DEVELOPING ORGANIZATION POLICIES AND STRUCTURE TO FACILITATE PROFITABLE RELATIONSHIPS WITH ENTREPRENEURS

INTRODUCTION

THANK YOU ROD (BOYES). IT'S BOTH A PLEASURE AND A PRIVILEGE TO BE HERE TODAY. IT IS ALSO AN EXERCISE IN RISK-TAKING TO VENTURE ANY SPEECH EARLY IN THE MORNING. ON THE OTHER HAND IT'S GOOD TO SEE THAT I DON'T HAVE THE SITUATION THAT THE PIANIST AND COMEDIAN VICTOR BORGE FOUND WHEN HE CAME TO FLINT SEVERAL YEARS AGO AND SAW THAT THE CONCERT HALL HE WAS TO PERFORM IN WAS HALF EMPTY. HE LOOKED OUT AT THE SLIM AUDIENCE AND SAID, "FLINT MUST BE AN EXTREMELY WEALTHY TOWN; I SEE THAT EACH OF YOU BOUGHT TWO OR THREE SEATS." SO ANYWAY THANK YOU ALL FOR COMING.

AT, IN ANY EVENT, TAKING RISKS IS REALLY WHAT THIS SEMINAR IS ALL ABOUT. RISK-TAKING, WHICH IS A PREREQUISITE FOR CREATING A VENTURE MENTALITY IN ANY ORGANIZATION, LIES AT THE HEART OF THE MEANING OF THE WORD "ENTREPRENEUR".
I once looked up the origin of the word "entrepreneur". It is French, of course, and was first used in the early sixteenth century to describe leaders of military expeditions -- an occupation obviously fraught with risk. The word comes from a French root meaning "to undertake", and was ultimately applied to enterprises and adventures of all sorts. (Contrary to what some unsuccessful entrepreneurs might think, "entrepreneur" has nothing in common with the word "undertaker".) Eventually, the word was linked directly to the world of business and commerce when economists defined an entrepreneur as "one who organizes, manages, and assumes the risks of a business or enterprise," which is its generally accepted definition today.

Entreprenuership

The subject of entrepreneurship has always been close to Control Data's heart. As many of you know, Control Data started as a small risk-taking enterprise just 28 years ago and is a prototype of the high technology entrepreneurial gamble that paid off. Therefore, I'd like to portray some of the entrepreneurial flavor of Control Data's history, give you a synopsis of our continuing involvement in entrepreneurship, and finally, share some thoughts about entrepreneurial policies and structure and in particular what they mean to the future challenges and opportunities facing every large business executive today.
FIRST, HOWEVER, LET ME TAKE A MOMENT TO DEFINE MY TERMS AND TO
MAKE CLEAR THE RELATION AS I SEE IT THAT EXISTS BETWEEN
INNOVATION AND ENTREPRENEURSHIP. PETER DRUCKER ONCE SAID,
"BUSINESS HAS ONLY TWO BASIC FUNCTIONS: MARKETING AND
INNOVATION." IN THE BROADEST TERMS, THEN, IT IS INNOVATION
NEW PROCESS OR PROCEDURE THAT OFFERS, ON ONE HAND, AN INCREASE
IN REAL PRODUCTIVITY AND REQUIRES, ON THE OTHER, A SUBSTANTIAL
MEASURE OF RISK. I SAY 'REAL PRODUCTIVITY' BECAUSE THERE IS NO
SHORTAGE OF 'PAPER ENTREPRENEURS' — PEOPLE CAPABLE OF
TREMENDOUS CREATIVITY IN REARRANGING EXISTING ASSETS BUT HAVE
NO DIRECT CONTRIBUTION TO AGGREGATE GAIN AND ECONOMIC
PRODUCTIVITY.

ENTREPRENEURIAL ACTIVITY TYPICALLY CARRIES WITH IT THE
POTENTIAL SUCCESS OR FAILURE OF AN ENTIRE VENTURE. IF IT
SUCCEEDS, THE GAINS ARE MANY — AND NOT THE LEAST OF THOSE IS
JOB CREATION.

