario, along with journalism students at the University of Regina, have been producing Westex News, a daily (Monday-to-Friday) package of agriculturally-oriented news for users of Grassroots.

During those 20 months, we've had little opportunity to find out how many people are actually reading our news and whether or not they find it useful. That's why we're hoping you'll take a few minutes to fill out this questionnaire and let us know if you use our service (and if you do, what you think about it).

In addition to questions about Westex, this survey also includes some items about videotex news in general. We think you're uniquely qualified to answer these questions because you're one of the first people in Canada to use videotex on a regular basis.

To obtain the most useful information for our study, we'd appreciate it if you would have the most frequent user of Grassroots in your household or business fill out this survey. Please answer the questions by writing in the space provided or by placing a check mark in the appropriate box, and return the questionnaire in the enclosed, self-addressed stamped envelope before the end of February, 1984.

Please try to be as precise and accurate as possible. You may be assured that any information you provide will be held confidential and will be used for research purposes only.

Thank you for your help and co-operation.

Best regards,

A handwritten signature in dark ink, appearing to read "Peter Desbarats", written over a horizontal line.

Peter Desbarats  
Dean

APPENDIX VI  
WESTEX NEWS APPRAISAL  
School of Journalism

PART A

This section contains some general questions about your use of Grassroots and Westex News. Please answer in the space provided, or place a check mark in the appropriate box.

1. How long have you had your Grassroots terminal? \_\_\_\_\_

2. About how many times in an average week do you access Grassroots? \_\_\_\_\_

3. Do you ever demonstrate Grassroots to friends or visitors to your home? Yes  No

4. Have you ever accessed Westex News on Grassroots? Yes  No

If no, what would you say is \_\_\_\_\_ the principal reason you have never accessed Westex News?

(Please check here)

- (1)  Didn't know it was there
- (2)  Not interested in news
- (3)  Don't have time
- (4)  Other (please specify)

If you have never accessed Westex News, please move on to Part C of the questionnaire.

5. If you have accessed Westex News, how did you happen to access it the first time you did so? (1)  Was browsing through Grassroots  
(2)  Saw Westex advertised on What's New  
(3)  Received mailed advertisement about Westex  
(4)  Other (please specify) \_\_\_\_\_

6. How often do you access Westex? (1)  Daily, Monday to Friday  
(2)  Two to four times a week  
(3)  Once a week  
(4)  One to three times a month  
(5)  Have accessed it several times, but never on a regular basis  
(6)  Have accessed it only once or twice

7. If you have accessed Westex News only once or twice, why have you never accessed it again? (1)  Didn't like it  
(2)  Not interested in news  
(3)  Don't have time  
(4)  Same news is available elsewhere on Grassroots  
(5)  Other (please specify) \_\_\_\_\_

If you said (1) Didn't like it please explain, if possible, what it is about Westex you didn't like

PART B

This section is to be answered only if you have accessed Westex News several times or more. If you have never accessed Westex, or have accessed it only once or twice, please move on to Part C of the questionnaire.

8. During the past 20 months, Westex has offered a number of different news categories, which are listed at right. Please check all of the categories that you have accessed, even if it was only once.

- (1)  World News
- (2)  National News
- (3)  Manitoba News
- (4)  Alberta News
- (5)  Saskatchewan News
- (6)  Prairie News
- (7)  Ontario News

9. (a) Of the categories you have checked above, please choose the three you access most frequently and rank them at right according to how often you use them. If you have checked only one or two categories above, rank them accordingly.

- RANK
- 1. (Access most frequently) = \_\_\_\_\_
  - 2. (Second most frequently) = \_\_\_\_\_
  - 3. (Third most frequently) = \_\_\_\_\_

(b) If you are uncertain which news categories you access most often, or feel you haven't used Westex News enough to have accessed one category more frequently than another, please choose the three categories of news from the list above that you are most interested in reading and rank them at right.

- RANK
- 1. (Most interested in reading) = \_\_\_\_\_
  - 2. (Second most interested) = \_\_\_\_\_
  - 3. (Third most interested) = \_\_\_\_\_

10. Do you ever browse through Westex by pushing the Next button to take you through each story in a category?

- Yes  No

11. Which do you prefer, to browse through Westex or to go directly to stories listed on the headline pages that you think will be of interest?

- (1)  Prefer to browse
- (2)  Prefer to go straight to stories of interest
- (3)  No preference

12. On both of the following scales, please circle the number that best describes your opinion of Westex headline pages.

- a)            Not at all useful                                  Moderately useful                                  Very useful
- 1                                  2                                  3                                  4                                  5
- b)            Very confusing                                  Reasonably clear                                  Very clear
- 1                                  2                                  3                                  4                                  5

13. On the following scale, please circle the number that best describes your opinion about the length of stories on Westex.

- Too short                                  About right length                                  Too long
- 1                                  2                                  3                                  4                                  5

14. How many times a day do you think Westex News should be updated?

- (1)  Once a day
- (2)  Twice a day
- (3)  Continuously during the day

15. Do you ever access Broadcast News?

- Yes  No

16. If **yes**, please compare Broadcast News and Westex in terms of the characteristics listed below. Please indicate with a check mark which service you consider superior in each of the following categories:

	Westex News	Broadcast News
1. Frequency of updating	_____	_____
2. Amount of general news	_____	_____
3. Amount of agricultural news	_____	_____
4. Variety of news categories	_____	_____
5. Number of feature stories	_____	_____
6. Organization of content	_____	_____
7. Ease of reading	_____	_____

17. About 50 per cent of Westex News content is not directly related to agriculture, but to the Manitoba, Saskatchewan and Alberta farm community in general. On the following scale, please circle the number that best describes your opinion about the amount of general news on Westex.

