



digital

**CORPORATE
PHILOSOPHY
and
ORGANIZATION**

APRIL 1977

INTRODUCTION

Digital Equipment Corporation, the world's leading manufacturer of minicomputers, was founded by Kenneth Olsen in 1957. The company was established to sell electronic modules to simulate Digital systems. Although many manufacturers already existed in the field, none had a firm control of this market. Ken Olsen, along with his brother, Stan, and Harland Anderson rented 8500 square feet of space, now Building 12, in the Maynard Mill complex, and began their manufacturing effort with 70% financing from American Research and Development.

When Digital first began to market small computers, a lot of people thought that a computer should fill up at least one room, and anything less was simply too small to be useful. But a few laboratory researchers purchased Digital systems and, shortly afterwards, minicomputers established their usefulness. Digital made it practical for users to consider new applications that had formerly been too expensive to computerize. The formal description of Digital's approach is "interactive computers," that is, computers that are accessible – that go where the problems are and work directly with people and equipment. It was this interactive approach which enabled Digital's minicomputers to play a larger role in many markets: communications, industrial, and educational for example. As the range of applications spread, Digital established specialized marketing groups to concentrate on meeting the particular needs of users in each of these fields.

Today Digital is a global enterprise ranking among Fortune 500's largest industrials. One of the reasons for its success is that Digital employees clearly understand that they are responsible for the company's performance. Employees know that everything the corporation does is ultimately judged by its value to the marketplace. Engineering, programming, manufacturing, service, education and marketing people all know what the criteria are: to offer the customer something useful and reliable at a price that represents good value.

The remainder of this CORPORATE PHILOSOPHY AND PERSONNEL booklet includes the company's formal philosophies and corporate personnel. Digital's development and growth are guided by the Operations Committee, a group comprised of President Ken Olsen and seven Vice Presidents who constitute the permanent membership, and fifteen Vice Presidents who serve as members on a three month rotational basis.

PHILOSOPHY

HONESTY

We want to be not only technically honest, but also make sure that the implication of what we say and the impressions we leave are correct. When we make a commitment to customers or to employees, we feel the obligation to see that it happens.

PROFIT

We are a public Corporation. Stockholders invested in our Corporation for profit. Success is measured by profit. With success comes the opportunity to grow, the ability to hire good people and the satisfaction that comes with meeting your goals. We feel that profit is in no way inconsistent with social goals.

QUALITY

Growth is not our primary goal. Our goal is to be a quality organization and do a quality job which means that we will be proud of our product and our work for years to come. As we achieve quality, growth comes as a result. The product we are selling includes the engineering, the software, the manufacturing, and the services, which include field service, software support, sales, order processing, training, and manuals.

RESPONSIBILITY

Plans are proposed by managers or teams. These plans may be rejected until they fit Corporate goals or until the Operations Committee feels confidence in the plans. But when you are accepted, they are the responsibility of those who proposed them. The impetus for the plan may come from outside the group making the proposal, but when it is accepted, the proposal is the responsibility of the one who proposed it.

LINE MANAGEMENT

We particularly want to be sure that line management jobs are clear and well defined. Because so many people are dependent on the plans of line managers, it is very important that his plans have regular automatic measurements built into them. Meeting financial results is only one measure of a plan; other measures are satisfied customers, development of people, meeting long range needs of the Corporation, development of new products, and opening new markets. We believe that our commitment to planning assures our freedom to act.

SOCIETY

We are committed as a Corporation to taking affirmative action in providing equal opportunity for employment and promotion for all persons regardless of race, color, creed or sex. We encourage all employees to take responsibility in community, social and government activities. We are always open for proposals as to what the Corporation or an individual on Corporation time may want to do in these areas. However, activities done on Company time or with Company funds should have a formal proposal including ways of regularly measuring success toward goals.

ENVIRONMENT

As good citizens, we believe we have a responsibility to keep our environment free of pollution and to set an example.