TO CITE PETER DRUCKER ONCE MORE, IN A BOOK PUBLISHED THIS YEAR,
INNOVATION AND ENTREPRENEURSHIP, HE WRITES THAT "THE
ENTREPRENEUR IS OFTEN DEFINED AS ONE WHO STARTS HIS OWN, NEW
AND SMALL BUSINESS. BUT NOT EVERY NEW SMALL BUSINESS IS
ENTREPRENEURIAL OR REPRESENTS ENTREPRENEURSHIP. THE HUSBAND
AND WIFE WHO OPEN ANOTHER DELICATESSEN STORE OR ANOTHER MEXICAN
RESTAURANT IN THE AMERICAN SUBURB SURELY TAKE A RISK. BUT ARE THEY ENTREPRENEURS? WHAT THEY DO IS WHAT HAS BEEN DONE MANY TIMES BEFORE. MCDONALD'S, HOWEVER, WAS ENTREPRENEURSHIP. IT DID NOT INVENT ANYTHING, TO BE SURE. BUT BY APPLYING MANAGEMENT AND MARKETING TECHNIQUES, MCDONALD'S BOTH DRASTICALLY UPGRATED THE YIELD FROM RESOURCES, AND CREATED A NEW MARKET AND A NEW CUSTOMER. THIS IS ENTREPRENEURSHIP."

DRUCKER ALSO WENT ON TO SAY, "CLASSICAL ECONOMICS OPTIMIZES WHAT ALREADY EXISTS, AS DOES MAINSTREAM ECONOMIC THEORY TO THIS DAY, INCLUDING THE SUPPLY-SIDERS. IT FOCUSES ON GETTING THE MOST OUT OF EXISTING RESOURCES AND AIMS AT ESTABLISHING EQUILIBRIUM. BUT ENTREPRENEURS SEE CHANGE AS THE NORM AND AS HEALTHY. THE ENTREPRENEUR ALWAYS SEARCHES FOR CHANGE, RESPONDS TO IT, AND EXPLOITS IT AS AN OPPORTUNITY."

HISTORY OF INNOVATION AND ENTREPRENEURSHIP

SOME HISTORICAL PERSPECTIVE ON INNOVATION AND ENTREPRENEURSHIP IS HELPFUL IN UNDERSTANDING WHERE WE ARE AND IN SHAPING CONCEPTS AND POLICIES TO PROVIDE MORE OF THOSE FACTORS IN OUR ECONOMY. ACTUALLY, THE PROCESS OF INNOVATION BY ENTREPRENEURS WAS QUITE HAPHAZARD UNTIL LITTLE MORE THAN A HUNDRED YEARS AGO. THEN THE PROFESSIONAL INVENTOR APPEARED IN THE PERSON OF THE SCIENTIST HIRED BY AN INDUSTRIAL CORPORATION TO IMPROVE OLD PROCESSES AND MACHINES, AND TO INVENT NEW ONES. UNTIL THEN, INVENTORS ALL BUT STARVED BEFORE THEY SUCCEEDED -- IF THEY SUCCEEDED AT ALL -- IN ACTUALLY INNOVATING. THAT IS IN ACTUALLY ESTABLISHING A BUSINESS TO PRODUCE THEIR PRODUCT OR SERVICE AND THUS SATISFY A MARKET NEED.

A TURNING POINT OCCURRED IN 1878 WHEN THOMAS EDISON CONVINCED A HANDFUL OF INFLUENTIAL INDUSTRIALISTS--J. P. MORGAN AND THE VANDERBILTS TO NAME A FEW--THAT A WIRE GLOWING INSIDE A GLASS BULB WAS THE FUTURE OF ARTIFICIAL LIGHTING. THE $300,000 THEY CONTRIBUTED IN CAPITALIZATION SPAWNED THE EDISON ELECTRIC LIGHT COMPANY--AND A SUCCESSFUL MARRIAGE OF INVENTIVE GENIUS AND INDUSTRIAL SPONSORSHIP BEGAN.
THIS WASN'T THE FIRST SUCH ARRANGEMENT IN HISTORY, BUT IT WAS ONE OF THE MOST IMPORTANT AND WORLD-CHANGING. BY THE YEAR 1900, GENERATING PLANTS HAD BEEN BUILT THAT POWERED ELECTRICAL RAILWAYS AND STREET LAMPS, AND ALL THE INITIAL ELECTRICAL WONDERS THAT WE LOOK BACK UPON TODAY WITH NOSTALGIA.