Not enough general news		About right amount		Too much
1	2	3	4	5

If you think there's too much general news on Westex, why do you consider the general news content too high? **Please check all that apply.**

- (1)  Grassroots is a business tool for farmers, not a newsmagazine or daily newspaper.
- (2)  Radio and newspapers provide the same service free of charge or at a small cost.
- (3)  Broadcast News already provides enough general news on Grassroots.
- (4)  Other (please specify) \_\_\_\_\_

18. Overall, how would you rate Westex News compared to the other services offered on Grassroots (i.e. commodity reports, weather, etc.) Please indicate your opinion by circling the appropriate number on both of the following scales.

a)	Not at all useful		Moderately useful		Very useful
	1	2	3	4	5
b)	Not at all interesting		Moderately interesting		Very interesting
	1	2	3	4	5

19. Do you ever demonstrate Westex News to friends or visitors to your home?

Yes  No

PART C

This section contains some general questions about news, your use of news, and news on videotex.

20. Please answer both parts A and B. Answer part A by simply checking off all the publications you receive at home. Answer part B next by circling the appropriate number that indicates the number of times you read all of the publications listed (whether at home, from a library, at a friend's, etc.).

A RECEIVE PUBLICATION	B READ				
	NEVER		SOMETIMES		OFTEN
_____ Weekly Newspaper	1	2	3	4	5
_____ Daily Newspaper	1	2	3	4	5
_____ The Western Producer	1	2	3	4	5
_____ Grainews	1	2	3	4	5
_____ Country Guide	1	2	3	4	5
_____ Commodity group publication(s)	1	2	3	4	5
_____ Department of Agriculture newsletters/ publications	1	2	3	4	5
_____ Maclean's magazine	1	2	3	4	5

21. If you access Broadcast News, how many times in an average week would you say you access that service?  
\_\_\_\_\_

22. How many times in an average week would you say you make it a point to:  
1) Listen to the news on the radio? \_\_\_\_\_  
2) Watch the news on television? \_\_\_\_\_

23. Please rank the following according to their importance to you generally as a source of agricultural news and information. (Mark 1 beside the most important source, 2 beside the second most important source, and so on.)

- |            |       |   |       |
|------------|-------|---|-------|
| Radio      | _____ | The Western Producer                                  | _____ |
| Television | _____ | Commodity/farm magazines                              | _____ |
| Newspapers | _____ | Department of Agriculture<br>newsletters/publications | _____ |
| Grassroots | _____ |   |       |

24. a) If you want to know what the weather is going to be tomorrow, what information source are you most likely to turn to? **Check one only.**

(1)  Radio  
 (2)  Television  
 (3)  Daily/weekly newspaper  
 (4)  Grassroots  
 (5)  Other (please specify) \_\_\_\_\_

b) If you want to know the current market price of a commodity, what information source are you most likely to turn to?

(1)  Radio  
 (2)  Television  
 (3)  Daily/weekly newspaper  
 (4)  Grassroots  
 (5)  Other (please specify) \_\_\_\_\_

c) If you want to know how a world event (i.e. a grain embargo or an outbreak of hoof-and-mouth disease) could affect you and the price paid for your commodity, what information source are you most likely to turn to?

- (1)  Radio
- (2)  Television
- (3)  Daily/weekly newspaper
- (4)  Grassroots
- (5)  Other (please specify)

d) If you want some practical information about farm management techniques (i.e. herbicide and chemical use, farm financial planning), what information source are you most likely to turn to?

- (1)  Radio
- (2)  Television
- (3)  Daily/weekly newspaper
- (4)  Grassroots
- (5)  Other (please specify)

25. On the following scale, please circle the number that best describes your opinion about the amount of news on Grassroots.

Not enough		About right amount		Too much
1	2	3	4	5

26. Do you think there's a need on Grassroots for a service such as Westex that offers news of particular interest to farmers rather than just general news?

Yes  No

If yes, do you think there is a need on Grassroots for Westex News in particular?

Yes  No

27. Do you ever access Grassroots just to read the news?

Yes  No

28. Do you ever skip the news on the radio or TV because you plan to read news on Grassroots at a more convenient time?

Yes  No

29. At what time of day would you be most likely to read news on Grassroots?

(1) In winter .....  
 (2) In summer .....

30. Since you began using Grassroots, your use of other media may have changed. On the scales below, please circle the number that indicates how much time you spend on other media now compared to before you started using Grassroots.

	Much less time		About the same		Much more time
(1) Television	1	2	3	4	5
(2) Radio	1	2	3	4	5
(3) Newspapers	1	2	3	4	5
(4) Newsletters	1	2	3	4	5

31. Which, if any, of the following do you consider to be disadvantages of obtaining news from videotex rather than a newspaper? Check all that apply.

- (a)  Videotex is more expensive than a newspaper
- (b)  Videotex is less portable than a newspaper
- (c)  Reading videotex news requires more work (i.e. accessing by phone, sorting through indexes)
- (d)  Reading from a screen can become tedious
- (e)  People can't take clippings from videotex like they can with a newspaper
- (f)  Other (please specify) .....



PART D

This final section seeks some general information about your personal, occupational and educational background.

32. What is your full-time occupation? \_\_\_\_\_

33. If farming is not your full-time occupation, is it your part-time occupation? Yes  No

If farming is not your full- or part-time occupation, please move on to question #39.

