THANK YOU AND GOOD EVENING. AFTER A BUSY DAY OF EXCHANGING
SHOP TALK I KNOW YOU ARE READY TO RELAX -- LEGAL SHOP TALK
REMINDS ME OF A REMARK: "THE GREATEST BORE IN THE WORLD IS A
LAWYER WHO TELLS YOU ABOUT HIS CASES WHERE YOU WANT TO TALK
ABOUT YOURS." YOU ARE NOT EVEN IN THE POSITION TONIGHT OF
BEING ABLE TO IGNORE MY "CASE" AS JUSTICE HOLMES ONCE WAS
ABLE TO IGNORE THE GOOD INTENTIONS OF HIS COLLEAGUE AND FRIEND,
JUSTICE BRANDIES, WHO THOUGHT HOLMES SHOULD TURN HIS PRODIGIOUS
READING HABITS MORE ALONG ECONOMIC AND SOCIAL LINES. TO
COUNTERACT HOLMES' "LOW" TASTE IN PAPER BACK FRENCH NOVELS
WHICH HE READ LIKE SO MUCH SALT AND PEPPER SPRINKLED AMONGST
VOLUMES OF GENERAL LITERATURE AND CLASSICS, BRANDIES, ONE
SUMMER, SENT A BOX OF BOOKS TO HOLMES AT HIS MASSACHUSETTS
HOME. UPON OPENING THE BOX, HOLMES NOTED THE TOP LAYER COVERED
WORKMEN'S COMPENSATION, INSURANCE LAWS, LABOR CODES AND SIMILAR
SUBJECTS.

"BOB, PUT THIS BOX DOWN IN THE CELLAR" HE TOLD HIS SERVANT AND
SAT BACK TO ENJOY HIS PAPER BACKS. THE BOX WAS DUTIFULLY
RETURNED IN THE FALL.

NO...YOU HAVE TO JUST SIT THERE AND LISTEN -- AND THAT REMINDS
ME OF A SECOND JUSTICE HOLMES STORY: HE WAS, OF COURSE, NOT
ONLY FAMOUS ON THE BENCH BUT JUST AS EAGERLY SOUGHT AS DINNER 
GUEST, VISITOR AND CONFIDENT-PEOPLE CAME TO SEE HIM IN 
DROVES... INCLUDING AN ELDERLY LADY WHO CAME TO TELL HIM OF THE 
BURGLARY OF HER HOME. IT SEEMS THE ROBBER BACKED A TRUCK UP 
TO THE HOUSE AND CLEANED IT OUT; HE WAS HOWEVER CAUGHT AND THE 
LADY HAD BEEN TO VISIT THE MAN IN JAIL.

SHE TALKED AT GREAT LENGTH TO JUSTICE HOLMES ABOUT THIS 
VISIT, HOW SHE HAD TRIED TO DISCOVER THE ROOT OF THE MAN'S 
PROBLEMS AND TO POINT OUT THE ERROR OF HIS WAYS. AND AS SHE 
WENT ON SHE SAID "I THINK I MUST HAVE TALKED TO HIM FOR OVER 
TWO HOURS." AT WHICH POINT JUSTICE HOLMES NODDED SYMPATHETICALLY 
AND SAID "POOR MAN, POOR MAN."

WELL, I PROMISE YOU LESS THAN TWO HOURS -- AND ANYWAY, IT'S 
NOT ENTIRELY CLEAR THAT TWO HOURS WOULD SUFFICE IN THE PRESENT 
INSTANCE. BUT I DO WANT TO TALK SERIOUSLY FOR A FEW MINUTES 
ABOUT US -- ABOUT CONTROL DATA. BUT FIRST JUST ONE FINAL AND 
PERHAPS APOCRYPHAL STORY.

HAVING BEEN ASKED FOR HIS TICKET BY THE TRAIN CONDUCTOR, JUSTICE 
HOLMES WAS ENGAGED IN A FRANTIC SEARCH OF HIMSELF AND HIS 
SURROUNDINGS FOR THE ILLUSIVE TICKET. THE CONDUCTOR RECOGNIZED 
HIS DISTINGUISHED PASSENGER, HOWEVER, AND ATTEMPTED TO PUT HIM 
AT EASE BY SAYING: "OH, THAT'S ALL RIGHT JUSTICE HOLMES -- YOU 
CAN JUST GIVE US YOUR TICKET WHEN YOU GET OFF AT THE STATION."
JUSTICE HOLMES CONTINUED HIS SEARCH, THEN STOPPED, LOOKED THE CONDUCTOR SQUARLY IN THE EYE AND SAID: "SIR, THE QUESTION IS NOT 'WHERE IS MY TICKET?' THE QUESTION IS 'WHERE AM I GOING?'