THEN, AS NOW, VISIONARY BUSINESSMEN SAW THIS SMALL INVENTION'S BIG POTENTIAL AND RISKED THE ENERGY AND MONEY TO FOUND A NEW INDUSTRY. AND WE WHO MANAGE SOME OF TODAY'S LARGEST CORPORATIONS STAND IN THE SAME POSITION: WE CAN RECOGNIZE AND SUPPORT LATTER DAY "EDISONS," TOO. IT'S OUR CHOICE. IT'S OUR RESPONSIBILITY. IT'S OUR VERY FUTURE.

OF COURSE MANY ARE DOING SO, AS THE LAST 100 YEARS REVEAL. GE, GENERAL MOTORS, 3M, AT&T AND MANY MORE HAVE LED THE FIELD AS THE LAISSEZ-FAIRE POLICY OF JUST LETTING INVENTION, MUCH LESS INNOVATION, HAPPEN GAVE WAY TO ORGANIZED RESEARCH LABS STAFFED BY HIRED SCIENTIFIC SPECIALISTS. THE RESULT HAS BEEN MAJOR DEVELOPMENTS IN METALS, IN TRANSPORTATION AND A HUNDRED OTHER INDUSTRIES THAT CREATED NEW JOBS AND NEW SOURCES OF REVENUE AND PROFITS—AND A NEW BREED OF CONSUMER. THE NUMBER OF PATENTS FILED IN THE U.S. PATENT OFFICE AFTER 1900 SNOWBALED. BY THE MID-1950s, TOTAL EXPENDITURES FOR RESEARCH IN THE UNITED STATES ROSE TO $4 BILLION, FROM ALMOST ZERO A CENTURY BEFORE.
AND THE ACCELERATION IN RESEARCH WAS ACCOMPANIED BY AN ACCELERATION IN THE ACCEPTANCE OF EMERGING BREAKTHROUGHS: THE STEAM ENGINE TOOK ALMOST A CENTURY TO ESTABLISH ITSELF; ELECTRICAL ENERGY TOOK LESS THAN 50 YEARS; THE VACUUM TUBE LESS THAN 15 YEARS; AND, MORE RECENTLY, THE MICRO-COMPUTER VIRTUALLY EXPLODED INTO EXISTENCE.

ENTREPRENEURSHIP AT CONTROL DATA

WHICH BRINGS US UP TO THE PRESENT. CONTROL DATA IS PART OF THIS GREAT CENTURY-LONG TRADITION, BECAUSE ITS PAST, ITS PRESENT, AND ITS FUTURE ARE FIRMLY FIXED ON THE PRINCIPLE OF INNOVATION. AS WE HAVE SEEN, INNOVATION AND ENTREPRENEURSHIP, DISCOVERY AND INVENTION, AND RISK TAKING, WHILE NOT SYNONYMOUS, ARE CLOSELY RELATED AND HAVE IMPORTANT OVERLAPS.

ENTREPRENEURSHIP ARISES AT LEAST AS MUCH FROM A DEDICATED BELIEF IN AN IDEA AS FROM A GOAL OF PROFITS. THAT IS, WHILE PROFITS ARE CERTAINLY EXPECTED TO FOLLOW THEY ARE TO A LARGE DEGREE VIEWED BY THE INNOVATOR, THE ENTREPRENEUR, AS THE INEVITABLE RESULT OF THE VALIDITY -- THE INTRINSIC VALUE TO THE ECONOMY -- OF HIS/HER IDEA.