34. Please indicate the kind of farming operation you are involved in. Check as many as apply.

- (1)  Board grains (wheat, oats, barley)
- (2)  Off-board grains (rye, rapeseed, flaxseed)
- (3)  Specialty crops (corn, sunflower, lentils, etc.)
- (4)  Beef
- (5)  Hog
- (6)  Poultry
- (7)  Dairy
- (8)  Other (please specify) \_\_\_\_\_

35. What is the present size of your farm? \_\_\_\_\_

36. How long have you been farming? \_\_\_\_\_

37. Please indicate your average yearly gross farm sales.
- (1)  Less than \$49,999
  - (2)  50,000 to 99,999
  - (3)  100,000 to 199,999
  - (4)  200,000 to 299,999
  - (5)  300,000 to 399,999
  - (6)  400,000 to 499,999
  - (7)  500,000 or more

38. Compared to other farmers in your province, where would you say your gross farm income falls? Check one only.
- (1)  In the top 10 per cent
  - (2)  In the top 25 per cent
  - (3)  In the top 50 per cent
  - (4)  In the bottom 50 per cent

39. Are you Male?  or Female?

40. In which province do you reside? \_\_\_\_\_

41. What is your age, as of your last birthday? \_\_\_\_\_

42. Are you at present: (1)  Single? (4)  Separated?  
(2)  Married? (5)  Widowed?  
(3)  Divorced?

43. If you have any children living at home,  
how many are there? \_\_\_\_\_

44. What is the highest level of education you have  
attained? **Check one only.**
- (1)  Grade school
  - (2)  Some high school
  - (3)  High school graduate
  - (4)  Some college or university
  - (5)  College or university grad
  - (6)  Post-graduate

Thank you for taking the time to complete this questionnaire.

APPENDIX VII

Survey of ag reps in Manitoba

WESTEX NEWS  
School of Journalism  
The University of Western Ontario  
London, Ontario  
N6A 5B7

WESTEX QUESTIONNAIRE: December, 1982

1. How often do you access Westex News on the Grassroots system?
  - (a) Never
  - (b) Very Seldom
  - (c) Several times a week
  - (d) Daily
2. What category of Westex News do you access most?
  - (a) World News
  - (b) National News
  - (c) Provincial News
  - (d) Local News
3. Do you ever demonstrate Westex News to friends or visitors?
  - (a) Yes
  - (b) No
4. What, in your opinion, is the time farmers are most likely to access Grassroots in general?
  - (a) early morning
  - (b) mid-morning
  - (c) lunch time
  - (d) mid afternoon
  - (e) supper time
  - (f) evening

5. What, in your opinion, would be the best time to release an updated version of Westex News?
  - (a) early morning
  - (b) noon
  - (c) late afternoon
  - (d) evening
  
6. Compared to other services offered by Grassroots, how do you rate Westex News?
  - (a) not useful or interesting at all
  - (b) only marginally useful or interesting
  - (c) quite useful and interesting
  - (d) very useful as guide to agricultural news of the day
  
7. Compared to the other services of Grassroots, how does Westex News stack up graphically?
  - (a) easy to read
  - (b) too little structure
  - (c) too much structure
  - (d) headline pages useful
  - (e) headline pages confusing
  - (f) not enough guidance to headline importance
  - (g) stories too long
  - (h) stories too short
  
8. If you had to choose between Westex News or Broadcast News, which would you prefer?
  - (a) Broadcast News
  - (b) Westex News
  
9. If you chose Broadcast News, which of the following reasons - if any - determined your choice?
  - (a) Broadcast News is continuous, therefore more up-to-date than Westex
  - (b) Broadcast News includes sports
  - (c) Broadcast News includes weather
  - (d) Other (Please specify) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

10. On a comparative basis from (1) to (5), with (1) for first-rate through (5) for worst, how would you rate the value of each of the following as a source of agriculture news?

RADIO	(1)	(2)	(3)	(4)	(5)
TELEVISION	(1)	(2)	(3)	(4)	(5)
GRASSROOTS	(1)	(2)	(3)	(4)	(5)
WESTEX	(1)	(2)	(3)	(4)	(5)
MANITOBA					
CO-OPERATOR	(1)	(2)	(3)	(4)	(5)
DAILY NEWSPAPERS	(1)	(2)	(3)	(4)	(5)
GOVERNMENT	(1)	(2)	(3)	(4)	(5)
FARM PUBLICATION	(1)	(2)	(3)	(4)	(5)

11. Would you like to see more analytical and research articles carried by Westex News?
- (a) Yes  
(b) No
12. Would you like to see a letters-to-the-editor section on Westex News?
- (a) Yes  
(b) No
13. Would you be willing to contribute news related to your district to Westex News through the "Messaging" function on Grassroots?
- (a) Yes  
(b) No  
(c) Maybe
14. How important do you think research-related agricultural news is?
- (a) Very important  
(b) Quite important  
(c) Not important

15. In general, what is your reaction to videotex?

- (a) Favorable and optimistic about its future usefulness
- (b) Undecided
- (c) Negative for the most part, unable to see much future use for the medium

16. Do you have any comments for which you were not specifically asked on either Grassroots or Westex? If yes, please state:

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APPENDIX VIII

SCHOOL OF JOURNALISM  
The University of Western Ontario  
London, Ontario, Canada  
N6A 5B7

VIDEOTEX/TELETEXT ADVERTISING QUESTIONNAIRE

1. Which of the following most closely describes your present attitude toward videotex/teletext advertising?
  - (a) Not familiar with it.
  - (b) Primarily experimental at this stage. We are looking at its future prospects.
  - (c) Convinced of future prospects. Doing research in this medium now, but don't try to "sell" clients on it.
  - (d) Convinced that videotex/teletext is the coming thing and are recommending to some clients that they include such advertising in their marketing strategies.
  
2. Have you had any experience in preparing and/or placing client advertising on a videotex/teletext system?
  - (a) Very little
  - (b) Considerable
  - (c) None
  
3. In "selling" videotex/teletext advertising, what is it that you are selling?
  - (a) We think of the product visually, akin to selling space in print media.
  - (b) We think more along lines used in selling television advertising - time and graphic impact - mass exposure.
  - (c) We think of selling "measurable access," i.e. the client can be given a precise count of people who saw advertisement, in addition to the usual "print" orientation.
  - (d) The medium is too new for us to have developed a clear attitude to the "product" sold.