CUSTOMERS

We must be honest and straightforward with our customers and be sure that they are not only told the facts, but that they also understand the facts. To the best of our ability, we want to be sure that the products we sell solve the needs of the customer even when he is too naive to understand these needs exactly. When we sell a product to a customer, we want to be sure the Corporation fulfills the obligations we took on with the sale. We sell our Corporation, not a single individual, to our customers and we must be sure all DEC commitments are met.

COMPETITORS

We never criticize the competition publicly. We sell by presenting the positive features of our own products. We want to be respectful of all competition, and collect and analyze all public information about competitors. When we hire people from competitors, we should never press them for confidential, competitive information nor should we use confidential literature they may have taken with them.

SIMPLICITY AND CLARITY

We want all aspects of DEC to be clear and simple and we want simple products, proposals, organization, literature that is easy to read and understand, and advertisements that have a simple, obvious message. We have thousands of employees and many thousands of customers. We have to keep things simple to be sure that we all work together. Our decisions must always consider the impact on the people who will be affected by them.

OEMs

Standard products are the base of our business. At times, in certain areas, we will invest in software and hardware specifically for special markets. But we should never lose sight that the base of our business is our standard products. We are very dependent on selling the OEMs. There are more applications for our products than we could ever develop. In addition, there are many risks to be taken in developing new fields which we cannot afford. We therefore are very dependent on OEMs, and when they take the risks and they are clever enough to be successful, we should be most respectful of their risks and their efforts and not compete with them or do things to hurt them. When our OEMs are in trouble with a customer, we should tell them.

PERSONNEL DEVELOPMENT

We encourage people to develop technical skills, breadth of knowledge, and expertise in a specific area. We also encourage people to develop supervisory and management skills. We believe that individual discipline should be self generated.

PROMOTION

We promote people according to their performance, not only their technical ability but also their ability to get the job done and to take the responsibility that goes with the job. Ability is measured not only by past results, but also by attitude and desire to succeed. Performance results are also used to decide whether a person should remain in his current job.