BACK IN THE 1950's, WILLIAM NORRIS WAS AT REMINGTON-RAND. ALONG WITH A SMALL GROUP OF ASSOCIATES, HE WAS DOING SOME OF THE MOST ADVANCED COMPUTER RESEARCH IN THE WORLD. HE SAW THE
FUTURE OF COMPUTING, WAS FRUSTRATED BY THE FACT THAT TOP MANAGEMENT OF REMINGTON-RAND DID NOT SHARE THAT VISION, AND, IN A PATTERN THAT IS COMMON TO ENTREPRENEURS, WALKED AWAY AND STARTED HIS OWN COMPANY. THAT WAS IN 1957. THE COMPANY'S STATED PURPOSE WAS TO DESIGN AND BUILD LARGE SCALE COMPUTERS FOR SCIENTISTS AND ENGINEERS. IT'S NOW AN AMUSING AND IRONIC FOOTNOTE TO RECALL THAT DURING THE 1950s VARIOUS "EXPERTS" HAD STUDIED THE EMERGING TECHNOLOGY AND DECIDED THAT SIX BIG COMPUTERS COULD HANDLE THE WHOLE WORLD'S COMPUTING NEEDS FOR ALL TIME. IN TERMS OF TECHNOLOGY AND RISK, THEN, THE BIRTH OF CONTROL DATA WAS A CLASSIC ENTREPRENEURIAL VENTURE.

UNDER NORRIS, CONTROL DATA SUCCEEDED THROUGH A CONTINUING PROCESS OF INNOVATION AND RISK TAKING INTO BECOMING A FORTUNE 100 COMPANY. ALONG THE WAY THE COMPANY ALSO ADAPTED ITS CENTRAL VISION OF THE ENORMOUS ECONOMIC NEED FOR COMPUTERS TO THE PRAGMATIC RECOGNITION OF SOME FACTS OF LIFE. ONE WAS THE CRITICAL IMPORTANCE OF ECONOMIES OF SCALE -- NOT JUST TO MANUFACTURING BUT EQUALLY OR EVEN MORE IMPORTANT TO RESEARCH AND DEVELOPMENT. ANOTHER FACT OF LIFE WAS THE DOMINANCE OF IBM IN THE COMPUTER HARDWARE PART OF THE INDUSTRY. PRAGMATIC ADAPTION TO SUCH REALITIES GAVE RISE TO THE BUSINESS OF SUPPLYING OTHER COMPUTER MANUFACTURERS WITH MAGNETIC DISK STORAGE DEVICES AND OTHER COMPUTER PERIPHERALS. THAT WAS THE BEGINNING OF THE ORIGINAL EQUIPMENT MANUFACTURER, OR OEM PERIPHERAL BUSINESS. IT LIKewise MOVED THE COMPANY TOWARD A MORE "VALUE-ADDED" APPROACH TO THE COMPUTER INDUSTRY -- SUPPLYING NOT JUST COMPUTER TOOLS BUT NEW VALUE ADDED INFORMATION AND KNOWLEDGE SERVICES WHICH USE COMPUTERS AS A NECESSARY AND DISTINCTIVE PART OF THE SERVICE.

PRAGMATIC RECOGNITION OF THE NEED FOR ECONOMIES OF SCALE LIKEWISE POINTED UP THE IMPORTANCE OF TECHNOLOGICAL COOPERATION AND THE POTENTIAL OF PUBLIC PRIVATE PARTNERSHIPS.
WE NOW HAVE SALES IN EXCESS OF $5 BILLION. BUT WE ARE YOUNG ENOUGH AND LUCKY ENOUGH TO STILL HAVE WITH US MANY PEOPLE FROM THE EARLY DAYS. AS A RESULT THE ENTREPRENEURIAL SPIRIT HAS ALWAYS BEEN HIGHLY PRIZED AND PROMOTED WITHIN THE COMPANY.

