TELIDON

Which videotex system delivers superior graphics while using the data base to maximum efficiency?

Which videotex system protects your hardware and data base investment against obsolescence due to expected advances in computer, carrier or display technologies?
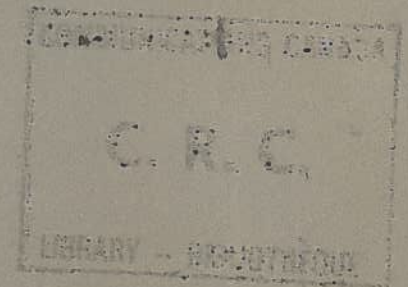
Which videotex system now meets all the requirements – technical and economic – of the ideal videotex system, and is most able to adapt to the certainties of future growth and changing markets?
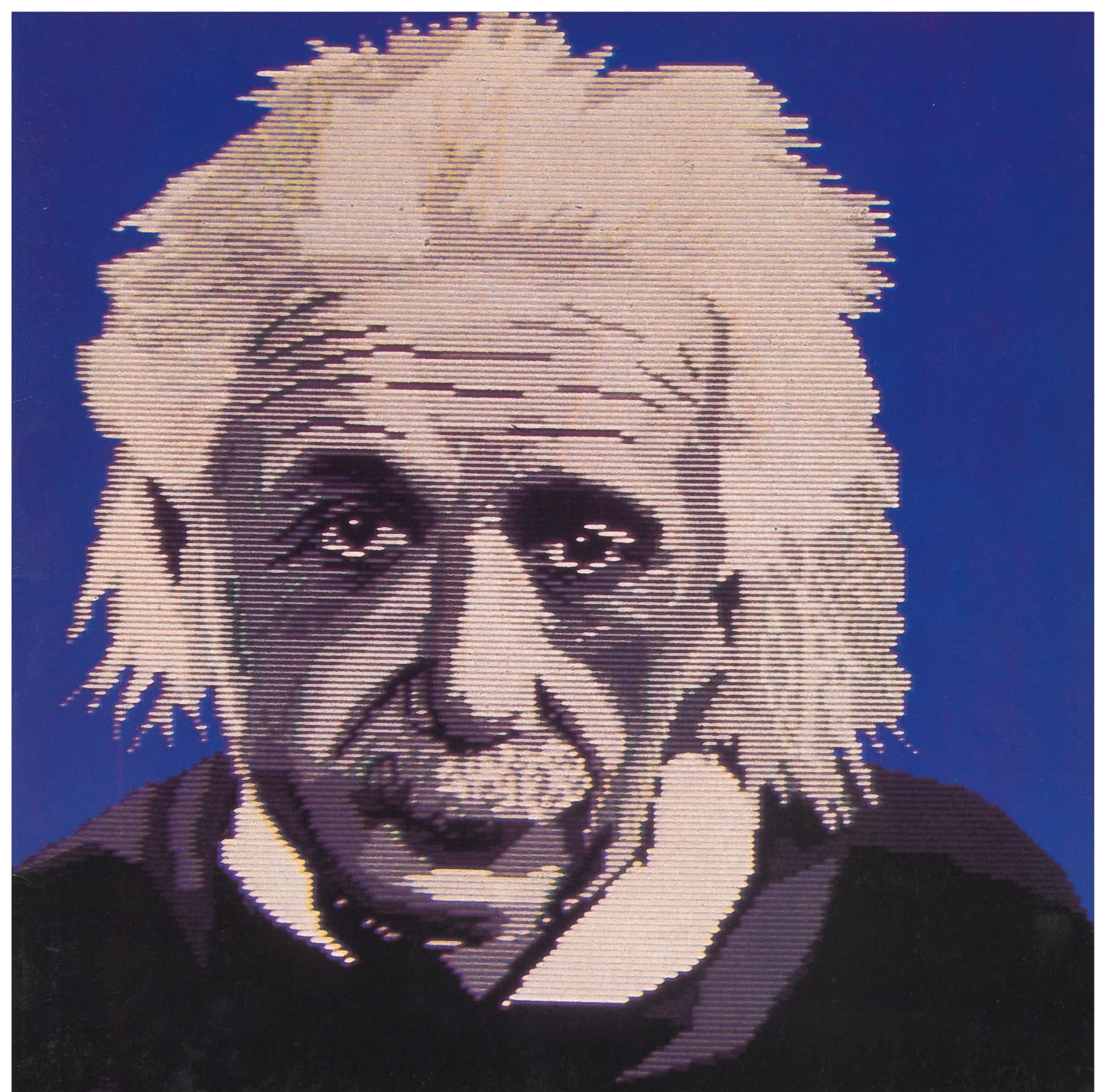
T TELIDON

Is there any other choice?

TELIDON'S UNMATCHED FLEXIBILITY

Telidon was designed to provide high quality graphics, while allowing complete freedom of choice for the type of service (videotex, teletext, person-to-person communication), the type of display and the type of data storage and transmission media.

Telidon also features forward and backward compatibility. Forward compatibility means that future terminals will be able to access information created today. Backward compatibility means that today's terminals will be able to receive, decode and display all future command formats in an intelligent manner. These important features allow for graceful system evolution.

The secret of Telidon is its coding scheme – the Picture Description Instructions (PDIs).

PDIs describe the content of images in terms of basic geometric elements such as points, straight lines, arcs, rectangles and polygons. This is why Telidon is described as alpha-geometric.

The PDI system codes information in a highly compact form. This makes for efficiency and economy in both storage and transmission. Typical Telidon pages average 400-500 bytes (or characters) of information.

PDIs mathematically define the shape of the structure to be drawn. Each form is specified with the minimum information necessary to define it uniquely.

For example, a point is described by one co-ordinate specification; straight lines and rectangles require two co-ordinates; arcs, three; and polygons as many co-ordinates as there are vertices. Additional information specifies color, fill texture for enclosed areas, and whether a line is to be solid or not. Co-ordinate positions are specified as a fraction of the width of the display screen.

At the receiving end, intelligent terminals interpret the commands and logically reconstruct the image to whatever degree of resolution the display hardware permits.

Telidon can also describe images as a series of scanned points in color or in black and white. The result is a photographic image of the original, similar to a facsimile.

Textual messages are transmitted by standard procedures, using ASCII (American standards code for information interchange) characters. Subscripts, superscripts and annotations are easily handled in an internationally approved manner. Any number of character sets may be supported by the Telidon system.

Ordinary Telidon terminals can receive non-Latin characters, ideographic symbols or cursive scripts in a way fully compatible with the international standards of the International Standards Organization (ISO). And they can appear according to the usual custom of the language – vertically or from right to left.

A STANDARD FOR TODAY – AND THE FUTURE

In November 1980, Telidon's alpha-geometric coding became one of the three international standards recognized by the International Telegraph and Telephone Consultative Committee (CCITT), the UN agency responsible for setting international telecommunications standards.

Telidon is currently capable of handling a wider range of the attributes of videotex service as defined by the CCITT, such as color, motion, overlays and display resolution, than other available videotex systems.

The Telidon standard gives you the potential of reaching the entire videotex market with your information. Because of its hardware-independent and variable resolution data format, Telidon information can easily be converted to other formats such as alpha-mosaic or DRCS (dynamically redefinable character sets). The converse is not possible. And identical pages can be transmitted over a variety of media without modification to the page contents.

Telidon's standards also guarantee you long-range system compatibility. Its design takes into account all technical changes expected to affect videotex between now and the turn of the century.

