



DIGITAL EQUIPMENT CORPORATION
THIRD QUARTER REPORT 1987

DECWORLD '87 is Coming ■ Thousands of Digital's customers are expected to visit Boston at the company's invitation over a two-week period in September. Boston's World Trade Center and the QE2 will be the site of DECWORLD '87, where customers will see how Digital can sharpen their competitive edge.

On the Cover: ■ A brief sampling of Digital's products, coupled with applications from members of our cooperative marketing programs, which will be exhibited at DECWORLD '87. Shown are Digital's family of VAX-based workstations, which covers the full range of workstation performance. From left to right: the new VAXstation 2000 system, displaying a printed circuit board layout from CASE Technology, Inc.; the monochrome VAXstation II system, displaying electronic publishing from Interleaf, Inc.; the 4-plane VAXstation II/GPX system, displaying CASS,* a schematic capture application from Silvar Lisco; and the 8-plane VAXstation II/GPX system, displaying Geomod,* a three-dimensional solids modeling application from Structural Dynamics Research Corporation (SDRC).

TO OUR SHAREHOLDERS

Total operating revenues for the third quarter ended March 28, 1987, were \$2,410,071,000, up 25 percent from the \$1,928,287,000 of the comparable period one year ago. Net income for the quarter was \$307,597,000, up 81 percent from last year's third quarter net income of \$170,348,000. Earnings per share for the quarter were \$2.29, on 134,262,167 average common and common equivalent shares outstanding, versus \$1.32 on 130,966,690 average common and common equivalent shares outstanding a year ago.

For the nine months ended March 28, 1987, total operating revenues were \$6,720,380,000, up 24 percent from last year's \$5,414,707,000. Net income for the nine months was \$760,185,000, compared with \$378,787,000 a year ago. Earnings per share were \$5.69, versus \$3.00 a year ago. Average common and common equivalent shares outstanding were 133,617,165, compared with 130,166,014 last year.

We are pleased with our performance in the third quarter and continue to be encouraged by the strong customer acceptance of the integrated networking solutions and wide range of compatible computer systems and application software we offer. Increases in orders and revenues are the result of ongoing investments in selling, marketing, and engineering over the past several years.

Several other companies have announced computers they claim will compete with the VAX family of computer systems. Departmental computing, however, requires years of extensive software development and networking capabilities to tie together effectively a whole organization.

We are seeing a return on this investment, evidenced by several recently published surveys. Digital now ranks among the 50 largest publicly held industrial companies in the United States and our reputation for customer satisfaction is among the highest of all computer manufacturers.



Kenneth H. Olsen
President

CUSTOMER WIN HIGHLIGHTS

Allendale Mutual Insurance Company, Johnston, Rhode Island, an insurer of commercial and institutional property, recently signed a \$5 million contract with Digital to provide distributed data-processing solutions for its remote offices across the United States and Canada. The contract calls for six VAX 8530 systems, one VAX 8250 system, and several MicroVAX systems, all of which will be located in Allendale's remote offices and networked to an IBM* mainframe in Allendale's corporate headquarters. The new systems also will be linked to IBM PCs, allowing Allendale offices to integrate their personal computing functions.

E.D. Jones, a nationwide brokerage firm based in St. Louis, Missouri, chose Digital to provide \$30 million in computer solutions for its brokerage branch automation system. The VAX-based system will provide E.D. Jones branches throughout the United States with the networked tools necessary to process orders and improve communication throughout the company and to customers. The contract includes VAXcluster systems, VAX-based workstations, the ALL-IN-1 Integrated Office and Information System solution, and local- and wide-area networking capabilities. Slated for implementation over a five-year period, the system initially will be installed in 1,100 offices throughout the United States—all of which will be networked to a large VAXcluster system in the St. Louis headquarters. By 1992, nearly 3,000 offices will be on the network.

Citicorp Investment Bank signed a three-year contract with Digital to provide the computer solutions for its Global Trading System. Valued at \$30 million, the trading support system will quicken the overall trading process dramatically by providing traders with real-time market information, online trade execution and news retrieval capabilities. The contract includes VAXcluster systems, VAX-based workstations, and various local- and wide-area networking capabilities. Initially, Citicorp Investment Bank will automate its London and Frankfurt operations to cut operating costs and improve communication, information management, and the overall trading process. By the end of 1989, similar capabilities and benefits will extend to Citicorp offices and customers around the world.

Nanyang Technological Institute (NTI), Singapore, recently awarded Digital a \$4.5 million contract for a campus-wide networked computer system. The contract calls for a VAXcluster system, comprising three VAX 8800 computers and a VAX 8200 system for academic purposes; a VAX 8500 system for administrative computing; eighty miles of ThinWire Ethernet cable; and associated peripherals. Some 4,000 students and 500 staff at the university, which gears its coursework to engineering applications and the needs of industries, are slated to use the system when the new academic year starts again this July.

The U.S. Department of Navy will use Digital's computers to automate portions of its Planning, Programming, and Budgeting System (PPBS). The Navy awarded a 10-year contract to install, support, and maintain the system to Systemhouse Inc. of Arlington, Virginia, which bid a VAX/VMS architecture and software system and ALL-IN-1 Integrated Office and Information System solution. Systemhouse is a subsidiary of SHL Systemhouse of Canada, Digital's largest Canadian original equipment manufacturer for commercial applications. Initial deliveries under the contract are valued at \$8.9 million, with the estimated total for the first three years being more than \$20 million. Full implementation could include 120 VAX systems, 120 ALL-IN-1 licenses, and nearly 700 terminals in the Washington, D.C., area and at seven Navy sites in the U.S. and Europe.

Amcast Industrial Corporation, a metals-oriented manufacturing company based in Dayton, Ohio, has purchased three VAX 8000 series systems running MANMAN* manufacturing resource planning software from ASK Computer Systems, Inc., Los Altos, California, and MAPS* financial software from Ross Systems, Inc., Palo Alto, California. ASK Computer Systems is a member of Digital's System Cooperative Marketing Program (SCMP) and Ross Systems is a participant in Digital's Cooperative Marketing Program (CMP). This purchase involves several

Amcast locations, including one of its largest, Stanley G. Flagg & Company, located near Philadelphia, which manufactures valves and pipe fittings. The systems will be used to implement a Digital-recommended CIM (computer-integrated manufacturing) strategy designed to boost productivity and upgrade financial and human resources activities, as well as to develop CAD/CAM (computer-aided design/computer-aided manufacturing) resources. The sale is valued at \$1.2 million.

Riley-Beard, Shreveport, Louisiana, one of the nation's largest manufacturers of pressure vessels and heavy equipment, recently purchased a VAX 8300 system for business and engineering applications, several VAXstation II computers running ANVIL* CAD software, and an Ethernet network. Developed by one of Digital's CMP vendors, Manufacturing and Consulting Services, Inc., ANVIL is a three-dimensional mechanical CAD program.

Components of General Electric's Government Electronic Systems Division, formerly MESO, located in Syracuse, New York, purchased three VAX 8800 systems valued at \$2.5 million. These groups are major suppliers of solid state radar, space surveillance, and anti-submarine warfare systems to the nation's Armed Forces. As technology leaders, they will use the VAX 8800 systems in the design and development of advanced military hardware and software systems.

Riley Stoker, Worcester, Massachusetts, purchased nine VAXstation II/GPX workstations that run Auto-Trol Technology's Series 5000 A/E/C software. The workstations will be used for steam boiler component design, including piping and tubing applications. Riley Stoker also installed Ethernet local-area networks throughout its facility. Auto-Trol Technology recently became an SCMP member.

MOODY'S RAISES DIGITAL'S CREDIT RATING

Moody's Investors Service recently raised Digital's long-term debt rating from Aa2 to Aaa, its highest rating. According to Moody's, its rating upgrade recognizes Digital's strong capital structure, ample liquidity, and financial self-sufficiency. The rating also reflects Digital's ability to better its recent operating performance and to further increase market share.

Also cited were Digital's solid technological base, strengthening market presence, and economies of scale in manufacturing. Additionally, Moody's stated that it believes Digital will continue to enhance its world leadership in medium-scale computer systems through successful new-product introductions in computers, networks, software, and services.

ANNOUNCEMENTS EXTEND DIGITAL'S VAX PRODUCT LINE AND DELIVER MORE VALUE TO CUSTOMERS

Several major announcements during the quarter demonstrate Digital's commitment to extend its total line of VAX computer systems and solutions and to deliver added value to an ever-widening set of customers. The announcements include:

- Two new mainframe-class VAX systems, featuring the most powerful central computing environments available from Digital, to support enterprisewide commercial and technical applications. The VAX 8974 and VAX 8978 computer systems are alternatives to mainframes for applications such as accounting, electronic funds transfer, large database management, data processing, and research and development.
- Three new midrange VAX systems, which feature up to a 40% increase in price-performance over earlier models they replace. The new VAX 8250, VAX 8350, and VAX 8530 systems can be easily integrated into

existing networks and can be used in an entry-level VAXcluster system. Replacing the VAX 8200, VAX 8300, and VAX 8500 systems, the new computers are designed for use in a wide variety of applications, including commercial, scientific, engineering, medical, and manufacturing markets.

- New offerings for work group computing, which bring the full resources and power of VAX computing to the desktop. The new products include the VAXstation 2000 workstation; MicroVAX 2000 multiuser system; and the new VAX Solution Systems program, in which Digital and participants in its cooperative marketing programs will work to define, build, and test solutions to actual customer problems. These new products are targeted at problem-solving in commercial, engineering, manufacturing, government, scientific, and education markets.

- Eighteen products and services, including ruggedized VAX systems for the manufacturing environment, and two new marketing agreements, which reinforce Digital's capabilities in the four essential areas of integrated manufacturing solutions: single architecture, integration tools, services, and application solutions provided by Rexnord Corporation and the Micro Switch Division of Honeywell.

- VAX Integrated Publishing, which was announced at the recent Corporate Electronic Publishing Show* in Chicago, along with three agreements with leading third-party vendors of publishing software and hardware. These included a Digital Distributed Software supplier's agreement with Aldus, Inc., Seattle, Washington, for its Pagemaker* publishing software, and Cooperative Marketing Program agreements with MicroTek Labs, Inc., Gardena, California, for its high-resolution model MS-300A scanner, and with Information Dimensions, Inc., Dublin, Ohio, for BASIS* document retrieval software.

- Several business initiatives designed to ensure the satisfaction for our end users with our products and services, and to enhance business relationships with our resellers and participants in our cooperative marketing programs. These initiatives include: a one-year warranty on all hardware products, with onsite service for complete systems and optional warranty extensions for two and three years; a unified discount schedule, based on total annual value of purchases from Digital; discount enhancements and earned credits to help equalize margins for resellers regardless of products sold or markets and customers served; and simplified procedures for transfer of software licenses.

DIGITAL CONTINUES TO EXPAND COOPERATIVE MARKETING PROGRAMS

Digital's commitment to several key markets continues to grow with the addition of many new participants in our Cooperative Marketing Program (CMP) and System Cooperative Marketing Program (SCMP). The two programs allow both parties to offer more comprehensive solutions to the Digital marketplace, while strengthening their leadership positions through cooperative marketing activities. Agreements were signed with the following companies in these targeted markets:

Chemical and Pharmaceutical Research ▪ Polygen Corporation, Waltham, Massachusetts, which develops automation software for the chemical and pharmaceutical research markets under exclusive licensing arrangements with Harvard University, the Massachusetts Institute of Technology, and York University in England, signed an agreement with Digital to cooperatively develop a networked scientific research automation system for the chemical and pharmaceutical industry.

Electronic Mail ▪ Soft-Switch,* Inc., King of Prussia, Pennsylvania, which develops and markets a comprehensive, integrated line of office networking and translation products designed to allow multi-vendor office systems to communicate, signed a CMP agreement. The companies will merchandise Soft-Switch products that interconnect Digital's ALL-IN-1 Integrated Office and Information System and the IBM PROFS* (Professional Office System Support) electronic mail system.

Financial Services ▪ Execucum Systems Corporation, Austin, Texas, a leading developer of financial modeling applications since 1975, signed a CMP agreement. Execucum will market a wide range of products which are available on all VAX and MicroVAX systems, including: Corporate DSS* (Decision Support System); IFPS/Plus,* a data management and analysis tool; IFPS/Personal,* a desktop version of IFPS/Plus that can be tied into a corporate planning network; and Impressionist, a new business presentation graphics software product.

National Computer Systems (NCS), Minneapolis, Minnesota, the leading supplier of turnkey trust and asset management solutions with installations at 500 banks, signed an SCMP agreement. NCS' Trustware* asset management applications span the entire range of investment accounting requirements, including applications for personal trust, corporate trust, employee benefits, participant accounting, pension payments, mineral management accounting, farm accounting, and private banking systems.

Laboratory ▪ Nicolet Instrument Corporation, Madison, Wisconsin, a worldwide supplier of analytical instrumentation for quality control, process monitoring, and chemical research and development, signed an SCMP agreement to provide a complete information environment for the laboratory. Nicolet will market three advanced laboratory automation products: the NIC-COM VAX Communications Package, which runs on any VAX computer; and the P3R3 Single Crystal Diffractometer and L-11 Crystal Diffractometer, both of which run on Digital's MicroVAX II computers.

Legal ▪ Henco Software, Inc., Waltham, Massachusetts, an established market leader in textual database applications, signed a CMP agreement. Henco's INFO products can be used in any department or organization that needs to store and retrieve large volumes of text—libraries, research and development, human resources, sales and marketing—but are particularly appropriate for case management/litigation support in corporate law departments.

Maintenance Management ▪ ABC* Technologies, Inc., of Bellingham, Washington, which offers an integrated software system for maintenance management that runs on all VAX computers, signed a CMP agreement. ABC will market its ABC/MM* product, which handles all aspects of corrective and preventive maintenance, including labor records, automatic work scheduling, estimates, performance control, budget control, equipment histories and other functions in the United States.

Daniel International Corporation, Greenville, South Carolina, signed a CMP agreement with Digital to cooperatively market Daniel's Computerized Maintenance Management System (CMMS) application software, which improves the maintenance of plant and equipment, and contributes to lower costs.

Mapping and Facilities Management ▪ Synercom Technology, Inc., Houston, Texas, a major supplier of automated mapping and facilities management software running on Digital equipment for more than 20 years, signed an SCMP agreement. Synercom will market its INFORMAP* software, designed to meet the mapping information management requirements of telephone companies, local and federal government agencies, gas and electric utilities, and engineering companies; and OPIS* software, a companion product to INFORMAP, which provides outside plant information management tailored for the telephone industry.

Media ▪ Collier-Jackson, Inc., Tampa, Florida, a major supplier of turnkey computer systems for newspaper circulation, advertising, layout, production, and financial management, recently became Digital's first SCMP member in the media industry. Collier-Jackson markets two newspaper management systems that run on all VAX computers: CJ/NEWSPAPER MANAGEMENT SYSTEMS,* which includes circulation, advertising, classified, ad tracking, layout, and newsprint modules; and CJ/BUSINESS INFORMATION SYSTEMS,* which includes modules to manage general ledger, accounts payable, accounts receivable, fixed assets, payroll, and personnel functions.

Petroleum Exploration ▪ GeoQuest Systems, Inc., Houston, Texas, the leading supplier of integrated interactive two- and three-dimensional seismic interpretation systems for oil and gas exploration, recently became Digital's first SCMP member in the petroleum exploration market. GeoQuest will market its Interactive Exploration System (IES*) software together with the full range of Digital's VAX family of computers, including VAXstation products, for applications in the petroleum exploration and production markets.

Process Industry ▪ Impell Corporation of Norcross, Georgia, a wholly owned subsidiary of Combustion Engineering Corporation, which designs and manages construction projects for power utilities, signed a CMP agreement with Digital. Impell will market its CAEMIS* System software, which includes a set of software modules designed to meet the pipe design, analysis, and drafting needs of process industries in the United States.

DIGITAL SHIPS 100,000TH VAX COMPUTER

During the quarter, Digital shipped its 100,000th VAX computer system. The VAX 8800 system will be used for oil exploration and production computing at The Standard Oil Company's Dallas Technical Data Center.

The 100,000th VAX will be part of a cluster in a DECnet/Ethernet local-area network in Dallas as well as part of a corporate-wide area network. Standard Oil currently uses Digital's integrated computing and networking products for a wide range of commercial, financial, oil, natural resources, and manufacturing applications throughout the company.