Indeed the most frequently voiced criticism of the company, including its current difficulties, is that risky and unusual projects and continual innovation have unnecessarily siphoned off valuable resources. The novel nature of some of Co.'s innovations is indeed startling to some and confusing to many. But they are in fact far less novel than the original undertaking itself. Moreover there is no question that our future success rests squarely on continued innovation and change. And true innovation is the distillation of entrepreneurial activity. So we are committed to it. Like any true entrepreneurial undertaking, Control Data has spawned other businesses. Entrepreneurial environments attract exactly that -- new ideas and visions -- sometimes to be pursued elsewhere. Rather than the haphazard, ad hoc, and frequently negative mode in which this normally takes place the company early on adopted an informal policy of assisting people who wanted to go out on their own. Probably the best example is Seymour Cray who designed many of Control Data's early computers.
EXPERIENCE LED US TO DEVELOP A PROCESS WHICH WOULD MAKE THE MOST OF IT FOR BOTH CONTROL DATA AND THE EMPLOYEE. THE CENTRAL MECHANISM IS THE EMPLOYEE ENTREPRENEURIAL ASSISTANCE OFFICE, WHICH I WILL DISCUSS.

EVOLUTION OF CORPORATE STRATEGY

BUT FIRST LET ME TALK ABOUT THE EVOLUTION OF THE COMPANY'S BUSINESS STRATEGY. I MENTIONED ALREADY THAT PRAGMATIC ADAPTATION TO MARKET REALITIES LED TO EXPANSION OF THE BUSINESS TO RELATED FIELDS SUCH AS OEM, PERIPHERALS AND A VARIETY OF SERVICES. AS THE NEED FOR, AND OPPORTUNITIES IN, KNOWLEDGE RELATED SERVICES UNFOLDED IT BECAME CLEAR THAT THE BENEFITS OF PRIVATE ENTERPRISE WOULD BE APPLIED TO AREAS OF HUMAN NEED WHICH PREVIOUSLY HAD BEEN LEFT UP TO GOVERNMENT. SOME FIFTEEN YEARS AGO, THEN, THE COMPANY ENLARGED IT'S CONCEPT OF COMPUTER BASED SERVICES FROM JUST THOSE ADDRESSING THE INFORMATION NEEDS OF DESIGN ENGINEERS AND BUSINESS PLANNERS IN LARGE BUSINESSES TO THE MANY KNOWLEDGE NEEDS OF SMALL BUSINESS AND THE ECONOMICALLY DISADVANTAGED. THIS HAS BEEN, INDEED AN ENTREPRENEURIAL UNDERTAKING -- IN THE WORDS OF PROFESSOR DRUCKER -- MARSHALING RESOURCES TO SATISFY A THEREFORE UNMET NEED OF THE ECONOMY.
CLEARLY, THERE IS NO SHORTAGE OF SUCH NEEDS: FROM IMPROVED EDUCATION AND HEALTH CARE TO A STRONGER FARM ECONOMY, AND ACCELERATED JOB CREATION BY IMPROVING THE SUCCESS RATE OF SMALL BUSINESS. CONTROL DATA HAS EMERGING BUSINESSES IN SEVERAL OF THESE AREAS. ONE SUCH IS SERVICES TO SMALL BUSINESS

LARGE/SMALL BUSINESS COOPERATION

LET'S CONSIDER FOR JUST A MOMENT THE MATTER OF SMALL BUSINESS — OR, MORE BROADLY STATED OF JOB CREATION. SMALL BUSINESSES, PARTICULARLY IN THE TECHNOLOGY FIELDS, ARE AT A TREMENDOUS COMPETITIVE DISADVANTAGE. ACQUIRING CRITICAL MANAGEMENT AND MARKETING EXPERTISE, NOT TO MENTION TECHNOLOGY, EQUIPMENT, FACILITIES, AND A HUNDRED OTHER THINGS A BIG COMPANY TAKES FOR GRANTED IS OFTEN IMPOSSIBLE FOR SUCH COMPANIES. AS A CONSEQUENCE SOME 8 OUT OF 10 START-UPS FAIL.

