

Systemhouse Ltd.

Annual Report 1983

Chairman's Message

Fiscal year 1983 was a period of restructuring and refocusing for Systemhouse. The financial position of the Company was restructured by the addition of \$37.3 million of equity and a reduction in operating expenses that cut \$14 million from operating costs in 1983 compared with 1982. The business of the Company was refocused by bringing together into business units the resources of the Company targeted to serve specific

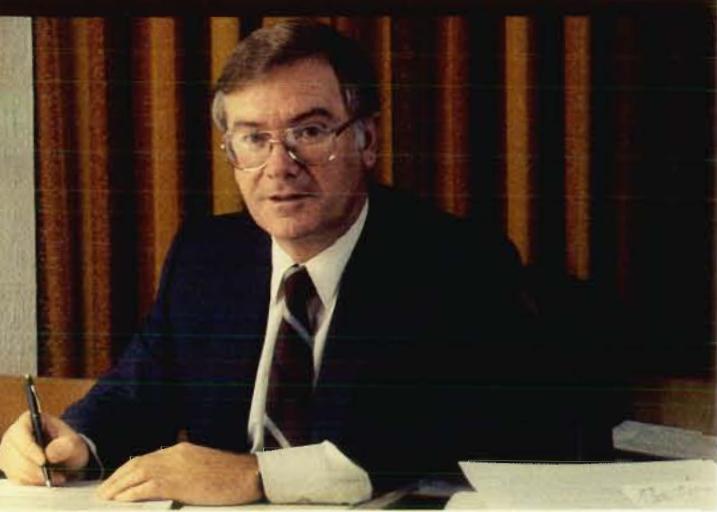
then recover in 1983 to regain most of the lost ground. The improvements resulting from the economic adjustments have been worth the suffering, with our economies in better shape to sustain growth in the future. Systemhouse experienced extreme pressure, but it has made the changes that were required, and investors have had the confidence and foresight to provide the equity needed to permit the Company to be a leader in the industry during the recovery now underway. 1984 will see a return of growth that will carry on through the rest of the 80's, and that will reward the support of our investors, employees and customers.

The business of Systemhouse is to successfully make computer technology serve specific users. The software and professional skills required to do this depend as much on the nature of the customer needs as on the technology available. Systemhouse has developed and delivered more than \$150 million of software and professional services since 1974. A wealth of experience has been gained in understanding the requirements of our customers.

Since 1979, this knowledge and experience has been applied in a research and development program to create packaged applications and system software for specific markets.

This combination of professional skill, experience and quality software will provide the basis for Systemhouse's competitive strength in 1984 and beyond. Since 1979, more than \$19 million has been invested in the development and packaging of software. The software has been created and maintained to run on evolving hardware and operating systems technology produced by leading manufacturers in North America. Continuing investment will be made in our software in pace with changing user demands and improving technology. These existing and future software investments will be major contributors to our revenues throughout this decade.

The prevailing practice in American companies, and a growing practice in Canada, is to charge as expense any money invested in software product development. In light of these forces in the market and financial community, the Board of Systemhouse decided to remove from the balance sheet all amounts reflecting previous expenditures for software development, and to follow the practice in future of expensing these costs as

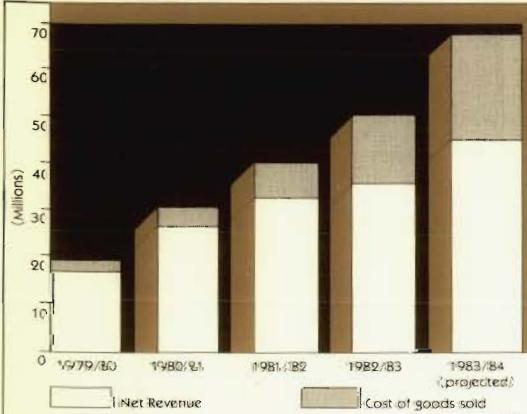


customer requirements. The result was to double revenue per employee from about \$40 thousand per year in 1982 to a rate of about \$80 thousand per year by fourth quarter 1983. Total revenue grew by 27% from \$39.2 million in 1982 to \$49.6 million in 1983, while the number of employees declined by 36% from a high of 1,067 in March 1982 to a low of 688 at the end of August 1983.

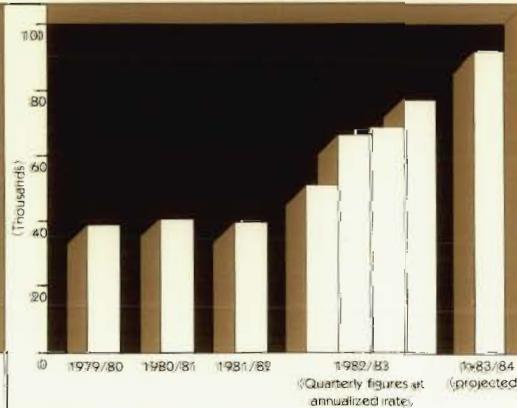
The loss for 1983, before extraordinary items, was \$13.97 million, less than half the loss for 1982. Any loss is disappointing. But the Company made enormous strides in the year to be in a position for profitability and growth in 1984.

The first three years of this decade have seen North America's economies contract to pre-1980 real output,

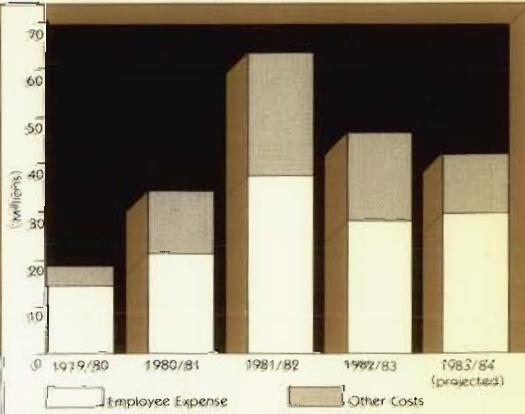
GROSS REVENUE 1980-1984



GROSS REVENUE PER EMPLOYEE 1980-84



TOTAL COSTS 1980-84



incurred. This decision is reflected by an extraordinary charge against 1983 earnings of \$14.8 million.

Entering its tenth year of operation, Systemhouse is in the strongest position in its history. The initial costs of staff growth, branch network development and software development have been absorbed. Expenditure in all these areas will continue, but in proportion to the base already established. Systemhouse has established itself as the leading systems company in Canada, and is firmly established in five major centers in the United States. Despite the adjustments in 1983, Systemhouse expanded revenues in both countries and improved its competitive market position.