DIGITAL RECEIVES AWARD FOR CORPORATE SOCIAL RESPONSIBILITY AND ACHIEVEMENT

The Social Investment Forum, a trade association of professionals and organizations involved in the field of socially sensitive investment, recently recognized Digital with its first annual Award for Corporate Social Responsibility and Achievement. The forum cited numerous reasons, including "its (Digital's) outstanding social and financial performance over the past year in the face of very difficult industry conditions." Also cited were:

- Digital's commitment to its employees.
- National honors the company has received from the U.S. Department of Labor for affirmative action programs; from "Working Mother Magazine" for being one of the 30 best companies for working women; and from "Black Enterprise" for being one of the 25 best companies for blacks.
- The study to examine health effects on people working in semiconductor processing and fabrication facilities, which Digital commissioned and funded.

CONSOLIDATED STATEMENTS OF INCOME

(Dollars in thousands except per share data)

Revenues

Product sales	
Service and other revenues	
Total operating revenues	

Costs and Expenses

Cost of product sales, service and other revenues	
Research and engineering expenses	
Selling, general and administrative expenses	
Operating income	
Interest expense	
Interest income	
Income before income taxes	
Income taxes	
Net income	
Net income per share	

Certain accounts for the periods ended March 29, 1986 have been reclassified to conform with the March 28, 1987 presentations. The accompanying notes are an integral part of these financial statements.

Three Months Ended		Nine Months Ended	
March 28, 1987	March 29, 1986	March 28, 1987	March 29, 1986
\$1,673,585	\$1,370,835	\$4,599,970	\$3,810,256
736,486	557,452	2,120,410	1,604,451
2,410,071	1,928,287	6,720,380	5,414,707
1,149,512	1,077,061	3,271,461	3,130,161
255,408	204,143	726,548	591,115
566,389	424,356	1,603,269	1,191,855
438,762	222,727	1,119,102	501,576
10,806	19,935	32,806	62,858
(32,231)	(34,420)	(92,285)	(80,168)
460,187	237,212	1,178,581	518,886
152,590	66,864	418,396	140,099
\$ 307,597	\$ 170,348	\$ 760,185	\$ 378,787
\$2.29	\$1.32	\$5.69	\$3.00

CONSOLIDATED BALANCE SHEETS

<i>(Dollars in thousands)</i>	March 28, 1987	June 28, 1986
Assets		
Current Assets		
Cash and temporary cash investments	\$2,422,526	\$1,910,933
Accounts receivable, net of allowances	2,155,316	1,903,287
Inventories	1,340,574	1,199,756
Prepaid expenses	132,548	85,274
Deferred income tax charges, net	262,000	206,998
Total Current Assets	6,312,964	5,306,248
Property, plant and equipment, net.	1,983,161	1,867,078
Other assets, net.	23,341	0
Total Assets	\$8,319,466	\$7,173,326
Liabilities and Stockholders' Equity		
Current Liabilities		
Loans payable to banks	\$ 17,051	\$ 18,697
Other current liabilities	1,716,937	1,064,838
Total Current Liabilities	1,733,988	1,083,535
Deferred income tax credits, net.	42,000	28,809
Long-term debt	270,043	333,155
Total Liabilities	2,046,031	1,445,499
Stockholders' Equity		
Common Stock, \$1 par value	130,008	128,591
Additional paid-in capital	2,322,771	2,224,304
Retained earnings	4,119,767	3,374,932
Treasury stock at cost, 2,086,890 and 0 shares	(299,111)	0
Total Stockholders' Equity	6,273,435	5,727,827
Total Liabilities and Stockholders' Equity	\$8,319,466	\$7,173,326

The accompanying notes are an integral part of these financial statements.

CONSOLIDATED STATEMENTS OF CHANGES IN FINANCIAL POSITION

<i>(Dollars in thousands)</i>	Nine Months Ended	
	March 28, 1987	March 29, 1986
Funds from Operations		
Net income	\$ 760,185	\$ 378,787
Depreciation	304,157	278,290
Other	4,850	35,670
Total from operations	1,069,192	692,747
Funds to Support Operations		
Increase (decrease) in working capital:		
Accounts receivable	252,029	174,931
Inventories	140,818	(381,472)
Prepaid expenses	47,274	23,677
Other current liabilities	(652,099)	(324,470)
	(211,978)	(507,334)
Additions to property, plant and equipment	450,455	387,323
Increase in other assets	23,984	0
Total to support operations	262,461	(120,011)
Net increase in funds from operations	806,731	812,758
Funds Provided (Used) by		
Increase (decrease) in:		
Loans payable to banks	(1,646)	2,149
Long-term debt	(63,112)	(402,096)
Conversion of debentures to common stock	0	395,721
Stock issued under employee stock plans	92,836	73,179
Purchase of treasury stock	(323,216)	0
	(295,138)	68,953
Net increase (decrease) in cash and temporary cash investments	511,593	881,711
Cash and temporary cash investments at beginning of year	1,910,933	1,080,180
Cash and temporary cash investments at end of period	\$2,422,526	\$1,961,891

The accompanying notes are an integral part of these financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Reclassifications

Certain accounts for the periods ended March 29, 1986, have been reclassified to conform with the March 28, 1987 presentations.

Earnings Per Share

Net income per share is based on the weighted average number of common shares and common share equivalents outstanding during each period; 133,617,165 shares and 130,166,014 shares for the nine month periods ended March 28, 1987 and March 29, 1986, respectively, and 134,262,167 shares and 130,966,690 shares for the three month periods ended March 28, 1987 and March 29, 1986, respectively.

Taxes

The Tax Reform Act of 1986, including the retroactive provisions, did not have a material impact on the financial results of the Company for the period ending March 28, 1987.

Capitalized Computer Software Costs

The consolidated financial statements for March 28, 1987 include the capitalization of computer software costs in accordance with recent pronouncements of the Financial Accounting Standards Board. These costs are included in Other assets, net, on the Balance Sheet.

Long-Term Debt

The Company has called for redemption on May 14, 1987, all of its outstanding 9³/₈ percent Sinking Fund Debentures due March 15, 2000. Accordingly, the principal amount outstanding at March 28, 1987, \$59,000,000, has been reclassified from Long-term Debt to Other current liabilities on the Balance Sheet.

Treasury Stock

The Company acquired shares of its common stock which is included in treasury stock at cost. The excess of cost over proceeds of treasury stock issued under employee stock plans during the quarter was \$15,350,000, which has been charged to retained earnings.

Digital's common stock is listed and traded on the New York Stock Exchange and Pacific Stock Exchange (Ticker Symbol "DEC".)

In Europe: Swiss Stock Exchanges of Zurich, Geneva, and Basel; and the German Stock Exchanges of Frankfurt, Munich, and Berlin.

Unlisted trading privileges have been granted by the Boston Stock Exchange, Cincinnati Stock Exchange, Midwest Stock Exchange, and Philadelphia Stock Exchange. In Europe: Luxembourg Stock Exchange.

Inquiries relating to investment in Digital Equipment Corporation should be directed to:

Albert E. Mullin, Jr.
Vice President, Corporate Relations
111 Powdermill Road
Maynard, MA 01754
(617) 493-5350

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First Quarter Report FY88



Digital Equipment Corporation

Digital Equipment Corporation
Maynard, Massachusetts 01754

ELIZABETH L CANE
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digital

*On the Cover: The Queen Elizabeth 2 provided
a very visible clue to the size and scope of DECWORLD.
Nearly 35,000 senior executives and managers from
85 countries and all 50 states attended.*

TO OUR SHAREHOLDERS

Total operating revenues for the first quarter ended September 26, 1987, were \$2,529,773,000, up 24 percent from the \$2,038,467,000 of the comparable period one year ago. Net income for the quarter was \$269,942,000, up 48 percent from last year's first quarter income of \$182,628,000. Earnings per share for the quarter were \$2.03, on 133,245,315 average common and common equivalent shares outstanding, versus \$1.37 on 133,005,213 average common and common equivalent shares outstanding a year ago.

We are very pleased with the revenue growth and order levels. Overseas business remained firm, while orders from customers in the United States accelerated somewhat. This performance is an indication of our customers' confidence in Digital's networking systems, applications, services, and solutions.

Initial demand for the new MicroVAX and VAXstation 3000 products has been strong. More than 3,000 application packages currently available on VAX systems are able to run—unaltered—on the new higher-performance systems. We expect to see many new applications brought into the VAX environment, as happened when we announced the MicroVAX II computer system.

Based on the strength of our products and services, and the increasing acceptance of networking, we have adopted an aggressive investment posture. While we are aware of the uncertainty in the financial markets, current plans, as indicated by first quarter results, call for increases in capital expenditures and in selling, marketing, and engineering costs. A portion of capital spending is for replacement of leased facilities with Digital-owned facilities—a move which should reduce operating costs over time. Overall, our cost structure should provide good earnings leverage from the expected growth of our business.



Kenneth H. Olsen

“THE NETWORK AT WORK”

DECWORLD '87 was the highlight of a very successful quarter. This customer conference and exposition, held at Boston's World Trade Center from September 8 through 18, provided a forum for the introduction of 26 new products. It also provided an opportunity for customers and prospective customers to see “The Network at Work” and a stage on which 170 third-party software and systems developers could demonstrate some of the many applications that run on networks of VAX computers. Finally, DECWORLD '87 provided the press, industry consultants, and financial analysts with a new appreciation of Digital's industry marketing and networking capabilities.

35,000 CUSTOMERS FROM 85 COUNTRIES

Attendance at DECWORLD was by invitation only. Nearly 35,000 senior executives and managers from 85 countries and all 50 states were drawn to the exposition.

To accommodate these visitors and more than 1,000 executive briefings and seminars, the Queen Elizabeth 2 and the Star/Ship Oceanic were docked alongside the World Trade Center where Digital had constructed a 400-node computer network. This network tied together industry-focused demonstration areas—process manufacturing, discrete manufacturing, federal government, state and local government, health care, education, telecommunications and utilities, travel, computer software and services, wholesale and retail distribution, media, and financial services—into a single, integrated demonstration of Digital's ability to support multinational enterprises.

Each attendee was given an account on the network that could be accessed from terminals and workstations on the exhibition floor, on the QE2 or the Oceanic, or from any of the seven Boston-area hotels tied into the network by microwave and fiber-optic Ethernet links.

THE DECWORLD NETWORK

The focus of the DECWORLD exposition was a live Network Control Center that supported not only the computers on the exposition floor but also Digital's 20,000-computer internal network encompassing 80,000 electronic mail accounts, 914 ongoing computer conferences, and 94 worldwide videotex infobases.

*The Network Control Center provided dramatic
and visible proof of Digital's ability to build and manage
complex, multivendor networks.*

Many DECWORLD demonstrations utilized this network, as well as online links to external networks both here and abroad. The currency trading demonstration utilized live links to major money markets around the world. A number of scientific demonstrations utilized a satellite link to a Cray supercomputer in Minnesota. Other demos featured links to IBM machines in remote locations.

The Network Control Center provided dramatic and visible proof of Digital's ability to build and manage complex multivendor networks. Visitors to DECWORLD could monitor actual network operations. A bank of video monitors showed network utilization, the number of nodes on line, and other network management information in realtime.

This was not a demo. The Network Control Center remained in operation 24 hours a day to support Digital facilities in Europe, the Americas, Australia, the Far East and Asia.

MAJOR CONTRACTS ANNOUNCED AT DECWORLD

Two major customer wins—Chemical Bank and Pacific Bell—were announced at DECWORLD. Digital won these contracts, in part, on the strength of its industry marketing program. This industry focus was never more apparent than on the exhibition floor. For example, in the discrete manufacturing area, the automotive exhibit included a real-life assembly and manufacturing process which featured a robot that actually built LEGO™ trucks and cars, in addition to nine other applications covering the entire manufacturing process starting with computer-aided design and manufacturing planning.

Two major customer wins—Chemical Bank and Pacific Bell—were announced at DECWORLD. Digital won these contracts, in part, on the strength of its industry marketing program.

This industry focus not only provides Digital customers with the solutions they need but also with strategic consulting and planning, program management, custom software and hardware, and all the other support services needed to build and maintain a competitive advantage.

For example, the contract with Chemical Bank calls for automating and networking 200 retail branch offices. Digital will provide Chemical Bank with a customer-service system and a telemarketing system and will work with the Consumer Bank in establishing a standard for information and service delivery.

The agreement with Pacific Bell calls for the joint development of an X.400-based internal messaging system, linking Pacific Bell's existing internal mail systems over a Digital MAILbus.™ Introduced at DECWORLD, the MAILbus integrates systems from different vendors into a single, global, electronic messaging network.

London's Metropolitan Police Force will link

240 Digital computers into one of the largest distributed relational databases in the United Kingdom.

Another contract announced recently was with London's Metropolitan Police, which will install a 17-million (pounds sterling) computer system linking 240 Digital computers into one of the largest distributed relational databases in the United Kingdom. The Crime Report Information System (CRIS) will be the most sophisticated of its kind and will provide 24 hour-a-day, 7 day-a-week access to automated crime reporting, analysis, and cross-referencing from any one of 2,000 terminals to be installed in the 75 Metropolitan Police divisions.

The CRIS system will use 233 MicroVAX II systems, all networked to a cluster of eight VAX 8700 computers. The links will be made using the existing MetNet X.25 network. This will allow the software developer, Systems Designers Ltd., to build a system which, in the event of failure, can switch users to a backup system within a few minutes.

MICROVAX 3000 SYSTEMS INTRODUCED AT DECWORLD

DECWORLD '87 provided the stage for the introduction of 26 new products, including a new generation of MicroVAX systems, many of which were seen on the exhibition floor running applications over the DECWORLD network. This new generation of MicroVAX systems relies on CMOS technology to provide up to three times the processing power of the MicroVAX II.

Like the MicroVAX II computer system, these new systems incorporate Digital's industry-standard Q-bus architecture, run existing VAX applications without change, and can operate in Local Area VAXclusters and other distributed computing environments. Extra CPU power and advanced chip architecture enable the new MicroVAX systems to support more users and to run more compute-intensive applications than the MicroVAX II. In fact, 60 active ALL-IN-1 users can share a MicroVAX 3000 system.

- The MicroVAX 3500 office pedestal system provides up to 32 Mbytes of memory and up to 560 Mbytes of local storage.
- The MicroVAX 3600 system comes with 32 Mbytes of memory and up to 2.5 Gbytes of local storage in a cabinet system that fits in most offices.
- The VAXstation 3200 system delivers 16 Mbytes of memory and up to 318 Mbytes of local storage in a workstation supporting color and black-and-white graphics.
- The VAXstation 3500 system provides up to 32 Mbytes of memory and 560 Mbytes of local storage.
- The VAXserver 3500 and 3600 systems are based on the MicroVAX 3500 and 3600 systems. The servers come with Local Area VAXcluster software to support local workgroups.
- The VAXserver 3602 system is actually two VAXserver 3600 systems sharing a single disk and tape. The second CPU provides extra compute power and high availability in a Local Area VAXcluster.

FOUR MAJOR NETWORKING ANNOUNCEMENTS

Digital's commitment to multivendor networking and international standards was demonstrated by the networking announcements made at DECWORLD.

▪ DECnet Phase V

True multivendor networking is the key focus of the DECnet Phase V program announced at DECWORLD. Digital is committed to integrating the Digital Network Architecture with the emerging Open System Interconnection (OSI) standards. Any computer from any vendor, as long as it conforms to OSI standards, can be incorporated into a Phase V network. A full DECnet Phase V implementation virtually eliminates network size restrictions and allows for unlimited expansion.

True multivendor networking is the focus of the DECnet

Phase V program announced at DECWORLD.

▪ Digital MAILbus

In conjunction with the Phase V announcement, Digital introduced the Digital MAILbus that links Digital electronic mail users to other mail systems, including IBM SNADS™ and PROFS,™ and unifies these systems into a single electronic mail network.

▪ Ethernet On Existing Telephone Lines

The existing "twisted pair" telephone lines found in most offices can now be used to implement an Ethernet local area network.

▪ DECnet System Services

This comprehensive set of new layered network products lets DECnet users access information without knowing the system, device, or location wherein the information is stored.

OTHER DECWORLD ANNOUNCEMENTS

In addition to the MicroVAX and networking announcements, DECWORLD provided a stage for the introduction of a number of other new products.