4. How was client response to suggestions that they try videotex/teletext advertising?
  - (a) Skeptical
  - (b) Positive
  - (c) Negative
  
5. On a scale of 0 to 5, how would you rate the importance of each of the following "selling points" of videotex/teletext advertising?
  - (a) Instant updating 0 1 2 3 4 5
  - (b) Continuous access 0 1 2 3 4 5
  - (c) Targeted audience 0 1 2 3 4 5
  - (d) Interactive response 0 1 2 3 4 5
  - (e) Future significance 0 1 2 3 4 5
  
6. On what type of database, or teletext feature, have you placed client advertising?
  - (a) general information database
  - (b) specialized information database
  - (c) news database
  
7. What features of a news database would discourage you to recommend client advertising?
  - (a) Possible negative effects of being associated with "bad news," of any kind.
  - (b) Possible negative effects of being associated with "opinion" or "analysis" pieces.
  - (c) Dilution of the "target audience" strength of the new medium.
  - (d) Generally, no random access of advertising pages is allowed, and without such random access the rationale for advertising on a news database ceases to exist.
  - (e) Other. Please specify: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



8. For what type of advertising do you see videotex/teletext as most suitable?

(a) Product awareness and brand reinforcement

(b) Interactive advertising

(c) Advocacy advertising

(d) Other. Please specify: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PART A - MANAGING EDITOR, EDITORIAL DIRECTOR

SECTION I

THE NEWS SERVICE - GENERAL

1. How long has your news service been in operation? \_\_\_\_\_
2. How much did it cost to set up? \_\_\_\_\_
3. How much does it cost to operate? \_\_\_\_\_
4. What is the status of your service, trial or fully operational? \_\_\_\_\_
5. How many subscribers (or participants) do you have? \_\_\_\_\_
6. Is your service commercial? (1) Yes ( )  
 (2) No ( )  
 /  
 If no, is it expected to become commercial?  
 (1) Yes ( )-----If yes, when? \_\_\_\_\_  
 (2) No ( )  
 (3) Don't know ( )
- Is it likely your service will end if it does not become commercial by then?  
 (1) Yes ( )  
 (2) No ( )  
 (3) Don't know ( )
7. How much must users pay to access your service? \_\_\_\_\_
8. How convenient is your news to access? (i.e. How many steps must user go through to get a page of news) \_\_\_\_\_
9. Does your system allow users to browse through the news package by pushing a single button or do they have to return to a main menu after each page or story? \_\_\_\_\_
10. a) Have you conducted any user surveys? (1) Yes ( ) (2) No ( )  
 b) Do you have access to "hit lists," computerized lists of individual page accesses by users? (1) Yes ( ) (2) No ( )
- If yes to either 9 (a) or (b), what have you learned about your users from this information?  
 1) Number of users. \_\_\_\_\_  
 2) Profile of users (average age, income, education, sex, occupation, etc.) \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
- 11) What items are accessed most frequently? \_\_\_\_\_  
 \_\_\_\_\_
- 12) Do users tend to read only the first page of a story? \_\_\_\_\_

5) Do users tend to read only the top stories in a category? \_\_\_\_\_

6) What do users say they like about your service? \_\_\_\_\_

7) What do users say they dislike about your service? \_\_\_\_\_

8) What do users say they would like to see on your service that you don't offer now? \_\_\_\_\_

9) How much do users seem willing to pay for your service? \_\_\_\_\_

10) If there is any other information you have about your users that you consider significant, but is not included above, please describe.

12. Have you made any changes to your service in response to user survey or "hit list" results? (1) Yes ( ) (2) No ( )

If yes, what changes have you made? \_\_\_\_\_

13. Have you had any direct feedback from your readers (letters, telephone calls)? (1) Yes ( ) (2) No ( )

If yes, how much of the direct response has been positive and how much has been negative? \_\_\_\_\_

What complaints and commendations have you received? \_\_\_\_\_

14. a) What news organization are you affiliated with? \_\_\_\_\_

b) Where is your newsroom located in relation to the regular newspaper, radio or TV newsroom of your affiliated news organization?

c) Do your staff have regular professional contact with journalists working in the other news media? (1) Yes ( ) (2) No ( ) (3) Don't know ( )

d) Do you think there is (would be) any advantage to having your newsroom located near, or even within, a regular newspaper, radio or TV newsroom?  
(1) Yes ( ) (2) No ( ) (3) Don't know ( )

Why or why not? \_\_\_\_\_

5. What hours and days do you operate? \_\_\_\_\_

6. Has your service experienced any technological problems since it began? (i.e. garbled transmissions, updates that don't "take")  
(1) Yes ( ) (2) No ( )  
If yes, please describe and indicate whether they still persist.

\_\_\_\_\_  
\_\_\_\_\_

a) What technology is your system based on? (i.e. Telidon, Antiope, etc.)

b) What is the character width of your screen? \_\_\_\_\_

c) How many lines per screen? \_\_\_\_\_

d) How many words does an average page of news contain? \_\_\_\_\_

SECTION II - STAFF

How many people staff your news service? \_\_\_\_\_

What are the various positions, the number of staff in each, and the primary responsibilities of each position?

Position	Number of staff	Primary responsibilities
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

What are the backgrounds of your "journalistic" staff in terms of education or training and previous news experience. (Please give a general breakdown if it's a large group, an exact breakdown if it's small.)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

What is your background? \_\_\_\_\_  
\_\_\_\_\_

a) How much are members of your journalistic staff paid? (Please give a breakdown according to position.)

Position	Salary
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. b) Are staff paid according to previous experience, or did everyone in the same position start off at the same salary?