OVER THE YEARS WITH THE ENORMOUS DIVERSITY OF CONTROL DATA, THE QUESTION OF "WHERE ARE WE GOING?" HAS PUZZLED A LOT OF OBSERVERS OF OUR COMPANY AND MANY EMPLOYEES AS WELL. IN RECENT YEARS THIS QUESTION HAS BEEN SOMEWHAT LESS INSISTENT BUT FREQUENTLY I FEEL IT IS MORE THAT PEOPLE FEEL GOOD ABOUT THE RATE AT WHICH WE ARE GOING SO THEY DON'T WORRY QUITE SO MUCH ABOUT THE DIRECTION. THIS EVENING I WILL TOUCH ON A FEW PERSPECTIVES OF WHERE WE ARE AND WHERE WE ARE GOING -AND THROW IN A FEW OBSERVATIONS ON THE RATE AT WHICH WE ARE MOVING AS WELL.

FOUR YEARS AGO THIS MONTH, THE INFAMOUS UBS PROJECT COLLAPSED. IN THE THIRD QUARTER OF THAT YEAR THE COMPUTER BUSINESS RECORDED A 28.2 MILLION DOLLAR LOSS INCLUDING A $30.2 MILLION RESERVE FOR THE UBS PROJECT. WE WENT ON TO A TOTAL YEAR LOSS OF $66.8 MILLION INCLUDING $58.0 MILLION OF PROVISIONS AND WRITE-OFFS.

IN THE THIRD QUARTER OF 1978, PROFITS WILL BE AT NEAR RECORD LEVELS AND FOR THE FULL YEAR THEY WILL SET A RECORD. YET IN 1978 WE HAVE HAD THE FAILURE OF A PROJECT AS LARGE AS UBS WITHOUT NOTICEABLE FINANCIAL IMPACT.
SURELY THAT SPEAKS VOLUMES FOR THE PROGRESS WE HAVE MADE OVER THESE LAST FOUR YEARS. I WILL SPEAK TO THAT QUALITATIVELY IN A MOMENT. BUT FIRST, LET ME GIVE A FEW NUMERICAL DIMENSIONS OF 1978 THUS FAR.

YEAR-TO-DATE (8 MONTHS) REVENUES ARE UP 21.0%, ASSETS ARE UP ONLY 4.4% AND PROFIT 77.3% RELATIVE TO 1977. SO PROFITABILITY AS WELL AS PROFITS HAVE IMPROVED DRAMATICALLY. FOR THE SEVEN MONTHS ENDED JULY 31, CONTROL DATA EARNED MORE THAN WE DID ALL OF LAST YEAR. COMPARISONS WITH 1974 ARE NOT NUMERICALLY MEANINGFUL BUT LOOKING AT THE PREVIOUS YEAR, 1973, REVENUES WILL HAVE INCREASED 89.8% PROFITS FOR EIGHT MONTHS IN 1978 ARE NEARLY DOUBLE THE FULL YEAR PROFIT IN 1973. ASSETS REQUIRED TO PRODUCE THOSE REVENUES AND PROFITS IN 1973 WERE $1.2 BILLION; IN 1978 THEY ARE $1.3 BILLION. IN EFFECT THEN, WE HAVE MORE THAN DOUBLED THE PRODUCTIVITY OF OUR ASSETS IN FIVE YEARS. THAT IS PRETTY HEADY STUFF.

WHERE DOES IT COME FROM? WELL FOR ONE THING, OUR SERVICES STRATEGY IS BEGINNING TO PAY OFF. DATA SERVICES REVENUES IN 1973 WERE $154.9 MILLION. THIS YEAR THEY WILL BE 2-1/4 TIMES THAT AMOUNT. OUR BUSINESS IS BETTER BALANCED. SERVICES, SYSTEMS, AND PERIPHERALS ALL CONTRIBUTE TO VOLUME AND TO PROFIT. IN 1977, THE BOTTOM LINE CONTRIBUTION OF THESE SEGMENTS WAS ALMOST EXACTLY IDENTICAL, WHEREAS IN 1973 OUR SYSTEMS BUSINESS CARRIED ALMOST THE ENTIRE BURDEN.