Telidon has built-in ability to adapt to technological change. The PDI concept ensures that future enhancements in computers, communications, data base management and display technology can be incorporated without restraint. Telidon gives you the option of adopting innovations, while protecting your

The secret of Telidon is in it's highly efficient coding scheme – The Picture Description Instructions ''PDIs'' which describe images in terms of basic geometric elements such as points, lines, arcs, rectangles and polygons. Telidon terminals can handle non-Latin characters, ideographic symbols or cursive scripts as well as the widest range of videotex attributes such as color, motion, overlays and display resolution.

investment in terminal equipment and data base content. Any part of the system can be upgraded or changed without making other parts obsolete.

Telidon is also designed to permit the easy addition of new features. PDIs form an extensible code which makes it possible to develop new software for special applications within a matter of months.

Telidon has unparalleled ability to accommodate future growth.

INDEPENDENCE NOT OBSOLESCENCE

The leader of the Telidon design team explains the underlying philosophy:

"We were determined as engineers not to make Telidon terminals dependent in any way on the communications media or on the receiving display hardware.

"We wanted this independence because we know there are different rates of change for terminal, transmission and data base management technologies. For example, existing communications are constantly being improved with fibre optics, satellite and other broadband services as well as improvements in the telephone networks and we know the resolution of TV itself may well be improved or TV may even be replaced by a totally new display technology. The additional electronics we're putting into a TV to allow it to display this new alphanumeric, graphic and tonal image material will also change rapidly with advances in micro-processors and memory systems and large scale-integration.

"We felt it was essential to adopt a methodology and an over-all systems approach permitting independence of information storage from the delivery and receiving systems. Otherwise, we would be stuck with a data life expectancy of about five years before much of the information in data banks would have to be redone for the next generations of systems. That's one area where our approach is definitely superior."

– Herb Bown, Director General,
  Information Technology,
  Department of Communications,
  Government of Canada.

Telidon's independence is the product of its PDI coding system. The variety of communications links that can be used with Telidon proves the value of this feature. Telidon has been transmitted over
- narrow and wideband telephone
- broadcast television
- microwave
- X.25 packet-switched networks
- video cable
- two-way packet-switched cable
- optical fibre
- satellite relay
- direct broadcast satellite

Because drawing commands are defined in terms of geometric elements rather than parameters of the display hardware, Telidon's coding system also ensures independence from the constraints of particular hardware.

Telidon can be used with
- 525-line North American TV receivers – the 625-line European standards – or future high-definition displays using several thousand lines
- low resolution 60 by 80 pixel block graphics display – medium resolution 200 by 256 pixel display – high resolution of 400 by 512 – or the ultra high resolution being considered for future digital television standards
- displays employing non-TV technology such as liquid crystal, plasma panel hardware, electro-luminescent flat panel, random vector or random point-to-point refresh screen.

At the Telidon terminal, PDIs are interpreted and displayed to the best quality permitted by the terminal.

The inherent flexibility of Telidon's coding scheme permits a variety of terminals to operate on the same network. Business users may require sophisticated terminals which offer high resolution, a wide range of colors and other features. Home subscribers will likely prefer a more modest package at a lower price, with the possibility of upgrading at a later date.
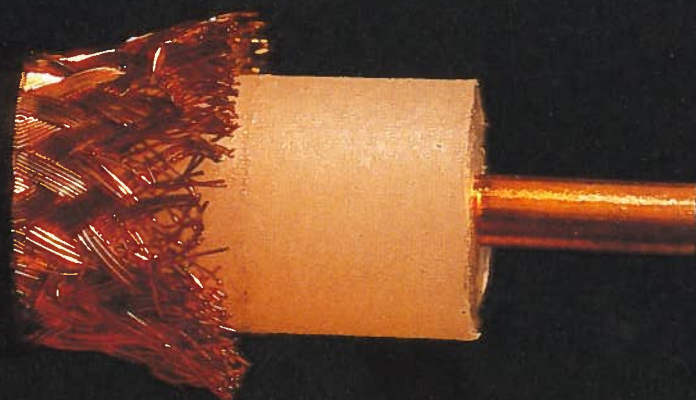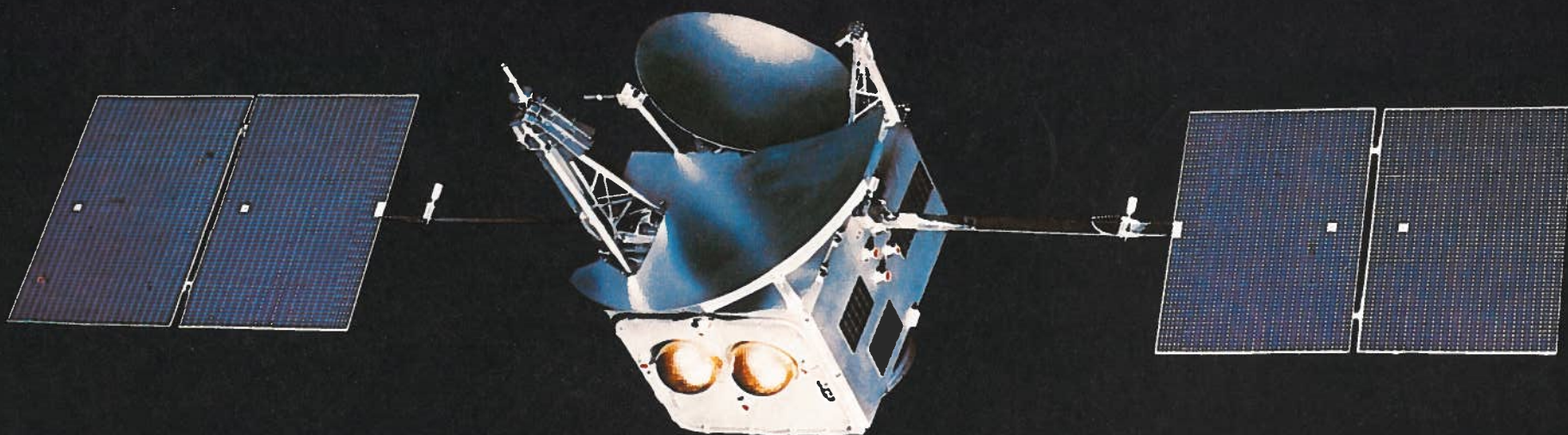
Telidon can be transmitted over any communications medium, whether optical fibre, satellite, coaxial cable, telephone lines or over-the-air broadcast.
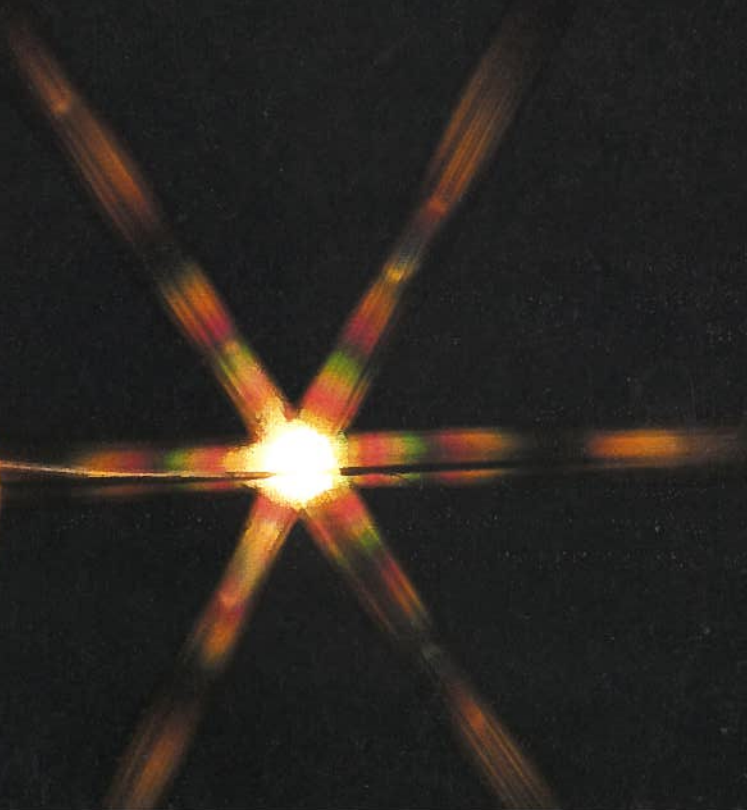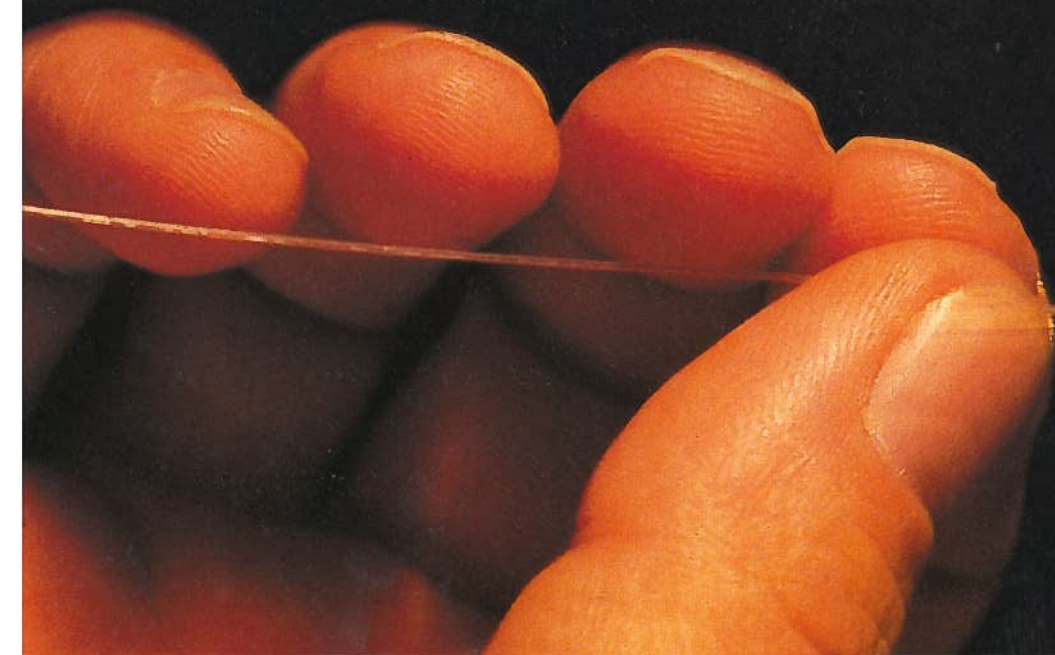
Telidon allows users to select terminals in the price and performance range they need, yet all can access the same data base and interpret the same PDIs, and all are mutually compatible. This gives Telidon unique adaptability to a variety of market conditions.

