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DIGITAL DISCUSSES COMPUTING STRATEGY WITH THE RESEARCH BOARD

Last month, Digital had an opportunity to explain its business and product strategies to senior executives in charge of computing and communications at about three dozen of the largest corporations in the U.S. The Research Board, a group of computer users (including such firms as Gillette, Monsanto, Bank of America, Eastman Kodak, Mobil Oil, Johnson & Johnson and Inland Steel) jointly funds research into developments in the computer industry.

This year the Board studied the mid-range products of the industry and, as a followup, invited IBM, Digital, Wang and Hewlett-Packard to make separate presentations and field questions. Jack Shields, vice president, Sales and Service, and Bill Johnson, vice president, Systems & Communications Engineering, represented Digital.

Among other questions, the Board asked whether having a standard architecture tied around VAX would limit innovation and creativity at Digital. ill's answer, summarized here, provides an overview of Digital's computing strategy.

"Digital's strategy takes into account the way people are using computers. In a large organization or corporation, there are typically three tiers --personal, departmental and corporate -- each with different computing needs, but all needing to be tied together for communication. Information has to be communicated up and down the organization, from tier to tier, and also side to side, within the same level.

"With our range of products, we offer a wide variety of solutions to computing and office needs at all levels of a corporation; and with our networks, we allow those diverse solutions to be tied together to enhance both up-and-down and side-to-side communications.

"That's the advantage we have from the compatibility we have designed into our networking architecture. Our VAX systems can communicate with our personal computers, our PDP-11s and our DECsystem-10s and 20s; and our terminals can tie into any of those machines. That means that no matter where you access a terminal in this network, it is going to look compatible to you. No other vendor can say that.

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*MGMT MEMO" is written by Corporate Employee Communication for the Office of he President. It is written for Digital's managers and supervisors to help them understand and communicate business information to their employees. Editorial Contact: Richard Seltzer, CFO2-3/K23.

DIGITAL'S COMPUTING STRATEGY...continued from page 1

"We realize that while we may have a good solution here, it is critical for us, at least in very large companies, to be able to tie into the central computer that IBM will have in many corporate headquarters. Hence we'veloped the gateway product for tying into IBM equipment from Digital products.

"Obviously, we have optimized DECnet for Digital-to-Digital communications, but it is very adaptable, as shown by the gateway to IBM and the ability to tie into X.25 public packetswitching networks and local area networks as well. Digital helped make Ethernet an industry standard and is a leader in implementing local area network technologies.

"In essence, with this one network architecture, we can cover all the communications and technologies and protocols we might have. And that's something that no one else in the industry can say."

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DIGITAL PLANS RESEARCH FACILITY FOR READING, ENGLAND

Digital will establish an office automation center in Reading, England, to develop products for Digital's worldwide markets. Plans call for an initial investment of \$12.5 million in a new building for the center.

According to Darryl Barbe, manager of Digital's United Kingdom subsidiary, Digital already has a 120-member group at Reading, specializing in office automation, networks and communications, which will expand to the new centre when it opens in two years. This expanded operation will develop and testoffice automation software, data communications products, local-area networks and integrated office technology. The center will also work on the development of computerized graphics displays and voice recognition technologies.

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NEW ORGANIZATION FOR BUSINESS CHANNELS GROUP

Area managers have been named for Digital's Business Centers (retail stores) in the U.S. Gerald Selby is responsible for centers in the Mid-Atlantic/-Southern States Area; Jeff Boetticher for the Western and Central States Area; and Geno Alissi for the New York/New Jersey and Northeast States Area. They report directly to Barry Cioffi, manager, Business Channels Group, and dotted line to the Area managers (Harvey Weiss, Dave Grainger and Chick Shue). Managers of the individual stores report directly to these new Area Business Center managers and dotted line to the District managers.

New centers recently opened in Miami, Florida; San Antonio, Texas; and Baltimore, Maryland.

Last month at the invitation of the Communications Industry Group, Ken Olsen moke on innovation and risk taking. The following remarks are excerpted som that talk:

"A risk is when you put your heart into something, when you really work a problem and you commit yourself to it, even though most of the people in the company are against it — not the management, but all your colleagues. If you fail, the point isn't that you get fired. The point is that everybody says — 'I told you so.'

"But the satisfaction is to do it. If you take no risks, life is dull.

"Not long ago, I told someone, 'If you don't get a project soon that you make a commitment to, stick your neck out for, make promises about, get into and out of trouble on, you're going to be an unhappy miserable guy until the day you retire.' I think that's true of many, many people. You take no risks, there's no fun.

"But risk taking isn't enough. It takes work too. Worry over every detail. Think it all through. Be prepared. Take risks, but plan it all.

"A number of years ago we were ridiculed for not being bolder. I said it was a little bit like the World War I stories about the soldier who never stuck his head up and never got shot. His friend said, 'You've been here so long and never got shot. You must be lucky. It's your turn to stick your head up.' He said, 'Oh no. I never stuck my head up, that's why I didn't get shot.'