THERE ARE OTHER IMPORTANT FACTORS AS WELL. IN 1973, THE ENTIRE REPORTED PROFIT WAS, IN ESSENCE, MONEY BORROWED FROM
THE FUTURE. THERE IS NO NEED HERE TO GO INTO ALL THE DETAILS OF WHAT I MEAN BY THAT. BUT IT IS, NEVERTHELESS TRUE, AND IT REFLECTED MANY MANAGEMENT AND BUSINESS PRACTICES — ALL PERFECTLY LEGITIMATE AND ACCEPTABLE BUT WHICH NEVERTHELESS MADE THE COMPANY FAR MORE VULNERABLE TO ADVERSITY — AND WE SAW THE PROOF OF THAT IN 1974 AND 1975.

SO IN MANY WAYS, WE SEE CONTINUING PROGRESS AND GOOD IMPROVEMENT IN OUR BUSINESS. BUT THE PROBLEM WITH ALL THAT IS WHERE WE IN FACT STAND WITH REGARD TO ACCEPTABLE PERFORMANCE NORMS. IN A WORD OR TWO, WE STAND WOEFULLY SHORT. LET ME GIVE YOU SOME STATISTICS:

OUR RETURN ON SALES (PRE-TAX) IS 5 PERCENT. THE COMPUTER INDUSTRY AVERAGE EX-IBM IS 13 PERCENT; WITH IBM IT IS 15.6 PERCENT. RETURN ON ASSETS IS 6.3 PERCENT COMPARED TO 14.6 PERCENT FOR OUR COMPETITORS.

ACCORDING TO THE LATEST FORTUNE 500 LIST, CONTROL DATA RANKS 170TH IN TOTAL REVENUE, WE RANK 268TH IN NET INCOME AS A PERCENT OF SALES, 431ST IN TERMS OF RETURN ON STOCKHOLDER'S EQUITY.

THOSE NUMBERS HAVE ONE CLEAR MESSAGE: AFTER FOUR YEARS OF STEADY — EVEN EXCITING — PROGRESS, WE ARE DEAD LAST AS FINANCIAL PERFORMERS IN OUR INDUSTRY.
NOW I HAVEN'T TALKED ABOUT THIS A LOT OVER THE LAST FOUR YEARS. WE'VE TALKED ABOUT FUNDAMENTALS; STRATEGY, SYSTEM OF MANAGEMENT, EXECUTION, PROJECTS TO IMPROVE THOSE THINGS, TRAINING, KNOWLEDGE, INDIVIDUAL GROWTH. IT WOULD HAVE BEEN EASY TO BE DISCOURAGED WITH HAVING TO WORK SO HARD -- KNOWING THAT IN FOUR YEARS WE WOULD BE ONLY A RESPECTABLE LAST PLACE. BUT ON THE CONTRARY -- CONTROL DATA IS MORE FUN, A BETTER VIEW OF THE FUTURE, THE BEST STRATEGY AND MORE POTENTIAL THAN ANY OTHER COMPANY.

THIS IS NOT THE PLACE TO ENUMERATE THE MANY THINGS WE MUST DO TO IMPROVE THAT SITUATION. THEY INVOLVE EVERY ASPECT OF THE BUSINESS -- HEADCOUNT GROWTH, RECEIVABLES MANAGEMENT, FACILITIES AND CAPITAL EQUIPMENT, ADMINISTRATIVE COSTS, LEGAL COSTS AND ON AND ON.

NOW LET ME TURN TO MORE LONG TERM CONSIDERATIONS. OUR COMPUTER BUSINESS FUTURE PLAN RESTS ON FIVE BASIC STRATEGIC STATEMENTS.

1. APPLY OUR TECHNICAL AND FINANCIAL RESOURCES IN DEVELOPING CREATIVE SOLUTIONS TO BASIC PROBLEMS OF SOCIETY, WHICH ARE CURRENTLY NOT BEING SOLVED BY EXISTING GOVERNMENT AND PRIVATE EFFORTS.

2. THE KEystone TO THESE SOLUTIONS IS COMPUTER SERVICES, PARTICULARLY DATA SERVICES AND EDUCATION SERVICES OF
WHICH ARE INTENDED TO CONTINUE AS THE WORLD'S LEADING SUPPLIER.

3. MAINTAIN LEADERSHIP AS A SUPPLIER OF ANY LARGE COMPUTER SYSTEMS AND CONCENTRATE IN THE SCIENTIFIC AND INQUIRING APPLICATION VITAL TO SOLUTIONS OF MAJOR SOCIETAL PROBLEMS.

4. RETAIN AND ENHANCE OUR CURRENT LEADERSHIP POSITION IN MEMORY TECHNOLOGY AND PRODUCTS, AND EXTEND THIS LEADERSHIP POSITION TO OTHER PERIPHERAL PRODUCT AREAS.