SEVERAL YEARS AGO WE CONCLUDED THAT WE COULD REALIZE ADDITIONAL INCOME FROM OUR OWN PAST EXPERIENCE AS WELL AS COMPUTER TECHNOLOGY BY MAKING AVAILABLE TO SMALLER COMPANIES PROFESSIONAL AND MANAGEMENT EXPERTISE AND SUPPORT SERVICES AS WELL AS COMPUTER-BASED TRAINING AND PROBLEM SOLVING SERVICES. THIS FAVE RISE TO THE BUSINESS AND TECHNOLOGY CENTERS. THESE ARE PHYSICAL PLANTS THAT PROVIDE VARIOUS COMBINATIONS OF CONSULTING SERVICES, MANUFACTURING, AND OFFICE SPACE, AS WELL
AS OTHER SERVICES THAT FACILITATE THE START-UP AND GROWTH OF SMALL BUSINESSES. IN VARIOUS FORMS SUCH FACILITIES HAVE NOW COME TO BE CALLED INCUBATORS. ECONOMIES OF SCALE MAKE IT POSSIBLE TO PROVIDE BUSINESS AND TECHNOLOGY CENTER TENANTS AND SMALL COMPANIES NEARBY WITH NEEDED FACILITIES AND SERVICES OF HIGHER QUALITY AT CONSIDERABLY LOWER COST THAN THEY COULD GET ELSEWHERE.

SOME TWENTY BUSINESS AND TECHNOLOGY CENTERS ARE NOW IN OPERATION, AND MORE ARE BEING ESTABLISHED. THE CONCEPT IS ALREADY YIELDING SIGNIFICANT RESULTS. FOR EXAMPLE, WHILE, AS I SAID, THE NATIONAL FAILURE RATE FOR SMALL BUSINESSES IS ROUGHLY 80 PERCENT DURING THE FIRST FIVE YEARS OF OPERATION. AT THE FIRST BUSINESS AND TECHNOLOGY CENTER IN ST. PAUL, MINNESOTA, ESTABLISHED IN 1979, THIS FAILURE RATE HAS BEEN CUT TO 14 PERCENT. THIS TREND IS BEING EXPERIENCED IN MORE RECENTLY ESTABLISHED BTC'S AS WELL.

SMALL BUSINESS ASSISTANCE

THE TOTAL PROBLEM OF PROMULGATING A SUCCESSFUL ENTREPRENEURIAL, SMALL BUSINESS ECONOMY IS CLEARLY LARGER THAN ANYTHING THAT CAN BE ADDRESSED BY ANY ONE COMPANY OR EVEN ALL LARGE COMPANIES. SO CONTROL DATA IS ALSO PROMOTING PUBLIC AND PRIVATE COOPERATION IN THIS MATTER ACROSS THE BROAD FRONT. ONE SUCH
EFFORT IS THE MINNESOTA COOPERATION OFFICE (MCO). THE MCO'S APPROACH IS SIMPLE. AN ENTREPRENEUR HAS AN IDEA FOR A NEW PRODUCT OR SERVICE AND WANTS TO START A COMPANY. HE OR SHE COMES TO THE MCO, AND MCO HELPS DEVELOP A BUSINESS PLAN AND OBTAIN FINANCING. THE PERMANENT STAFF OF THE MCO IS SMALL, BUT A VOLUNTEER ADVISORY PANEL OF ENGINEERS, SCIENTISTS, AND EXECUTIVES EVALUATE AND ASSIST IN PREPARATION OF THE BUSINESS PLANS. BECAUSE THE PLANS ARE EXPERTLY CONCEIVED, THE CHANCES OF RECEIVING FINANCING AND OF ACHIEVING ECONOMIC VIABILITY ARE INCREASED ACCORDINGLY.

IN ADDITION, CONTROL DATA PARTICIPATES IN SOMETHING CALLED START-A-COMPANY (OR STAR-CO). THE FIRST STAR-CO EFFORTS WERE LAUNCHED IN MINNESOTA ABOUT FIVE YEARS AGO, AND THUS FAR, 17 NEW COMPANIES HAVE BEEN STARTED BY MINNESOTA BUSINESS WITH A TOTAL OF 300 EMPLOYEES.