In this report, the business units of the company are profiled. These units have been defined by customer focus and each will lead the Company's growth program in its market segment. The growth in 1984 will take place within the units that were in place as the year began: Branch Operations; Commercial Systems; Graphics Systems; Control Systems; Healthcare Systems and Office Information Systems. These operating units are supported by the corporate finance and administration group located in Ottawa and Washington. During the past year, this group has provided leadership in implementing first class financial and administrative management throughout Systemhouse.

The Branch Network operates in Canada under the Canadian Operations Division, while the United States Branches operate within Systemhouse Inc., a wholly-owned subsidiary. The Commercial Systems Division has full responsibility for development, maintenance, enhancement and marketing of our application software products for the manufacturing and distribution industries; Graphics Systems and Control Systems each function as a separate business unit within our Technical Systems Division; Healthcare Systems Division is a business unit focused on hospital management systems; Office Information Systems is in the development stage, with EXPRESS - our integrated office automation product - now being delivered to the first major client. Full responsibility for Office Information Systems will remain in the Research and Development Division through 1984.

The business plan for Systemhouse for 1984, approved by the Board of Directors in August 1983,

recognizes this to be a year of transition. The Company plans to move from loss to profit by mid-year, and to achieve a number of key results to provide the basis for continued growth in 1985, including:

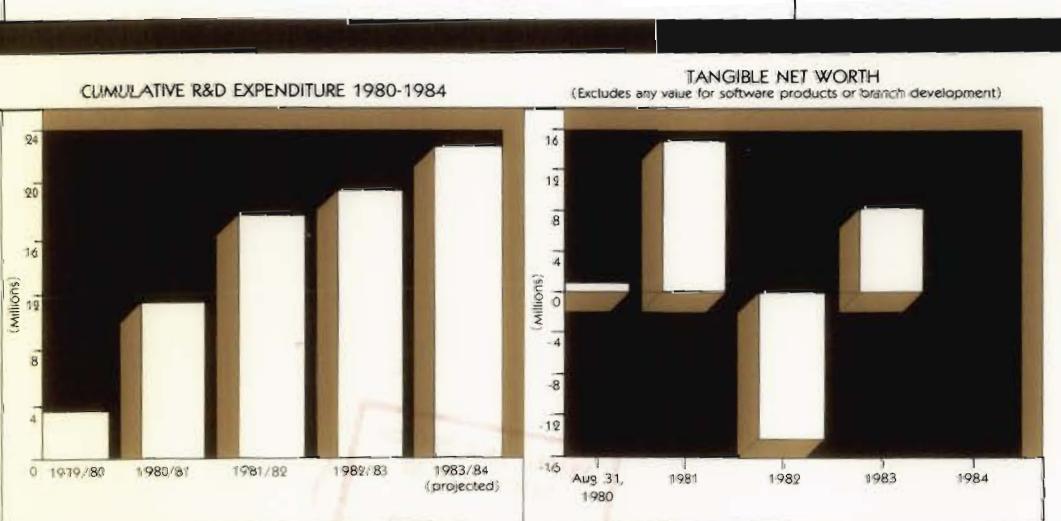
- clear internal focus and market perception;
- an enhanced reputation for quality;
- a confident and aggressive work force;
- an executive and middle management ready and able to manage expanded operations;
- a level of profitability of 10% of net revenues; and
- a balance sheet with the strength to finance 40% internal growth for that year.

The past two years were difficult for all who are part of Systemhouse. The mettle of the people who make up our Company was tested. That Systemhouse can continue to look to the future with confidence is a tribute to the people of Systemhouse who worked to bring about a return to health. It is also a tribute to the people who invested their money to give the Company the financial strength to solve difficult problems and to seize exciting opportunities.

There is every reason to believe that 1984 will see the beginning of reward for this exceptional support.



R.M. Bryden
Chairman and President



The Business of Systemhouse



Systemhouse has always been dedicated to one principal business - the business of successfully making computer technology serve specific users.

In recent years, a host of factors has made the marriage of technology and users more complicated, more demanding. On one hand, in the two streams of computer technology - hardware and software - advances have come faster than ever. On the other hand,



Systemhouse methodology ensures client understanding & input. Users have become more sophisticated and more numerous as computer power becomes more accessible, less expensive and more varied in its applications.

Systemhouse began in 1974 to be the bridge between technology and the user. To form that bridge,



Company R&D facility has produced major software development. We have evolved a deep understanding of and participation with both sides. We have been responsible for significant advancements in software and, by extension, hardware, while almost a decade of serving end users has made us keenly aware of the evolution of

business requirements for computers.

The mainstay of our technology bridge and the vehicle by which we transfer useful technology to clients, is our system methodology. This methodology has been tested and proven again and again as the most effective way to introduce new systems. The process begins with a clear general definition of the client's requirements and moves through a Feasibility Study which determines the viability of the proposed project to a Detailed Analysis of the system content and scope. At the Design stage, the "how" of the system, including formats and procedures, is drawn up. System Development entails the creation or modification and testing of computer programs to meet design specifications. Implementation, procedures for hardware/software installation, user training and data conversion are defined and applied. Finally, an evaluation is conducted to assess the performance of the system.

The Systemhouse Methodology, although a logical, rational blueprint, is nonetheless dynamic. Depending on the options which fit a particular problem - packaged or custom software or a combination of both - and depending on the tools and techniques being used - fourth generation programming languages, prototyping, structured analysis, etc. - some phases of the process may be compressed or overlapped. At all points, client participation is actively encouraged.

Within this framework, we can apply the latest tools and techniques in data base management and productivity aids to arrive at solutions which are most appropriate to a client's business needs. Moreover, such comprehensive knowledge of both technology and the long range objectives of a client ensure that a Systemhouse solution is designed to anticipate and accommodate changes in the computer industry and changes in a customer's business environment.

The characteristic that distinguishes Systemhouse from most competitors in the data processing industry is the Company's ability to realize all stages of the system development cycle. Whereas companies with a narrower focus - hardware vendors, consultants, software firms - can perform some phase or phases, Systemhouse takes a project from start to finish. Systemhouse's depth of professional staff and strength of its proprietary software products, combined with OEM agreements with major hardware manufacturers, and a thorough knowledge of hardware architectures, mean that the Company truly does deliver total solutions.