5. DEMONSTRATE THAT THE PRECEDING STRATEGIC OBJECTIVES CAN BE ACHIEVED WITH CORRESPONDING BENEFITS TO THE STAKEHOLDERS IN THE COMPANY:

   - IMPROVED BUSINESS FUNDAMENTALS RESULTING IN HIGHER FINANCIAL RETURNS TO THE STOCKHOLDERS.

   - ENHANCED GROWTH OPPORTUNITIES FOR INDIVIDUAL EMPLOYEES, ESPECIALLY MINORITIES AND WOMEN.

   - MORE EMPLOYMENT IN THE COMMUNITIES IN WHICH WE ARE LOCATED, PARTICULARLY IN THOSE DEPRESSED AREAS WHERE JOB OPPORTUNITIES ARE CURRENTLY LIMITED.

THE FINANCIAL DIMENSIONS OF THE PLAN ARE AS FOLLOWS:
1979 is the first step of that long-range goal. For 1979 in the computer group, we look for revenues to increase by 13%, assets by 6.8% and profits by at least 25%.

Improvement cannot occur without change in the basic productivity of every element of our business. It cannot be done by brute force. Netted out, our plans say that profitability will triple or better in five years. Can that be done by asking everyone to work at one-third pay? Ridiculous you say! And it is. Can it be done by charging three times as much for the same products? Likewise ridiculous. No, the secret is that old standby -- leverage. Leverage . . . man faced with tasks beyond his individual strength invented levers -- and he is still doing it. We say work smarter, not harder -- we're talking leverage.

So, leverage must be applied to each of our tasks, to each line of our P&L and balance sheet. Take revenue -- revenue leverage comes from product uniqueness and more precisely the degree to which that uniqueness represents value-added to our customers. Leverage must be applied to production costs -- leverage must be applied to assets -- leverage must be applied to marketing, to administrative and development costs.
TIME DOES NOT PERMIT ME TO FULLY EXPLORE WITH YOU THIS STRATEGIC JOURNEY INTO THE FUTURE BUT LET ME TOUCH ON JUST A FEW SIGHTS ALONG THE WAY. THE PROBLEM OF JOB CREATION HAS HAD INCREASING VISIBILITY IN RECENT YEARS. THE STATISTICS ALONE ARE AWESOME. TO KEEP THE LID ON UNEMPLOYMENT, WE MUST GENERATE 20 MILLION NEW JOBS IN THE NEXT TEN YEARS. THIS WOULD BE THE LARGEST INCREASE OF ANY TEN YEARS IN OUR HISTORY. IN THE PAST DECADE, FOR EXAMPLE, 13 MILLION JOBS WERE CREATED.

UNEMPLOYMENT AND UNDEREMPLOYMENT ARE NATIONAL AND WORLDWIDE PROBLEMS. MINORITY YOUTH UNEMPLOYMENT IN THE UNITED STATES IS RUNNING AROUND 35%. AS ECONOMIC HARDSHIP GROWS AND EACH COUNTRY FACES RISING UNEMPLOYMENT -- OR IN THE CASE OF COMMUNIST COUNTRIES, UNDEREMPLOYMENT, NATIONALISM INCREASES. NEW AND DIFFERENT TRADE BARRIERS GROW.

SO -- IT IS NOT SURPRISING THAT ALTHOUGH IT IS MASKED BY THE ISSUE OF PRIVACY, THE REAL ISSUE BEHIND TRANSBORDER DATA FLOW IS ONE OF ECONOMICS. AT THE OECD SYMPOSIUM ON TRANSBORDER DATA FLOW LOUIS JENNET, THE FRENCH MINISTER OF JUSTICE, MADE THE FOLLOWING STATEMENT: "INFORMATION IS POWER AND ECONOMIC INFORMATION IS ECONOMIC POWER. INFORMATION HAS AN ECONOMIC VALUE, AND THE ABILITY TO STORE AND PROCESS CERTAIN TYPES OF DATA MAY WELL GIVE ONE COUNTRY POLITICAL AND TECHNOLOGICAL ADVANTAGE OVER OTHER COUNTRIES."
PROTECTIONISM AND OTHER INTERNATIONAL TRADE BARRIERS HAVE NOT BEEN A MAJOR FACTOR, WITH THE NOTABLE EXCEPTION OF JAPAN, IN LIMITING THE FORMATION OF NEW BUSINESS IN OR THE GROWTH OF OUR INDUSTRY. BUT IT IS DEFINITELY A FUTURE THREAT.

BACK ON THE HOME FRONT -- AND MORE ALARMING -- IS THE APPARENT LACK OF UNDERSTANDING OF WHAT IT TAKES TO CREATE A JOB AND THE ROLE OF SMALL BUSINESS IN DOING SO. MOST NEW JOBS ARE NOT CREATED BY LARGE BUSINESS -- THEY ARE CREATED BY SMALL BUSINESS.