Creating and maintaining vast data bases are major cost factors in any videotex system. Telidon's data base independence protects this large investment from the effects of continuing changes in display and communications delivery technologies.

A single data base is capable of serving terminals with a variety of graphics qualities over a variety of communications media without special processing. This ensures that you can choose the equipment and the communications system best suited to your needs.

Improvements in other parts of the system do not fragment the data base. For the system designer, this brings freedom to introduce innovations without restriction. For the information provider, it eliminates obsolescence of the data base. There is no need to create and store several versions of the same page or to build in processing overhead to cover the selection of which page to send to which terminal.

"Telidon is virtually immune to obsolescence. As advances are made in other related technologies, such as transmission media, television sets and data base storage, they will only make Telidon look even better."

**– Francis Fox,
Minister of Communications,
Government of Canada.**

INFORMATION CREATION MADE EASY

Telidon's information provider (IP) systems have sophisticated graphics creation and editing capabilities – plus many of the text handling features of word processors. And they are easy to use.

Crisp high-resolution visuals can appear as line drawings or solid color silhouettes. Intricate shapes, flowing lines and photographs are handled precisely by Telidon technology. Animation is possible, as are multiple overlays. And graphics can appear on the screen in any order the artist wishes.

No special training is required to use an IP terminal. Telidon's input system is so simple that you can teach yourself to use it in about 10 minutes.

The rate of production is very high. An operator using a Telidon IP terminal can create a page of text in about five minutes. A moderately complex chart might take 10 or 15 minutes to create.

With some systems, information creation can be a time-consuming and expensive process. Telidon, however, spells savings for information providers, by keeping to a minimum the time required to create information. The information itself is compactly coded for efficient and economical storage and transmission.

At the same time, you have full control over the complexity of the pages you create. You can design simple pages – or extremely sophisticated and detailed illustrations if that is what your application requires.

Telidon provides graphic flexibility. It maximizes the freedom and productivity of the artist and permits artistic creation in a natural manner. There are no inherent limits on the type of images you can create.

Images can be created in the following ways:
▶ By retrieving an image from a graphics library and then modifying it.
▶ By entering freehand sketches or tracing prepared drawings using a digitizing graphics tablet and a stylus. As an aid to copying, a video camera can be trained on an object and the image can be displayed on the monitor.
▶ By using high-level drawing commands defined as geometric elements:
POINT sets the drawing cursor to any position in the drawing space, and optionally draws a point.
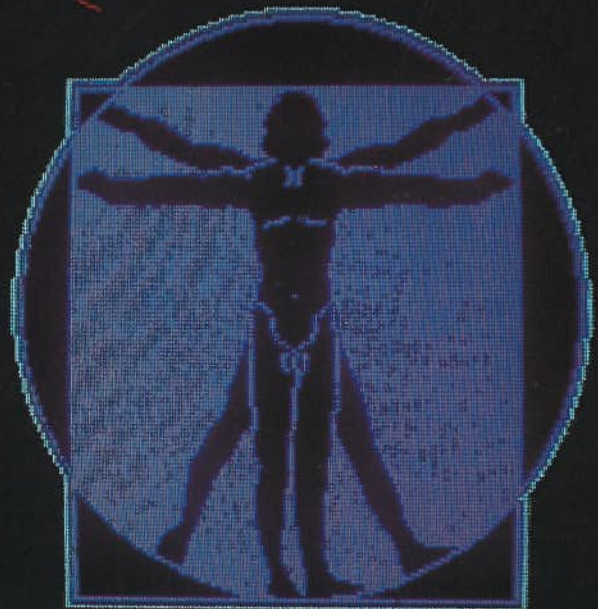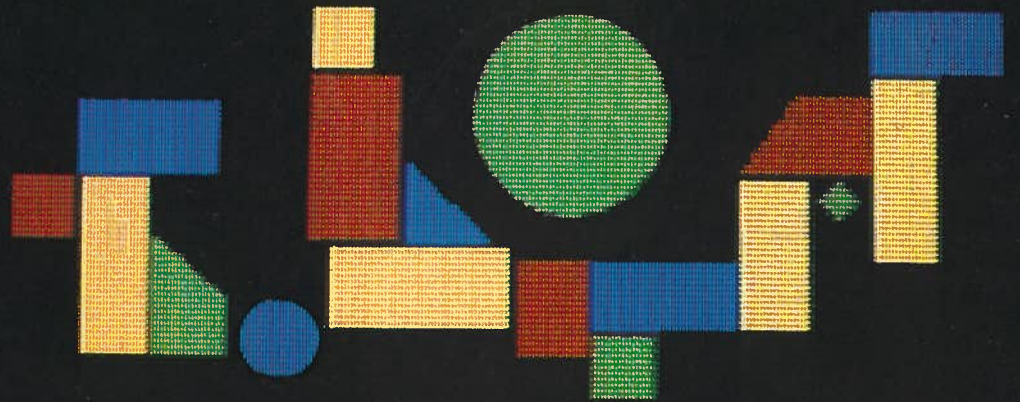
LINE draws a line based on its endpoints.