For clients, this comprehensive approach has the twin advantages of quality assurance and accountability and the guarantee of continuity and completeness. With over \$150,000,000 of installed systems in the Company's nine year history, it seems evident that this approach is both appropriate and successful.

Our Greatest Asset: Our Customers

In order to properly have technology serve users, it takes much more than a solid knowledge of computers and the software that makes them perform. It takes special skills and expertise in public and private sector vertical markets. It also requires a genuine commitment to the principle that the customer is our greatest asset.

At Systemhouse, we've established individual Business Centers whose collective energies are applied to specific industry or market segments. Our Business Center Managers are trained to pinpoint areas where a business could be improved, areas where productivity can be increased, where profitability can be maximized and where customers can be served more effectively. They know the information systems business. They know what hardware, software and communications options are available, they know what talents have to be drawn from our professional resource group and how to mould these elements into an overall system solution. Through these Business Centers, the skills, knowledge, talents and experience of some 700 full-time personnel are brought to bear to serve our customers.

When our clients entrust us with the task of helping them solve their systems problems, the Business Center Manager coordinates our efforts, matching the resources both within Systemhouse and available in the industry with the needs of the client organization. He is directly accountable for ensuring that the proper solution to the problem is implemented in a way that recognizes all of the realities of a client's business.

Because Systemhouse strives to develop on-going relationships with clients, Business Center Managers do much more than ensure a system works. They are selected for their ability to work with clients, helping them to manage change which inevitably occurs as new systems are put in place.

The Systemhouse Business Center is the channel through which the Company delivers complete solutions to clients. The Business Center Manager is the continuing focus for customer service - service which goes far beyond the pure functionality of a hardware/software system. Whether the system has been based on packaged application software or a custom-built solution, Business Center Managers make available the full range of post-implementation services, including:

Documentation: Systemhouse provides meaningful and extensive documentation that is designed and written to give clients a complete practical reference to operating a new system.

Training: Recognizing that more and more systems are implemented outside the data processing sections of major corporations and government departments, Systemhouse can undertake complete user training. This training is characterized by a thorough "hands on" approach at the client's site on the new system.

Enhancements: Because the Business Center Manager's responsibilities do not end with the implementation, clients are kept informed of all software and hardware advances relevant to their systems.

Periodic Evaluation: To ensure that the full benefits of a particular technology continue to be enjoyed by

clients, periodic evaluations are conducted. Systemhouse professionals will monitor organizational objectives, productivity gains, and cost benefits to help assure the on-going value of any system.

Our experience shows that the completion of the technology "bridge" with a solid commitment to customer satisfaction is the best possible way to effectively implement information systems.



Thorough training is a key post-installation service.



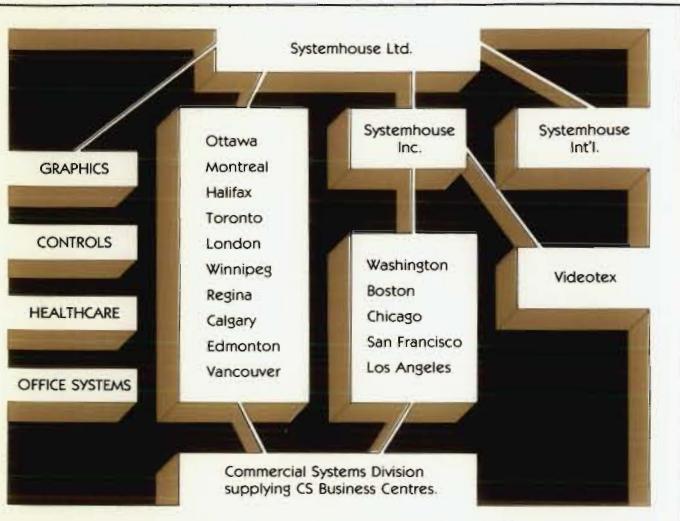
Documentation and reference library provides an important resource.

The Systemhouse Branch Network



Systemhouse delivers its professional services and commercial applications systems through a network of fifteen branches across the United States and Canada. With over 500 employees and 1982/83 revenues of \$43,600,000, this network represents one of the largest professional consulting and system implementation capabilities in the North American market.

Toward the end of 1982/83, in conjunction with the



Organizational diagram of the SHL branch network.

streamlining of the corporate divisions toward increased accountability and customer focus, similar changes were made within the branch network. This resulted in the development of Business Centers operating as profit centers within each branch. By September, 1983, all



SHL business center managers provide key client interface.

fifteen branches were operating under the Business Center approach. This has led to increased responsiveness to customer service requirements, a reduction in management overhead, and has improved our ability to specialize in products and services within

certain customer groups requiring similar service approaches.

Business Centers are directed by very senior branch management staff. The average Systemhouse general manager, for example, has fifteen years of industry experience, more than five years of which has been gained with Systemhouse.

The Company has reinforced the importance of a professional career path for those individuals wishing to achieve the highest levels of technical excellence within their areas of specialization. Along with our commitment to our customers is our commitment to our employees - to be the best employer in the industry in each of our branch locations. The just-ending recession necessitated a consolidation of operations but has led to the evolution of a professional group in every branch whose capabilities are truly extraordinary.

The market for computer-based solutions is segmented by the size and complexity of user needs. The Systemhouse branch network focuses its efforts on the medium and large size customers.

SHL's General Systems Business Centers combine professional services and available hardware and software creation or modification to arrive at a solution which meets a precise requirement of a customer. Normally, these solutions are not industry specific and are usually large-scale projects.

The Commercial Systems Business Centers deliver solutions selected by Systemhouse for appropriateness to a specific industry. Industrial sectors for which Systemhouse offers tailored solutions include discrete manufacturing and wholesale/distribution.

General Systems

The large organizations in which Systemhouse has experienced many years of success continue to be addressed by the branch network through dedicated General Systems Business Centers. Major corporations and government organizations have long recognized Systemhouse's ability to understand their requirements, to evaluate the applicability of emerging technologies and to work with them in producing reliable, cost-effective computer-based solutions.

With the refinements in software productivity tools over the past few years, Systemhouse has gained experience with most major tools and techniques. The evaluation and use of fourth generation productivity aids is a standard practice in both our large scale system development projects and in the modification and integration of packaged software.

Most branches are actively involved with large customers as they move to define a role for the microcomputer within their information processing environment. As personal computers evolve from stand-alone applications to become integral components in large scale distributed applications, Systemhouse is at the forefront - as advisor, implementor and integrator.