EARLIER THIS YEAR A DETAILED STUDY OF INNOVATION AND JOB CREATION WAS DONE FOR THE JOINT ECONOMIC COMMITTEE OF CONGRESS. HERE ARE A FEW EXCERPTS FROM THAT STUDY: "...THE MARKETING OF NEW PRODUCTS BY U.S. FIRMS IS SLOWING, BECAUSE MORE AND MORE MARKETS ARE DOMINATED BY A FEW LARGE FIRMS. AS INNOVATIVE FIRMS BECOME ESTABLISHED AND AS MANAGEMENT FUNCTIONS PASS FROM INNOVATORS TO PROFESSIONAL MANAGERS, DECISIONS BECOME MORE CONSERVATIVE. AS FIRMS BECOME LARGE FACTORS IN A MARKET, THEY TEND MORE OFTEN TO OPPOSE INNOVATIONS IN THEIR PRODUCT LINES, BECAUSE THEY HAVE MORE TO loose AND LESS TO GAIN BY SUPPLANTING EXISTING PRODUCTS."

IT WAS FURTHER POINTED OUT THAT -- "...THE VAST MAJORITY OF MAJOR INVENTIONS DURING THE PAST 50 YEARS WERE MADE OUTSIDE THE LABORATORIES OF THE LARGE CORPORATIONS. THEREFORE, ...CONGRESS (WAS URGED) TO DEVISE WAYS TO PROVIDE EASIER ACCESS TO RISK CAPITAL FOR SMALL, INNOVATIVE FIRMS AND TO
HELP NEW FIRMS ENGAGED IN TECHNOLOGY DEVELOPMENT TO SURVIVE THE PERILOUS EARLY EARS OF THE INNOVATION PROCESS."

"SCIENCE INDICATORS -- 1974 CONTAINED DATA SHOWING THAT LARGE FIRMS HAD PLAYED A RELATIVELY LARGER ROLE IN INNOVATION SINCE 1966. WHILE FIRMS WITH FEWER THAN 1,000 EMPLOYEES PRODUCED THE GREATEST NUMBER OF MAJOR INNOVATIONS DURING THE PERIOD 1953 TO 1966, COMPANIES WITH 10,000 EMPLOYEES OR MORE LED FROM 1967 TO 1973. ONE REASON FOR THIS CHANGE IS THAT SMALLER FIRMS MUST DEPEND HEAVILY ON BORROWED CAPITAL AND INTEREST RATES ROSE SHARPLY AFTER 1965, WHILE ACCESS TO FUNDS FOR SMALL FIRMS BECAME DIFFICULT."

SAYING THAT ANOTHER WAY, SINCE THE LATE '60's THE ABILITY OF SMALL FIRMS TO SURVIVE HAS DECLINED MARKEDLY AND AS A CONSEQUENCE, SO HAS INNOVATION IN THE UNITED STATES.

IT IS INDEED TRUE THAT THE SMALL BUSINESSMAN FACES MANY PROBLEMS. NOT THE LEAST OF THESE, OF COURSE, IS TAX LEGISLATION DESIGNED BY PEOPLE WHO SIMPLISTICALLY THINK THAT WITH APPROPRIATE FISCAL STIMULUS JOBS WILL BE CREATED BY LARGE BUSINESS. THE DEBILITATING PROBLEMS OF OVER REGULATION ARE ALSO WIDELY DISCUSSED. AND THE UNWANTED TAKEOVER IS ANOTHER PRINCIPAL MENACE.

BUT THERE IS ONE BARRIER TO IMPROVED VIABILITY OF SMALL BUSINESS WHICH CAN BE ATTACKED WITH NO WHERE NEAR THE FRUSTRATION
LEVEL INHERENT IN TRYING TO INFLUENCE GOVERNMENT ECONOMIC AND REGULATORY POLICY MAKING. THAT PROBLEM IS KNOWLEDGE -- OR RATHER THE LACK OF IT. MOST ENTREPRENEURIAL IDEAS FAIL NOT BECAUSE OF THE BASIC NON-VIABILITY OF THE IDEA, BUT RATHER BECAUSE OF FAILURE OR EXECUTION. LACK OF KNOWLEDGE IS THE KEY FACTOR IN THAT FAILURE. CONTROL DATA, BY ITS VERY NATURE THEN, SHOULD SEE GREAT OPPORTUNITY IN THE JOB CREATION PROBLEM. I WILL SUMMARIZE A FEW OF THESE KNOWLEDGE TOOLS CONTROL DATA INTENDS TO BRING TO SMALL BUSINESS.