ARC draws an arc based on three points of the arc.

AREA draws a rectangular area of a specified width and height.

POLYGON draws a polygonal area based on a series of vertex points.

Colors, line textures and fill patterns may be modified as desired.

"Wedge"

bálos

Telidon images can be created easily and by a variety of means, such as by using a digitizing graphics tablet and stylus or by keyboard.

You can copy an image as many times as you wish and make it larger or smaller. You can place these images in any position or orientation on the screen, or nest them one inside the other.

The number of colors that can be displayed is theoretically unlimited. Colors and grey tones can be mixed within the same page. As is the case with resolution, the present limits on color are to be found in terminal design. Eight basic colors (green, blue, red, cyan, yellow, magenta, black and white) and six shades of grey as well as flashing white are available on most terminals. The potential for additional color is inherent in the PDI protocol.

Because the PDI interpreter can access the display memory at random, the order of appearance of the different components of a page can be arranged for maximum viewer interest. Graphic images can be built up in layers, including photographic, geometric and textual annotation components.

Animations of any length desired are produced by modifying images through a sequence of selective image overlays and erasures. Speed of presentation is controlled by timing codes included in the PDI commands.

During an input session, the color TV monitor provides continuous visual feedback and displays editing prompts as well as the current status of the editor. If you make a mistake as you are working, there is a command for cancelling the last object.

Telidon IP terminals offer a wide range of graphic editing actions including:

ROTATION OF OBJECTS UP TO 360° IN EITHER DIRECTION
IMAGE SCALING FROM 0.01 TO 100.0 TIMES THE SIZE OF THE ORIGINAL
IMAGE REFLECTION
TEXT AND GRAPHIC ANIMATION
MOTION
GRID OVERLAY
OVERLAYS AND OVERWRITING
REPOSITIONING OBJECTS
CHANGING THE SEQUENCE IN WHICH OBJECTS APPEAR
TIMING CONTROL
WINDOWING, TO ZOOM IN ON A PORTION OF THE PAGE
DELETING SPECIFIED OBJECTS
CHANGING THE COLOR OF AN OBJECT OR FILLING IT WITH COLOR.

Telidon text input systems have a range of word processing functions such as:

ADDING AND DELETING BLOCKS OF TEXT
MOVING TEXT
OVERWRITING CHARACTERS.

You can enter text into the system by typing it on the terminal keyboard. But you can avoid re-keyboarding much existing text. Since Telidon codes are compatible with those used in most computerized systems, text can be captured electronically from word processors, newswire services, data base computers and even optical character readers. Telidon will then automatically reformat to your specifications.

Many of the repetitive formatting functions are automated. Format commands include:

JUSTIFICATION ON RIGHT, LEFT OR BOTH SIDES.
SPECIFICATION OF LINE LENGTH AND PAGE SIZE.
SPACING OF TEXT.
INDENTATION.
EMBEDDING AND APPENDING OF OTHER TEXT FILES.
CHANGING COLOR OF TEXT.
SPECIFYING COLOR OF BACKGROUND.

In addition, you can specify the point on the screen where you want the text to start and the size of characters to be used in the display.

Text can be merged with images to produce final documents. For example, a graphic logo or header can be automatically added to each page.

The transparent mode allows captioning of regular TV pictures, or mixing of PDI images and conventional TV pictures.

Once your text is entered and formatted, it's easy to organize it into tree-structured data bases. The creator assigns numbers to each document and defines their hierarchical relationship. Menu selection pages can then be created easily and the subtree can be previewed on the information provider terminal.
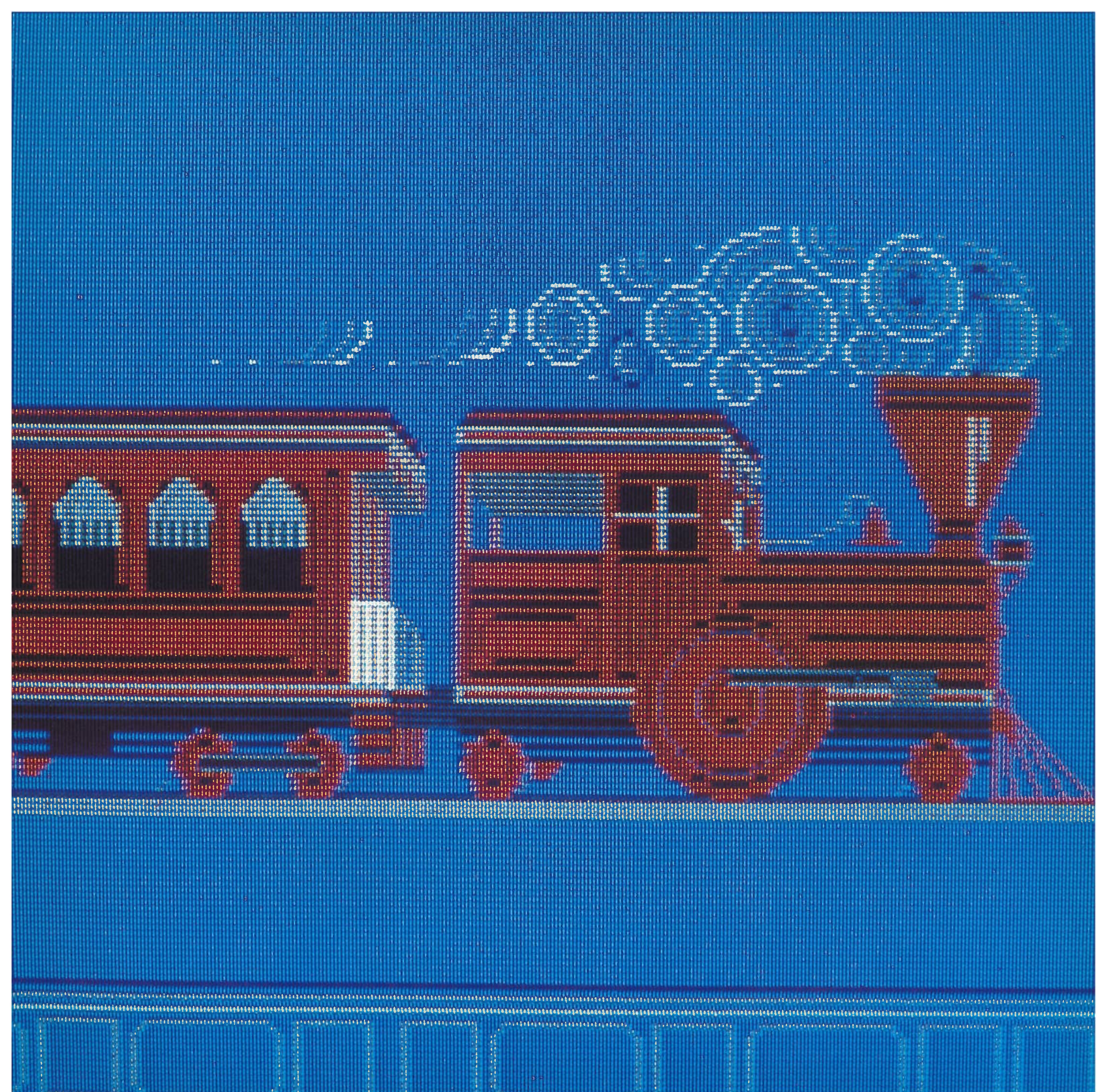
Completed pages can be sent on-line to the host computer or placed in permanent storage on a floppy disc. You can transfer the disc to the host computer or keep it in your own office and read the contents over a communications link to the computer.