Commercial Systems

The completion of the major Systemhouse application products for distributors and manufacturers, and the integration of product sales within the branch network have created for Systemhouse a unique market position matching the requirements of the commercial marketplace.

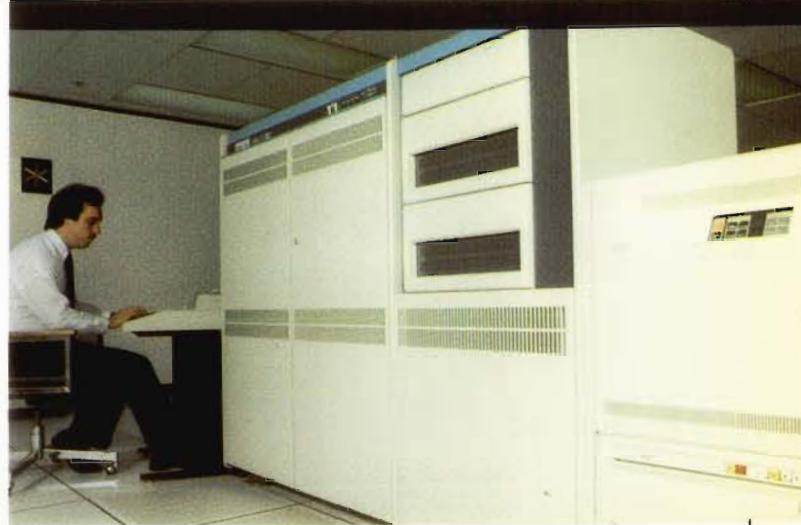
The medium-sized commercial customer's requirements are most often satisfied by software package-based solutions installed with hardware on a turnkey basis. While there are literally thousands of application software packages addressing the horizontal commercial market sectors of manufacturing and distribution, there are few companies who have both the proprietary software and the critical local professional capability to successfully identify the requirements, take responsibility for modifications, integration and implementation, and provide the ongoing local support which so often spells the difference between success and failure as an organization moves to automate its essential business operations. The fact that few medium-sized commercial organizations have, or wish to have, full time data processing staff establishes the basis for mutually successful partnerships between these customers and the local Systemhouse branch.

The prototype for this approach is the very successful LBMS - Lumber and Building Materials Suppliers System. This system is based on our ADAM distribution product, but after input from the branches, it was extensively modified and packaged by the Commercial Systems Division to meet the specific requirements of the lumber and building supply sector.

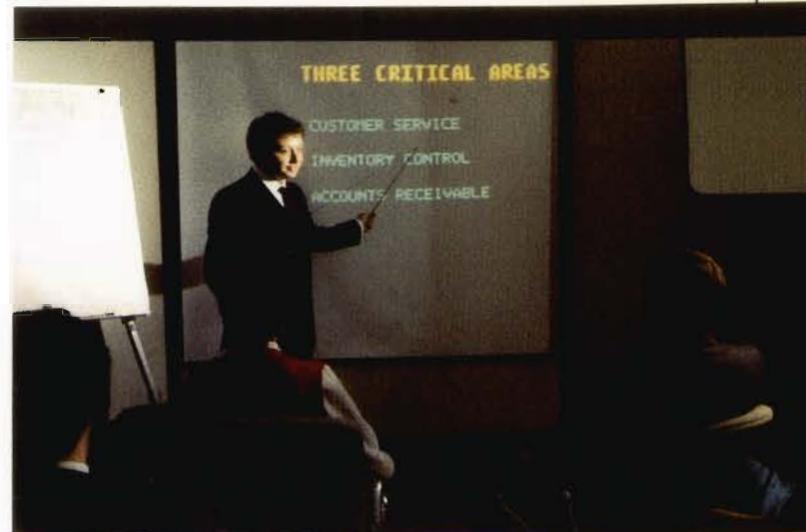
Commercial Systems Business Centers were established to deliver full systems to targeted markets. To accomplish this, each maintains a team of professionals who are responsive and knowledgeable industry experts. The Commercial Systems Business Center also has the responsibility of channeling market intelligence to the centralized Commercial Systems Division so that software can be created or enhanced to reflect industry needs.

Based on the concept of dedicated Commercial and General Systems Business Centers, each focused on defined customer groups, the Systemhouse branch network is poised for growth in market share and profitability across North America.

The differences among markets are reflected in the specific business development activities of each branch. However, in every branch, our commitment is to work with customers over the long term as their partners in implementing solutions which will permit them to exploit the latest developments in proven technology to their fullest in the pursuit of their own business objectives.



Commercial systems are usually delivered on a turnkey basis.



Industry-specific seminars focus on organizational bottlenecks.

Graphics Systems

In 1982 the Graphics Systems Division was established to bring focus to Systemhouse's capability in systems design, software engineering and marketing for computer graphics applications in three areas: Automated Mapping and Facilities Management, Computer-Assisted Drafting and Advanced Graphics.



SHL's resource analysis, mapping and records management system.

AM/FM (Automated Mapping/Facilities Management)

A software product named SHL-RAMS was developed by Systemhouse in a three year program completed in 1982, to meet the needs of government



CEADS-CADD a valuable tool for architects and engineers.

and industry for resource and facilities management based on graphical information. During the past year, the product's strength in the production of topographic and natural resources maps provided the basis for the addition of 6 new clients, raising the total of mapping

systems sites to 20 from 14, with an installed value of \$10 million.

In 1982-83, significant sophistication and new capabilities were added to the database supporting the RAMS product. These specific software features target RAMS at new vertical markets including the engineering and management of outside plant facilities for the natural gas industry and telephone utilities.

In the natural gas sector, RAMS is currently being used to support the engineering, construction and plant management of 5,100 kilometers of natural gas pipeline throughout the Province of Quebec.

In the telecommunications area, a joint development project between Systemhouse and Telcom Engineering Inc. of St. Louis, has resulted in the RAMS/Telegraphics product, which is used by telephone companies to support the engineering, accounting, operations and maintenance functions of their cable plants.

Our two companies are co-operating in the marketing of RAMS/Telegraphics to 22 Bell operating, and 1,500 independent telephone companies throughout the United States and abroad. In a recent poll, less than 1% of these companies indicated their current use of automated mapping/facilities management systems, while more than 50% expressed their intention to acquire such systems within the next five years.