Me can take risks. But don't stick you head up just to stick your head up. Be sure we know what the game is and what we want to win. Make yourself an expert, and collect experts.

"Too often people don't know enough to ask for help. They think that to do some risk-taking and be bold, they have to do it all themselves. When I've got a problem, I ask everybody. Take risks, but study everything, and ask everybody.

"Because we're getting large, we have tremendous pressures right within our organization to do what everybody else in the industry is doing, to be the same as everybody else. The pressure is enormous, and it doesn't come from the top. It comes from your colleagues, and it's you pressuring the other people. But our survival is dependent on being different; taking care of the customer. Maybe we won't be heroes or be appreciated, but we have to know we're right and win."

Opening Digital's first Manufacturing Productivity Conference in March, Jack Smith challenged the attendees to help Manufacturing change its role and direction. He noted that "in the past, Manufacturing's role was to provide service and to chase demand. We learned how to get the products to the waiting market. We learned how to add people very fast, how to assimilate them, train them and help them learn to be productive. Now we want to make Manufacturing more of a strategic weapon by aggressively using new technologies and tools.

"From past experience, we know we have to challenge our people...help them understand the issues, catch their imagination, provide the tools, and challenge them. If we can do these things, I'm sure they will come through for us as they have in the past." The purpose of the three-day conference, held in Andover, Mass., was to share knowledge of technologies already in use at Digital plants and at Digital's Andover Manufacturing Technology Center and to discuss other advanced development efforts required to keep Digital's manufacturing organization competitive.

Also at the conference, Roger Cady, Vice President, Manufacturing, Distribution and Control, announced a new Sales partnership with Manufacturing called the CounSELLor Program. "Senior Manufacturing management will work on a geographic basis with our Field Sales organization to give Manufacturing professionals the opportunity to talk with customers about manufacturing problems. This means a chance for us to learn about their problems and solutions and for them to learn about our solutions to our problems.

Two things will happen as part of the CounSELLor program. Each sales district will form a partnership with a Digital Manufacturing facility, and Corporate Account Teams will link with Manufacturing Staff management. The program includes visits to customers, manufacturing training programs for the sales force, plant visits and tours, and joint staff meetings. Early success stories involving Albuquerque, Colorado Springs, Galway, Greenville, Phoenix and others have demonstrated that the concept works.

"All of us have a common goal...to make Digital the most successful computer vendor in history," says Roger. "We can have the best engineering, the best marketing, the best products, the best service, the best manufacturing and the best sales force individually. The CounSELLor Program teams up two organizations to make Digital even stronger."

Other speakers at the conference dealt with topics such as material handling, testing, robotics, manufacturing design, value engineering, Unified Plant Management, CAD/CAM, planning, data collection, networks, office automation, quality and artificial intelligence.

"WALL STREET JOURNAL" CITES DIGITAL SUCCESS IN ARTIFICIAL INTELLIGENCE

In an April 4, 1983 article, the "Wall Street Journal" noted that Japan has committed itself to deliver an intelligent computer by 1990. It mentioned that some major U.S. companies are also working on expert systems, but very few products have reached the market.

The "Journal" explained that "expert systems work roughly the way human They combine textbook knowledge with the rules of thumb that experience teaches, and then make informed guesses about the situation at hand, whether it be diagnosing the ills of a human being or a broken computer. Once they are built, they work tirelessly, often with higher accuracy rates than humans have been able to achieve."

The development of these systems is very complex and requires an extensive commitment of time and resources. The "Journal" noted that "despite the problems, one notable industry success is Digital Equipment Corp.'s R1 expert system, which the company designed after extensive consultation with John McDermott, a Carnegie-Mellon computer scientist. The electronic expert at DEC can now design an individualized computer system for a DEC customer with much greater speed and accuracy than a person. The 'expert' has worked on 17,000 orders since January 1981, diligently reminding DEC engineers to include the right number of cables, memory boxes and other components."

The article also noted that "DEC is working on another expert system that will let its salesmen talk directly with the computer and figure out system requirements for customers. The new expert dubbed XSEL, won't let the salesman sell inconsistent components,' says Arnold Kraft, manager of solution marketing at DEC. 'It will only give you valid choices for whatever configuration you asked for,' he says."

COEM SALE VALUES \$40 MILLION

The Commercial OEM Group has sold ARC Automation Services, Inc. of Irving, Texas, \$40 million worth of computers and peripheral devices. A subsidiary of Fireman's Fund Insurance Companies, ARC will buy 800 PDP-11/23, 11/24, and 11/44 systems as well as 32-bit VAX computers over a four-year contract. Disks, including the recently announced RA60 and RA80 products, are also included in the sale.

ARC is the largest vendor of turnkey, computer-based systems to independent insurance agents and brokers throughout the U.S. and Canada. The company's newest product, the ARCom/2000 Minicomputer System, will be standardized on Digital's computers and will be marketed in a variety of configurations based on client need and anticipated growth.