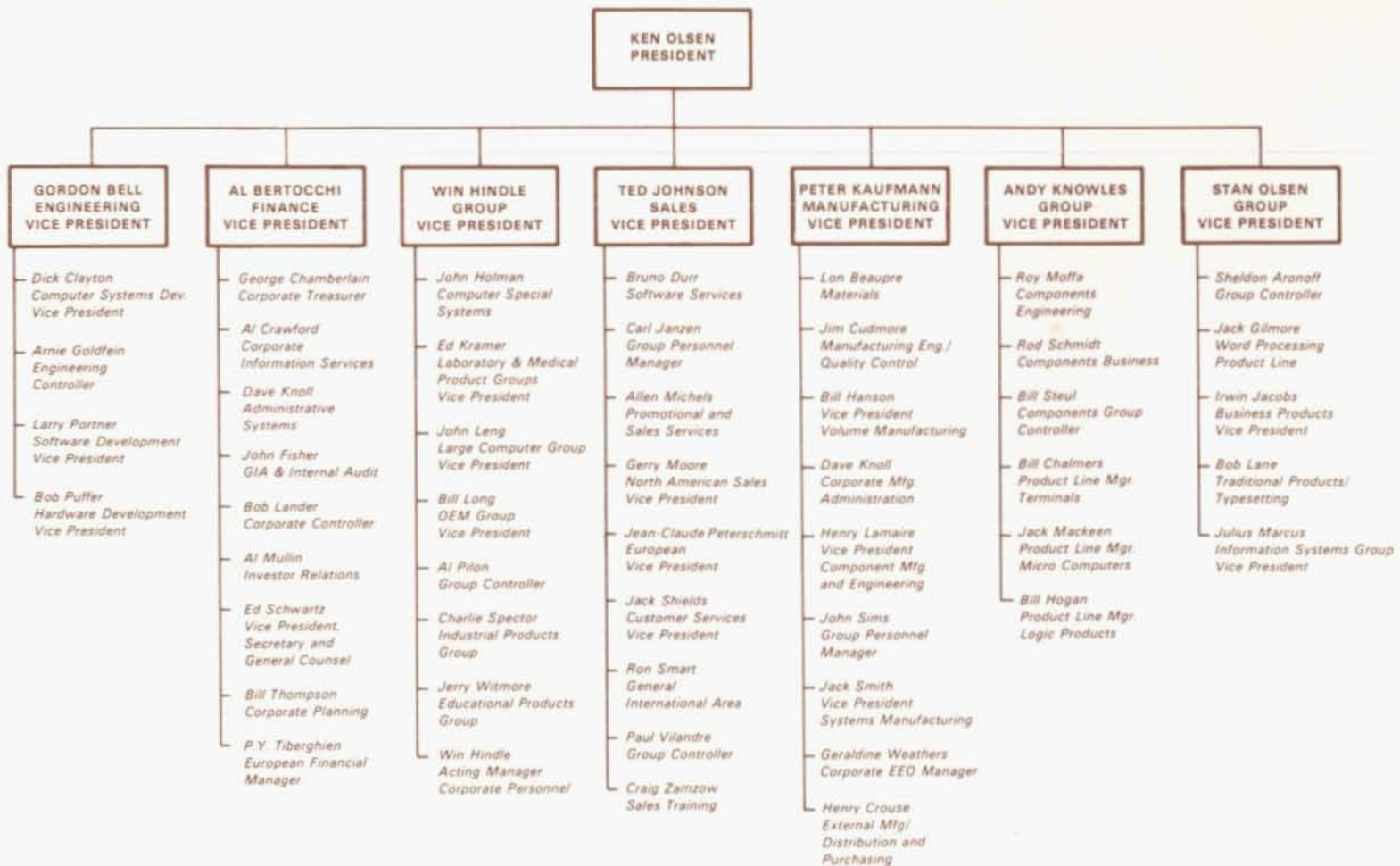
HIRING FROM CUSTOMERS

We should be exceedingly careful when hiring employees from customers. Sometimes this is reasonable and desirable; but we should do it with all caution and by being sure that the employee first tells the customer and allows the customer the chance to compete against us.

FIRST RULE

When dealing with a customer, a vendor, or an employee, do what is "right" to do in each situation.

CORPORATE ORGANIZATION CHART



OPERATIONS COMMITTEE



KENNETH H. OLSEN

Kenneth H. Olsen was born on February 20, 1926 in Bridgeport, Connecticut. He received B.S. and M.S. degrees in Electrical Engineering from Massachusetts Institute of Technology, Cambridge, Massachusetts.

During World War II, he served as an electronics technician in the U.S. Navy. In 1950, Ken joined the staff of the MIT Digital Computer Laboratory and later was assigned as leader of the section of MIT Lincoln Laboratory which designed and built the MTC computer used in the SAGE Air Defense Computer design program. He then led the group responsible for building the high-performance transistorized Digital computers, the TX-0 and TX-2, which set a standard of comparison for transistor circuit performance. He left Lincoln Laboratory in 1957 to found and head Digital Equipment Corporation in Maynard, Massachusetts.

Ken is a Director of the Shawmut Corporation, Boston, Massachusetts, and a member of the Board of Directors of Polaroid Corporation, Cambridge, Massachusetts. In addition, he is a member of the Corporation of Massachusetts Institute of Technology, Cambridge, Massachusetts, and Chairman of the Visiting Committee. He is a member of the Board of Trustees Gordon College, Wenham, Massachusetts, and of the Corporation of Wentworth Institute, Boston, Massachusetts.

Ken served on the Computer Science and Engineering Board of the National Academy of Science, Washington, D.C., and the President's Science Advisory Committee. He is currently a member of the Governor's Management Task Force for the State of Massachusetts.

He is a member of the Board of Trustees and of the Corporation of Joslin Diabetes Foundation, Inc., Boston, Massachusetts; a member of the Corporation of the Museum of Science, Boston, Massachusetts; and, a Deacon of Park Street Church, Boston, Massachusetts.