Computer-Assisted Drafting

In 1981, Systemhouse became the exclusive Canadian distributor of CEADS-CADD, a powerful, efficient mid-range drafting and design system. Since that time, Systemhouse has installed 35 systems, representing the largest sales volume among all international distributors of that product. Most users are engineering and architectural firms.

Systemhouse has also recorded the largest single sale of CEADS-CADD - to the Northern Alberta Institute of Technology where 23 workstations are being used in the training of approximately 600 students annually.

The system's flexibility, ease of learning and cost-effectiveness, make it particularly valuable in both an educational and operational environment.

Advanced Computer Graphics Systems

Specialized graphics requirements often demand highly customized software and systems integration. Our Advanced Graphics projects typically encompass the conceptualization, development and implementation of complex hardware and software systems for public and private sector clients. Applications include Military Command and Control, Computer-Assisted Engineering, and others involving the real-time compilation and display of geographically-referenced information.

The computer graphics industry is growing rapidly in both value of sales and complexity of requirements. Systemhouse will continue to focus its graphics products and services in key growth areas of this market and in those applications where our experience base provides us with a competitive edge in providing superior quality products and services to our customers.

Control Systems

Ihe Controls Division of Systemhouse specializes in the development, marketing and implementation of computer-based systems to capture data which physically controls non-computerized equipment and devices. The Division currently has Building Control and Automation Systems for energy management and Supervisory Control and Data Acquisition systems for utility applications such as water and sewage treatment.

- The SHL 7000 is a distributed Building Control and Automation System intended for large building complexes. Ten of these systems have been installed or are being installed across Canada.
- A recently announced building control product, the SHL 8000, is a stand-alone controller intended for smaller buildings.
- The DACS 4000 is a Data Acquisition and Control System for water and sewage treatment application. Two systems, valued at over \$2.5 million, are currently being installed.

The technical expertise of the Division is also marketed directly in creating customized real-time systems including Laboratory Data Acquisition and Military Strategic Display Systems, among others.

To carry out development, engineering and installation tasks, the Systemhouse Controls Division has assembled a diverse, highly competent group of key software personnel, professional engineers of various disciplines (electrical, mechanical, instrumentation), technicians and technologists, hardware design specialists and qualified tradesmen for installation tasks that can put together the theoretical and practical skills required for turnkey engineering products. Additional personnel are being added to the Division to further complement the group's technological capabilities with the objective of offering unmatched services for turnkey, real-time engineering systems.

During the past year, the Division's installations in the Atlantic Provinces and Central and Western Canada were supported from Ottawa with assistance from local branches. In the fall of 1983, the Division opened a Western office in Calgary using SHL facilities. To better serve clients, further expansion is planned in selected U.S. and Canadian sites.

A strong research and development program was responsible for the creation of innovative products and for our entry into the controls industry. This R&D program is continuing in order to build on our strengths and our user base in Building Controls, Automation and Energy Management.

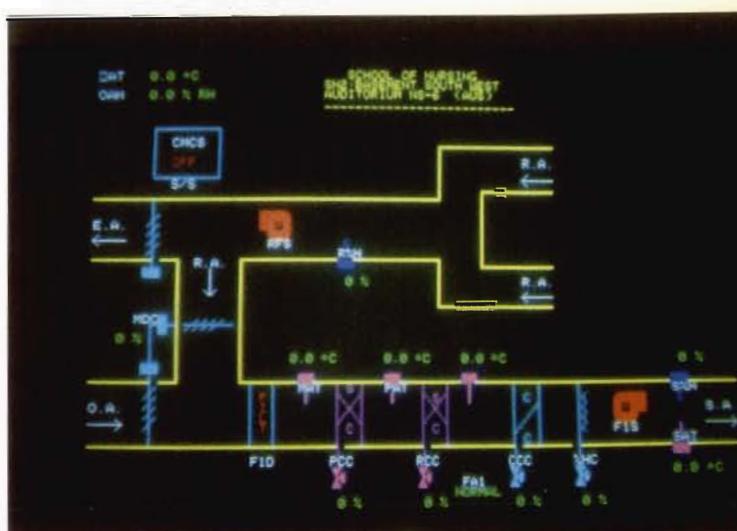
Equally promising is the modification of these development results which will give us an entry into new market areas such as industrial process control, computerized material handling and transportation.

Since 1981, the Division has consistently produced revenue growth; for the year just ended it accounted for \$4 million in revenues and a healthy profit contribution. The steadily growing reputation of the Company in the controls and engineering field, combined with an expanding sales force and product line will translate into continued revenue growth and corresponding profits.

The strong performance of this division and continued focus on quality and product development indicate that Systemhouse will capture a profitable share of the North American market for control systems, conservatively estimated to reach \$4.5 billion by 1990.



Building control and energy management systems gaining acceptance.



Computer-generated schemata assists in building control function.

Commercial Systems

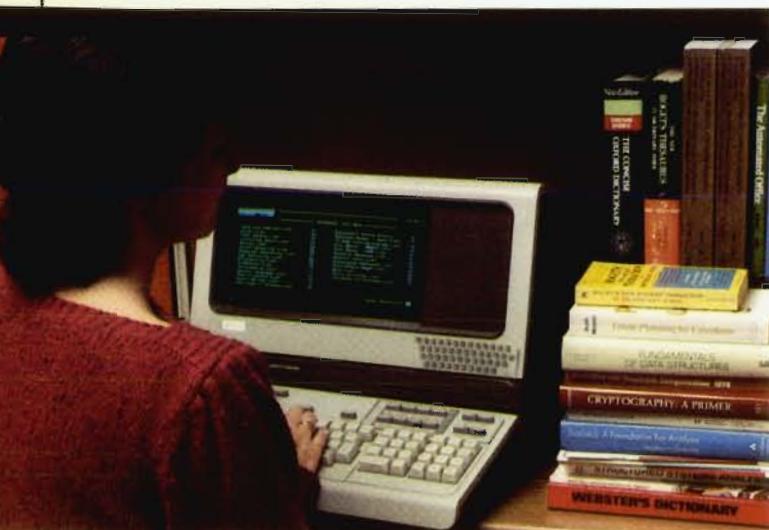
Ihe Commercial Systems Division is responsible for the development, packaging and marketing support of the Company's software products for the business systems market. The products are sold primarily through the Commercial Systems Business Centers in the branches.