FIRST OF ALL, THERE IS THE MATTER OF INNOVATION. INNOVATION IS THE WELL SPRING OF GROWTH IN ANY ORGANIZATION -- LARGE OR SMALL.

SMALL ENTERPRISES WHO HAVE THE MOTIVATION AND WILLINGNESS TO INNOVATE DO NOT HAVE THE R&D RESOURCES OR THE ACCESS TO TECHNOLOGY. IMPROVED TECHNOLOGY TRANSFER MECHANISMS ARE THE ANSWER TO THIS AND REPRESENT AN OPPORTUNITY IN TWO WAYS -- TECHNOLOGICAL COOPERATION BETWEEN LARGE AND SMALL ENTERPRISES AND COMPUTER-BASED TECHNOLOGY TRANSFER SYSTEMS.

CONTROL DATA IS DOING BOTH. IN PARTICULAR, AS MANY OF YOU IN THIS ROOM KNOW SO WELL, WE ARE IN THE VANGARD OF SHAPING NEW COOPERATIVE VENTURES.

IN THE MATTER OF ACCESS TO TECHNOLOGY, THREE YEARS AGO WE LAUNCHED THE SERVICE CALLED TECHNOTEC TO ASSIST THE TRANSFER
PROCESS. BUT WE ALSO ESTABLISHED A RELATED CONSULTING SERVICE, "WORLDTECH", TO ASSIST IN ALL PHASES OF TECHNOLOGY TRANSFERS.

SECONDLY, THERE IS THE MATTER OF MANAGEMENT EXPERTISE. AGAIN, SMALL ENTERPRISES SIMPLY DO NOT HAVE THE WHEREWITHAL OR THE ACCESS TO THE LARGE BODY OF KNOWLEDGE WHICH HAS BEEN ACCUMULATED REGARDING EFFECTIVE MANAGEMENT. THE ANSWER TO THIS NEED IS COMPUTER-BASED EDUCATION. THROUGH CBE EVEN THE SMALLEST ENTERPRISES CAN HAVE AVAILABLE A VAST BODY OF MANAGEMENT KNOWLEDGE AT AN AFFORDABLE PRICE. CLOSELY RELATED TO EDUCATION IS INFORMATION, AND COMMUNICATION OF INFORMATION.

CERTAINLY HERE THE PROBLEM IS NOT QUANTITY -- ALL OF US ARE BOMBARDED BY INFORMATION OF BEWILDERING DIVERSITY AND COMPLEXITY. THE PROBLEM IS JUST THAT VERY DIVERSITY. IT LACKS FOCUS AND, THEREFORE, MEANING. BUT COMPUTER DATA BASES ORGANIZED IN BROAD DISCIPLINES AND AREAS OF KNOWLEDGE CAN AUGMENT COMPUTER-BASED EDUCATION SO ONE GETS NOT ONLY INFORMATION -- DATA -- BUT ALSO INSTRUCTION, CONTEXT AND PERSPECTIVE WHICH MAKES THE INFORMATION USEFUL.

THIS WEEK, IN MINNEAPOLIS, THE ENTREPRENEURSHIP INSTITUTE OF COLUMBUS, OHIO, IS HOLDING A TWO-DAY SEMINAR. THIS SEMINAR IS TO PROVIDE PRACTICAL INFORMATION AND ASSISTANCE IN THE START-UP AND GROWTH OF SMALL BUSINESSES. SUCCESSFUL EXECUTIVES LEAD THE PARTICIPANTS STEP-BY-STEP THROUGH THE PROCESS OF
SUCCESSFUL GROWTH OF SMALL BUSINESSES. CONTROL DATA IS THE PRINCIPAL SPONSOR OF THE E.I. ULTIMATELY THIS KIND OF TRAINING -- INCLUDING INTERACTION WITH "EXPERTS" -- WILL BE AVAILABLE VIA COMPUTER-BASED EDUCATION.

THERE IS FOR ALL BUSINESSES THE MATTER OF TECHNICAL AND ADMINISTRATIVE TRAINING. EXPENDITURES FOR TRAINING IN U.S. INDUSTRY ARE ESTIMATED AT $100 BILLION ANNUALLY. AND, OF COURSE, MOST OF THIS IS SPENT BY LARGE COMPANIES. ACCESS TO COST EFFECTIVE TRAINING BY SMALL BUSINESSES IS ANOTHER OPPORTUNITY. AND, FOR THAT MATTER, MORE COST EFFECTIVE TRAINING FOR LARGE AS WELL AS SMALL COMPANIES IS AMONG THE LARGEST INFORMATION SERVICES OPPORTUNITIES OF THE NEXT DECADE.