In 1960, Ken was elected "Young Electrical Engineer of the Year" by Eta Kappa Nu, the electrical engineering honorary fraternity. He was also named "Businessman of the Year" in 1970 by the Boston Chapter of the Society for the Advancement of Management; and, was the first person to receive the "President's Award" from the New England Chapter of the Electronic Representatives' Association.

He is a Fellow of IEEE, and was recently elected Fellow by the American Academy of Arts and Science, Boston, Massachusetts.



C. GORDON BELL

C. Gordon Bell, Vice President of Engineering, joined Digital in 1960 as a Computer Engineer. In 1966, Gordon took a leave of absence from Digital to join the faculty of the Electrical Engineer and Computer Science Departments at Carnegie Mellon University. He returned to Digital in 1972 as Vice President of Engineering concerned with products ranging from terminals, processor-on-a-chip computers, to computer networks. He attended Massachusetts Institute of Technology where he received SB and SM degrees. In 1958, Gordon went to Australia as a Fulbright Scholar. Later, he worked as a staff researcher at MIT's Speech Laboratory using the computer to assist in speech analysis and recognition. Gordon is well-known for his prolific writings and holds several patents. He is a Fellow of the IEEE, a member of Eta Kappa Nu, and received the 6th Mellon and IEEE's McDowell Award for Contributions to the Computer Art.



ALFRED M. BERTOCCHI

Alfred M. Bertocchi, Vice President for Finance, joined Digital in April 1971. He is responsible for the company's legal, accounting and treasury operations, and general administration. Prior to joining Digital, he was with McCord Corporation serving as Vice President and Controller. He is a 1952 graduate of Northeastern University with a BS degree in Business Administration. Al is a member of the National Association of Accountants, Board of Directors, Associated Industries of Massachusetts, and Director of the National Council of Northeastern University.



WINSTON R. HINDLE, JR.

Winston R. Hindle, Jr., Vice President and Group Manager, is responsible for six business groups: Original Equipment Manufacturers (OEM), Large Computers/Engineering Systems, Education Products, Laboratory Data Products/Medical Products, Industrial Products, and Computer Special Systems. In addition, he is responsible for the Corporate Personnel Department. Prior to joining Digital in 1962, he was associated with the Massachusetts Institute of Technology where he was Industrial Liaison Officer and Acting Director of the Industrial Liaison Office. He is a graduate of Amherst College with a BA in Physics (magna cum laude) and the Massachusetts Institute of Technology, Sloan School of Management with a MS in Industrial Management.



THEODORE G. JOHNSON

Theodore G. Johnson, Vice President of Sales and Service, is responsible for the worldwide Sales and Field Service department, as well as other marketing services and administrative operations in the corporate headquarters. He was the company's first sales engineer and held several positions in the sales department before being named Vice President in 1967.

A 1956 graduate of the California Institute of Technology, Ted also received a MS degree in Business Administration from the Harvard Business School.



PETER J. KAUFMANN

Peter J. Kaufmann, Vice President of Manufacturing, is responsible for the company's total manufacturing efforts, including those in Canada, Puerto Rico, Taiwan, Hong Kong, Galway and Holland. He joined Digital in 1966 after four years with Beckman Instruments, Inc. Pete is a graduate of John Hopkins University with a degree in Industrial Engineering. In 1955 he received a MS degree in Industrial Management from the Massachusetts Institute of Technology.



ANDREW C. KNOWLES

Andrew C. Knowles, Vice President and Group Manager, is responsible for the Components Group which markets high volume, unbundled Digital computer components such as terminals, LSI-11s and logic products. The Springfield, Massachusetts native joined Digital in late 1969 and has served as PDP-11 Product Line Manager since its inception. He was promoted to Vice President in 1972 when he was given responsibility for all of Digital's small computer products. In 1974, he formed the Components Group.

Prior to joining Digital Andy was employed at RCA from 1960 to 1969 as Manager of Applications and Design Engineering for memory devices and systems.

He served in the U.S. Air Force from 1957 to 1960, attaining the rank of first lieutenant as a communications officer. Before joining the Air Force, he was an Associate Engineer with the Martin Company in Baltimore. Andy earned his B.S. degree in electrical engineering at the University of Massachusetts in 1957 and did graduate work at Babson Institute.