- The RA70 disk drive, incorporating Digital's own thin film technology, provides 280 Mbytes of storage in a 5 1/4-inch form factor.
- The RA82 hard disk drive offers 622 Mbytes on a 14-inch disk.
- The TK70 tape drive has a 296 Mbyte capacity and is designed as a matched backup device for the RA70 disk drive.
- ULTRIX 2.2 extends Digital's UNIX support to local area networks composed of diskless workstations—such as those by Sun Microsystems, Inc.—that share applications and data from a single server.
- The VT320 terminal incorporates a number of new features and is priced 30-percent lower than the popular VT220 that it replaces. Over one million VT220 terminals have been produced by Digital. To highlight this milestone, the millionth terminal, with a gold-colored enclosure and keyboard, was displayed at DECWORLD and then sent to the Smithsonian Institution's National Air and Space Museum to be used as a control terminal for the museum's dual PDP-11 computer system.
- The LJ250 series of serial- and parallel-interface color printers are low-priced desktop units ideally suited for use with video terminals, personal computers, and workstations. They output color graphics as well as text.
- The MIRA computer system features complete hardware redundancy and dual, independent, power supplies. This new dual MicroVAX system was designed for applications where continuity of operation is essential.

COMPLEMENTARY SOLUTIONS ORGANIZATIONS AT DECWORLD

DECWORLD reflected Digital's continuing commitment to its Cooperative Marketing Program. Over 170 Complementary Solutions Organizations (CSOs) participated in staging DECWORLD, its demonstrations and seminars.

During the quarter, a record number of leading independent software developers and systems companies signed Cooperative Marketing Program (CMP) and Systems Cooperative Marketing Program (SCMP) agreements with Digital.

- *Aspen Technology, Inc.*, Cambridge, Massachusetts, will provide ASPEN PLUS™ process simulation software for VAX systems.
- *ATEK Information Services, Inc.*, Canton, Ohio, will market integrated court management software, WRITS,™ for VAX computer systems. This ATEK application helps automate the daily activities of a court.
- *Bailey Controls Company*, Wickliffe, Ohio, will build distributed process control systems for the utility and process manufacturing industries. Its NETWORK 90® distributed process control system functions at the unit level of control.
- *BBN Software Products Corporation*, Cambridge, Massachusetts, will promote its RS Series of data analysis tools—including RS/1,® RS/Explore,™ RS/Discover,™ and QCA—on Digital's VAX family computers. These applications address the data analysis needs of laboratory, manufacturing, and engineering customers.
- *The Computer-Aided Design Group (CADG)*,™ Marina del Rey, California, will market CADG's CADG + FM™ software and VAX computers to facilities managers and space planners. CADG is Digital's first CMP supplier to offer an alphanumeric facilities-management solution to CAD customers in large corporations, architectural and real estate firms, government, and institutions.

- *Datalogix Formula Systems, Inc.*, Hartsdale, New York, will provide a Manufacturing Planning and Control System (MPCS). This is a comprehensive formula and recipe management and cost control system for chemical and food and beverage customers.
- *Eastman Kodak Co.*, Rochester, New York, will market a family of image document management systems. KIMS Systems use the VAX/VMS platform to manage the scanning, storage, and printing of large numbers of paper or film-based documents.
- *Effective Management Systems, Inc.* (EMS), a Milwaukee-based systems supplier, will market shop-floor information and management systems for discrete manufacturing industries. Its Shop Floor Information System (SFIS)[™] software runs on the full range of Digital's VAX systems.
- *Epic Data Corporation*, Seattle, Washington, will market VAX-based factory data collection systems to aerospace, automotive, and electronics manufacturers who wish to take advantage of the VAXELN realtime environment and Ethernet capabilities.
- *Factrol, Inc.*, West Lafayette, Indiana, will cooperatively market FACTOR, a software package that makes use of simulation technology to provide manufacturers with interactive, detailed scheduling capabilities on the plant floor.
- *GE Fanuc Automation North America, Inc.*, Charlottesville, Virginia, will market NCAM-Plus,[™] a complete distributed numerical control system, for aerospace, automotive, and general manufacturing industries. NCAM-Plus runs on the entire range of VAX computers.
- *Logicraft, Inc.*, Nashua, New Hampshire, will develop hardware and software products that integrate PC and VAX environments by adding MS-DOS[™] PC functionality to Digital's VAX systems. Logicraft's 386WARE[™] DOS server and CARDWARE[™] coprocessor board will be used with VAX computers.

- *PRC Public Management Services*, McLean, Virginia, will market its public safety applications on VAX computer systems. PRC specializes in computer-aided dispatching systems for police, fire, and emergency medical services.
- *Sales Technology, Inc.*, (ST), Atlanta, Georgia, will market Account and Territory Management modules and Digital's sales and marketing software solutions. ST's modules are used for automating sales activities in a wide range of industries, including process and discrete manufacturing.
- *Setpoint, Inc.*, Houston, Texas, an engineering and computer applications company, will market SETCON[®] products for area process control applications.

In addition to the Cooperative Marketing Program, Digital provides a wide range of support services to Complementary Systems Organizations. For example, Digital signed an agreement with Simpack Associates, Inc., of San Diego, to provide full hardware installation and ongoing hardware support for Simpack's VAXBI-licensed communications processor. To date, over fifty VAXBI licenses have been approved by Digital.

And in a joint announcement with Honeywell, Inc., Minneapolis, plans were announced for VAX-based integrated process control solutions. Honeywell will develop an interface between its TDC 3000[™] process control system and Digital's VAX computer family. Honeywell will also provide Digital's VAX computers as an alternative solution for its process industry manufacturers. Honeywell will offer VAX systems to run process modeling and simulation applications. These systems will complement Honeywell's existing product offering based on the Honeywell Bull DPS-6 computer system and will further extend Honeywell's capability to provide complete process control system solutions.

DIGITAL WINS QUALITY AWARD

One hundred 18-wheel trailer trucks were required to deliver all the equipment used at DECWORLD. The entire exhibit was networked and brought online in a matter of days, illustrating the quality of Digital hardware, software, and support personnel.

Digital's quality and reliability were recognized by *The Quality Review*, a publication of The American Society for Quality Control. The ASQC cited Digital as one of the ten best companies in terms of "quality of products and services." Digital was the only computer company to earn this distinction.

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This reputation for quality products and services has enabled Digital to establish a position of leadership in key market areas. For the third straight year, Dataquest's study of the U.S. integrated office system market showed that ALL-IN-1, Digital's Office and Information System, led the market. The study concluded that of the 2.35 million users of integrated office systems, nearly half used ALL-IN-1. One reason for the success of ALL-IN-1 is that many software developers have incorporated their application solutions into the ALL-IN-1 environment. In fact, more than 120 DECWORLD applications utilized ALL-IN-1.

KEN OLSEN WINS ENTREPRENEURSHIP AWARD

Digital's president, Ken Olsen, was named 1987's Master of Entrepreneurial Management by *Venture* magazine and Arthur Young Entrepreneurial Services. He was cited for "ingenuity, hard work, and innovation," and for Digital's role in the Technology Executive Roundtable sponsored by Digital's Channels Marketing Group.

The Technology Executive Roundtable is an organization for founders, board members, and chief executive officers of technology-related companies with fewer than 300 employees. Roundtable members can share information, discuss their concerns, and learn from their peers. There are chapters in Atlanta, Boston, Dallas/Fort Worth, Los Angeles, and Santa Clara.

CORPORATE GRANTS HIGHLIGHTS

Digital has awarded a \$5.76-million equipment grant to Carnegie Mellon University's Computer Aided Design (CAD) Center in Pittsburgh. The gift, which will be disbursed over a three-year period, includes several large VAX computers, graphics workstations, laser printers, and related disk storage equipment.

A grant was awarded to the Los Angeles County Museum of Art for the purchase of a VAX computer. One of the leading cultural institutions in southern California, the museum will use the system for business operations and collections management.

Digital also announced an equipment grant to the New York Foundling Hospital, one of the country's oldest and largest institutions of its kind. A VAX 8530, will be used to expand its current computer services for patient care, financial, legal, administrative, and laboratory services.

“THE INFINITE VOYAGE”

On October 28, the Public Broadcasting System (PBS) launched the prime-time television premiere of “The Infinite Voyage,” a three-year series that used advanced technology to explore some of the most profound questions of science and philosophy. Produced by WQED/Pittsburgh in association with The National Academy of Sciences, the series was underwritten on public television and sponsored on commercial television by Digital.

“The Infinite Voyage,” ...used advanced technology to explore some of the most profound questions of science and philosophy. ...the series is underwritten on public television and sponsored on commercial television by Digital.

The premiere, entitled, “Hidden Worlds,” focused on things not visible to the human eye. The program took viewers to the inner reaches of the human body—through a stunning sequence of images produced by digital subtraction audiography, sonography, and microcinematography—and outward to the realms of galaxies and quasars, with the assistance of optical telescopes.

The broadcast was the first in a series of scientific, cultural, and educational projects that will be known as The Digital Discovery Series.

HIGHLIGHTS FROM EUROPE

Digital, like many of its customers, has manufacturing plants, laboratories, and service facilities around the world. The following news items reflect Digital's active role in the economies of those nations where we do business. The international character of our market is also seen in the decision to hold DECWORLD '88 in Cannes, France.

In the United Kingdom, Digital is setting up that country's first “value added” network for the financial services industry. Insurance companies, banks, building societies, financial institutions, and financial advisors will be able to carry out transactions over the network. Initial services will be for mortgages and life insurance and will start in January 1988. Other areas of personal finance such as pensions and unit trusts will follow.

In France, Digital opened a Corporate Research Laboratory. This new facility located near Paris reflects the Corporation's commitment to maintain a position of leadership in the European computer industry and to support the development of European networking standards such as OSI. Digital also announced its intention to substantially increase its activities at the Sophia Antipolis Science Park near Nice. The Corporation is planning to acquire a further 20 hectares of land, and intends to double its existing installations.

In the Federal Republic of Germany, the country's 5,000th VAX computer system—a VAX 8530—was installed in the Munich computer centre of BMW Technik, which develops advanced products and procedures for the automobile industry. BMW Technik is a subsidiary of BMW, the famous German car maker. More than 200 Digital computers are in service throughout the Bavarian Motor Manufacturing group.

CONSOLIDATED STATEMENTS OF INCOME

	Three Months Ended	
	September 26, 1987	September 27, 1986
<i>(Dollars in thousands except per share data)</i>		
Revenues		
Product sales	\$1,686,072	\$1,352,725
Service and other revenues	843,701	685,742
Total operating revenues	2,529,773	2,038,467
Costs and Expenses		
Cost of product sales	670,698	578,372
Service expense and cost of other revenues	525,142	448,240
Research and engineering expenses	298,364	237,752
Selling, general and administrative expenses	689,512	497,950
Operating income	346,057	276,153
Interest expense	8,855	10,931
Interest income	(32,582)	(29,339)
Income before income taxes	369,784	294,561
Income taxes	99,842	111,933
Net income	\$ 269,942	\$ 182,628
Net income per share	\$2.03	\$1.37

Certain accounts for the period ended September 27, 1986, have been reclassified to conform with the September 26, 1987 presentation. The accompanying notes are an integral part of these financial statements.

CONSOLIDATED BALANCE SHEETS

	September 26, 1987	September 27, 1986
<i>(Dollars in thousands)</i>		
Assets		
Current Assets		
Cash and temporary cash investments	\$2,175,437	\$2,042,728
Accounts receivable, net of allowances	2,351,746	1,954,611
Inventories	1,556,788	1,221,160
Prepaid expenses	132,544	126,824
Deferred income tax charges, net	222,000	225,200
Total Current Assets	6,438,515	5,570,523
Property, plant and equipment, net	2,279,513	1,888,923
Other assets, net	86,291	6,026
Total Assets	\$8,804,319	\$7,465,472
Liabilities and Stockholders' Equity		
Current Liabilities		
Bank loans and current portion of long-term debt	\$ 3,534	\$ 14,689
Other current liabilities	1,909,307	1,154,515
Total Current Liabilities	1,912,841	1,169,204
Deferred income tax credits, net	25,900	33,300
Long-term debt	269,375	333,772
Total Liabilities	2,208,116	1,536,276
Stockholders' Equity		
Common Stock, \$1 par value	130,008	128,975
Additional paid-in capital	2,370,877	2,242,661
Retained earnings	4,595,026	3,557,560
Treasury stock at cost, 3,169,456 and 0 shares	(499,708)	0
Total Stockholders' Equity	6,596,203	5,929,196
Total Liabilities and Stockholders' Equity	\$8,804,319	\$7,465,472

The accompanying notes are an integral part of these financial statements.

CONSOLIDATED STATEMENTS OF
CHANGES IN FINANCIAL POSITION

	Three Months Ended	
	September 26, 1987	September 27, 1986
<i>(Dollars in thousands)</i>		
Funds from Operations		
Net income	\$ 269,942	\$ 182,628
Depreciation	103,982	95,303
Other	9,503	(4,035)
Total from operations	383,427	273,896
Funds to Support Operations		
Increase (decrease) in working capital:		
Accounts receivable	39,558	51,324
Inventories	103,869	21,404
Prepaid expenses	13,351	41,550
Other current liabilities	(89,675)	(92,061)
	67,103	22,217
Additions to property, plant and equipment	273,005	122,155
Increase in other assets	8,959	6,126
Total to support operations	349,067	150,498
Net increase (decrease) in funds from operations	34,360	123,398

	Three Months Ended	
	September 26, 1987	September 27, 1986
<i>(Dollars in thousands)</i>		
Funds Provided by		
Increase (decrease) in:		
Bank loans and current portion of long-term debt	(1,339)	(7,508)
Long-term debt	83	1,733
Stock issued under employee stock plans	24,045	14,172
Purchase of treasury stock	(7)	0
	22,782	8,397
Net increase (decrease) in cash and temporary cash investments	57,142	131,795
Cash and temporary cash investments at beginning of year	2,118,295	1,910,933
Cash and temporary cash investments at end of period	\$2,175,437	\$2,042,728

The accompanying notes are an integral part of these financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Reclassification

Certain accounts for the period ended September 27, 1986, have been reclassified to conform with the September 26, 1987 presentation.

Earnings Per Share

Net income per share is based on the weighted average number of common shares and common share equivalents outstanding during each period; 133,245,315 shares for the three months ended September 26, 1987, and 133,005,213 shares for the three months ended September 27, 1986.

Digital's common stock is listed and traded on the New York Stock Exchange and Pacific Stock Exchange (Ticker Symbol "DEC").

In Europe: Swiss Stock Exchanges of Zurich, Geneva, and Basel and the German Stock Exchanges of Frankfurt, Munich, and Berlin.

Unlisted trading privileges have been granted by the Boston Stock Exchange, Cincinnati Stock Exchange, Midwest Stock Exchange, and Philadelphia Stock Exchange. In Europe: Luxembourg Stock Exchange.

Inquiries relating to investment in Digital Equipment Corporation should be directed to:

Albert E. Mullin, Jr.
Vice-President, Corporate Relations
111 Powdermill Road
Maynard, MA 01754
(617)493-5350

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digital

Second Quarter Report FY88



Digital Equipment Corporation

Digital Equipment Corporation
Maynard, Massachusetts 01754

digital

On the Cover: The Infinite Voyage, Digital's science television series, took viewers to the high plains of Tibet where scientists gained new understanding of nomadic people and their severe environment. Watch the next episode, "Fires of the Mind," on April 6th (PBS) and April 11th (commercial and cable stations).

TO OUR SHAREHOLDERS

Total operating revenues for the second quarter ended December 26, 1987, were \$2,782,252,000, up 22 percent from the \$2,271,842,000 of the comparable quarter a year ago. Net income for the quarter was \$329,532,000, up 22 percent from \$269,960,000 of the comparable quarter a year ago. Quarterly earnings per share were \$2.48, versus \$2.02 last year, up 23 percent.

For the six months ended December 26, 1987, total operating revenues were \$5,312,025,000, up 23 percent from the \$4,310,309,000 of the comparable period a year ago. Net income for the six months was \$599,474,000, up 32 percent from the \$452,588,000 of the comparable period a year ago. Earnings per share were \$4.50 versus \$3.39 last year, up 33 percent.

We are gratified that revenues continue to grow at a rate which indicates market share gains. Business overall is firm and our international business remains quite strong. Some of the industry sectors that performed particularly well in the quarter include health care, electronics, aerospace, retail, financial services, and state and local government.