(1) According to experience ( ) (2) Started off the same ( )

6. How do these salaries compare with those of other U.S. journalists?

(1) Higher ( ) (2) Lower ( ) (3) About the same ( ) (4) Don't know ( )

7. What is the average age of your journalistic staff members? \_\_\_\_\_

8. How long would you say it takes to train the following persons to become a videotex/teletext journalist?

a) Someone with no journalism training or experience \_\_\_\_\_

b) Someone with journalism training, but little or no working experience \_\_\_\_\_

c) Someone with lots of experience in another news medium, with or without formal training \_\_\_\_\_

9. When hiring staff for the new medium of videotex/teletext, what attributes and skills were you looking for in applicants?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

10. When hiring for this medium, did you (or do you) have any preference for:

a) young staff (i.e. under 30) vs older? (1) Yes ( ) (2) No ( )

b) inexperienced (i.e. just out of college) vs experienced? (1) Yes ( ) (2) No ( )

c) print vs broadcast experience (1) Yes ( ) (2) No ( )

If so, why did you have any of these preferences? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

11. What do you think are the most important skills for the videotex/teletext journalist? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

12. How do these skills differ, if they do, from those needed by journalists in the traditional media? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

SECTION III - CONTENT

4. Have you developed a style guide for videotex/teletext news?

(1) Yes ( ) (2) No ( )

5. Did you set up style guidelines before the service got under way or have they evolved primarily through trial and error?

(1) Before service began ( ) (2) Have evolved ( )

6. If you set up a style guide in the beginning, have you made any changes to it as your service has evolved? (1) Yes ( ) (2) No ( )

If yes, please give some examples of changes you have made. \_\_\_\_\_

7. What are some of your major guidelines for style and content? (i.e. number of paragraphs per page, length of lead, print vs broadcast style, etc.)

8. About what percentage of your news items are:

a) From a wire service? \_\_\_\_\_

b) From reports by other local media? \_\_\_\_\_

c) From press releases? \_\_\_\_\_

d) From telephone reporting? \_\_\_\_\_

e) From on-the-street reporting? (including personal interviews, meeting coverage, etc.) \_\_\_\_\_

f) From other sources? (please specify) \_\_\_\_\_

9. What proportion of their time do your staff spend in the office, as opposed to on the street, reporting? \_\_\_\_\_

10. Who makes the editorial decisions of what stories to use and how to treat them? \_\_\_\_\_

11. Is your news service catering to any particular audience (i.e. farmers)?

(1) Yes ( ) (2) No ( )

12. If no, are there any particular rules based specifically on the nature of the videotex/teletext medium that govern your decision of what news items to put on the system, or do you think you use the same news values and judgments you'd use if you were choosing stories for a newspaper or a radio broadcast?

10. Describe the news flow in your operation. How many hands does a news item pass through before it is placed on the system? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

11. Who is ultimately responsible for accuracy, consistency in style and spelling, avoiding libel, etc.? \_\_\_\_\_

\_\_\_\_\_

12. Do you produce a hard copy of all the news you publish online?

(1) Yes ( ) (2) No ( ) -----

If yes, are you legally required to do so?

(1) Yes ( )  
(2) No ( )

If no, do you think there's a potential for journalists to become more lax about accuracy, libel, etc when no hard copy is kept?

(1) Yes ( )  
(2) No ( )  
(3) Don't know ( )

13. a) How often is your news updated? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

b) If your news is updated more than once a day, what's the maximum length of time you'll allow (1) a hard news story to run? \_\_\_\_\_  
(2) a feature to run? \_\_\_\_\_

4. Do you think your system of updating is the best for this medium?

(1) Yes ( ) (2) No ( ) (3) Don't know ( )

Why or why not? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

5. Do you think a teletext or videotex news service can be successful if it is updated only once a day? (1) Yes ( ) (2) No ( )  
(3) Don't know ( )

6. What is your content style? (i.e. bulletins, just headlines, full text of a newspaper, edited text) \_\_\_\_\_

7. a) What types and categories of news and information do you offer and what is the approximate percentage of each in your daily package?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

b) What proportion of your news content would you say is hard news vs soft?

\_\_\_\_\_

c) Which of the following, if any, does your news package include?

1) Features ( ) (2) Editorials ( ) (3) Analysis ( )  
(4) Backgrounders ( ) (5) Letters to the editor ( )

18. Please describe how your news is indexed.

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19. How do you signify the varying importance of news items and attract readers to a particular story? \_\_\_\_\_

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20. a) Do you use bylines? (1) Yes ( ) (2) No ( )

b) Why, why not? \_\_\_\_\_

c) How do you credit the various sources of your news items? \_\_\_\_\_

---

21. a) How many pages (screens) does an average news item run? \_\_\_\_\_

b) What is the maximum length for 1) Hard news stories? \_\_\_\_\_

2) Features? \_\_\_\_\_

22. How many items do you run in an average day? \_\_\_\_\_

---

23. Does your system place any technological limit on the number of items you can run or the number of pages in each story? (1) Yes ( ) (2) No ( )

24. If there is no such limit on your service, do you have a quota of items you like to have on the system at any given time? (1) Yes ( ) (2) No ( )

25. Do stories continue sentences over a page, or does each page stand alone?  
(1) Continues sentences ( ) (2) Stands alone ( )

26. Do you try to have each page of a multi-page item tell a complete story without the reader needing the next page? (1) Yes ( ) (2) No ( )

27. a) Do you use sidebars? (1) Yes ( ) (2) No ( )

b) Do you ever run a series of stories over two or more days?

(1) Yes ( ) (2) No ( )

28. a) What is the maximum character length of your headlines? \_\_\_\_\_

b) With such restricted space, do you think it's more important to give the reader a clear idea of what the story is about in the headline, or to attract him to the story with a bright head? \_\_\_\_\_

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c) Do you use: Kickers? (1) Yes ( ) (2) No ( )

Sub-heads? (1) Yes ( ) (2) No ( )

29. a) Is your style (1) All caps? ( ) or (2) Upper and lower case? ( )

b) Which style do you think is more readable?