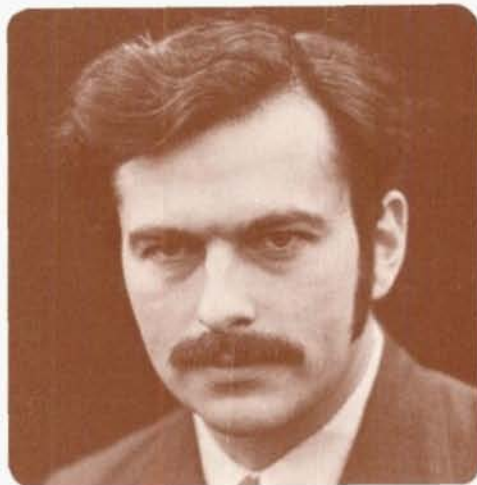
STANLEY C. OLSEN

Stanley C. Olsen, Vice President and Group Manager, is responsible for the Commercial Products Group: Finance, Insurance, Transportation, Utilities, Government Information Systems, Manufacturing Industry, Distribution, Service Industry, Word Processing, Traditional Products and Typesetting product lines. He is one of the three original founders of the company and is the brother of Kenneth H. Olsen, President. He is a graduate of Northeastern University with a BBA in Engineering Management.

Stan has been actively involved in the Marlboro Hospital as a trustee, treasurer, and member of the hospital's Board of Governors. He is on the Board of Directors of Venture Founders, a Director of the National Council of Northeastern University, a Member of the Corporation of Northeastern University, Board of Trustees of Worcester Polytechnic Institute and Board of Visitors at the University of New Hampshire.

OPERATIONS COMMITTEE

Rotating Members



RICHARD J. CLAYTON

Richard J. Clayton, Vice President of Computer Systems Development, was the Product Line Manager for the PDP-11/45 computer line since it was introduced in 1971. His present responsibilities include PDP-8 and PDP-11 computer systems development. Dick joined the company in 1965 as a Design Engineer, and was the Product Line Manager for and designer of the PDP-12 and earlier line-8 system. Dick is a graduate of MIT and has a BS and MS in Electrical Engineering.



WILLIAM C. HANSON

William C. Hanson, Vice President of Volume Manufacturing, joined the company in 1967 as Module Materials Manager and since then has guided the high volume production aspect of the company. His current responsibilities include manufacturing central processors, peripherals, metals and volume subassemblies at Digital locations in Massachusetts, Arizona, New Mexico, Colorado, and Puerto Rico. Prior to joining Digital, Bill was employed at Beckman Instruments. He is a graduate of Stanford University where he earned BSIE and MSIE degrees.



IRWIN JACOBS

Irwin Jacobs, Vice President of Business Products, joined Digital in 1965 as an Applications Engineer, and has held a variety of positions at both the district and regional sales level. He served as a Sales Engineer and District Manager in Connecticut before becoming District Manager/metro Boston in 1968. Jacobs was Business Product Line Manager in 1973 and became Group Manager 1975. In his current position, Irwin is responsible for computers sold for commercial applications in the manufacturing, distribution, insurance and service industries.

Before coming to Digital, he worked for Sylvania Electronic Systems. Irwin is a 1960 graduate of Worcester Polytechnic Institute, with a B.S. in Electrical Engineering.



EDWARD A. KRAMER

Edward A. Kramer, Vice President of Laboratory and Medical Products, joined the company in 1967 as an Applications Engineer. He has served as Marketing Manager for the PDP-12 computer, the Product Line Manager for the Education Products Group, PDP-15 group, and most recently as Product Line Manager for the Laboratory Data Products Group. In his present position, Ed is responsible for computer products sold into laboratory and medical markets which include universities, research institutions and medical facilities worldwide. Before joining Digital, he was employed by Sylvania Electronic Systems. A 1961 graduate of the City College of New York with a B.S. in Electrical Engineering, Ed earned his M.S. in Electrical Engineering from Northeastern University in 1965. He is a member of IEEE.