In the second half of our 1982 fiscal year, and the first half of fiscal 1983, the four principal software



Company offers wide range of software products.

products, DBS, ADAM, GMS and MINISIS, were fully packaged and released to the branch network. The products are sold to most customers as integrated systems, with hardware, on-site implementation and training. A dedicated team in the Division provides



MINISIS is a powerful tool for managing information.

full software support and maintenance services.

The Division also undertakes a full range of marketing initiatives including industry research, pricing strategies, promotional material and packaging of industry specific seminars offered by our branch network.

Distribution Systems

For the highly competitive distribution/wholesale marketplace, Commercial Systems Division offers two integrated software products: ADAM - operating on Wang minicomputers; and DBS - running on DEC's PDP11 and VAX line of minicomputers.

These software packages fully integrate financial and operational management systems to optimize inventory, improve customer service and increase financial control.

Based on experience with our customers, specially tailored versions of our ADAM package have been developed to serve three vertical markets.

- LBMS is a unique product targeted at the lumber and building materials market.
- SEED meets the specific requirements of electronics and electrical distributors.
- A package filling the needs of the food industry is now in operation in several companies in California and will be offered in other locations in 1984.

In 1982/83, Systemhouse sold and installed 78 integrated systems for the distribution market, bringing the total installed base of SHL proprietary software products in this sector to 125.

Manufacturing Systems

The General Manufacturing System (GMS) is an integrated interactive control system which supports the most contemporary principles of manufacturing management. The product includes accounting applications, inventory management and product planning control and provides access to a common corporate database.

The GMS product delivered to manufacturers is the basis for a system tailored to the individual company's requirements. Manufacturing industries are in a period of significant change in management practices and technologies, aimed at improving productivity in the use of the company's resources. Manufacturing industry experience and expertise, the strength and flexibility of GMS and our established Systemhouse Methodology combine to form a full turnkey response to the needs of manufacturing clients.

Relational Database Management Systems

MINISIS is an information and records management system used to organize, manipulate and store large volumes of data. This flexible relational database system permits customers to manage and reference data in an unrestricted fashion. Originally developed for government and quasi-government applications, MINISIS has been successfully packaged and promoted by CSD into broader target markets in the commercial sector.

MINISIS is used by 29 customers in Canada and the U.S. and a further 47 outside North America.

Security Management Systems

Increasing concerns about computer security and data integrity led Systemhouse to develop SMS - Security Management System, designed to provide comprehensive management of system activities and to prevent unauthorized access attempts.

To be marketed in 1984 through the branch network and directly by CSD, this security/menu driver system has strong appeal for the over 100,000 users of DEC's popular VAX family of minicomputers.

Office Information Systems

TOffice Systems demand the application of data processing (minicomputer and mainframe computer), communications (telephones and datacommunications), and office products (word processing and copying) technologies to facilitate the work of the office. As a "solutions oriented" company, Systemhouse has created a software-based integrated system to tie together and enhance the effectiveness of these technologies.

The Company's thrust into Office Systems began as a research initiative in 1981 with an analytical study of offices, office work, and the potential for automation. The principal results of this research were implemented as a demonstration prototype system which was completed in mid-1982. In early 1982, the Company was selected to conduct a field trial of that product within the Canadian Department of National Defence, including over 100 workstations distributed throughout several organizational units, five buildings and two cities - Ottawa and Winnipeg. During the current year, development of the product, known as EXPRESS, will be completed and the full system will be implemented at National Defence.

EXPRESS is a dynamic product, intended to grow and evolve with available technologies. The development program is therefore expected to continue and expand as the product gains overall market acceptance.

Within the overall Office Systems market, the market for integrated office systems is projected to grow at a rate several times the average for the industry as a whole. An integrated office system not only provides several different tools or functions, but also combines these functions into a single consistent package. It is this market that is the focus of EXPRESS.

Amongst the multitude of office systems products being developed and promoted by the various types of vendors, Systemhouse believes its product to be unique in several ways, including:

- **Software-Based, User-Centered Design**

Every aspect of EXPRESS's design is based on the manner in which the function would be used by the office worker, rather than the potential of the technology. The product fits the work patterns of the office worker who may be neither experienced nor interested in computers.

- **Functional Integration**

EXPRESS provides functional integration by distinguishing between the document (memo, report, or business form) and the action (create, edit, file, mail, or retrieve). As a result, the user applies a single set of functions which are used consistently for all types of work.

- **Communications Flexibility**

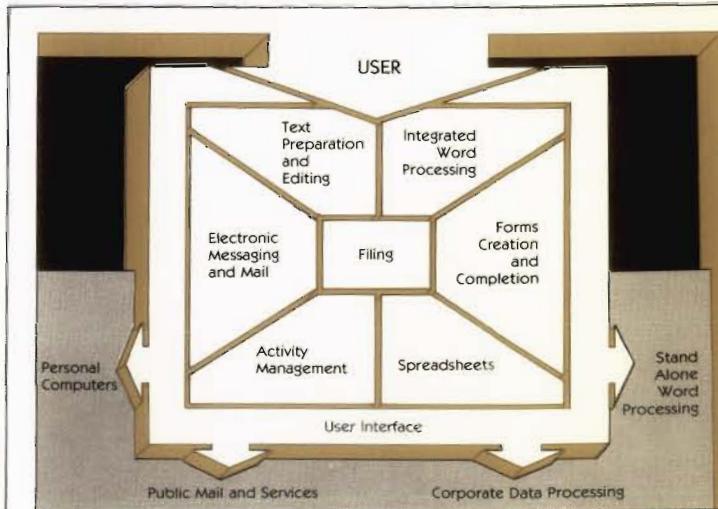
EXPRESS is based on a modular, distributed communications architecture which provides the client with a high degree of power and flexibility to apply the communications system chosen by the user.