The company's MicroVAX and VAXstation product lines continue to find broad appeal across many industries and geographies as workstations, servers, and in Local Area VAXclusters. At the same time, the newly announced MicroVAX and VAXstation 3000 products were greeted enthusiastically by customers and volume shipments will commence in the third quarter. Additionally, the VAX 8250 and 8350 systems continue as popular entry-level VAXcluster products.



Kenneth H. Olsen
President

HIGHLIGHTS FROM THE ANNUAL MEETING

The Annual Meeting of Shareholders was held Thursday, November 5, at the World Trade Center in Boston, site of DECWORLD'87.

Approximately 83 percent of the common shares outstanding, or 106 million shares, were represented at the meeting in person or by proxy. The items of business listed in the Proxy Statement were voted upon at the meeting and received a majority of the votes cast.

In his remarks at the meeting, Digital President Kenneth H. Olsen reviewed Digital's accomplishments and its goals for the future. "What we've accomplished and where we're going can be best illustrated by looking at DECWORLD'87.

"DECWORLD made it clear that Digital has progressed from an organization that worked closely with scientists, engineers, and manufacturing people to an organization that has won the confidence of the corporate world. We demonstrated that we can work with insurance companies, financial institutions, and other large enterprises.

"Much of what we sell is designed to do a specific job. Yet, as we do specific jobs, we realize the advantage of having everybody working together. Digital is offering the technology for doing this.

"By concentrating our efforts on one computer and one software system, we have built a stable base around which we can integrate other software systems, including UNIX, MS-DOS,™ and SNA. We've demonstrated that we can integrate large organizations filled with industry-standard personal computers. We can integrate VAX systems with IBM personal computers, IBM clones, and IBM mainframes to provide our customers with a single, enterprise-wide computing system."

NETWORK APPLICATIONS SUPPORT STRATEGY

Shortly after the end of the quarter, Digital unveiled a sweeping strategy for the integration of competitive systems into DECnet/OSI networks.

Digital's Network Application Support facilities will provide users of Apple Macintosh™ computers, industry-standard MS-DOS and OS/2 personal computers, UNIX-based systems, and Cray supercomputers, as well as users of desktop VAX/VMS systems and Digital VT terminals, with common application access, business communication, and information/resource-sharing services.

Digital's ability to move beyond enterprise-wide VAX/VMS networks to integrate multivendor environments is based, in large part, on the adoption of OSI (Open Systems Interconnection) standards. Because these standards have already been incorporated into Digital networking products, DECnet/OSI networks provide a stable, open, and fully supported multivendor environment. Digital is unique in its ability to incorporate PCs, PC networks, UNIX workstations, and supercomputers into enterprise-wide DECnet/OSI networks.

Many of the products needed to implement this multivendor networking strategy are already in place, including the Cray supercomputer gateway and VAX/VMS Services for MS-DOS. In addition, Digital announced a major joint development effort with Apple to integrate Macintosh personal computers and AppleTalk™ networks with VAX systems and DECnet/OSI networks.

This effort will focus on the key capabilities customers look for in networking and integrating PCs and larger systems, including file sharing, document interchange, electronic mail, conferencing, terminal emulation, database access, and network management. These capabili-

*John Sculley, president of Apple Computer, Inc., and
Digital president, Kenneth Olsen, met with the press to
announce joint development efforts.*



ties will address the needs of the growing number of companies that use both Macintosh personal computers and Digital networked systems. Studies have shown that about 36 percent of VAX sites now have Macintosh systems.

*"We network large numbers of Apple™ computers with
VAX computers...we work well together."*

—Kenneth H. Olsen, November 5, 1987

At the same time, the joint development effort will benefit independent software vendors by providing a consistent set of application programming interfaces that can be used to write distributed applications.

In making the announcement, President Olsen noted, "The development efforts with Apple will provide PC integration for customers who use and love the Macintosh, and will advance the movement toward OSI international standards."

COMPUTER INTEGRATED TELEPHONY PROGRAM ANNOUNCED AT TELECOM 87

At the international telecommunications conference in Geneva—Telecom '87—sponsored by The International Telecommunications Union, Digital introduced a technological blueprint for the functional integration of voice and data at the application level.

*"Open Systems Interconnection standards will provide a
protocol that all computer manufacturers can use for
transmitting data."*

—Kenneth H. Olsen, November 5, 1987

CIT—Computer Integrated Telephony—provides the framework to integrate VAX computers and third-party PBXs, making new applications available to the user. This program marks a major new initiative for Digital in the \$144-billion international telecommunications market, a market in which Digital has long-established relationships with operating telephone companies and other service providers, telecommunications equipment manufacturers, and large corporations who use telecommunications services in their computer networks.

At Telecom '87, British Telecom/Mitel and Northern Telecom demonstrated CIT applications.

In addition, Ericsson in Sweden, Phillips in the Netherlands, Plessey in the United Kingdom, NEC (North America), and Siemens in West Germany have indicated that they plan to provide CIT-compatible hardware and software.

Standards are critical in the telecommunications industry. They have led to the creation of a worldwide telephone network in which virtually any telephone subscriber can talk to any other telephone subscriber. Working with international standards groups and other manufacturers of computers and telecommunications equipment, Digital is working toward the day when computers built by different manufacturers can be connected to an enterprise-wide voice and data network. Digital has made three major initiatives toward this goal:

- DECnet Phase V merges Digital Network Architecture with international Open Systems Interconnection (OSI) standards as they become formalized.
- Digital's Computer Integrated Telephony program provides telecommunications equipment manufacturers with a framework for the full integration of computers and telephone-switching equipment to provide voice/data integration at the desktop.
- Digital is working with equipment manufacturers and operating telephone companies to implement ISDN, the emerging international standard for Integrated Services Digital Networks. As part of this initiative Digital is working with Siemens to supply the West German Bundespost with switching systems that will link existing corporate text and data networks into a national ISDN network.

23 MANUFACTURERS ADOPT DIGITAL'S LABORATORY AUTOMATION STANDARD

At the end of the first quarter Digital announced its Integrated Laboratory Automation (ILA) standard. To date, 23 manufacturers of 37 different laboratory devices have implemented the ILA Standard. Based on Digital DECnet software, ILA establishes a technical framework for communications, data management, and data integration among computer-based laboratory products built by different vendors.

Additionally, Digital announced a series of enhancements to its realtime laboratory computer systems and related software. Realtime applications require fast, predictable responses to external, time-critical events. For example, realtime computers are used to control, monitor, and acquire data from ongoing experiments and laboratory tests. The enhanced products include a MicroVAX 3500-based VAXlab Scientific Workstation, enhanced versions of VAXlab system software, VAXlab Software Library, VAXELN realtime software, and DECscan/ELN software that gives users access to controllers and instruments using the Intel BITBUS.[™]

DIGITAL CUTS COST OF PC INTEGRATION

Digital is a leader in the integration of PCs into corporate networks. This quarter, Digital cut the cost of PC integration. In the past, integration required the separate purchase of VAX/VMS Services for MS-DOS and DECnet/OSI software. With this software, a departmental computer could act as a PC server. Files and programs could be shared and exchanged among PCs. And, users of desktop systems could access files and programs on larger systems anywhere on the network.

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23 MANUFACTURERS ADOPT DIGITAL'S LABORATORY AUTOMATION STANDARD

At the end of the first quarter Digital announced its Integrated Laboratory Automation (ILA) standard. To date, 23 manufacturers of 37 different laboratory devices have implemented the ILA Standard. Based on Digital DECnet software, ILA establishes a technical framework for communications, data management, and data integration among computer-based laboratory products built by different vendors.

Additionally, Digital announced a series of enhancements to its realtime laboratory computer systems and related software. Realtime applications require fast, predictable responses to external, time-critical events. For example, realtime computers are used to control, monitor, and acquire data from ongoing experiments and laboratory tests. The enhanced products include a MicroVAX 3500-based VAXlab Scientific Workstation, enhanced versions of VAXlab system software, VAXlab Software Library, VAXELN realtime software, and DECscan/ELN software that gives users access to controllers and instruments using the Intel BITBUS.[™]

DIGITAL CUTS COST OF PC INTEGRATION

Digital is a leader in the integration of PCs into corporate networks. This quarter, Digital cut the cost of PC integration. In the past, integration required the separate purchase of VAX/VMS Services for MS-DOS and DECnet/OSI software. With this software, a departmental computer could act as a PC server. Files and programs could be shared and exchanged among PCs. And, users of desktop systems could access files and programs on larger systems anywhere on the network.

Now any VAX or MicroVAX computer using DECnet/OSI software can act as a PC server supporting industry-standard personal computers—without the purchase of additional software. VAX/VMS Services for MS-DOS is included in all current and future DECnet-VAX licenses at no additional charge.

*“We’ve demonstrated that we can integrate
large organizations filled with industry-standard
personal computers.”*

—Kenneth H. Olsen, November 5, 1987

VAX/VMS Services for MS-DOS is recognized in the industry as the premier PC integration package. In *Computerworld’s* Annual Microcomputer Awards this PC integration software was voted the most useful micro-mainframe product.

The packaging of VAX/VMS Services for MS-DOS with DECnet-VAX underlines Digital’s commitment to provide cost-effective and complete desktop-to-datacenter, enterprise-wide integration.

NEW STUDY SHOWS DECNET/OSI NETWORKS COST LESS TO OPERATE

A study conducted by Dr. Michael Treacy of M.I.T.’s Sloan School of Management and the management consulting firm, Index Group, shows that DECnet-based networks cost up to 50 percent less to operate than comparable networks from IBM.

The study of 17 major networking sites in 14 Fortune 500 companies also showed that 65 percent of networking costs are incurred after installation, with personnel costs the largest line item. For example, in manufacturing environments, personnel and associated costs accounted for 50 percent of all networking costs.

*“Our goal, our ambition, our dream is to tie the whole
organization together.”*

—Kenneth H. Olsen, November 5, 1987

Digital’s cost advantage was due, in part, to the lower staffing levels required to support VAX computers.

NEW CAPABILITIES INTRODUCED DURING THE QUARTER

During the quarter Digital introduced a number of new products enhancing its networking and graphics capabilities:

- DECserver 500 connects as many as 128 terminals, printers, and personal computers to an Ethernet local area network. It supports multiple sessions, load balancing, status and performance monitoring, and intra-server communications. Up to eight multiple sessions per user allow easy transition from one application to another without repeatedly logging in.
- A highly interactive 3D graphics support system, VAX PHIGS, implements the Programmers Hierarchical Interactive Graphics System. This high-performance software tool is based on a draft standard adopted by ANSI, the American National Standards Institute. VAX PHIGS is compatible with VAX languages and is supported by the entire line of Digital workstations. It provides high-performance capabilities that have long been needed for three-dimensional CAD/CAM, molecular modeling, simulation, and robotics.
- At 2,000 lines per minute, the LP29 is Digital's fastest impact printer. It was designed for use with VAX 8000 and MicroVAX 3000 systems.

AGREEMENTS SIGNED WITH SIEMENS AND IDX FOR MEDICAL IMAGING AND RADIOLOGICAL APPLICATIONS

During the quarter, Digital announced that it is working with Siemens Medical Systems, Inc. of Iselin, New Jersey, to develop a Picture Archiving and Communications System that will enable health care institutions to integrate medical images and patient information into department- and organization-wide computer networks.

Digital also announced an agreement with IDX Corp., of Burlington, Vermont, to market Digital's DECrad software as part of the IDX Hospital Information System. DECrad, developed in conjunction with the Radiology Information Systems Consortium, a national coalition representing the radiology departments in 30 leading medical centers, is designed to manage the daily activities of diagnostic radiology depart-

ments. IDX, a participant in Digital's Systems Cooperative Marketing Program, sells hospital information systems for patient and general accounting, and for clinical, ancillary, and administrative functions.

DECWINDOWS—BUILDING A STANDARD FOR WINDOWING SOFTWARE

Digital is playing a leading role in the development of a standard for windowing software that will let a user display multiple files, combining text and graphic images on a single screen.

Digital's DECwindow architecture, announced last year, is one of the first implementations of the X Window™ standard developed at M.I.T. X Windows is a network-transparent, operating-system-independent, portable windowing system originally developed as part of Project Athena, a major M.I.T. initiative, in which Digital engineers worked directly with M.I.T. scientists. Project Athena was funded, in part, by a \$30-million grant from Digital.

Now, in order to support the further development of the X Window standard, Digital has become the charter corporate member of the M.I.T. X Consortium that will undertake further development of X Window documentation, software validation, toolkits, 3D graphics, image processing, and video graphics.

Digital also signed an agreement with Adobe Systems Incorporated to incorporate Adobe's Display PostScript™ software into DECwindows, so text and graphics can be displayed on a VAXstation as it will be formatted and printed on a PostScript®-supported laser printer. In other words WYSIWYG—what you see is what you get.

COOPERATIVE MARKETING PROGRAM

The success of Digital's industry marketing activities can be measured by the number of Complementary Solutions Organizations who have signed Cooperative Marketing Program agreements with Digital. The independent software and system suppliers, nearly 150 in number, see Digital's VAX architecture as a universal platform. Their customers want everything to work together. By offering solutions that work within the larger context of an integrated organization—where every computer and everyone who uses those computers works together—these third parties enjoy a real competitive advantage.

*“Having one system for everyone—be they in the factory,
the office, the laboratory, or the warehouse—is a
tremendous advantage.”*

—Kenneth H. Olsen, November 5, 1987

The following independent companies recently signed Cooperative Marketing Program agreements with Digital:

- SAS Institute, Inc., Clary, North Carolina, for the SAS® System for data management and analysis.
- Computer Associates International, Inc., of Andover, Massachusetts, for the Masterpiece® Series of integrated financial applications. In addition to general accounting, Masterpiece provides a query system and a PC link for ad hoc reporting and executive inquiries.

- Star Technologies, Inc., of Sterling, Virginia, for ST-100 and ST-X high-performance, 32-bit array processors for VAX computers. Array processors are used in medical imaging, nondestructive testing, numerical simulation, and military and intelligence data processing.

The following independent organizations signed System Cooperative Marketing Program agreements covering hardware/software systems:

- The DATA Group Corporation, a NYNEX Company, Burlington, Massachusetts, for the Fieldwatch™ integrated field service management system.
- NPRI, Alexandria, Virginia, for the TeleTech telemarketing system used in the publishing, media, telecommunications, banking, and insurance industries.
- GeoVision Corp., Ottawa, Canada, for AMS (Automated Mapping System) and GIS (Geographic Information System).
- Money Management Systems, Inc., Waltham, Massachusetts, for MoneyMarket II™, an automated fixed-income securities trading system for commercial banks, thrift institutions, brokers, and dealers.
- Quodata Corporation, Hartford, Connecticut, for a relational database system for institutions of higher education.

In support of both its own field sales organization and the Cooperative Marketing Program, Digital opened its 17th Application Center for Technology. The new 14,500-square-foot facility in Andover, Massachusetts, provides a center for expertise for New England electronics companies where many of the applications sold through Digital's Cooperative Marketing Program can be demonstrated to prospective customers.

WORKSTATION SALES PACE CUSTOMER WINS

Digital has become one of the fastest-growing manufacturers of workstations. During the quarter a number of major workstation and networking sales were announced.

In the Space Systems Division of Lockheed Missiles and Space Company, management wanted to eliminate the incompatibilities between engineering and publishing systems. Taking advantage of the large installed base of VAX systems, a VAXstation platform was chosen for technical publishing. The VAXstation ensured a smooth flow of information between engineering and publishing groups, allowing further time to refine the technical design and to ensure meeting publication due date.

Digital's Finnish subsidiary installed a 1600-terminal Ethernet with 25 DECserver 500 terminal servers in just three weeks for Imatran Voima Oy. IVO is the state-owned power production and distribution company. The network combines coaxial, thinwire, and fiber-optic technology to link five buildings at IVO's new headquarters in Vantaa, near Helsinki. Managed by a VAX system, the network supports a multivendor environment with VAX, IBM, and Hewlett-Packard computers and wide-area links to other IVO facilities throughout Finland. Applications running on the headquarters VAXcluster and VAX computers distributed throughout Finland include ALL-IN-1; videotex; power plant maintenance management; and other technical, scientific, and business applications.

Sun Maid Growers of California, the world's largest raisin producer, packer, and marketer is the latest food and beverage manufacturer to turn to Digital for VAX systems to lower distribution costs. Sun Maid is now using a VAX system to speed grower payments and obtain up-to-date information on product costs and profitability.