HENRY P. LEMAIRE

Henry P. Lemaire, Vice President of Component Manufacturing and Engineering, joined the company in 1972 as Manager of Memory Operations. He developed Digital's core memory plant in Natick, Massachusetts, and the stack manufacturing operation in Taiwan. He has responsibility for overall Memory Operations including plants in Natick, Taiwan, Hong Kong, and Memory Engineering in Maynard. He is also responsible for Semiconductor Operations including Design Engineering in Maynard, Wafer Processing in Worcester, and the LSI Test Center in Marlboro. Prior to joining Digital, Henry was employed by RCA. He holds BS and MS degrees from the University of Manitoba (Canada) and received his Ph. D. from Purdue University in 1950.



JOHN LENG

John Leng, Vice President of Large Computers, was Product Line Manager for the DECsystem-10 since 1971 and during that time was responsible for the engineering, manufacturing and marketing efforts for this product. He was appointed Vice President in 1974. John joined Digital Equipment of Canada, Ltd. in 1963 as the Manufacturing Engineering Manager. The following year, he went to England to establish Digital Equipment Corporation U.K., Ltd., a sales and service subsidiary which he managed for two years. In 1966, John became European Regional Manager with responsibility for Digital's sales, service and manufacturing efforts throughout Europe. He was named Regional Sales Manager for the Western United States in 1968, headquartered in San Francisco, and held that position until being named Manager of the DECsystem-10 operation in 1971. Since then, he has also assumed the responsibility for the PDP-15 and Engineering Computation Product Lines, now known as the Engineering Systems Group. He holds degrees in electrical and mechanical engineering from the College of Technology Art and Commerce, Oxford, U.K., and is a graduate of the Stanford University Business School Executive Program.



WILLIAM H. LONG

William H. Long, Vice President of OEM, has been responsible for Digital's Original Equipment Manufacturer business since being named Product Line Manager in 1972. Prior to that, he had been Product Line Manager of PDP-8 minicomputers. He joined Digital in 1963 as a Design Engineer and was a member of Digital's engineering management team. In 1968, Bill was sent to England to begin the company's special systems business in Europe. Before coming to Digital, Bill was associated with MIT's Lincoln Labs. He is a 1959 graduate of Northeastern University where he earned a BS degree in electrical engineering and was elected to two national engineering honor societies. He is also an alumnus of the Senior Executive Program at the MIT Sloan School.



JULIUS L. MARCUS

Julius L. Marcus, Vice President of Information Systems, is currently accountable for the overall business direction of the Information Systems Group. Previously he was Communications Group Manager responsible for Digital's minicomputer activities in the communications market. Julius joined Digital in 1969 as Marketing Manager for the PDP-11 16-bit minicomputer and had marketing responsibility for the development and promotion of hardware and software associated with this computer. He also served as Product Line Manager for the PDP-11 family of machines. Prior to joining Digital, he was associated with G.E. where he was responsible for an industrial computer applications office serving the East Coast. Julius holds a BS degree in Mechanical Engineering and a MS in Instrumentation Engineering, both from Case Western Reserve University.



GERALD T. MOORE

Gerald T. Moore, Vice President of North American sales, is responsible for the company's total sales effort in the United States and Canada. Since joining the company in 1962, Gerry has held positions in both the U.S. and Europe, including District Sales Manager for Germany from 1966 to 1968, and Regional Manager for Digital's Central Region Chicago office. Prior to joining Digital, Gerry was employed as a Project Engineer with an electronic systems house in Boston engaged in the design and development of numerical control systems. He is a native of Massachusetts and a graduate of Massachusetts Institute of Technology.



JEAN-CLAUDE PETERSCHMITT

Jean-Claude Peterschmitt, Vice President, Europe, is responsible for all facets of the corporation's European operations. He joined the company in 1967 as a District Manager for France, Switzerland and Italy and was appointed European Regional Manager in August, 1968. Born in France, Jean-Claude holds a degree in mechanical engineering from the Swiss Federal Institute of Technology (Eth, Zurich) and a M.S. degree from the Massachusetts Institute of Technology.