Page contents may be modified by overwriting the desired portion of the page in the terminal display memory. There is no restriction on the number of successive updates which can occur within a single page.

A MODULAR APPROACH

Information provider systems feature a modular approach that permits you to tailor your system to your own specific requirements. This allows for easy upgrading and extension of system capabilities as well as second sourcing.

The basic components are a stand-alone microcomputer with local disc storage, a keyboard and visual display unit which together form the command terminal, a PDI decoder and a color television receiver.

The command terminal is used to create and edit text, to input commands and to display editing prompts as well as the current status of the editor.

A digitizing graphics tablet is a valuable option for inputting freehand sketches. A soft key feature allows you to add your own functions through programming sensitive areas of the tablet.

Other optional extras include a video camera and a hard-copy printer.

Most ordinary text-oriented terminals, as well as Telidon user terminals with full keyboard, can be used for Telidon page creation when connected to a remote computer. Simple graphics can be created this way, or graphics can be designed on a more sophisticated terminal and merged with text portions of the frame later.

TELIDON VIDEOTEX

Telidon videotex is an interactive or two-way system in which users access a computer data bank directly, to call up text or graphic information.

Contents pages called *menus* guide users through a tree-structured search technique. Or if they already know where to find the information, they simply key in the page number directly.

Special keys provide for forward or backward browsing and a return to the first menu.

Each terminal is identified by an address code so that subscribers can be billed for material they request. In some cases, information is provided at no charge to the user – for example, advertising or government information.

Videotex is typically used for providing information with a longer life than teletext information – for example, reference material for business and education, statistics and entertainment such as video games.

Telidon videotex also allows the user to place an order for a product, play computer games, request more detailed information on a specific topic or leave messages for other Telidon users. In addition, the central computer can act as a switch to relay requests and retrieve information from third-party data bases in a remote computer.

The Telidon videotex terminal with its built-in computing power can act as a mini-computer for home or office use.

The memory is large enough to be utilized for program storage and execution when the video display is not in use. In addition, the terminal can accept a wide range of peripheral devices to allow it to serve as a full-fledged home computer.
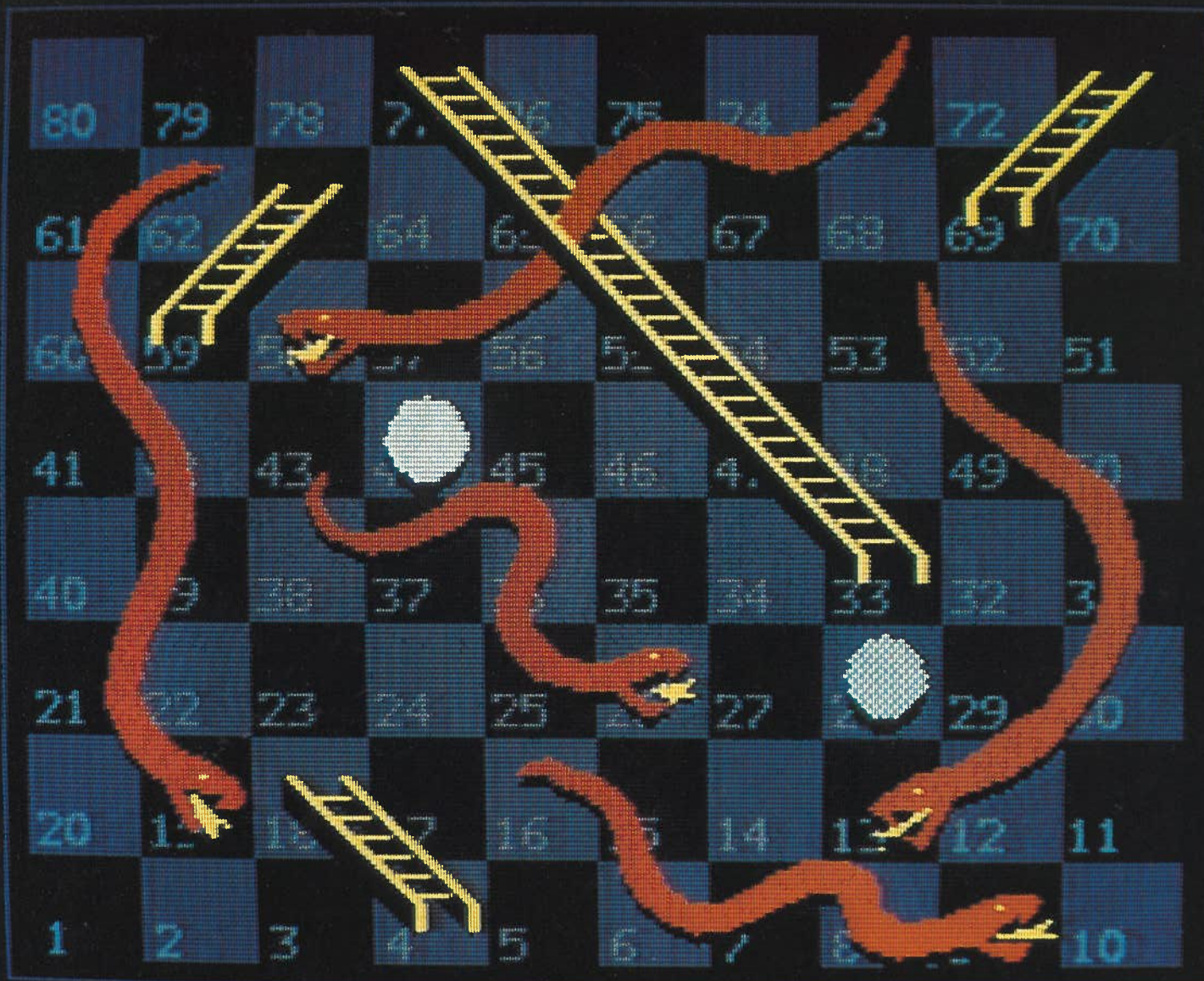
Telidon can be used in a variety of applications,
such as electronic mail and video games...

DATE: May 15, 1981
TIME: 14:00
FROM: 123654

Come home John.

All is forgiven.

love Mom

TELIDON TELETEXT

Telidon teletext is the broadcast or mass medium mode which permits the public to receive text and graphics on an ordinary television receiver equipped with a decoder.

Information is broadcast in digital form over the air or via cable in the unused sections of regular television signals (the vertical blanking interval), or teletext signals may be carried on a full television channel.

The entire file of timely general interest information is continually broadcast in a cycle, while special interest programs can be scheduled to arrive at specific periods. Viewers typically use a small keypad to choose the pages they wish to have displayed.

The viewer's terminal waits for and selects the desired page. Waiting time averages about 12 seconds for a cycle of 100 pages transmitted on two lines in the vertical blanking interval. On systems using a full TV channel (almost 500 lines), an average access time of 10 seconds can be expected with a file of 10,000 pages.

Hybrid systems are also possible. For example, requests might be made via the telephone network to an information supplier who would insert data in the next broadcast teletext cycle.

Teletext material typically includes news, weather, sports, community notes, stock listings and advertising.

Telidon's teletext mode can also handle program-related services such as closed captioning, through its capability to selectively overwrite stored graphics or text over a TV picture.

Telidon user terminals may simply be standard television sets with an add-on electronics package – or they may have the special electronics built in.

In addition to the TV set or other display unit, the terminal contains a microprocessor to translate communications codes into display commands, and is equipped with a keypad or keyboard for making selection. Hardware is also needed to connect the terminal to the communications line.