Glaxo Inc., the U.S. subsidiary of Glaxo Holdings PLC, one of the world's leading pharmaceutical companies, is building a VAX-based international network to link its facilities in the U.S., U.K., Italy, Switzerland, and Canada. The initial equipment order was for \$4.5 million.

FRENCH NETWORKING GROUP FORMED

Digital S.A., along with ten other French computer companies, formed the Association Francaise des Centres d'Essais pour les Reseaux Locaux Industriels (French Association of Industrial Local Area Network Test Centers). Similar in function to the Corporation for Open Systems in the U.S., the new association will establish and validate local area networking norms for use in French industry. Digital's participation in this new association reflects the Corporation's commitment to work with other vendors, on both a national and international basis, to establish standards that will enable equipment built by different manufacturers to work together.

"Half of our equipment is sold overseas."

—Kenneth H. Olsen, November 5, 1987

QUARTERLY REPORTS ARE ON-LINE

Quarterly Financial Reports are now being made available to customers through Digital's Electronic Store. This computer-based videotex service provides online product information, prices, and demonstrations. The Electronic Store can be accessed from any VT100-, 200-, or 300-compatible terminal with a 1200/2400 baud modem by dialing 1-800-DEC-DEMO. "Shopping" directions are provided on the terminal screen.

THE DIGITAL DISCOVERY SERIES

The Digital Discovery Series premiered during the quarter with "Unseen Worlds," the first broadcast in a three-year series entitled, "The Infinite Voyage." The second episode, "To The Edge of The Earth," was broadcast early in January.

*"The Infinite Voyage really caught the imagination
of the science community."*

—Kenneth H. Olsen, November 5, 1987

In addition to creating greater awareness for Digital, these programs are designed to interest young people in careers in science and engineering. Course materials were prepared for school use, and the series has been endorsed by the National Education Association.

CORPORATE GRANTS HIGHLIGHTS, UNITED WAY RECORD.

Digital has made a grant of ten million francs to INSEAD, a leading European business school. The money will be used to fund an international information center that will be named in honor of General Georges Doriot, who was instrumental in the founding of Digital and served as a director for many years.

Digital and Digital employees continue to make significant contributions to the communities in which they live and work. For example, this past quarter Digital employees, with the assistance of a Corporate program that matches contributions dollar-for-dollar, gave close to \$5 million to 350 United Ways across the country. This represents a 28-percent increase over last year.

DeLaSalle University in the Philippines and Grady Hospital in Atlanta are representative of the educational and health care institutions that received major equipment grants during the Quarter.

DeLaSalle is establishing an Information Technology Center and expanding its College of Computer Studies to help provide a pool of qualified computer science professionals for the Philippines and the Far East.

Grady is one of the five largest hospitals in the United States. The equipment grant will be used to expand the hospital's administrative and cost-containment services.

In addition to the equipment grants, Digital also made a cash donation to the United Negro College Fund to assist 43 private, historically black colleges and universities around the country.

CONSOLIDATED STATEMENTS OF INCOME

(Dollars in thousands except per share data)

Revenues

Product sales	
Service and other revenues	
Total operating revenues	

Costs and Expenses

Cost of product sales	
Service expense and cost of other revenues	
Research and engineering expenses	
Selling, general and administrative expenses	
Operating income	
Interest expense	
Interest income	
Income before income taxes	
Income taxes	
Net income	
Net income per share	

The accompanying notes are an integral part of these financial statements.
Prior year reclassified for comparative purposes.

Three Months Ended		Six Months Ended	
December 26, 1987	December 27, 1986	December 26, 1987	December 27, 1986
\$1,826,054	\$1,494,360	\$3,512,126	\$2,847,085
956,198	777,482	1,799,899	1,463,224
2,782,252	2,271,842	5,312,025	4,310,309
728,607	614,634	1,399,305	1,193,006
594,525	480,703	1,119,667	928,943
301,076	233,388	599,440	471,140
756,650	538,930	1,446,162	1,036,880
401,394	404,187	747,451	680,340
9,743	11,069	18,598	22,000
(37,864)	(30,715)	(70,446)	(60,054)
429,515	423,833	799,299	718,394
99,983	153,873	199,825	265,806
329,532	269,960	599,474	452,588
\$2.48	\$2.02	\$4.50	\$3.39

CONSOLIDATED BALANCE SHEETS

	December 26, 1987	December 27, 1986
<i>(Dollars in thousands)</i>		
Assets		
Current Assets		
Cash and temporary cash investments	\$2,337,957	\$2,357,300
Accounts receivable, net of allowances	2,506,667	2,026,454
Inventories	1,541,594	1,269,756
Prepaid expenses	154,463	118,854
Deferred income tax charges, net	246,000	243,500
Total Current Assets	6,786,681	6,015,864
Property, plant and equipment, net.	2,538,535	1,934,884
Other assets, net.	98,325	15,073
Total Assets	\$9,423,541	\$7,965,821
Liabilities and Stockholders' Equity		
Current Liabilities		
Bank loans and current portion of long-term debt	\$ 3,373	\$ 16,178
Other current liabilities	2,071,871	1,319,817
Total Current Liabilities	2,075,244	1,335,995
Deferred income tax credits, net.	31,000	37,500
Long-term debt	276,846	329,353
Total Liabilities	2,383,090	1,702,848
Stockholders' Equity		
Common Stock, \$1 par value	130,008	129,920
Additional paid-in capital	2,400,808	2,311,075
Retained earnings	4,863,794	3,827,520
Treasury stock at cost, 2,248,857 and 55,904 shares	(354,159)	(5,542)
Total Stockholders' Equity	7,040,451	6,262,973
Total Liabilities and Stockholders' Equity	\$9,423,541	\$7,965,821

The accompanying notes are an integral part of these financial statements.

CONSOLIDATED STATEMENTS OF CHANGES IN FINANCIAL POSITION

	Six Months Ended	
	December 26, 1987	December 27, 1986
<i>(Dollars in thousands)</i>		
Funds from Operations		
Net income	\$ 599,474	\$ 452,588
Depreciation and amortization	226,568	196,799
Other	7,245	(738)
Total from operations	833,287	648,649
Funds to Support Operations		
Increase (decrease) in working capital:		
Accounts receivable	194,479	123,167
Inventories	88,675	70,000
Prepaid expenses	35,270	33,580
Other current liabilities	(252,239)	(258,479)
	66,185	(31,732)
Additions to property, plant and equipment	646,298	277,690
Increase in other assets	23,019	15,224
Total to support operations	735,502	261,182
Net increase in funds from operations	97,785	387,467
Funds Provided (Used) by		
Increase (decrease) in:		
Bank loans and current portion of long term debt	(1,500)	(6,019)
Long-term debt	7,554	(3,802)
Stock issued under employee option and purchase plans	115,823	74,263
Purchase of treasury stock	0	(5,542)
	121,877	58,900
Net increase in cash and temporary cash investments	219,662	446,367
Cash and temporary cash investments at beginning of year	2,118,295	1,910,933
Cash and temporary cash investments at end of period	\$2,337,957	\$2,357,300

The accompanying notes are an integral part of these financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Earnings Per Share

Net income per share is based on the weighted average number of common shares and common share equivalents outstanding during each period; 133,156,190 shares and 133,294,664 shares for the six month periods ended December 26, 1987 and December 27, 1986, respectively, and 133,067,064 shares and 133,584,116 shares for the three month periods ended December 26, 1987 and December 27, 1986, respectively.

Digital's common stock is listed and traded on the New York Stock Exchange and Pacific Stock Exchange (Ticker Symbol "DEC").

In Europe: Swiss Stock Exchanges of Zurich, Geneva, and Basel and the German Stock Exchanges of Frankfurt, Munich, and Berlin.

Unlisted trading privileges have been granted by the Boston Stock Exchange, Cincinnati Stock Exchange, Midwest Stock Exchange, and Philadelphia Stock Exchange. In Europe: Luxembourg Stock Exchange.

Inquiries relating to investment in Digital Equipment Corporation should be directed to:

Albert E. Mullin, Jr.
Vice-President, Corporate Relations
111 Powdermill Road
Maynard, MA 01754
(617) 493-5350

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AppleTalk is a trademark of Apple Computer, Inc.; BITBUS is a trademark of Intel Corporation; Display PostScript is a trademark of Adobe Systems, Inc.; DOS is a trademark of Microsoft, Inc.; Fieldwatch is a trademark of The DATA Group Corporation; Macintosh is a trademark licensed to Apple Computer, Inc.; Masterpiece is a registered trademark of Computer Associates International, Inc.; Money Market II is a trademark of Money Management Systems, Inc.; MS is a registered trademark of Microsoft, Inc.; PostScript is a registered trademark of Adobe Systems, Inc.; SAS is a registered trademark of SAS Institute, Inc.; X Window is a trademark of Massachusetts Institute of Technology; IBM is a registered trademark of International Business Machines Corporation.

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Third Quarter Report FY88



Digital Equipment Corporation

Digital Equipment Corporation
Maynard, Massachusetts 01754

ELIZABETH L CANE
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On the Cover: Digital introduced two new series of VAX systems with symmetric multiprocessing and parallel processing capabilities, the VAX 8800 Series (shown) and the VAX 6200 series, providing our customers with simple upgrades from one VAX system to the next.

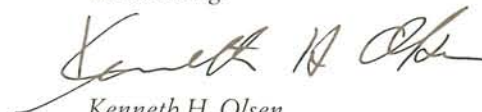
TO OUR SHAREHOLDERS

Total operating revenues for the third quarter ended March 26, 1988, were \$2,823,982,000, up 17 percent from the \$2,410,071,000 of the comparable period a year ago. Net income for the quarter totaled \$305,146,000, compared with \$307,597,000 a year ago. Quarterly earnings per share were \$2.33 versus \$2.29 last year.

The company's order-rate growth, while not what we planned, continues to outpace that of the industry and is particularly robust for workstation products. We have maintained our strong position in the technical markets, which has made possible the large increase in orders for workstations and MicroVAX 3000 computer systems.

Recent data indicates that Digital is again, for the nineteenth year, the largest seller of UNIX® hardware, software, and services. UNIX continues to be a significant part of our business. Being the industry leader in the factory floor, the laboratory, the integrated office, and the artificial intelligence markets has provided Digital with a strong business base. All of the applications for these markets, of course, are implemented on our open systems network—DECnet/OSI.

While our overall growth is strong, demand for some of our larger computer systems has been less than planned due to a combination of factors, such as customers evaluating our new product offerings and concern about U.S. and overseas economic conditions. In view of this, expense growth has been reduced. Demand for new products introduced in the quarter and earlier in the year has been strong. Backlog is building, and production and delivery of these products are accelerating.



Kenneth H. Olsen
President

INTRODUCING SYMMETRIC MULTIPROCESSING AND A NEW GENERATION OF VAX SYSTEMS

In a series of spring announcements Digital introduced two new VAX series of systems, a new version of VAX system software (VMS 5.0) and software licensing changes. These new VAX products provide high system availability, simple upgrades, and far more processing power by introducing symmetric multiprocessing and parallel processing capabilities to the VAX environment.

The high-end VAX 8800 Series, which supports symmetric multiprocessing, was announced in March, and first shipments were made the same month. The VAX 8810, VAX 8820, VAX 8830, and VAX 8840 systems provide a straightforward upgrade path for both new users of existing VAX 8700 and VAX 8800 systems. The high-end VAX 8840 processor delivers from two to four times the processing power of any prior VAX uniprocessor. In addition, Digital announced the VAX 8842 system that combines symmetric multiprocessing power and VAXcluster capabilities for high system and data availability.

Digital also introduced the midrange VAX 6200 series of symmetric multiprocessing systems, which are powerful, easily expandable, yet very compact computer systems, each taking up less than six square feet of floor space. The new VAX system uses low-cost but highly reliable CMOS (Complementary Metal Oxide Semiconductor) technology which Digital introduced with the successful MicroVAX 3500/3600 systems last September. The VAX 6200 series includes the VAX 6210, VAX 6220, VAX 6230, and VAX 6240 systems delivering from 2.8 to 11 times the performance of a VAX 11/780 computer. All VAX 8800 and VAX 6200 system series can be clustered with existing VAX systems.

INCREASED POWER, COST SAVINGS THROUGH NEW SOFTWARE

The new version of the VAX/VMS operating system, VMS 5.0, delivers several new benefits to customers, including symmetric multiprocessing and parallel processing capabilities, extension of Local Area VAXclusters, remote system management, license management, international character sets, and the option of future distribution of software and documentation via compact disk.

In addition, Digital has taken a number of steps to help customers reduce software licensing costs by as much as 65 percent. Customers can now license software for VAXcluster or Local Area VAXcluster systems as well as for individual processors in a cluster. Over time customers can determine whether individual processors or cluster-wide licenses are more economical.

Symmetric multiprocessing...enabling the system to run more jobs, support more users, and handle larger workloads.

In symmetric multiprocessing (SMP), a number of tightly coupled processors work together as a single system under the control of a single copy of the operating-system software. Symmetric multiprocessing dynamically balances the workload among processors, enabling the system to run more jobs, support more users, and handle larger workloads than would be possible under either a single processor or a more loosely coupled system.

Parallel processing provides improved performance for large, compute-intensive applications by breaking down or decomposing programs into multiple subtasks that can run simultaneously on multiple processors. By executing these subtasks in parallel on a multiprocessor system, the total job is completed in less time than it would take to run on a single processor.

Two participants in Digital's Cooperative Marketing Program (CMP) have already announced application packages to take advantage of the VMS 5.0 multiprocessing capabilities. INTERA-ECL of Denver introduced a multiprocessing version of its ECLIPSE 300 Compositional Reservoir Simulator, used for oil exploration and development. Structural

Parallel processing provides improved performance for large, compute-intensive applications.

Dynamics Research Corporation of Milford, Ohio, introduced a multiprocessing version of its I-DEAS,™ Integrated Design Engineering Analysis Software, which runs three times faster on a VAX 8840 system than on a VAX 8810 system.

Other VMS 5.0 features include:

- Phase II Local Area VAXclusters—Local Area VAXcluster users can now incorporate the processing power and disk and tape facilities of a large VAXcluster into a Local Area VAXcluster, giving customers new flexibility in organizing computing resources. Work groups distributed throughout the organization can now access central databases that will appear to the user as local resources.

- Centralized Management—System managers can centralize management of multiple nodes within a VAXcluster System, allowing them to define their system environment and providing automatic execution of management tasks from a centralized location.
- License Management Facility—Customers can track the use of licensed software so that, over time, they can determine whether individual processor or cluster-wide licenses are more economical.
- Internationalization—Customers can specify the national alphabet they want to use, and format date and time information in accordance with local custom. The system automatically converts characters between programs. As a result, users in different countries can all work within a single VAX system without having to deal with character sets and system commands written in languages foreign to them.
- Compact Disk Distribution—VMS Version 5.0 software and documentation will be available on compact disk, speeding and simplifying software installation, making documentation more readily available, and reducing paper usage.

NEW VAXSTATION 8000 INTRODUCED

During this quarter, Digital strengthened its position as a major workstation vendor with the introduction of the VAXstation 8000 workstation. This new system applies breakthrough technology to the critical process of design visualization.

With a VAXstation 8000 workstation, engineers can now create and manipulate complex graphic images in realtime. The new system features the fastest three-dimensional antialiased vector performance and the highest image quality in the industry with its apparent screen resolution of 8,000 by 6,000 pixels, which is about eight times the resolution of most conventional workstations.

The new full-color VAXstation, developed jointly by Digital and Evans & Sutherland Corporation of Salt Lake City, features special antialiasing hardware to eliminate the distortions inherent in conventional graphic systems that are unable to accurately display lines or curves. Antialiasing also eliminates the moire patterns, distortions often seen in wireframe models in which a number of lines intersect.

*Digital has the broadest family of
workstations in the industry.*

Powered by a VAX 8250 computer, three MicroVAX II processors, and special graphics performance hardware designed cooperatively with Evans & Sutherland, the VAXstation 8000 system can generate outstanding three-dimensional performance in realtime.

With the addition of the VAXstation 8000 workstation, Digital has the broadest family of workstations in the industry, all backed with full-year system warranties and available with either VMS or ULTRIX (Digital's fully supported and enhanced native UNIX® operating systems).

DIGITAL REAFFIRMS COMMITMENT TO A UNIX STANDARD

At the introduction of the new VAX 8800 Series, Digital President Kenneth Olsen reaffirmed the corporation's commitment to the UNIX marketplace and support of the development of a much-needed UNIX standard.