LAWRENCE J. PORTNER

Lawrence J. Portner, Vice President of Software Development since 1974, was formerly Group Manager for Software Engineering and Services with responsibility for software development for the full spectrum of Digital's product lines. He established the Software Distribution System, the Software Service Organization, the Software Research Group, and the Computational Services Group. Larry also established the Software Income Services Product Line, a rapidly-growing and integral organization designed to provide additional software consulting services to the company's expanding customer base. He joined Digital in 1963 as a PDP-5 programmer and later served as Software Development Manager for the PDP-6. Larry holds a B.S. degree in Business Administration from Temple University.



ROBERT W. PUFFER, III

Robert W. Puffer, III, Vice President of Hardware Development, has responsibility for corporate engineering support and for peripherals engineering. He joined Digital in 1969 as a manager of manufacturing engineering responsible for introducing new products into production and for corporate process engineering. He subsequently became responsible for the development of Digital's peripherals and for the PDP-11 family of minicomputers. Bob earned a BS degree in electrical engineering from the Massachusetts Institute of Technology and a M.S. degree from The Sloan School of Management at MIT.



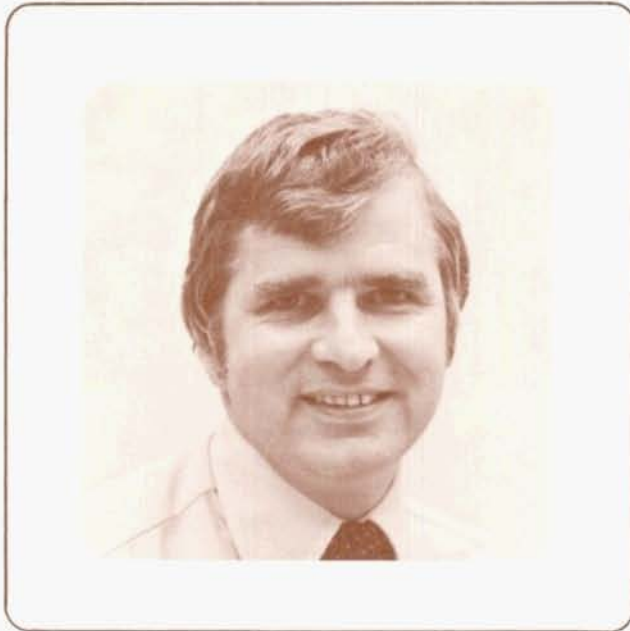
EDWARD A. SCHWARTZ

Edward A. Schwartz, Vice President, General Counsel, and Secretary, joined the company in 1967. As General Counsel, he is responsible for the legal affairs of the company and its worldwide subsidiaries. He is Digital's chief legal officer as well as supervisor of the Real Estate and Contract departments. Prior to joining the company, Ed practiced law with firms in Boston and Hartford, Connecticut. He is a graduate of Oberlin College and Boston Law School.



JOHN J. SHIELDS

John J. Shields, Vice President of Customer Services since 1974, is responsible for several of Digital's service organizations employing more than 5,000 persons. These organizations include worldwide Field Service, Educational Services, User Services, and the Technical Documentation groups. Jack has been Corporate Manager for Customer Services, and prior to that, Corporate Manager for Field Service worldwide. He joined the company in 1961 as a Field Service Engineer. He is a graduate of the School of Industrial Management at Worcester (Mass.) Polytechnic Institute and the Management Development Program of the Harvard Graduate School of Business Administration.



JOHN F. SMITH

John F. Smith, Vice President of Systems Manufacturing, has been involved with manufacturing since he joined the company in 1958. He is currently responsible for manufacturing operations in Westminster, Marlboro, Salem, Kanata and Europe. His Digital experience spans our initial entry into the systems business to today's worldwide multi-plant systems manufacturing operations. During this period he has directed all the manufacturing disciplines within the systems manufacturing operation. Jack received his BSEE degree from Northeastern University in 1963.