AN INTERNAL CONTROL DATA BUSINESS DEALING WITH SMALL BUSINESS IS CONTROL DATA BUSINESS ADVISORS, WHICH RECOGNIZES THAT SMALLER COMPANIES HAVE A NEED FOR EXPERIENCED PROFESSIONAL ASSISTANCE. MAJOR CONSULTING FIRMS TYPICALLY HAVE LITTLE INTEREST IN THESE COMPANIES, AND THE RESOURCES SMALL COMPANIES DO HAVE ACCESS TO — LOCAL ACCOUNTING FIRMS, FOR EXAMPLE — ARE BY NATURE RATHER LIMITED. AT THE SAME TIME, THE EXPERTISE THEY REQUIRE EXISTS WITHIN ALMOST ANY LARGE COMPANY. AT THE SAME
TIME MANY EMPLOYEES IN LARGE COMPANIES BECOME STALE AND DEMOTIVATED WHILE PERFORMING REPETITIOUS TASKS DAY AFTER DAY. BY ADAPTING A COMPANY POLICY THAT ALLOWS EMPLOYEES UP TO TWO WEEKS A YEAR TO DO CONSULTING FOR BUSINESS ADVISORS BOTH THE PROBLEM AND THE NEED OF SMALL COMPANIES FOR A BROAD ARRAY OF TECHNICAL AND MANAGERIAL EXPERTISE HAVE BEEN ADDRESSED. TODAY BUSINESS ADVISORS DRAWS ON A "TALENT POOL" OF SEVERAL THOUSAND -- ABOUT HALF OF WHOM ARE CONTROL DATA EMPLOYEES AND THE REST PEOPLE EXTERNAL TO CONTROL DATA.

ALONG THE WAY WE DISCOVERED THE OPPORTUNITY TO CUT CORPORATE OVERHEAD AND STAFF EXPENSE.

BUSINESS ADVISORS WAS ALSO GIVEN THE ABILITY TO CANNIBALIZE CONTROL DATA'S STAFF OPERATIONS FOR ANYTHING IT FELT COULD BE SOLD EXTERNALLY. SUCH THINGS AS OCCUPATIONAL ANALYSIS AND EMPLOYEE ATTITUDE SURVEYS REQUIRED ONLY SOME VERY SIMPLE REPACKAGING TO TURN THEM INTO MARKETABLE PRODUCTS. WHAT THIS ADDRESSES FROM A PURELY INTERNAL PERSPECTIVE IS THE MATTER OF PRODUCTIVITY AND IT IS ONE REASON WHY TODAY CONTROL DATA'S REVENUE PER EMPLOYEE HAS GROWN TO OVER $100,000.

ANY LARGE COMPANY SUCH AS CONTROL DATA HAS A NUMBER OF TECHNOLOGIES THAT -- BY THE COMPANY'S STANDARDS -- ARE OUTDATED. BUT THEY USUALLY STILL HAVE A MARKET AND A USE.
BUSINESS ADVISORS IS IN A POSITION OF IDENTIFYING THESE AND SELLING THEM TO SMALLER FIRMS THROUGHOUT THE COUNTRY.

BUSINESS ADVISORS AND THE OTHER EFFORTS I'VE MENTIONED SERVE A NUMBER OF PURPOSES. THEY FURTHER CONTROL DATA'S BUSINESS STRATEGY BY ADDRESSING THE NEED FOR JOB CREATION THROUGH A HEALTHY SMALL BUSINESS SECTOR. THEY ALSO PROVIDE POTENTIALLY LUCRATIVE MARKETS FOR CONTROL DATA'S GOODS AND SERVICES. FINALLY, THEY OFFER A WAY FOR EMPLOYEES TO BECOME MORE FULFILLED AND MOTIVATED.

PROMOTING ENTREPRENEURSHIP AMONG EMPLOYEES

WE HAVE, THEN, A DEEP COMMITMENT TO PROMOTE INNOVATION AND ENTREPRENEURSHIP AT EVERY LEVEL, INSIDE AND OUT. LET ME RETURN TO THE SUBJECT THAT I RAISED EARLIER OF DEALING WITH THE PROBLEM THAT MOST LARGE COMPANIES FACE WHICH IS THE DESIRE FOR MANY EMPLOYEES TO TRY TO "DO THEIR OWN THING."