Automatic user identification and automatic dialling for accessing the control computer are available on some terminals.

For teletext mode, a decoder is needed to examine each packet of information and to determine whether it is addressed to the user, and whether it belongs to the requested page.

TELIDON A/V SYSTEMS

Telidon audio-visual systems have specially-designed terminals with 100 pages of extra computer memory which allow Telidon's high-resolution animated graphics and text to be used as an effective, low-cost tool for business meetings, sales presentations, training seminars and public displays.

Telidon audio-visual displays can be stored in the special terminals, re-ordered at the touch of a button and projected at any speed the operator wishes. Or material can be stored on floppy disc or transmitted direct to a customer. An optional cassette recorder is available for recording visuals and sound tracks on ordinary audio cassette tapes.

Displays can be shown on the audio-visual terminal or projected on a large screen. The electronic projection system is useful for presentations to crowds.

For applications such as information booths, the system can be modified to allow viewers to choose slides dealing with areas of specific interest in any order they wish simply by pushing a button. Optional equipment allows quick production of hard copies of the material on display.

RESEARCH CONTINUES

Developed at the Canadian government's Communications Research Centre, Telidon emerged from years of research into interactive graphics communications preceded by computer graphics work in support of Canada's space satellite program.
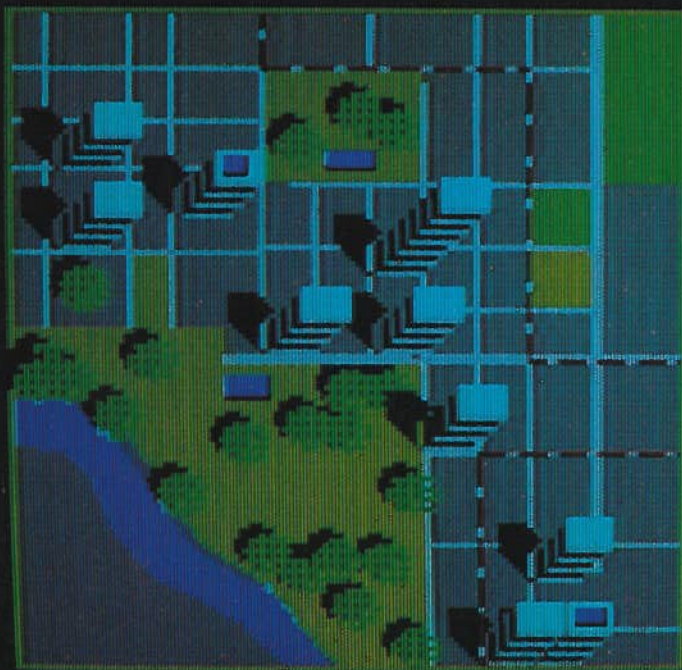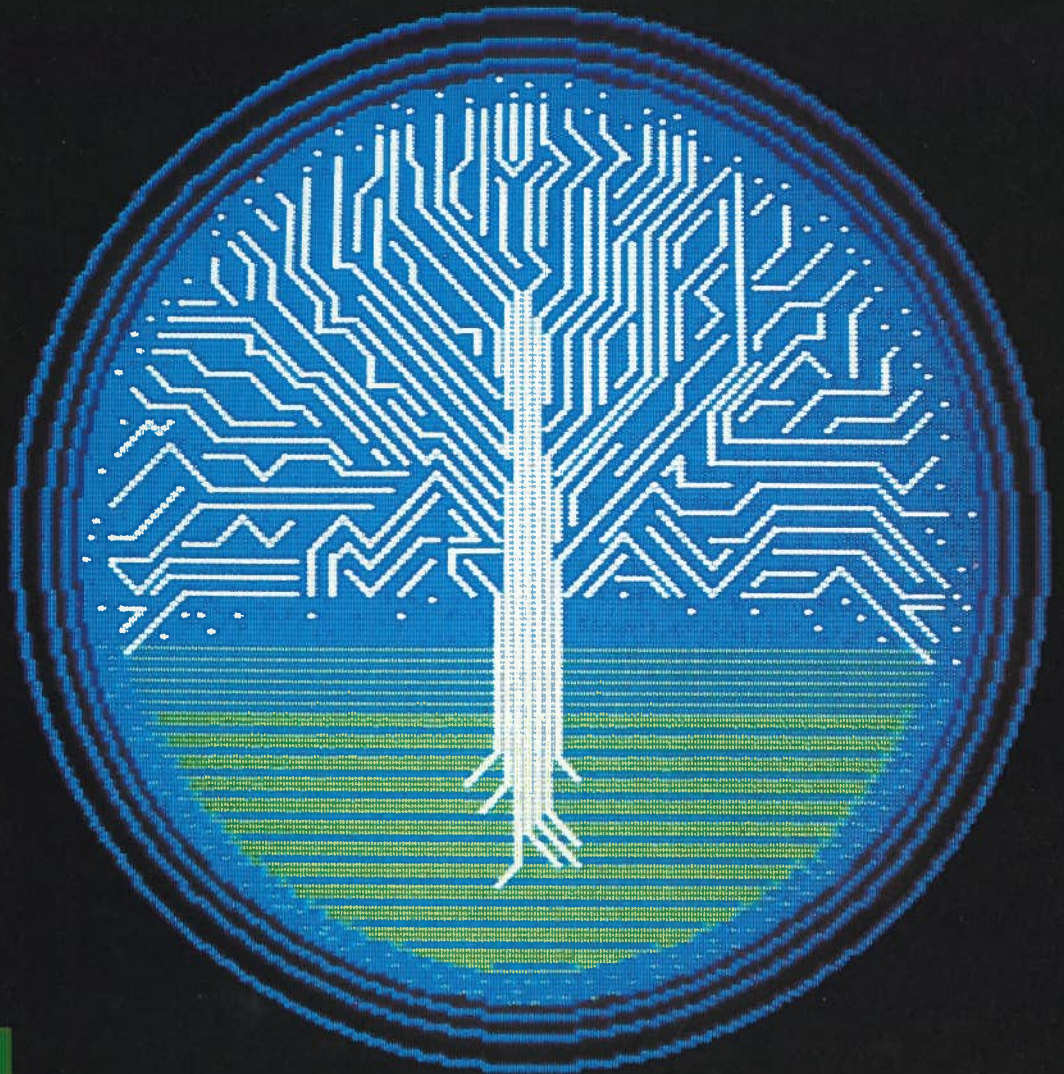
Research continues to refine and improve Telidon. For example, VLSI low-cost terminals, small enough to fit inside display units, captioning-for-the-deaf adaptors and person-to-person communications hardware are in advanced stages of development.

UNEMPLOYMENT BY AGE & SEX   2124

November '78 seasonally adjusted rate

The Financial Post   page 2124

. . . as well as for presenting labor force data, city plans and video art.

Other future enhancements under consideration include addition of audio capability, photographic editing routines, speech recognition and direct access to large blocks of data containing many pages of information for off-line perusal.

Telidon will be able to accommodate many future developments through extension procedures built into the standards. PDIs are a subset of a more general set of instructions permitting full dynamic animation as well as improved interaction. Extensions are already in preparation for multi-node interpersonal communications, a generalized photographic mode, picture manipulation instructions to turn each terminal into an information provider terminal, synthesized voice and audio output, and a generalized telesoftware language capability.

In addition, since Telidon coding is compatible with keyword searching, software is being developed to make this a reality without overloading the central data base computer. This feature will give the user more freedom in looking through various data bases.