The U.S. government is supporting the development of a UNIX standard called POSIX from the IEEE 1003.1 committee and has indicated that POSIX certification will likely be a requirement for all UNIX sales to governmental agencies. Digital is committed to meeting the POSIX standard and to merging the VMS and ULTRIX environments. According to Olsen, much of the work has been done. ULTRIX and VMS systems can be intermixed on the same DECnet/OSI or TCP/IP network. VAX C, VAX FORTRAN, and VAX LISP compilers produce code that will run—unchanged—on both ULTRIX and VMS systems. In addition, ULTRIX has key commercial features not included in most UNIX implementations, including autoloading, autoconfigure, online diagnostics, error logging, and bad-block replacement.

*Digital is currently the largest vendor of
UNIX systems in the computer market.*

According to industry figures, Digital is currently the largest vendor of UNIX systems in the computer market. UNIX was originally developed for PDP-11 systems, and for the past five years Digital has been offering ULTRIX, an optimized, fully supported UNIX, to VAX customers.

Digital recently won a \$3.2-million contract for VAX ULTRIX systems from one of the five largest U.S. hospitals—Grady Memorial Hospital in Atlanta. The computers will support 1,000 terminals that will be used by physicians, nurses, technicians, clerks, and administrators to capture and review patient information. With 850 beds and 3,000 outpatient and 800 emergency-room visits a day, Grady maintains one of the world's largest and most sophisticated medical-record databases, using system software, THERESA,™ developed by Medical Systems Development Corporation. The new Digital equipment will literally bring this database to the bedside.

PITTSBURGH CONFERENCE SHOWCASES ILA STANDARD

The growing acceptance of Digital's Integrated Laboratory Automation Standards program was dramatically demonstrated at the 1988 Pittsburgh Conference & Exposition in New Orleans.

More than 100 laboratory applications were linked over a high-speed local area network based on Digital's DECnet software. This network provided a demonstration of Digital's Integrated Laboratory Automation Standards, which have been adopted by over 30 different manufacturers of laboratory equipment. The adoption of a standard defining the technical criteria for communicating and sharing data among laboratory applications provides laboratory managers with a broad selection of products with which to build an integrated, multivendor computing environment.

\$1.01-BILLION HEALTH CARE SYSTEM TO BE BASED ON MUMPS

The Department of Defense has awarded a \$1.01-billion contract to Science Applications International Corporation (SAIC) of La Jolla, California, to computerize 750 medical treatment facilities worldwide. This represents a \$400-million sale for Digital.

The contract calls for a network of VAX, MicroVAX, and PDP-11 computers running Digital Standard MUMPS—an operating and data management system originally developed for hospital applications. MUMPS is an acronym for Massachusetts General Hospital Utility Multi-Programming System. According to SAIC, "Digital's involvement in the bid was one of the reasons we won...and Digital's hardware was a key factor."

Massachusetts General Hospital (MGH) is also a valued customer of Digital. MGH recently signed a contract with Digital for an institutionwide network linking the hospital proper in Boston with a new computer center across the river in Charlestown. Seven hundred terminals will be linked on an Ethernet local area network. The LAN, in turn, will be linked to the Charlestown facility by microwave. The contract includes networking software and 150 DECserver 200s to provide terminal access to the network. In addition, MGH recently acquired two VAX 8650 systems and a DECrad radiology information-management system.

NETWORKING KEY TO GOVERNMENT, FINANCIAL, AND CHEMICAL SALES

Digital's networking leadership reached a new milestone this quarter with over one million Ethernet terminal ports shipped. Enthusiasm for Digital's worldwide networking capabilities continues to increase.

A new milestone...over one million

Ethernet terminal ports shipped.

The U.S. Navy awarded a \$21-million, six-year contract to IBIS Corporation; it will provide Digital VAX computers and ALL-IN-1 applications integration environment to the Navy's Office Information System for the Naval Aviation Depot Operations Center in Maryland, as well as six naval aviation depots across the U.S. Eight VAX 8530 computers running ALL-IN-1 software will be used primarily for electronic messaging, calendaring, and file transfer requirements.

Massachusetts Mutual Life Insurance Company in Springfield signed a \$6-million purchase agreement with Digital for a new claims-processing system for its Group Life & Health operations. Under the agreement, the nation's eleventh-largest life insurer will receive a wide range of Digital products, including VAXcluster and MicroVAX systems, and various wide and local area networks. Digital's networking, software, and service capabilities will bring claims processing closer to the customer, helping Massachusetts Mutual better respond to the needs of its marketplace.

*Digital's networking, software, and service capabilities will
bring claims processing closer to the customer.*

Also, AmeriTrust in Cleveland announced it will be developing a new generation of branch-bank delivery technology in conjunction with Digital, allowing branch customers immediate and comprehensive service for their financial needs. AmeriTrust expects capital expenditures to total about \$10 million.

Monsanto Chemical Company installed Digital's ALL-IN-1 office information system throughout its Chocolate Bayou manufacturing plant in Alvin, Texas. Chocolate Bayou is one of four plants in Monsanto's Fibers Division currently installing ALL-IN-1 software. The plant purchased a VAX 8530 system, MicroVAX II computers, and DECnet networking to connect the systems and to interface these systems with other computer equipment via a newly installed, plant-wide local area network.

CMP SALES MAKE NETWORK AND WIRE SERVICE NEWS

Several major participants in broadcasting and the news media recently announced VAX system purchases. Digital's Cooperative Marketing Program played an important role in four of these customer wins.

Associated Press (AP) and National Public Radio (NPR) both signed orders for additional VAX hardware that will run SISCOM software for newsroom management. AP is expected to purchase over 50 MicroVAX systems that will be installed at member sites. NPR bought a cluster of four VAX 8500 systems.

McGraw Hill's Datapro subsidiary is also buying a VAXcluster system that will run NPRI software to provide telemarketing applications.

*Digital's Cooperative Marketing Program played
an important role in customer wins.*

Dow Jones placed an initial \$2.3-million order with Digital and IDI, a member of Digital's Cooperative Marketing Program, for VAXstations and VAX 8530 systems as part of a program to bring incoming data into a single network with a single user interface to allow editorial preprocessing.

In addition to these CMP sales, Digital announced a \$1.6-million order from Quad/Graphics, an independent company that prints regional editions of *Newsweek*, *US News and World Report*, and other national publications. This purchase included a VAX 8550 system, a VAX 8700 system, and HSC disk controllers to create a new VAXcluster.

Digital is the largest supplier of general-purpose computers in India. Recent sales included a \$2.5-million sale to Bajaj Automotive of Poona. More than 150 workstations were purchased for 11 buildings, all connected via local area network bridges and Ethernet to a VAX 8800 system. This is probably the largest private network currently operating in India. The application uses IMPCON," a manufacturing resource planning package from Computer Systems Development, Inc., designed to run on VAX computers.

Digital has established a subsidiary in Thailand to support the growing demand for its equipment not only by local users but by the many multinational companies that have operations in Thailand.

Two sales were made in the People's Republic of China. Digital was awarded a contract with the World Bank to provide computer systems to 57 Chinese universities. The sale includes 13 VAX 8350 systems and 129 MicroVAX computers.

The Ministry of the Petroleum Industry purchased a large VAX system for seismic data processing, reservoir simulation, and well logging. One reason for Digital's success in the People's Republic is that Digital's VMS operating system and ALL-IN-1 office software have been adapted by the Chinese so that native ideograms can be used in various operations and Chinese character strings can be used as meaningful identifiers of files and other data structures. Similar Chinese-language versions of the Digital Rdb relational database management system, the Common Data Dictionary, and FMS (Forms Management System) have been developed.

When completed in 1993, "The Chunnel," as London newspapers refer to the English Channel Tunnel, will join the road and rail systems of the United Kingdom and France. To support the multibillion-dollar program, the builders, Eurotunnel, have selected an integrated networked information system based on a cluster of VAX computers and more than 300 intelligent workstations running Digital's WPS-PLUS/DOS software.

In Finland, the city of Espoo is building a \$12.5-million municipal information network based on DECnet/OSI software. Digital ALL-IN-1 soft-

*The builders have selected an integrated networked
information system based on a cluster of VAX computers.*

ware will provide a common interface for the 2,000 municipal employees who will use the network.

In France, Groupe Auchan, a food, hardware, home appliance, and textile store chain is using 40 MicroVAX computers to decentralize its accounting processing. Each of the 40 Auchan outlets will use GL PLUS® accounting software from McCormack & Dodge, a member of Digital's Cooperative Marketing Program. This distributed accounting solution allows Auchan's financial database to be accessed locally and consolidated at headquarters via the network.

Digital is also continuing to increase its share of the European financial services market. For example, two-thirds of the stockbrokers in Paris are now using VAX computers to obtain realtime access to European money markets.

In Switzerland, representatives of the nine major Swiss banks unanimously selected Digital systems for the first fully automated trading and clearing system for options and futures. Arthur Andersen is responsible for application development. SOFFEX, the Swiss Options and Financial Futures Exchange system, will be based on a DECnet/OSI network linking MicroVAX systems in Zurich, Basel, and Geneva to a VAX 8700 cluster. When completed, the system will enable exchange members to perform dealing and brokerage functions electronically with automated matching of orders and quotes, and it will provide members with an automated interface for matched trades.

Two-thirds of the stockbrokers in

Paris are now using VAX computers.

Major customer wins were also announced in Computer Integrated Manufacturing (CIM) and retailing. In Italy, Digital has been awarded a contract to automate the Ferrari factory in Marinello. Production management will be integrated with existing Flexible Manufacturing Systems (FMS) through a VAXcluster connected via Ethernet to MicroVAX computers supervising automation cells.

COOPERATIVE MARKETING PROGRAM

As Digital continues to penetrate new markets worldwide, independent software and system suppliers work with Digital to give their mutual customers the best possible solutions.

Digital's Cooperative Marketing Programs are designed to align leading application suppliers with Digital's direct-marketing and sales activities in selected markets. The programs currently encompass applications in a variety of engineering, design, manufacturing, business and financial management, education, healthcare, laboratory, and realtime environments.

The following independent companies recently signed Cooperative Marketing Program agreements with Digital:

- BIOSYM Technologies, Inc., San Diego, California, for two software products—DISCOVER™ and INSIGHT™. These molecular-modeling systems for simulating the behavior and properties of chemical systems are used by pharmaceutical, biotechnological, chemical, and process companies, as well as by government and education.
- CP Technology, Inc., New York, New York, for its Market Information Exchange (MIX™) product. MIX feeds digital-based realtime financial-market data into a VAX system and distributes it to traders at banks, brokerages, and investment firms.
- Combustion Engineering, Inc., Stamford, Connecticut, for PASCE™, a series of computer-aided design/computer-aided engineering products aimed at the process and power industries. PASCE is a complete plant-modeling and information management system that helps design, modify, and maintain operating assets.

- Digital Insurance Systems Corporation, Columbus, Ohio, for its DISCorp Health Claims Processing System (HCPS™) used in the Health Maintenance Organization (HMO) market segment. HCPS is a group-practice/ambulatory-care application with a full-function administrative system for HMOs, Preferred Provider Organizations, and Individual Practice Associations.
- Impell Corporation, Berkeley, California, for RE:Vision™ software that allows users to view and edit raster images produced by scanning hard-copy engineering documents.
- KineticSystems Corporation (KSC), Lockport, Illinois, offers products for data acquisition and analysis for use in a wide variety of industrial and scientific realtime data-acquisition and process-control applications.
- Mechanical Dynamics, Inc., Ann Arbor, Michigan, for Automatic Dynamic Analysis of Mechanical Systems ADAMS® software—general-purpose mechanical CAE analysis tools for software prototyping in the aerospace, automotive, and machine-design industries.
- Pilot Executive Software, Inc., Boston, for its Command Center Executive Information System (EIS™) used by senior executives in a variety of vertical industries. EIS automatically scans corporate data to help the executive identify performance records and emerging trends in the business.
- Precision Visuals, Inc. (PVI), Boulder, Colorado, for DI-3000™ a modular 2D/3D graphics library with all the attributes for building and viewing graphics models.
- Signal Technology Inc., Goleta, California, for SMARTSTAR™ a general-purpose, application development, and information management system designed for VAX systems.

The following independent organizations signed System Cooperative Marketing Program agreements covering hardware and software systems:

- Applied Dynamics International, Inc., Ann Arbor, Michigan, which offers an advanced realtime simulation product, called SYSTEM 100, that works with VAX computers and VAX networks.
- Crosfield Data Systems, Inc., Glen Rock, New Jersey, for AdWizard™, Crosfield 2300™, Crosfield 2400™, and Crosfield 2450™ systems for the pre-press newspaper publishing and printing market. These four products can be used in the editorial, classified ad, and production departments of newspapers of all sizes.
- De La Rue Printrak, Inc., Anaheim, California, for Printrak's Automated Fingerprint Identification System (AFIS™). AFIS systems automate routine functions of fingerprint matching and of processing and file maintenance for city and state police departments and large county or municipal governments.
- Project Software and Development (PSDI), Cambridge, Massachusetts, for the PROJECT/2® system and QUIKNET Professional® project-management software that creates realtime information models of project conditions, such as NASA's space shuttles and the 1988 Winter Olympics.
- SISCOM (Satellite Information Systems Company), Boulder, Colorado, for its NewsPro Product Control System—a fully functional electronic-newsroom management system designed for the broadcasting industry.

CORPORATE GRANT HIGHLIGHTS

Digital awarded Morehouse College, an independent, predominantly black college in Atlanta, an equipment grant of \$520,000. Morehouse recently developed the Access Computer Technology program to meet the growing demand for campus computing facilities. The money will be used toward the purchase of a VAX 8530 system, 20 VAXstation 2000 workstations, and terminals and printers for the program. This equipment allows Morehouse to network all academic departments, faculty offices to department heads, student dormitories to department offices, and major laboratories to auxiliary laboratories.

A major international exhibition...Monet in the '90s.

As part of its ongoing commitment to the arts, Digital awarded Boston's Museum of Fine Arts a grant to underwrite a major international exhibition, *Monet in the '90s*. This is the largest corporate grant in the museum's history and will be used to reassemble as fully as possible Monet's exhibitions during the 1890s. Following its premiere in Boston, February 1990, the exhibit will travel to the Art Institute of Chicago and the Royal Academy of Arts in London.

Digital announced its commitment to a new research program—Quantum. This Stanford University program sponsors independent research projects of strategic interest to Digital, including work in distributed systems, networking, multiprocessing, programming environments, expert systems, robotics, and semiconductor devices. Digital will provide equipment allowances to \$3.9 million, as well as maintenance allowances and cash grants.

Digital recognizes that it has a role to play in the world community.

As a global company Digital recognizes that it has a role to play in the world community as well as in all the local communities in which it does business. The Digital European Contributions Committee awarded the World Health Organization (WHO) a VAX computer system to be integrated into the existing local area network and used as an electronic-mail system for the organization.

Digital has underwritten the sponsorship of program specials and community outreach programs in Boston and San Francisco. This is part of AIDS Lifeline, a nationwide educational program dealing with AIDS. Developed by Group W Television, AIDS Lifeline receives ongoing support from Digital for its education programs.

CONSOLIDATED STATEMENTS OF INCOME

(Dollars in thousands except per share data)

Revenues

Product sales	
Service and other revenues	
Total operating revenues	

Costs and Expenses

Cost of product sales	
Service expense and cost of other revenues	
Research and engineering expenses	
Selling, general and administrative expenses	
Operating income	
Interest expense	
Interest income	
Income before income taxes	
Income taxes	
Net income	
Net income per share	

The accompanying notes are an integral part of these financial statements.
Prior year reclassified for comparative purposes.