FINALLY, SMALL BUSINESS LACKS THE RESOURCES TO DEAL WITH ADMINISTRATIVE BURDENS: PERSONNEL POLICIES, REPORTING REQUIREMENTS, INFORMATION AND FINANCIAL SYSTEMS AND SO ON. ALL SUCH SYSTEMS ARE INFORMATION BASED AND, THEREFORE, REPRESENT OPPORTUNITIES.

TAKING A PACKAGED APPROACH TO THE TOTAL SMALL BUSINESS PROBLEM, CONTROL DATA IS LAUNCHING A NEW SERVICE CONCEPT -- THE BUSINESS AND TECHNOLOGY RESOURCE CENTER. THESE CENTERS WILL OFFER NOT ONLY PHYSICAL FACILITIES FOR SMALL BUSINESSES BUT ADMINISTRATIVE SERVICES, FINANCIAL SERVICES, COMPUTER-BASED EDUCATION, LABORATORY SERVICES, TECHNOLOGY TRANSFER, CONSULTING AND DATA PROCESSING SERVICES. BOTH URBAN AND RURAL --
THAT IS -- INDUSTRIAL AND AGRICULTURAL VARIATIONS OF THIS BASIC CONCEPT ARE POSSIBLE.

I CAN ASSURE YOU THAT THE CHALLENGES AND UNSOLVED PROBLEMS OF RESOURCE CENTER CONCEPT ARE MANY. BUT AS A BUSINESS OPPORTUNITY NOTHING COULD BE MORE EXCITING.

WHAT I HOPE HAS STRUCK YOU IN THIS QUICK VIEW OF THE FUTURE AND ITS STRATEGIC PERSPECTIVE IS THAT YOU IN THIS ROOM ARE DEEPLY INVOLVED IN ALL OF IT. YOUR INDIVIDUAL AND COLLECTIVE ABILITIES -- YOUR DEDICATION AND CREATIVITY -- ARE VITAL TO CONTROL DATA'S FUTURE.
WE ARE PLOWING NEW GROUND AND THE ABILITY TO REASON, TO THINK
BECOMES FAR MORE IMPORTANT THAN ANY AMOUNT OF STORED INFORMATION.
IN THAT REGARD, TRAINING IN THE LEGAL PROFESSION IS A GREAT
ADVANTAGE. I REMEMBER READING A PASSAGE ONCE BY DEAN ACHESON
THAT WAS ELOQUENTLY WRITTEN AS ONLY HE COULD: "AND IT IS THE
INTRODUCTION (TO LOGIC) WHICH MAKES THE FIRST YEAR SO STIMULATING
TO MOST LAW STUDENTS - TO DISCOVER THAT THEIR MINDS ARE NOT
JUST SPONGES TO SOAK UP INFORMATION ... THEY FIND MINDS ARE
CUTTING TOOLS TO BE USED ON TOUGH MATERIALS TO SHAPE FASCINATING
CONCEPTION."

BELIEVE ME - THE MATERIALS OUT OF WHICH WE SHAPE OUR FUTURE
IN CONTROL DATA ARE TOUGH!

ON THE OTHER HAND I ALSO RECALL A REMARK ATTRIBUTED TO EDMUND
BURKE THAT: "LAW SHARPENS A MAN'S MIND BY NARROWING IT."
WHICH IS CERTAINLY CLEVER AND SOMETIMES PROBABLY EVEN TRUE.....
BUT NOT IN THIS ROOM.....RIGHT?!

NO COMPANY HAS BENEFITED MORE FROM IMPRESSIVE LEGAL TALENT
THAN CONTROL DATA. AND WE HAVE NOT ONLY THE MONUMENT OF THE
IBM CASE BUT THE PAVING STONES OF CREATIVE AND FORWARD
THINKING VENTURES, TO PROVE IT.

BUT THE CHALLENGE OF THE FUTURE TO APPLY LEVERAGE TO OUR TASKS
APPLIES NOT ONLY TO ENGINEERING, SALES AND ADMINISTRATION --
IT APPLIES TO YOU AS WELL. THE JOB OF SHAPING THOSE LEVERS
IS YOURS, BUT I DO HAVE A THOUGHT OR TWO THAT MIGHT MAKE LIFE
A BIT EASIER AS YOU LABOR.

THE FIRST THOUGHT MIGHT BE CALLED IN BUMPERSTICKER-ISE --
"A LITTLE SELLING GOES A LONG WAY."