- **Open System Architecture**

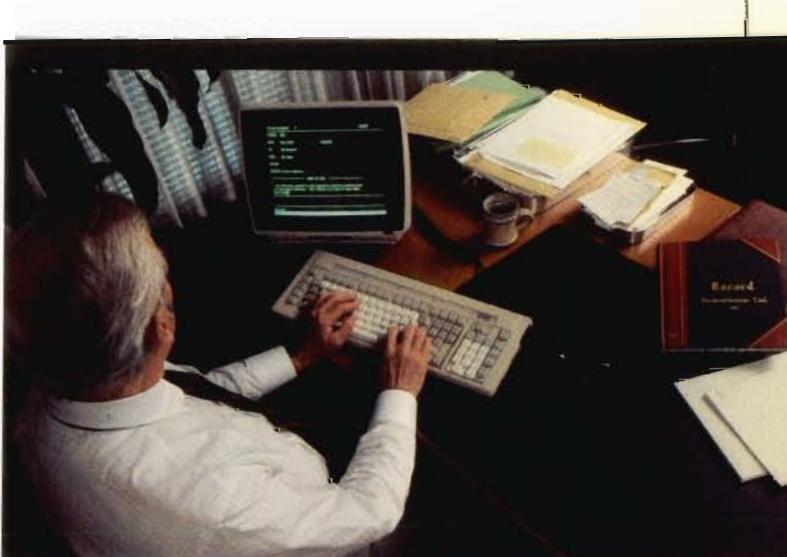
The EXPRESS product will maintain an open system architecture to support interconnection to a broad range of office equipment and computers.

The potential market for Office Systems is immense, with most studies showing annual sales projections exceeding \$50 billion by 1987. We are confident that EXPRESS will be a factor in that market.

Initial marketing will target very large corporations and federal, provincial and state governments in Canada and the U.S. - an area of traditional success for Systemhouse. EXPRESS will be released to the field in mid-1984.



Schemata of EXPRESS functionality.



EXPRESS designed for ease of use, functionality and integration.

Healthcare Systems



The Healthcare Division is responsible for the development, marketing, implementation and support of management information systems for hospitals. The core products of the Division are a Hospital Financial Management System (HFMS) and a Central Registry/Admission, Discharge, Transfer System (CR/ADT) which handles patient information and movement.

This past year saw the completion of large scale

installations of HFMS in two major Canadian hospitals and the adoption of CR/ADT as a teaching standard at the British Columbia Institute of Technology.

With these successes, and with all major product development concluded, the primary focus of the Division is on the marketing of our software products and the integration of these systems with clinical and operational systems. To this end, we are developing interfaces between our administrative system and patient care systems offered by other suppliers.

This approach both eliminates costly in-house development programs for these departments and increases the appeal and range of our offerings at a time when hospitals are, once again, proceeding with the implementation of major computer systems.

The healthcare market in 1983 was unusually quiet for a number of reasons: uncertainty in funding, changing Ministry demands and the "wait and see" attitude of hospitals searching for fully-integrated systems. A resurgence in demand is now evident and coincides with the success of our enhancement/integration program so that 1984 sees the Division well positioned to meet a growing demand for financial, patient registry and fully integrated hospital management systems.



Specialized Systems and Services

Experience gained and software developed to meet major customer requirements have provided the basis

AFTER-SALES SUPPORT



- PERIODIC UPDATES
- HOT-LINE
- NEWSLETTERS
- BUG REPORTS

Videotex proving to be powerful communications medium.

for specialized capability in several areas.

Videotex - Systemhouse's Videotex Systems and Services Group offers videotex and teletext consulting, system integration, implementation and project management services principally to three business sectors: banking and

finance, cable and broadcast and general consumer-oriented companies. The Company's skills in this exciting communications medium have been used by Citishare, the University of Alaska and NORAD, among others.

Social Services - From our first engagement in the social services area, Systemhouse has exhibited an expertise that is proving to have no equal in North America. Following the Company's success with many Canadian provinces, the Company installed, in 1983, its first U.S. system - for the State of Alaska and is now in the process of implementing a similar system for the State of North Dakota.

Systemhouse's unique combination of demonstrable technological ability and sensitivity in the human services field has resulted in a cost-effective system with great potential throughout the U.S. and Canada.

Real Estate - Based on its powerful relational database management system, Systemhouse has created a fully integrated, on-line system for real estate boards and sales organizations. Producing high quality MLS books and giving agents and brokers instant access to data on residential and commercial listings, the system, known as HOUSE, was first sold in 1982 to the Montreal Real Estate Board as part of a \$6,000,000 contract.

Food Distribution - Our ADAM distribution package has formed the basis for unique applications for five major California food suppliers. The encouraging results of these projects have led the Company to begin making this expertise available through its U.S. and Canadian branches.

Systemhouse and Government



Since its inception, the Company has demonstrated its capability in handling the unique and consistently challenging aspects of Federal, State, Provincial and major Municipal government projects.

This past year saw Systemhouse retain its position as the largest single outside supplier of computer services to the Canadian federal government while making a significant advance in acceptance with the U.S. Department of Defence through a \$20 million contract award from the Department of the Navy.

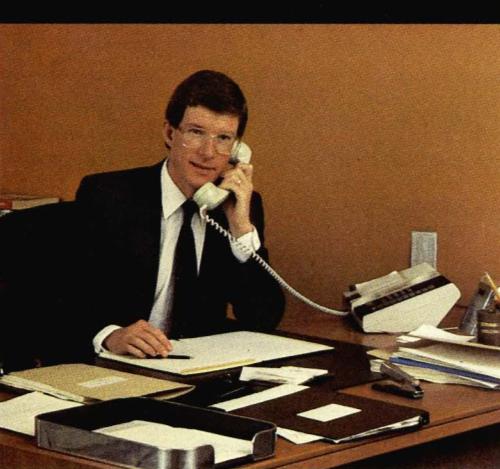
With a substantial permanent professional staff in both Ottawa and Washington, Systemhouse has been able to undertake assignments whose magnitude and individuality are illustrated below.

- **U.S. Navy** - IBM hardware/software systems delivered and installed in Washington and Cleveland to complete Phase I of the PERSPAY program to consolidate the Navy's personnel and payroll functions.
- **Department of National Defence** - A 100 work-station office automation system for DND HQ facilities in Ottawa and Winnipeg.
- **National Parole Board** - Records management system for the parole application process, located at Ottawa headquarters and regional offices in Moncton, Montreal, Kingston, Saskatoon, and Burnaby.
- **U.S. Army** - Bibliographic system to record and update information on all suppliers to the U.S. Army.
- **Public Archives Canada** - Information management system to handle federal government historical records made up of 500 million items of data.
- **Department of Supply and Services** - Installation and management of computer-based laser printing system in the Contracts Division of DSS.
- **Department of National Defence** - Building Energy Management and Control System for the ship repair units at Halifax Harbour.
- **Environment Canada** - Mapping and Analysis System to automate the charting of ice flows in commercial shipping lanes in the Canadian arctic.
- **State of Alaska** - Eligibility Information System to provide up to date information on users of 10 state programs operated by the Alaska Department of Health and Social Services.
- **State of Arizona** - Social Services Requirements Study.
- **NORAD** - Videotex-based information system for the Battlestaff and Weather Information Section of the NORAD complex in North Bay, Ontario.
- **Ontario Ministry of Environment** - Control and Monitoring Systems for the water treatment facility in the Regional Municipality of Durham and the sewage treatment plant at Duffin Creek.
- **Province of Manitoba** - Payroll System for provincial government employees.
- **City of Saskatoon** - Materials Management System for municipal works.
- **Zimbabwe** - Resource management and topographic mapping system for the Surveyor General of Zimbabwe.
- **Government of Malaysia** - The design of a financial