Both software and hardware are being developed to turn the powerful computing ability of the Telidon terminal into the main element of a flexible home or office computing system. In the not-too-distant future, a Telidon user will be able to receive complete computer programs down-loaded onto his own terminal, then disconnect from the host computer and operate independently. This holds particular promise for computer-aided learning, video games or calculations such as income tax.

Software is also being developed to allow direct access to mainframe computers by means of the Telidon network.

THEY WANTED THE BEST

More and more organizations are making Telidon their choice. Some are already offering commercial services, while others are engaged in major market trials.

In spring 1981, Bell Canada undertook a major field trial using Telidon in the residential market in Toronto and Quebec City. About 500 terminals are involved.

Participants have their choice of up to 100,000 pages of on-demand information such as travel schedules, news, entertainment guides, classified ads and electronic yellow pages — in English or French. Information is transmitted over telephone lines. In a later phase of the trial, participants will be able to teleshop and to reserve plane tickets.

"We have been genuinely impressed by the government's Telidon technology since its introduction."

**– J. C. Thackray, President,
Bell Canada.**

Project Grassroots, the world's first commercial Telidon service, opened in southern Manitoba in May 1981, offering farmers direct access to 20,000 pages of specialized information at no charge. Costs are paid by the organizations that supply the information.

Current market prices, feed costs, grain futures, bank rates, weather forecasts and other information are available through terminals located in public places such as agriculture offices. Infomart is providing the service over a special Manitoba Telephone System network.

In future, the system may be expanded to include two-way applications such as an electronic buy-and-sell bulletin board.

"Telidon is an ideal medium to address this kind of need because it's inexpensive, attractive and easy to use. To store a page of information on the system and provide users with unlimited access costs information providers only $1 per page per month."

**– David M. Carlisle, President,
Infomart.**

Time Inc. plans to test the first national multi-channel teletext service in the U.S. designed for general in-home use. The new service is to begin operation towards the end of 1981, with a 24-hour-a-day, seven-days-a-week programming schedule.

Time's teletext service will be distributed by satellite and delivered as a multi-channel service to the viewer's television set.

```
8:30
9:00  Board Meeting - Athabasca account
9:30
10:00
10:30
11:00
11:30
12:00  meet G.Johnson -lunch at Greenery
12:30
1:00
1:30
2:00
2:30
3:00
3:30
4:00
4:30
5:00  bring home supper
```

*The world's first commercial Telidon service,
Project Grassroots, opened in southern
Manitoba in May 1981 and offers farmers direct
access to some 20,000 pages of specialized
information.*

Editorial material will be drawn from Time Inc.'s own resources and from national and local newspapers as well as others information sources.

The trial will also test the potential for informational advertising, to explore the possibility of funding teletext through a combination of advertising and subscription.

''After reviewing all the competing teletext technologies, we determined that Telidon is the most desirable because it allows the greatest degree of editorial flexibility. Its capacity to produce graphics exceeds the current capabilities of other teletext formats.''

– Sean McCarthy, Director,
Video Group Development Unit,
Time Inc.

Venezuela is using Telidon to provide information about government health, social and economic aid programs to the vast numbers of people moving into the capital from rural areas.

Thirty Telidon terminals have been placed in store-front information centres across Caracas to provide ready access for people seeking government information. Terminals have also been installed in public libraries, phone-in telephone offices and other information centres.

The system is using telephone lines as the medium of transmission.

The Ontario Educational Communications Authority (OECA) began a trial of Telidon in January 1980. Sixteen hours a day, seven days a week, OECA's educational network, TVOntario, carries 500 pages of frequently updated news as well as TVOntario program listings and program notes.

OECA sees teletext being used for topical, local information of broad interest such as school bus status, while the videotex data base contains more permanent or specialized information such as bibliographies, course descriptions, career information and home viewer questions. OECA also plans to explore computer-assisted and computer-managed learning via Telidon.

TVOntario considers Telidon to be an educational medium in its own right because:

▶ Telidon has the potential of delivering educational experiences to anyone, regardless of location or time.

▶ Telidon's interactive capability allows each learner to proceed at his or her own pace with periodic feedback on progress. Computer-assisted learning over a distance therefore becomes possible.

▶ Its graphics capability can provide a wide range of educational illustrations such as music scores, charts, graphs and maps.

▶ It has the ability to provide pages of information that unfold at a controlled rate, focussing the viewer's attention and pacing the learning experience.

The Times Mirror Company chose Telidon for a major videotex field trial in the Los Angeles area.

Scheduled to start in October 1981, the trial will include 200 home terminals. The Los Angeles Times and other publishing subsidiaries of Times Mirror are expected to be major information providers for the system.

The Telidon users will be able to connect their televisions to telephone or cable lines, and to send and retrieve information. Among the interactive services expected to be offered are banking, shopping and ticket reservations.

Télécâble-Vidéotron, a Montreal cable television company, is heading a group that plans to test Telidon as part of an integrated two-way information retrieval system. The trial, to involve 250 terminals, is scheduled to start in late 1981. Packet switching and multiplexing will ensure a high rate of data transmission.

FOR RENT

Telidon's high resolution capability make it an ideal medium for real-estate listings and weather maps.
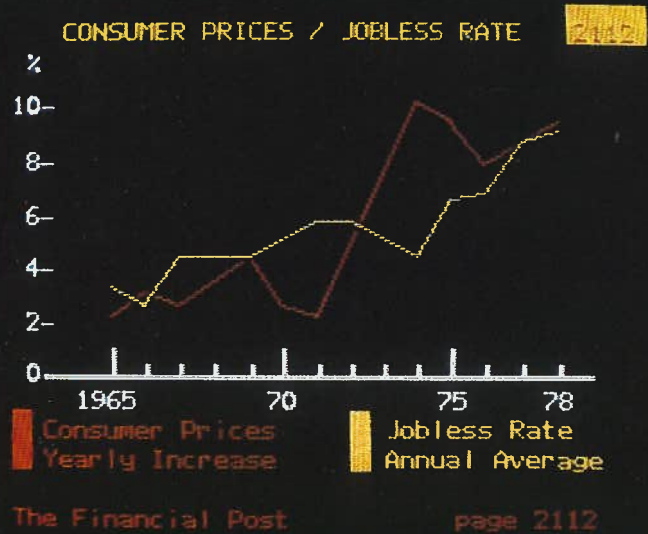
Information to be available includes news, weather, sports, video games, entertainment listings, classified ads, real estate listings and yellow pages. In addition, users will be able to access bibliographic data banks and computer-assisted learning programs created by the Université du Québec.

The Alternate Media Centre at the New York University School of the Arts designed and is managing the first U.S. consumer trial of teletext, in conjunction with PBS station WETA in Washington, D.C. Telidon was selected for this trial, which begins in Spring 1981.

Some 300 pages of constantly updated material are being broadcast with the WETA signal.

Telidon teletext receivers are being placed in private homes and in public locations in order to evaluate consumer reaction to various information services being considered for the new medium.

The trial is sponsored by the Corporation for Public Broadcasting, the National Science Foundation, the National Telecommunications and Information Administration and the Department of Health, Education and Welfare.

TO KEEP THE COMPETITIVE EDGE

"Already it is clear that, despite claims to the contrary, alpha-geometric terminals are not *necessarily* more expensive than alpha-mosaic."

– Hilary B. Thomas, in CONTEXT,
   Report Three, May 1980.

Roger Woolfe, a partner in the British firm of Butler Cox & Partners, recently completed a cost projection of prices for Canada's Telidon system. He concluded that the price of videotex decoders depended more on quantity than the technology used, and that the cost of decoders with equivalent display capabilities would therefore be the same.