(1) All caps ( ) (2) Upper and lower case ( )



0. Do you use graphics?  
 (1) Yes ( ) (2) No ( )-----If no, please move on to question #34.
- a) If yes, what kind? (charts, maps, etc.) \_\_\_\_\_  
 \_\_\_\_\_
- b) About what percentage of your stories are accompanied by a graphic?  
 \_\_\_\_\_
- c) What is your policy, if any, governing when and how often to use graphics?  
 \_\_\_\_\_  
 \_\_\_\_\_
- d) Do you store your graphics in a computer "morgue" to be used again?  
 \_\_\_\_\_
32. Are you using graphics more than when you first began, less, or about the same?  
 (1) More ( ) (2) Less ( ) (3) About the same ( )
33. Do all members of your journalistic staff design graphics or is it done only by artists?  
 (1) All staff ( ) (2) Artists only ( )
34. Do you use color? (1) Yes ( ) (2) No ( )  
 If yes, how do you use it? \_\_\_\_\_  
 \_\_\_\_\_
35. On a scale of one to five, with one being very unimportant and 5 being very important, how important do you think graphics and color are to teletext/videotex news? Please circle one.  
 Very unimportant 1 2 3 4 5 Very important
36. If you have advertising, please describe its use on your service. (i.e. Do you use company logos on individual pages, are there separate pages of ads, do you have classified ads, display ads?) \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
37. a) Do you include any references in a story to where a reader could get more information on the subject - either in backgrounders on your system or in the other media? (1) Yes ( ) (2) No ( )
- b) Do you provide any separate package of backgrounder information?  
 (1) Yes ( ) (2) No ( )
38. Which of these phrases do you think most accurately describes your news service?  
 (1) Printed radio ( ) (2) Broadcast newspaper ( )  
 (3) Electronic magazine ( ) (4) None of these ( )
- If you think none of these phrases apply, please describe your service, in a phrase. \_\_\_\_\_
39. Do you think there are any improvements to your service - either stylistically or technologically - that would improve readability or accessibility of your content for the user?  
 (1) Yes ( ) (2) No ( ) (3) Don't know ( )
- If yes, please describe. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

0. Do you think your service could be doing more journalistically to improve the quality of your content for the user?  
(1) Yes ( ) (2) No ( ) (3) Don't know ( )

If yes, please describe. \_\_\_\_\_  
\_\_\_\_\_

1. Are any changes in your service planned in the near future?  
(1) Yes ( ) (2) No ( ) (3) Don't know ( )

If yes, please describe. \_\_\_\_\_  
\_\_\_\_\_

SECTION IV - VIDEOTEXT JOURNALISM

1. On the whole, how good a job of informing the public do you think the news media are doing today? (1) Outstanding ( ) (2) Very good ( )  
(3) Good ( ) (4) Fair ( ) (5) Poor ( )

2. How good a job of informing the public do you think your news organization is doing? (1) Outstanding ( ) (2) Very good ( )  
(3) Good ( ) (4) Fair ( ) (5) Poor ( )

What advantages do you think videotex/teletext has as a news medium over newspapers, radio and TV? \_\_\_\_\_  
\_\_\_\_\_

4. What disadvantages do you think videotex/teletext has as a news medium compared with newspapers, radio and TV? \_\_\_\_\_  
\_\_\_\_\_

5. How do you see videotex/teletext evolving as a news medium over the next decade? What do you think its potential is? \_\_\_\_\_  
\_\_\_\_\_

What do you foresee could keep videotex/teletext news from developing its potential? \_\_\_\_\_  
\_\_\_\_\_

Do you think there is a place for in-depth or investigative journalism on videotex/teletext? \_\_\_\_\_  
\_\_\_\_\_

Why or why not? \_\_\_\_\_  
\_\_\_\_\_

1. What impact, if any, do you think videotex/teletext news services will have on the other news media? (i.e., will they complement, compete with or replace the other media?) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

9. In your opinion, which of these groups stand to benefit from the growth of electronic news delivery, which will be harmed, which will be unaffected?

- a) Newspaper owners and management \_\_\_\_\_
- b) The public \_\_\_\_\_
- c) Reporting journalists \_\_\_\_\_
- d) Editing journalists \_\_\_\_\_
- e) Advertisers \_\_\_\_\_

10. a) Do you agree or disagree that the role of the editor is diminished in videotext journalism because the nature of the medium allows users to be their own editors? (1) Agree ( ) (2) Disagree ( )

b) What do you think the role of the editor will be in videotex/teletext news systems? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

11. Which do you think has more potential as a news medium - videotex or teletext? (1) Videotex ( ) (2) Teletext ( )  
(3) Both have same potential ( ) (4) Don't know ( )

Please give a reason for your choice. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. How do you think videotex/teletext news will be financed?

- (1) By users ( ) (2) By advertisers ( )
- (3) By a combination of users and advertisers ( )
- (4) By a new method ( )

3. How do you think the role of advertising will evolve on videotex/teletext news systems? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4. Do you think videotex/teletext news should be subject to any of the regulations applied to broadcast news? \_\_\_\_\_  
\_\_\_\_\_

15. In your opinion, who should control the videotex/teletext system that a news service publishes on? (i.e. newspapers, time-share computer firms, telephone firms.) \_\_\_\_\_

Who controls your system? \_\_\_\_\_

16. What potential do you think there is for a videotex/teletext news service that puts the contents of a newspaper or newswire directly onto the system as opposed to rewriting it specifically for the medium? \_\_\_\_\_

17. How does your experience in videotex/teletext news compare with any other news experience you may have had? \_\_\_\_\_

18. Do you want to be working in videotex/teletext five years from now?  
 (1) Yes ( ) (2) No ( ) (3) Don't know ( )

19. Are you more enthusiastic about teletext/videotex than when you first entered the field, less enthusiastic or about the same?  
 (1) More enthusiastic ( ) (2) Less enthusiastic ( )  
 (3) About the same ( ) (4) Don't know ( )

If your enthusiasm has risen or declined, please explain why.