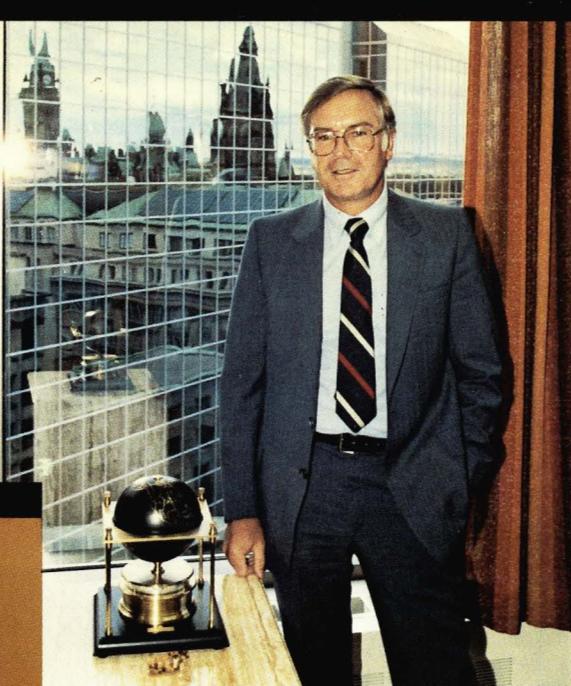
management system to be used country-wide by the Ministry of Health.



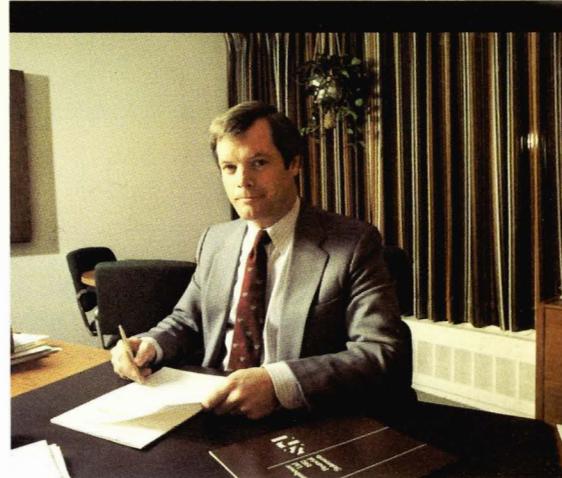
**Systemhouse
Executive
Committee**



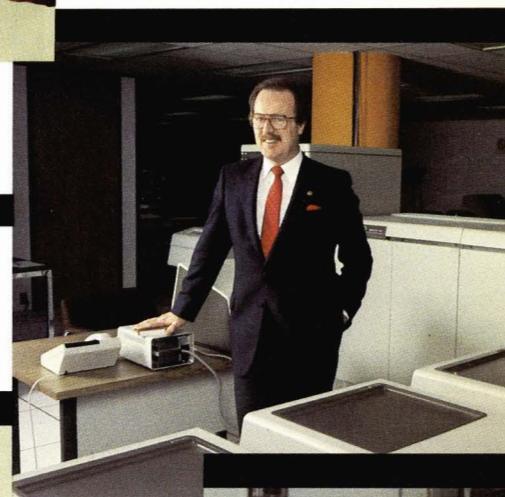
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Canadian Operations



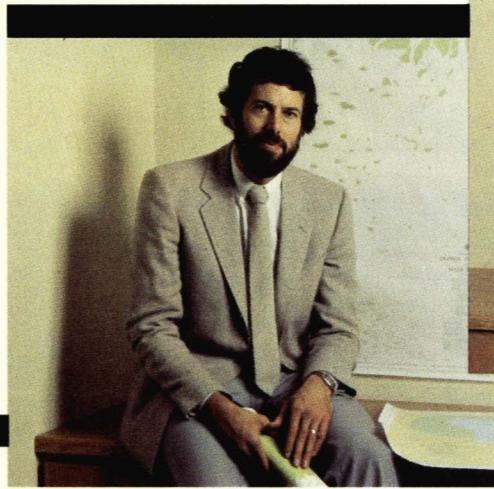
R.M. Bryden, Chairman
and President



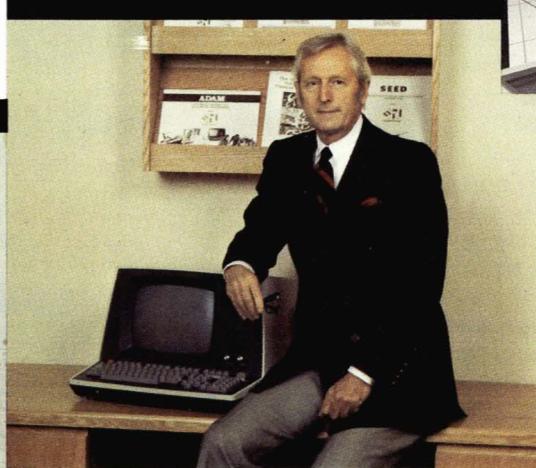
P.S. Crombie, Vice-President,
Finance



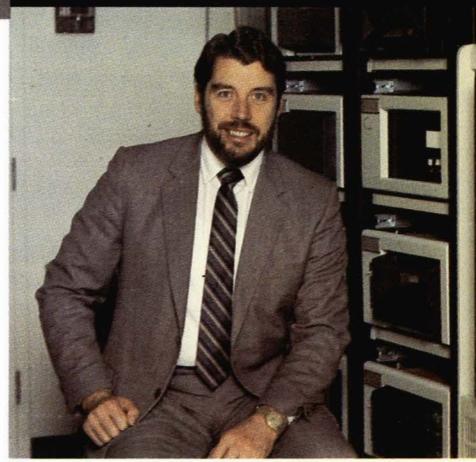
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