Three Months Ended		Nine Months Ended	
March 26, 1988	March 28, 1987	March 26, 1988	March 28, 1987
\$1,834,233	\$1,631,485	\$5,346,359	\$4,478,570
989,749	778,586	2,789,648	2,241,810
2,823,982	2,410,071	8,136,007	6,720,380
760,855	636,340	2,160,160	1,829,346
600,622	513,172	1,720,289	1,442,115
322,768	255,408	922,208	726,548
759,352	566,389	2,205,514	1,603,269
380,385	438,762	\$1,127,836	1,119,102
9,893	10,806	28,491	32,806
(36,370)	(32,231)	(106,816)	(92,285)
406,862	460,187	1,206,161	1,178,581
101,716	152,590	301,541	418,396
\$305,146	\$307,597	\$904,620	\$760,185
\$2.33	\$2.29	\$6.83	\$5.69

CONSOLIDATED BALANCE SHEETS

(Dollars in thousands)	March 26, 1988	March 28, 1987
Assets		
Current Assets		
Cash and temporary cash investments.	\$2,071,150	\$2,422,526
Accounts receivable, net of allowances.	2,520,450	2,155,316
Inventories.	1,586,434	1,340,574
Prepaid expenses.	166,264	132,548
Deferred income tax charges, net.	267,000	262,000
Total Current Assets.	6,611,298	6,312,964
Property, plant and equipment, net.	2,830,556	1,983,161
Other assets, net.	110,233	23,341
Total Assets.	\$9,552,087	\$8,319,466
Liabilities and Stockholders' Equity		
Current Liabilities		
Bank loans and current portion of long-term debt.	\$ 154,703	\$ 75,835
Other current liabilities.	2,236,033	1,658,153
Total Current Liabilities.	2,390,736	1,733,988
Deferred income tax credits, net.	35,000	42,000
Long-term debt.	124,871	270,043
Total Liabilities.	2,550,607	2,046,031
Stockholders' Equity		
Common Stock, \$1 par value.	130,008	130,008
Additional paid-in capital.	2,413,650	2,322,771
Retained earnings.	5,141,524	4,119,767
Treasury stock at cost, 5,013,572 and 2,086,890 shares.	(683,702)	(299,111)
Total Stockholders' Equity.	7,001,480	6,273,435
Total Liabilities and Stockholders' Equity.	\$9,552,087	\$8,319,466

The accompanying notes are an integral part of these financial statements.

CONSOLIDATED STATEMENTS OF CHANGES IN FINANCIAL POSITION

(Dollars in thousands)	Nine Months Ended	
	March 26, 1988	March 28, 1987
Funds from Operations		
Net income.	\$ 904,620	\$ 760,185
Depreciation and amortization.	369,067	304,800
Other.	5,174	4,207
Total from operations.	1,278,861	1,069,192
Funds to Support Operations		
Increase (decrease) in working capital:		
Accounts receivable.	208,262	252,029
Inventories.	133,515	140,818
Prepaid expenses.	47,071	47,274
Other current liabilities.	(416,401)	(596,815)
	(27,553)	(156,694)
Additions to property, plant and equipment.	1,086,610	450,455
Increase in other assets.	38,285	23,984
Total to support operations.	1,097,342	317,745
Net increase in funds from operations.	181,519	751,447
Funds Provided (Used) by		
Increase (decrease) in:		
Bank loans and current portion of long term debt.	149,830	53,638
Long-term debt.	(144,421)	(63,112)
Stock issued under employee option and purchase plans.	129,425	92,836
Purchase of treasury stock.	(363,498)	(323,216)
	(228,664)	(239,854)
Net increase in cash and temporary cash investments.	(47,145)	511,593
Cash and temporary cash investments at beginning of year.	2,118,295	1,910,933
Cash and temporary cash investments at end of period.	\$2,071,150	\$2,422,526

The accompanying notes are an integral part of these financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Earnings Per Share

Net income per share is based on the weighted average number of common shares and common share equivalents outstanding during each period; 132,497,396 shares and 133,617,165 shares for the nine month periods ended March 26, 1988 and March 28, 1987, respectively, and 131,179,809 shares and 134,262,167 shares for the three month periods ended March 26, 1988 and March 28, 1987, respectively.

Digital's common stock is listed and traded on the New York Stock Exchange and Pacific Stock Exchange (Ticker Symbol "DEC").

In Europe: Swiss Stock Exchanges of Zurich, Geneva, and Basel and the German Stock Exchanges of Frankfurt, Munich, and Berlin.

Unlisted trading privileges have been granted by the Boston Stock Exchange, Cincinnati Stock Exchange, Midwest Stock Exchange, and Philadelphia Stock Exchange. In Europe: Luxembourg Stock Exchange.

Inquiries relating to investment in Digital Equipment Corporation should be directed to:

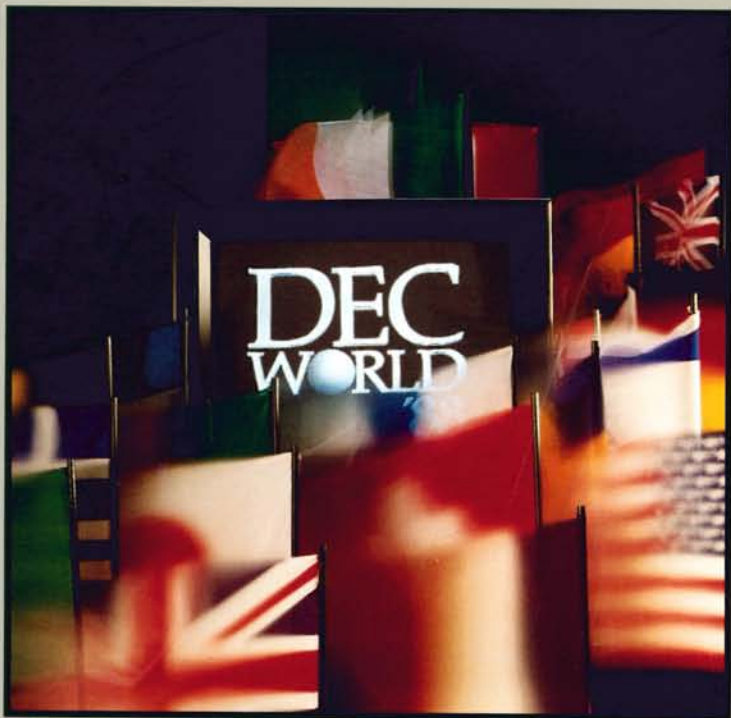
Albert E. Mullin, Jr.
Vice-President, Corporate Relations
111 Powdermill Road
Maynard, MA 01754
(617) 493-5350

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First Quarter Report

Digital Equipment Corporation
Maynard, Massachusetts 01754

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ELIZABETH L CANE
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On the cover...DECWORLD '88 reached an international audience. The program included a live 90-minute satellite television panel discussion on "Managing Change."

To Our Shareholders

Revenue growth for the company's first fiscal quarter continues to outpace industry growth. Customer demand overseas continues very strong, particularly in Europe, Japan, and several other Far East markets. In this quarter, non-U.S. revenues accounted for 53% of total revenues, the highest percentage in history. Demand in the U.S., however, continues below that experienced overseas, as it has for several quarters.

Sales of low-end and mid-range systems were strong. Sales of high-end systems, however, were below expectation. This resulted in lower profit than in the comparable quarter a year ago. Net employment levels were essentially flat with the previous quarter. The investment in selling has all been in the high growth international markets. The company continues to make investments in new products and new technologies. Desktop computing, high end systems and transactions processing are areas in which the company is investing heavily.

Demand for our low-end products remains strong. Customers have the need to incorporate the desktop into their enterprise-wide computing strategy. Network Application Services, announced by Digital in early 1988, was the first step in supporting multivendor desktop environments in our customers' enterprises. Last year we shipped 30,000 workstation products in support of Network Application Services, and in the quarter just ended we shipped 12,000 units. This puts Digital in the number two position in the workstation market.

The recently announced VAX 6200 series of midrange products, which can be used in parallel and in clusters to make powerful computing systems, continues to exceed expectations across all markets in the U.S. and abroad. The one-thousandth unit was shipped only five months after the product was announced, a first for a system in this price-performance range.

Earlier in the quarter we announced DECtp, an extension of the VAX/VMS environment that makes transaction processing systems easier and less expensive to develop, maintain and integrate with other applications across the enterprise. This is a large and important market for us, and we're pleased that customer reaction to our products has been enthusiastic.



Kenneth H. Olsen
President

“Integrating the Enterprise” Draws Over 20,000 Customers to DECWORLD’88

DECWORLD’88 was truly an international demonstration of distributed network computing. Over 18,000 executives from Europe, Asia, and the United States gathered in Cannes, France, from September 12 to 23. Another 5,000 participated by attending special DECWORLD’88 events at eleven of Digital’s Application Centers for Technology in the United States.

Satellite television brought U.S. participants together for a 90-minute panel discussion on “Managing Change.” Hosted by ABC “Nightline’s” Ted Koppel, the panel included John Naisbitt, author of *Megatrends*, computer consultant Michael Hammer, Peter Sprague, Chairman of National Semiconductor, and Alberto Vitale, President and CEO of Bantam Doubleday Dell Publishing Group.

The basis for the panel discussion, originating from New York’s Waldorf Astoria, was a study on the “Enterprise-wide Impact of Technology,” conducted by the Roper Organization for Digital. Eighty-one percent of the 320 chief executive officers and chief operating officers interviewed believe computer networks are critical to international operations.

“Eighty-one percent of...chief executive officers and chief operating officers...believe computer networks are critical to international operations.”

Two-thirds of the respondents believe that computer technology helps their companies penetrate foreign markets.

This emphasis on enterprise-wide computing was reflected in the 350 demonstrations and the 70 executive and specialist sessions conducted every day at DECWORLD’88. Included were more than 200 third-party Complementary Solutions Organizations from around the world, whose products and services enhance Digital’s enterprise networking capabilities.

The “distributed” format of DECWORLD’88, involving both Europe and the U.S., provided a firsthand demonstration of how a single software environment can combine people, management processes, business strategy, and information technology into a unified enterprise-wide system.

Enterprise Integration Announcements Accelerate Digital’s Service and Network Leadership

Digital strengthened its leadership in enterprise computing with the DECWORLD’88 announcement of two integration programs for customers who manage worldwide enterprises. Together, these initiatives formalize Digital’s commitment to supporting the people side as well as the machine side of customers’ computing requirements.

The first was Digital’s Enterprise Services, an extension of the already comprehensive portfolio of services that have helped major corporations with systems integration. Among the new service offerings are:

- *Enterprise Planning and Design Services*—Assistance in articulating business goals and strategies, and framing of information technology strategies, designs, and architectures consistent with the customer’s business plan.
- *Program Management*—The single-point management of the design and implementation of large, complex, enterprise-wide solutions that typically involve multivendor equipment, and the coordination of all the components of these solutions.
- *Integrated Support Services*—Single-point services and support for customized management and operational support for Digital and Digital/third-party operations.
- *Service Alliances*—Formal relationships with leading service suppliers to strengthen Digital’s ability to be a single source for customers’ enterprise-wide service needs.

In introducing Enterprise Services, Digital noted that the company is already working on over 100 large programs that average \$30 million each and run up to five years in length.

The second announcement concerned Digital’s Enterprise Management Architecture (EMA), a comprehensive, open network-management system designed to tie multiple voice and data systems together under a single management umbrella. Compliant with ISO/OSI standards, EMA gives customers the choice of centralized or distributed network management on everything from the smallest LAN to the largest multivendor network. A consistent user interface and common management-information structure let users accommodate future requirements in a distributed environment.

Most important, customers and third parties can manage non-Digital devices, applications, and systems or add functions of their own with EMA's open interfaces. This flexibility is already attracting third parties. Seven communications vendors have signed agreements to write interfaces

"EMA gives customers the choice of centralized and/or distributed network management on everything from the smallest LAN to the largest multivendor network."

between their products and the new architecture. They are Codex Corporation of Canton, Massachusetts; DCA, Inc., of Alpharetta, Georgia; Siemens AG of Munich, West Germany; Stratacom, Inc., of Campbell, California; Timeplex International, Inc., of Ontario, Canada; and Vitalink Communications Corporation of Fremont, California.

DECtp Brings Quiet Revolution To Transaction Processing

Digital extended its enterprise-wide computing capabilities with the introduction of DECtp, an extension of the VAX/VMS environment that makes transaction processing and information-management systems easier and less expensive to develop, maintain, and integrate with other applications across the enterprise.

These products provide the functionality, performance, availability, security, and service required for network transaction processing while providing an open environment. Without changing software, users can move applications down to the desktop or run them on an extremely large and powerful production system built by clustering VAX computers.

With other vendors' systems, transaction processing is often isolated and cannot interact with other applications. DECtp users can implement transaction processing applications and then exchange data with decision support, office information, engineering and scientific applications. And because Digital's networking will let customers structure transaction processing as a fully distributed system, a centralized system, or a system that contains the best elements of both, DECtp offers flexibility not found in other transaction processing approaches.

Offering a nearly 3-to-1 price/performance advantage over comparable systems, DECtp increases Digital's overall transaction processing speeds to levels formerly associated only with mainframe-based traditional environments. Several new and enhanced products are part of the DECtp environment.

- The DECintact transaction monitor which can execute more than 100 transactions per second on a large VAXcluster.
- VAXlink software, which enables VAX Rdb/VMS databases to accept copies of IMS- and VSAM-format data files from IBM mainframes.
- The SA600 Storage Array, a thin-film head and media storage array, with a capacity of 9.7 billion bytes and the fast access time and high reliability that are critical in transaction processing.
- A fivefold performance increase to VAX Rdb/VMS, the relational database management system that ensures transaction processing users of fast updates and retrievals.

Industry Standards Update

First UNIX-based Software Compliant with All Industry Standards. With its announcement of ULTRIX-32, V.3., Digital became the first vendor to comply with all key industry standards, including X/Open, National Bureau of Standards, Open Software Foundation, and POSIX. POSIX (Portable Operating System for Computer Environments) is the government-supported IEEE UNIX™ standard that will be a requirement for all UNIX sales to government agencies.

Reinforcing Digital's position as one of the industry's leading suppliers of UNIX-based products and services, the company also announced new DECnet-ULTRIX software for network resource sharing and management, a new version of ULTRIX Worksystem software, two software products that better integrate ULTRIX with VMS, as well as enhanced international utilities for Version 3 of ULTRIX-32.

Developers Join in Support of New ULTRIX. Several independent software vendors joined Digital in support of the new version of ULTRIX-32.

Kinetics, Inc., announced VAX-to-Macintosh™ networking software, while System Strategies, Inc., announced a VAX Link product to support communication between VAX processors and IBM mainframes and minis. At the low end, Locus Computing Corporation joined the effort with software to link MS-DOS® and ULTRIX-32 operating systems.

Digital also signed distributed software agreements with three companies. Digital will sell Oracle Corporation's ORACLE® an SQL-language relational database management software package for ULTRIX systems. It will sell and distribute Philon, Inc., language compilers for use with Digital's VAX systems, including MicroVAX systems and VAXstation worksystems running ULTRIX. And Digital will sell the Informix relational database

Digital and Tandy Corporation Announce Agreements for Joint Development, Manufacturing, Technology Exchange and Service

Digital and Tandy Corporation announced a comprehensive set of agreements which cover manufacturing, service and exchange of technology. The agreements provide for Tandy to manufacture microcomputers to be marketed by Digital under its brand name, and for Digital to service Tandy-brand products owned by Digital customers.

This agreement is another important step in Digital's Network Applications Support program, in which Digital offers customers a range of choices of desktop devices for their individual users, while providing full access to all computing resources throughout the enterprise. Customers will also have the option of complete service and support for mixed Tandy and Digital environments from Digital.

Joint Projects and Cooperative Efforts

Digital and Allen-Bradley Set Precedent for Multi-Vendor Industrial Automation. Digital and Allen-Bradley Company announced the development of a new generation of industrial control systems, the Pyramid Integrator,[™] which includes a MicroVAX Information Processor module.

The incorporation of Digital's VAX architecture and DECnet/OSI networking with the Allen-Bradley Pyramid architecture will enable manufacturers to truly integrate—rather than merely interface—computers and industrial control systems.

The alliance between Digital and Allen-Bradley also includes agreements for ongoing joint development, marketing, and service on a worldwide basis.

Apple and Digital Outline Joint Development Program. Digital and Apple Computer, Inc., reaffirmed their joint-development agreement at a two-day conference held for independent software developers in August.

Defining the framework for connecting Apple Macintosh personal computers with Digital VAX/VMS systems, the two companies told developers that they would place highest priority on the most common user needs—file services, print services, database access, network management, and network terminal services. The two companies also signed an agreement naming Digital as an authorized service provider for Apple products at Digital customer sites in the United States.

management software and application development tools developed by Informix Software, Inc., of Menlo Park, California.

Licenses Offered for DECwindows User Interface Software. Well ahead of other vendors in developing a single, consistent user interface to different operating environments, including MS-DOS, UNIX, and VMS, Digital in August announced plans to license its DECwindows user interface software to independent software vendors.