20. On a scale of one to five, with one being no problem and five being a big problem, how do you rate the following as possible problems for readers of videotex/teletext news? Please circle the appropriate number.

1. Teletext/videotex generally provides no photographs.

No problem 1 2 3 4 5 Big problem

2. Readers can't keep clippings of stories. 1 2 3 4 5

3. Readers may think that teletext/videotex articles are harder to find than articles in a newspaper. 1 2 3 4 5

4. Viewers may have difficulty in seeing and reading type on the screen. 1 2 3 4 5

5. Several successive TV screen changes may not sustain reader interest. 1 2 3 4 5

6. Readers must position themselves at a TV set instead of wherever they want to read. 1 2 3 4 5

7. Readers may find that teletext/videotex requires too much button-pushing. 1 2 3 4 5

8. Readers can't see several stories together on a full page. 1 2 3 4 5

9. Readers may want to hold the paper in their hands.

Do you agree or disagree with the following general statements about electronic news and its potential impact on other media and society.

1. Newspapers will be dead in 10 years. (1) Agree ( ) (2) Disagree ( )
2. Newspapers won't die but they will appraise their role, eliminate some of their superficial content, turn to more in-depth journalism.  
(1) Agree ( ) (2) Disagree ( )
3. Videotex/teletext will inherit much of the superficial content that newspapers now handle. (1) Agree ( ) (2) Disagree ( )
4. Videotex/teletext will erode the newspaper advertising base.  
(1) Agree ( ) (2) Disagree ( )
5. The blur of news and advertising on videotex/teletext will affect the credibility of journalists. (1) Agree ( ) (2) Disagree ( )
6. The quality of videotext journalism suffers because of its lack of depth and controversy. (1) Agree ( ) (2) Disagree ( )
7. The quality of videotext journalism suffers because of the predominance of young, inexperienced reporters in this field.  
(1) Agree ( ) (2) Disagree ( )
8. Videotex/teletext is more a medium for people who know what they're looking for, than a medium for people who want to browse.  
(1) Agree ( ) (2) Disagree ( )
9. Because videotex/teletext allows users to select a narrow range of information, a society of videotex/teletext users would be exposed to fewer ideas and events than newspaper readers.  
(1) Agree ( ) (2) Disagree ( )
10. A society of videotex/teletext users, exposed to fewer ideas and events, would be less capable of making decisions in a democracy.  
(1) Agree ( ) (2) Disagree ( )
11. The growth of videotex/teletext as a news medium would cut into newspaper reading time because the amount of time and money people spend on the media is generally inelastic. (1) Agree ( ) (2) Disagree ( )
12. Videotex/teletext news eliminates the sensationalism of other news media. (1) Agree ( ) (2) Disagree ( )
13. Videotex has no chance of becoming a popular news medium until the cost of using it comes down. (1) Agree ( ) (2) Disagree ( )

PART B  
WRITER/REPORTER/EDITOR SURVEY

1. Age \_\_\_\_\_

2. How long have you worked here? \_\_\_\_\_

3. Please describe your background in the following areas:

a) Education, training \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

b) Other jobs, other jobs in the news business \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4. If you have previous news experience, how does this compare? (i.e. What do you miss about other news jobs? What do you prefer about this one?)  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. What do you do exactly? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6. In an average week, about what percentage of your time do you spend:

a) in the office? \_\_\_\_\_

b) outside the office, reporting? \_\_\_\_\_

c) on the phone, reporting? \_\_\_\_\_

d) working at a terminal? \_\_\_\_\_

e) in staff meetings? \_\_\_\_\_

f) writing, answering letters? \_\_\_\_\_

7. How often do your stories involve news gathering from more than one source?

(1) Most of the time ( ) (2) Sometimes ( )

(3) Rarely ( ) (4) Never ( )

8. What are some of the major style and content guidelines you follow when writing for videotex/teletext?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

9. How many pages (screens) do you write in an average day? \_\_\_\_\_

- Do you ever write:
- a) Features? (1) Yes ( ) (2) No ( )
  - b) Backgrounders? (1) Yes ( ) (2) No ( )
  - c) Analysis? (1) Yes ( ) (2) No ( )
  - d) Editorials? (1) Yes ( ) (2) No ( )

11. Do you do graphics? (1) Yes ( ) (2) No ( )

12. What skills do you think are required for this job?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

13. How does that compare with other news jobs you may have had?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

4. Which of those skills do you have now that you didn't have when you first started working here?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

How long did it take you to acquire those skills?

\_\_\_\_\_

\_\_\_\_\_

6. On a scale of one to five, with one being very unimportant and five being very important, how important to your kind of journalism would you say the following skills are? Please circle the appropriate number.

1. The ability to give people a sense of the personalities and atmosphere of an event.

Very unimportant 1 2 3 4 5 Very important

2. The ability to give a straightforward account of the facts of an event.

1 2 3 4 5

3. The ability to show people what conclusion they should draw from a story.

1 2 3 4 5

4. The ability to recognize "the story" in any assignment and write up events accordingly.

1 2 3 4 5

5. The ability to write quickly and spell correctly.

1 2 3 4 5

6. The ability to condense long stories quickly through editing.

1 2 3 4 5

7. The ability to write headlines quickly which are within count and accurate in meaning.

1 2 3 4 5

8. The ability to gather information from different sources quickly.

1 2 3 4 5

17. Whom do you report to (if anyone)? \_\_\_\_\_  
How often? \_\_\_\_\_

18. How much autonomy do you have - in deciding what stories to do, how to write them, etc.? \_\_\_\_\_

19. What do you like most about this job?  
\_\_\_\_\_  
\_\_\_\_\_

20. What do you dislike about this job?  
\_\_\_\_\_  
\_\_\_\_\_

21. On the whole, how satisfied would you say you are with your job?

- (1) Very satisfied ( ) (2) Fairly satisfied ( )  
(3) Somewhat dissatisfied ( ) (4) Very dissatisfied ( )

22. Are you more enthusiastic about teletext/videotex than when you first entered the field, less enthusiastic or about the same?