(FROM LAWYERS IN THE REPUBLIC)

"...WE HAD FINISHED A DISCUSSION IN WHICH I HAD ANALYZED A
PROPOSAL PUT FORWARD BY ANOTHER TO ITS CONSIDERABLE DETRIMENT."

"YOU HAVE JUST MADE A GREAT MISTAKE," THE PHILOSOPHER SAID,
"AND POSSIBLY AN ENEMY. YOU HAVE REASONED WITH A MAN WHO
IS NOT TRAINED TO REASON, AND HAVE MADE HIM LOOK FOOLISH AND
FEEL FRUSTRATED. VERY FEW PEOPLE UNDERSTAND LOGIC OR RELEVANCE,
OR ARE GOVERNED IN THEIR THINKING BY EITHER. YOU ARE TRAINED
IN LAW; I, IN PHILOSOPHY. WE ARE IN A SMALL MINORITY. MOST
PEOPLE ASSOCIATED IDEAS AND HOLD THEM TOGETHER BY THE STRENGTH
OF THEIR WISH TO DO SO. OUR COLLEAGUE KNOWS THAT THE SITUATION
IN WHICH WE FIND OURSELVES -- LET'S CALL IT POINT A -- IS UNDESIR-
ABLE AND POSSIBLY DANGEROUS. HE LOOKS AROUND AND SEES A VISION
OF POINT B:

.....WHICH SEEMS TO LIE BEFORE US LIKE A LAND OF DREAMS,
SO VARIOUS, SO BEAUTIFUL, SO NEW.
BUT YOU WITH COLD ANALYSIS AND RELENTLESS LOGIC PROVE THAT THERE IS NO ROAD FROM A TO B, AND, THAT IF THERE WERE, B IS ONLY A MIRAGE WHICH

HATH REALLY NEITHER JOY NOR LOVE, NOR LIGHT NOR CERTITUDE, NOR PEACE, NOR HELP FOR PAIN.

YOU LEAVE HIM ROBBED OF HOPE AND HAVE STIRRED HIS RESENTMENT AT YOU AS THE ROBBER. YOU CANNOT ARGUE HIM INTO ACCEPTING A SOUNDER AND MORE PRACTICABLE ALTERNATIVE, JUST AS -- TO USE JUSTICE HOLMES'S METAPHOR -- 'YOU CANNOT ARGUE A MAN INTO LIKING A GLASS OF BEER.' YOU MUST ASSOCIATE YOUR ALTERNATIVE WITH HIS DESIRES. YOUR SUGGESTION, LET'S CALL IT POINT C, MUST BE PICTURED WITH EVEN MORE CHARMS THAN POINT B. IN POINT C THE SUN IS BRIGHTER, THE GIRLS ARE PRETTIER, THE FOUNTAINS RUN WITH CHAMPAGNE, AND EVEN THE RUSSIANS HAVE GOOD MANNERS AND ARE TRACTABLE."

THE SECOND THOUGHT -- AND AGAIN RESORTING TO THE BUMPERSTICKER -- "CYNICS HAVE LESS FUN." NO PROFESSION IS SUBJECTED TO MORE CONTINUOUS OBSERVATION OF HUMAN FOLLY. THE WONDER IS NOT THAT SOME LAWYERS ARE CYNICS BUT THAT ALL OF THEM ARE NOT. A RATHER DABBING STUDENT OF WORLD WAR II HISTORY I HAVE BEEN STUCK BY THE STORIES OF MEN LIKE DEAN ACHESON, GEORGE MARSHALL, HENRY M. STIMSON AND OTHERS. STIMSON WAS ALSO A LAWYER AND HE WROTE, IN OLD AGE, THE FOLLOWING ADVICE:
"YOUNG PEOPLE," HE SAID, "SHOULD HAVE HOPE, AND VIRTUE, AND LET THEM BELIEVE IN MANKIND AND ITS FUTURE, FOR THERE IS GOOD AS WELL AS EVIL, AND THE MAN WHO TRIES TO WORK FOR THE GOOD, BELIEVING IN ITS EVENTUAL VICTORY, WHILE HE MAY SUFFER SETBACK AND EVEN DISASTER, WILL NEVER KNOW DEFEAT. THE ONLY DEADLY SIN I KNOW IS CYNICISM.

PROBABLY THAT IS ENOUGH RUMINATION FOR ONE EVENING. CONTROL DATA HAS AN EXCITING FUTURE IF WE WILL BUT MAKE IT HAPPEN. EACH OF YOU HAS THE TREMENDOUS OPPORTUNITY TO SHARE IN THAT EXCITEMENT AND HELP MAKE IT HAPPEN. AND I LOOK FORWARD TO SHARING IT WITH YOU. THANK YOU!