In March 1981, a Telidon terminal could be purchased for about $1200 (Canadian). In the next few years, prices will drop to the $100-250 range and the difference in cost between a low resolution (block graphics) terminal and a medium resolution (bit plane memory) terminal is estimated to be $28.00 (Canadian) in 1982 and a mere $2.00 (Canadian) in 1986.

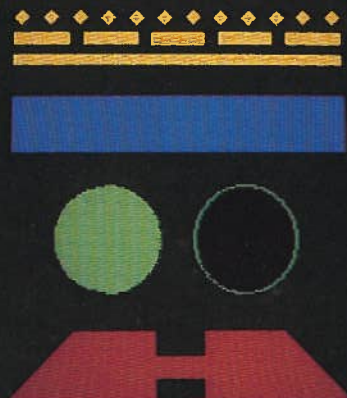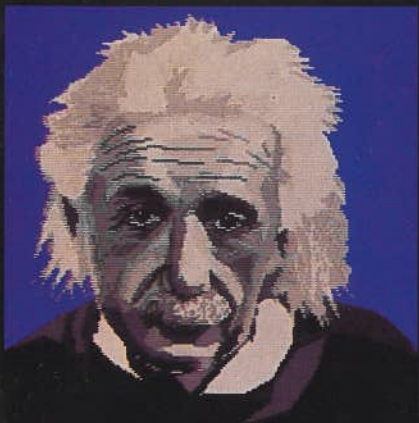When you consider total cost and life cycle of the system, Telidon is your best choice.

Telidon. Tomorrow's technology designed for today. Superb graphics, flexibility and long-term compatibility. Efficient, economical and affordable. Telidon has everything you need to keep the competitive edge. Can you afford to settle for less?

Photo-Telidon can describe images as a series of scanned points in color or in black and white. The result is a photographic image of the original.
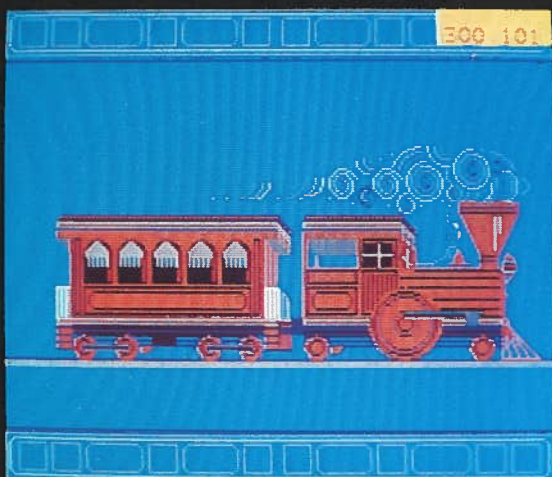
TELIDON
THE BEST CHOICE

TELIDON THE BEST CHOICE

300 101

UNEMPLOYMENT BY AGE & SEX 2124

%
15
10
5
0

15-24
25 & over
Total

15-24
25 & over
Total

MEN WOMEN

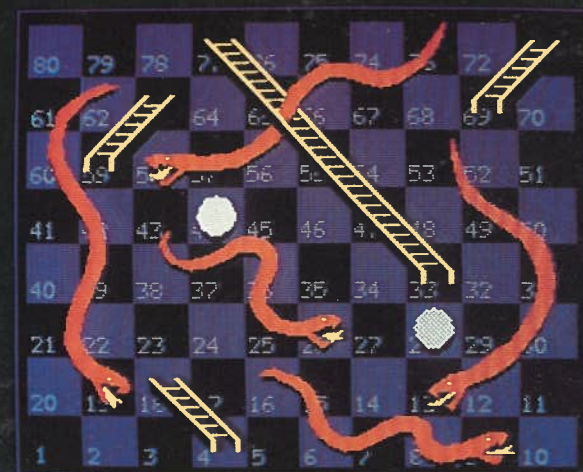November '78 seasonally adjusted rate

The Financial Post   page 2124

8:30
9:00 Board Meeting – Athabasca account
9:30
10:00
10:30
11:00
11:30
12:00 meet G. Johnson –lunch at Greenery
12:30
1:00
1:30
2:00
2:30
3:00
3:30
4:00
4:30
5:00 bring home supper

DATE: May 15, 1981
TIME: 14:00
FROM: 123654   300 114

Come home John.

All is forgiven.

love Mom

CAN YOU AFFORD TO SETTLE FOR LESS ?

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Additional information on Telidon is available from Telidon, Department of Communications, Room 2000, JT South, 300 Slater Street, Ottawa, Ontario, Canada K1A 0C8.

Following is a list of companies who can help you set up a Telidon system — by supplying component hardware or complete turnkey systems, by training your staff, creating and updating information pages and entering them in a data bank, preparing audio-visual displays using Telidon and advising on marketing strategy.

Telidon manufacturers are licensed through Canada Patents and Development Limited. Controlled technical and operating standards protect your investment and ensure the orderly evolution of Telidon networks.

AEL Microtel Limited
Business Information Systems
4664 Lougheed Highway
Burnaby, B.C.
V5C 5T5

Alberta Government Telephones
Telidon, Floor 30-F,
10020 – 100 Street
Edmonton, Alberta
T5J 0N5

Bell Canada
Project Vista
25 Eddy Street
5th Floor
Hull, Québec
J8Y 6N4

Bell Canada International
1 Nicholas Street, 8th Floor
Ottawa, Ontario
K1G 3J4

Bell-Northern Research Limited
P.O. Box 3511, Station C,
Ottawa, Ontario
K1Y 4H7

British Columbia Telephone Co.
Videotex Project
3777 Kingsway
Burnaby, British Columbia
V5H 3Z7

Canadian Broadcasting Corporation
Marius Morais
1500 Bronson Avenue
Ottawa, Ontario
K1G 3J5

Canadian Patents And Development
275 Slater Street
Ottawa, Ontario
K1A 0R3

Electrohome Limited
Videotex Marketing
809 Wellington Street North
Kitchener, Ontario
N2G 4J6

Gandalf Data Communications Limited
9 Slack Road
Ottawa, Ontario
K2G 0B7

Hemton Corporation
1760 Courtwood Crescent
Ottawa, Ontario
K2C 3L3

Infomart
Village by the Grange
122 St-Patrick Street
Toronto, Ontario
M5T 2X8

Manitoba Telephone System
Carolyn Rickey
Area B-101C
P.O. Box 6666
Winnipeg, Manitoba
R3C 3V6

Microtel Pacific Research
105 – 4664 Lougheed Highway
Burnaby, B.C.
V5G 5T5

New Brunswick Telephone Co.
Project Mercury
P.O. Box 1430
Saint-John, NB.
E2L 4K2

Norpak Limited
P.O. Box 70
Pakenham, Ontario
K0A 2X0

Northern Telecom Canada Limited
300 Fenmar Drive
Weston, Ontario
M8L 1M6

Rogers Cablesystems Inc.
P.O. Box 249
T.D. Centre
Commercial Union Tower
Suite 2602
Toronto, Ontario
M5K 1J5

SED Systems Inc.
P.O. Box 1464
Saskatoon, Saskatchewan
S7K 3P7

Systemhouse
99 Bank Street
Ottawa, Ontario
K1P 6B9

Télécâble Vidéotron
3700 Losch Blvd.
St-Hubert, Québec
J3Y 5T6

Teleglobe Canada
Télidon Project
680 Sherbrooke Street West
Montreal, Québec
H3A 2S4

Telidon Videotex Systems
Suite 400
Three Landmark Square
Stamford, CT. 06901 USA.

The Genesys Group
880 Lady Ellen Place
Suite 207
Ottawa, Ontario
K1Z 5L9

TVOntario
Telidon Project
Box 200
Station Q
Toronto, Ontario
M4T 2T1

Canada