- (1) More enthusiastic ( ) (2) Less enthusiastic ( )  
(3) About the same ( ) (4) Don't know

If your enthusiasm has risen or declined, please explain why.  
\_\_\_\_\_  
\_\_\_\_\_

23. Do you hope to be working for the same organization five years from now, or would you prefer to be working somewhere else by then?

- (1) Same organization ( ) (2) Somewhere else ( ) (3) Don't know ( )

24. If somewhere else, do you intend to stay in the news media or work outside the news media?

- (1) In the news media ( )  
(2) Outside the news media ( ) (3) Don't know ( )

25. a) Do you have access to information about your users, i.e. surveys or "hit lists," computerized lists of individual page accesses by users?

- (1) Yes ( ) (2) No ( )

b) Do you ever get any direct feedback from readers? (calls, letters)

- (1) Yes ( ) (2) No ( )

If yes, has user response been favorable, unfavorable, or both?  
\_\_\_\_\_  
\_\_\_\_\_

26. On the whole, how good a job of informing the public do you think the news media are doing today?

- (1) Outstanding ( ) (2) Very good ( ) (3) Good ( )  
(4) Fair ( ) (5) Poor ( )



7. How good a job of informing the public do you think your news organization is doing?

- (1) Outstanding ( ) (2) Very good ( ) (3) Good ( )  
(4) Fair ( ) (5) Poor ( )

8. Do you think your service could be doing more than it is? Do you feel limited at all? \_\_\_\_\_  
\_\_\_\_\_

9. Are there some stories that you think you should be covering, but for some reason you are not? (1) Yes ( ) (2) No ( ) (3) Don't know ( )

If yes, could you give an example of such a story and the reason the story is not being covered? \_\_\_\_\_  
\_\_\_\_\_

10. On a scale of one to five, with one being very unimportant, and five being very important, how important do you think is it for your news organization to do the following?

1. Investigate claims and statements made by the government.

Very unimportant 1 2 3 4 5 Very important

2. Provide analysis and interpretation of complex problems.

1 2 3 4 5

3. Get information to the public as quickly as possible.

1 2 3 4 5

4. Discuss national policy while it's still being developed.

1 2 3 4 5

5. Stay away from stories where factual content cannot be verified.

1 2 3 4 5

6. Concentrate on news which is of interest to the widest possible public.

1 2 3 4 5

7. Develop intellectual and cultural interests of the public.

1 2 3 4 5

8. Provide entertainment and relaxation.....1 2 3 4 5

9. Take up grievances.....1 2 3 4 5

10. Advise and help people.....1 2 3 4 5

11. Be a spokesman for the underdog.....1 2 3 4 5

12. Be a proponent of new ideas.....1 2 3 4 5

13. Be an advocate of a political position....1 2 3 4 5

31. In general, how do you see videotex/teletext evolving as a news medium over the next decade? What do you think its potential is?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

32. Do you think there is a place for in-depth or investigative reporting in videotex/teletext journalism?

(1) Yes ( ) (2) No ( ) (3) Don't know ( )

Why or why not? \_\_\_\_\_

33. What impact, if any, do you think videotex/teletext news systems will have on the other news media? (i.e. will they complement, compete with or replace the other media?) \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

34. Which phrase do you feel best describes your news service:

(1) Printed radio ( ) (2) Broadcast newspaper ( )  
(3) Electronic magazine ( ) (4) None of these ( )

If you think none of these apply, please describe your service, in a phrase.

\_\_\_\_\_

35. Are you in contact with journalists in other news media? \_\_\_\_\_

If yes, what is the reaction of other journalists to your job and videotex/teletext news in general? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

36. Do you feel you are being paid on a scale with other journalists with your experience and training? (1) Yes ( ) (2) No ( ) (3) Don't know ( )

37. If you have previous news experience, do you think your skills as a journalist are being used to full capacity in videotex/teletext?

\_\_\_\_\_

38. Do you think your journalistic skills have deteriorated, improved or stayed about the same since you began working in teletext/videotex? Please elaborate.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

APPENDIX XI  
Promotional Letter

We'd like to introduce you to WESTEX NEWS - 2045 on your Grassroots system.

WESTEX NEWS is a different kind of news service -- news selected and written for Western farmers. It's the first daily videotex news service anywhere, custom designed for farmers.

Since April, 1982, WESTEX NEWS has been providing Manitoba farmers with the latest international, Canadian, and local news.

You can get the news that interests you quickly on WESTEX NEWS because it is written for videotex. We make it easy to find the important news and we write it clearly and concisely, to save you time.

A five-minute "browse" through the daily Westex News package costs less than most daily newspapers. And we carry all the important stories published by Western farm newspapers -- only earlier.

Through its association with Canadian Press, WESTEX NEWS brings you the news from around the world and across the nation. The regional, Western Canada wire keeps Westex News staff on top of what's happening in your city, town or neighborhood.

In addition to wire service news, there are WESTEX-originated items, adding background information and insight to the events that affect you every day.

Through our computer links with other data banks, such as the University of Nebraska's AGNET, we give you the latest developments in U.S. agriculture.

And then there are our special reports on such events as the International Plowing Match and the Royal Winter Fair. If Manitoba farmers are there, WESTEX NEWS makes it a point to find out.

And now, with the Grassroots "messaging" function, you can even write "letters to the editor" using your terminal pad. Tell us how you feel about news issues or Westex itself. Just address your comments to WESTEX NEWS. Our box number is 7195.

WESTEX NEWS. Check us out.

Daily. On Grassroots.