This software product, called XUI, is part of Digital's DECwindows Program, which implements the X/Open standard developed at the Massachusetts Institute of Technology as part of the \$50-million Athena project that Digital helped sponsor.

Concurrently, Digital is working actively with several other hardware worksystem vendors who are interested in providing XUI as part of their X Window System product offerings. In addition, Digital has offered its X Windows application program interface and user interface to the Open Software Foundation in response to a "Request for Technology" for the User Environment Component in the level one UNIX-based software environment.

Digital Buys RISC Technology from MIPS Computer Systems, Inc.

Digital entered into a comprehensive technology exchange agreement for current and future RISC (reduced instruction set computing) technology and designs developed by MIPS Computer Systems, Inc., of Sunnyvale, California.

With the addition of ULTRIX/OSF systems using RISC technology, Digital will offer customers even more versatility in matching technology to applications demands. RISC/ULTRIX and VAX/VMS will be alternate technologies within the common framework of Digital's system architecture.

Digital also announced that it will purchase a minority interest in MIPS and may appoint a member to the MIPS Board of Directors.

Through its DECompatible Service, Digital has been servicing multivendor environments since 1983. Support has now grown to cover more than 1,000 products manufactured by more than 100 vendors.

Pacific Bell and Digital Test Public E-mail System in California. Digital and Pacific Bell announced a pilot E-mail system in California. E-mail will be tried out at the University of Santa Clara, the Easter Seal Society of Santa Cruz and Monterey counties, the National Centers Users Group of San Francisco, and the Sacramento-based Foundation Health Care Corporation.

"Using Digital products, Pacific Bell will be the first telephone company to provide low-cost X.400 electronic messaging to its customers."

The pilot system uses Digital's X.400 MAILbus, the interface that conforms to X.400 international communication standards and lets users exchange electronic mail between public and private networks.

Pending successful completion, the pilot program will be extended—making Pacific Bell the first telephone company to provide low-cost X.400 electronic messaging to its customers.

Digital to Develop Secure Workstation for Defense Intelligence Agency. Digital has been selected by the U.S. Defense Intelligence Agency (DIA) to participate in the Compartmented Mode Workstation program.

This program is an outgrowth of a two-year security study by MITRE Corporation which determined that workstation computer security can be addressed at the user level. Vendors who successfully meet the DIA's workstation security requirement will be authorized to sell their products into the government's intelligence community.

A pioneer in secure systems, Digital will build a prototype secure workstation and submit it to the Defense Intelligence Agency and the National Computer Security Center.

First Millennium® for VAX. McCormack & Dodge, a leading financial software vendor, introduced its Millennium® Series of financial software for VAX systems in August.

The company announced its General Ledger: Millennium and will follow with other applications such as Accounts Payable (AP: Millennium) and Fixed Assets (FA: Millennium).

The Millennium products will run on systems from the MicroVAX to the high-end VAX 8900, strengthening Digital's ability to provide customers with top-quality financial and administrative solutions in a networked environment.

Retail MS-DOS Banking Software New for VAX Platform. Berman Technologies, one of the retail banking industry's leading application software vendors, will integrate its Cross Sell Manager™ banking application with VAX/VMS. Cross Sell Manager is among the most powerful and popular MS-DOS-based platform packages available for retail bankers.

Enterprise Networking Wins

Digital Part of Largest Urban Transportation Project in U.S. The Commonwealth of Massachusetts awarded a five-year multimillion-dollar contract for the Central Artery/Third Harbor Tunnel project to McDonnell Douglas Corporation, a member of Digital's System Cooperative Marketing Program.

Digital and McDonnell Douglas will jointly develop a statewide Computer-Aided Design and Drafting (CADD) system for the project. This system combines McDonnell Douglas' Graphics Design System (GDS) software with VAXstation 2000 and MicroVAX 3600 workstations operating in Local Area VAXcluster systems. This \$3.1-billion project is currently the largest ongoing urban transportation project in the United States.

Comprehensive Network Links Virginia Correction Sites. The Commonwealth of Virginia has purchased a \$13-million networked computer system from Digital to automate its State Department of Corrections.

By mid-1990, nearly 2,000 computer terminals will be part of a network linking over 100 Corrections sites throughout the state. Significant improvements in communications and the ability to handle thousands of records and statistical data are expected.

Bankers Trust Signs \$10-Million Contract for Trading System. Digital and Bankers Trust will jointly develop and install an advanced \$10-million trading display system that will deliver realtime market information to trading workstations.

This joint effort will bring a wide range of Digital products to Bankers Trust, including several VAX systems, VAX-based worksystems, networking, as well as software for handling market data from a variety of third-party information providers.

Network installation, service, and training will also be provided by Digital.

Multimillion-Dollar Agreement with British Gas. British Gas has signed an agreement to purchase a number of Digital systems that will become the largest configuration anywhere in the world of computers used for utility mapping applications.

Digital's Systems Cooperative Marketing Program participant, Synercom Technology, Inc., will supply the georelational information management software and related services for the system.

Digital will provide VAX 6200 and VAX 8800 systems, as well as VAXstation 2000, VAXstation II/GPX, VAXstation 3200, and VAXstation 3500 worksystems. All the systems will be linked in a wide area network under Digital's VMS operating system.

Digital Wins Space Forecast Center Contract from U.S. Air Force. The U.S. Air Force has awarded Digital a \$24 million contract for VAX systems that will be used to gather and evaluate solar data at the Space Forecast Center, a new facility under construction at Falcon Air Force Base in Colorado Springs, Colorado.

Digital will provide VAX 8000 series computers, MicroVAX systems and workstations, along with a number of software products and software engineering tools. Digital will also develop custom applications software for the program, whose mission is to determine how the sun's energy and particles in space affect satellite communications.

\$4-Million Volkswagen Sales Support System Implemented by Digital. Volkswagen factory headquarters in Wolfsburg, West Germany, has purchased a \$4-million sales support system, providing the information technology behind the Volkswagen strategic program "Faster to the Customer."

Comprising 180 VAXstations, a local area network, and a cluster of three VAX 8250s, the system eliminates information bottlenecks that formerly hindered communications between dealerships and factory headquarters. As a result, Volkswagen customers are now able to get immediate answers to questions about vehicles that they've ordered.

Networking Key to Municipal Government Sale. The City of Austin, Texas, recently bought a \$5.5-million Digital Customer Service information system designed to help municipal offices respond more effectively to citizens' requests for services.

Linking 28 geographically dispersed departments, the fully networked Digital customer service solution features a Citizens' Request Tracking

System—specially designed using ALL-IN-1, DATATRIEVE and FMS—allowing the City of Austin to track requests, analyze results and troubleshoot critical operational problems relating to city services.

New Networking and Office Products

New Generation of Interconnectivity Products. In August, Digital announced nine communications hardware and software products that improve network performance and offer Digital-to-IBM host links as well as wide area network links.

Leading the parade of new products was the DEC MicroServer communications server. Based on the MicroVAX II chip technology, the server gives a four-fold performance improvement. New DECrouter and X25router software complemented the hardware announcement.

Unveiled at the same time were four enhancements to SNA interconnect software that permit greater flexibility in Digital-to-IBM connections. DECnet SNA Gateway-CT and DECnet SNA Gateway-ST software were introduced for departmental links, while VMS/SNA software was announced for geographically dispersed applications. Digital's DECnet/SNA Data Transfer Facility (DTF) software was also enhanced with extended file transfer and management capabilities to MS-DOS and DECnet-ULTRIX systems.

"Unveiled at the same time were four enhancements to SNA interconnect software that permit greater flexibility in Digital-to-IBM connections."

Wrapping up the product set was new VAX File Transfer and Access Management (FTAM) software that enables DECnet/OSI network users to manage files and transfer them to any system that complies with the FTAM Open Systems Interconnection (OSI) specification.

VAX Grammar Checker. Digital also announced VAX Grammar Checker, the world's first computer-aided proofreading software. Based on the CorrecText® Grammar Correction System and licensed to Digital by Houghton Mifflin Company, VAX Grammar Checker is the result of many years of work on the codification of American English grammatical rules and on data-compression techniques. It corrects documents by analyzing sentence structure, and identifying the grammatical function and relationship of words in the sentence.

Asia and the Far East

In the People's Republic of China, the Ministry of the Petroleum Industry (MOPI), and the China National Offshore Oil Company (CNOOC) have signed a contract totaling \$13.6-million, split between Digital and Geoquest Systems of Houston, Texas, for seismic interpretation worksystems.

With the sale of 35 MicroVAX 3500 systems that will run Geoquest's IES seismic interpretation package at 23 different MOPI/CNOOC oil fields throughout the People's Republic of China, Digital becomes the major vendor for seismic data interpretation worksystems in the People's Republic of China.

Four Major Asian Language Products Announced. Digital introduced an array of new products for four major Asian languages. The languages are Hanzi (simplified Chinese in the People's Republic of China), Hanyu (traditional Chinese used in Taiwan and Hong Kong), Hangul (used in Korea) and Thai.

The products announced include Asian VAX/VMS operating system, Asian WPS-PLUS/VMS document-processing software, VAX RALLY/Hanyu Fourth-generation Language for application development, FMS/Hanzi V.2.3, and the Hanzi terminal VT382. Together, they establish a well-defined hardware and software platform for Asian language support by Digital.

Cooperative Marketing Program

Digital's Cooperative Marketing Program expanded in the first quarter with the addition of the following companies in the United States:

- *CIMCORP, Inc.*, Aurora, Illinois, for the CIMCELL® cell control system that provides realtime production monitoring and control for fabrication, machining, and assembly operations.
- *Western Data Systems*, Woodland Hills, California, for COMPASS CONTRACT®, a comprehensive set of integrated MRPII manufacturing management software products for the Aerospace/Defense industry.
- *Carnegie Group, Inc.*, Pittsburgh, Pennsylvania, to jointly market their Knowledge Craft™, Graphpak™, and Simpapak™ products for the artificial intelligence market.
- *Computer Generation, Inc.*, Atlanta, Georgia, for RTRS/ORDB software that provides a complete set of functions and data files for determining the charges for toll service calls in the telecommunications industry.

- *Telco Research*, A NYNEX Company, Nashville, Tennessee, for CCO SYSTEM™, TRU SYSTEM™, and the NETWORK PATHFINDER SYSTEM™, all telecommunications-management software products.
- *BIOSYM Technologies, Inc.*, San Diego, California, to jointly market its bioresearch and molecular sciences products, DISCOVER™ and INSIGHT™.
- *Spectragraphics Corporation*, San Diego, California, for its CommSet™ 1080 and DesignSet™ Communication Controller, both IBM interconnect products.
- *Teradyne, Inc.*, Boston, Massachusetts, for BoardWatch™ software that links Teradyne's circuit board testing equipment to a VAX host via DECnet/OSI.

In addition, the following U.S. Cooperative Marketing Partners extended their presence in Europe.

- *SILVAR-LISCO*, for its software product set SDS, GARDS™, CAL-MP™ for electronic computer aided design in Germany.
- *Racal-Redac*, for its Visula™ software for PCB design in manufacturing industries in Germany.
- *McCormack & Dodge*, for its Plus series, a suite of general accounting software packages, for cross-industry financial and administrative applications in the United Kingdom.

Corporate Contributions Highlights

Stanford University (CA). Stanford University received a five-year, \$8 million cash and equipment grant to support two specific programs: the networking development of its Near West Campus—a project to expand and renovate the Computer Science and Engineering facilities and programs into one campus area; and the expansion of its overall academic and research computing needs.

Children's Hospital/Institute for Technology (MA). The Children's Hospital/Institute for Technology is a leader in adaptive technology for the disabled, particularly children. The Institute has been awarded an equipment grant of \$400,000 toward the acquisition of DECTalk boards and peripherals. The boards will be used to modify DECTalk systems to accommodate a wide range of disabilities—from cerebral palsy to spinal cord injuries. In addition, Digital has contributed a cash grant of \$100,000 to establish a Technology Equipment Fund, a revolving loan fund which will provide systems to children that lack the financial resources.

Consolidated Statements of Income

	Three Months Ended	
	October 1, 1988	September 26, 1987
<i>(Dollars in thousands except per share data)</i>		
Revenues		
Product sales	\$1,896,401	\$1,686,072
Service and other revenues	1,045,398	843,701
Total operating revenues	2,941,799	2,529,773
Costs and Expenses		
Cost of product sales	799,622	670,698
Service expense and cost of other revenues	649,668	525,142
Research and engineering expenses ..	363,996	298,364
Selling, general and administrative expenses	848,259	689,512
Operating income	280,254	346,057
Interest expense	8,902	8,855
Interest income	34,640	32,582
Income before income taxes	305,992	369,784
Income taxes	82,618	99,842
Net income	\$ 223,374	\$ 269,942
Net income per share	\$1.71	\$2.03

Earnings Per Share

Net income per share is based on the weighted average number of common shares and common share equivalents outstanding during each period; 130,961,583 shares for the three months ended October 1, 1988, and 133,245,315 shares for the three months ended September 26, 1987.

Consolidated Balance Sheets

	October 1, 1988	July 2, 1988
<i>(Dollars in thousands)</i>		
Assets		
Current Assets		
Cash and temporary cash investments	\$ 2,106,519	\$ 2,163,580
Accounts receivable, net of allowances	2,590,246	2,592,160
Inventories	1,642,265	1,575,059
Prepaid expenses	319,725	274,160
Deferred income tax charges, net ...	337,000	324,962
Total Current Assets	6,995,755	6,929,921
Property, plant and equipment, net .	3,254,136	3,095,025
Other assets, net	90,316	86,610
Total Assets	\$10,340,207	\$10,111,556
Liabilities and Stockholders' Equity		
Current Liabilities		
Bank loans and current portion of long-term debt	\$ 153,887	\$ 154,670
Other current liabilities	2,235,018	2,259,434
Total Current Liabilities	2,388,905	2,414,104
Deferred income tax credits, net ...	66,000	63,154
Long-term debt	129,770	123,924
Total Liabilities	2,584,675	2,601,182
Stockholders' Equity		
Common Stock, \$1 par value	130,008	130,008
Additional paid-in capital	2,436,775	2,424,391
Retained earnings	5,649,723	5,463,050
Treasury stock at cost, 3,380,325 and 3,718,375 shares	(460,974)	(507,075)
Total Stockholders' Equity	7,755,532	7,510,374
Total Liabilities and Stockholders' Equity	\$10,340,207	\$10,111,556

Consolidated Statements of Changes in Financial Position

	Three Months Ended	
	October 1, 1988	September 26, 1987
<i>(Dollars in thousands)</i>		
Funds from Operations		
Net income	\$ 223,374	\$ 269,942
Depreciation and Amortization	146,060	105,682
Other	4,117	7,803
Total from operations	373,551	383,427
Funds to Support Operations		
Increase (decrease) in working capital:		
Accounts receivable	(1,914)	39,558
Inventories	67,206	103,869
Prepaid expenses	45,565	13,351
Other current liabilities	24,416	(89,675)
	135,273	67,103
Additions to property, plant and equipment	304,438	273,005
Increase in other assets	9,114	8,959
Total to support operations	448,825	349,067
Net increase (decrease) in funds from operations	(75,274)	34,360
Funds Provided by		
Increase (decrease) in:		
Bank loans and long-term debt	5,063	(1,256)
Common stock issued under employee stock plans	13,150	24,038
	18,213	22,782
Net increase (decrease) in cash and temporary cash investments	(57,061)	57,142
Cash and temporary cash investments at beginning of year	2,163,580	2,118,295
Cash and temporary cash investments at end of period	\$2,106,519	\$2,175,437

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Digital's common stock is listed and traded on the New York Stock Exchange and Pacific Stock Exchange (Ticker Symbol "DEC").

In Europe: Swiss Stock Exchanges of Zurich, Geneva, and Basel and the German Stock Exchanges of Frankfurt, Munich, and Berlin.

Unlisted trading privileges have been granted by the Boston Stock Exchange, Cincinnati Stock Exchange, Midwest Stock Exchange, and Philadelphia Stock Exchange. In Europe: Luxembourg Stock Exchange.

Inquiries relating to investment in Digital Equipment Corporation should be directed to:

Albert E. Mullin, Jr.
Vice-President, Corporate Relations
111 Powdermill Road
Maynard, MA 01754
(617) 493-5350

Digital Equipment Corporation
Maynard, Massachusetts 01754

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