FIVE YEARS AGO WE STARTED WHAT WE CALL THE EMPLOYEE ENTREPRENEURIAL ASSISTANCE OFFICE. THIS IS A CONFIDENTIAL SERVICE. EMPLOYEES HAVE A PLACE TO TEST OUT THEIR IDEAS AND GET HELP EXPLORING THE POSSIBILITIES. IF THE IDEA IS OF INTEREST TO THE COMPANY THERE IS A SHORTCUT THROUGH NORMAL BUREAUCRACY OF A BIG COMPANY AND A NEW COMPANY OWNED AND
SPONSORED UNIT CAN BE SET UP IN THE NEW BUSINESS DEVELOPMENT GROUP. IF THE IDEA IS SOUND BUT OF NO STRATEGIC INTEREST THE ADVISORY OFFICE WILL HELP THE EMPLOYEE GET CRITIQUE AND ADVICE IN WRITING A BUSINESS PLAN. PERHAPS MOST IMPORTANT IF EMPLOYEES DON'T FULLY UNDERSTAND THE IMPLICATIONS OF GOING OFF ON THEIR OWN THEY CAN EXPLORE THIS WITHOUT LEARNING THE HARD WAY. ONLY ABOUT 10% OF THE PEOPLE WHO SEEK SUCH ADVICE ACTUALLY DECIDE TO LAUNCH A NEW ENTERPRISE. THE OTHER 90% RETURN TO THEIR JOBS MORE MOTIVATED, MORE ASSURED THAT THE COMPANY CARES ABOUT THEM. AND MORE INNOVATIVE IN THEIR JOBS. SINCE THE PROGRAM STARTED, MORE THAN 1100 EMPLOYEES HAVE SOUGHT ITS COUNSEL, SOME 130 NEW BUSINESSES HAVE BEEN STARTED — EVERYTHING FROM AN ANTIQUE SHOP TO A MAGNETIC DISK REFURBISHING SHOP. AS A MATTER OF PASSING INTEREST I SHOULD ALSO NOTE THAT THESE ENTERPRISES HAVE CREATED OVER 1,500 NEW JOBS AND THERE HAVE BEEN ONLY ONE OR TWO BUSINESS FAILURES. LET ME GO BACK TO THOSE IDEAS IN WHICH THE COMPANY DOES HAVE AN INTEREST. WHAT IS INVOLVED IS A FORM OF WHAT HAS BECOME KNOWN AS INTRAPRENEURSHIP.

INTRAPRENEURSHIP

UNLIKE THE ENTREPRENEUR WHO STARTS UP A VENTURE ON HIS OR HER OWN, THE INTRAPRENEUR DEVELOPS AN IDEA WITH THE FULL SUPPORT OF THE COMPANY. IN THIS INSTANCE THE CORPORATION FUNCTIONS MUCH
THE SAME FOR THE ENTREPRENEUR AS THE VENTURE CAPITALIST WOULD. BUT THE INTRAPRENEUR WORKS WITHIN THE CORPORATION TO THE MUTUAL BENEFIT OF BOTH.

FROM THE EMPLOYEES' POINT OF VIEW, THE ADVANTAGES OF INTRAPRENEURSHIP ARE OBVIOUS. THEY TAKE A LIMITED RISK REGARDING THEIR INDIVIDUAL ECONOMIC SITUATIONS. THEY CAN UTILIZE THE KNOW-HOW OF THE CORPORATION. THEY CAN USE MACHINERY AND TOOLS DURING SLACK TIMES FOR DESIGN AND TESTING. THEY HAVE ACCESS TO THE MARKETING EXPERTISE -- AND THEY ARE ENTITLED TO, AND EXPECTED TO, LOOK UPON THE ENVIRONMENT WITH A DIFFERENT PERSPECTIVE. THEY ARE ENDOwed WITH A SPECIAL MEANS TO DEVELOP NEW BUSINESS THAT THE CORPORATION MIGHT OTHERWISE HAVE OVERLOOKED OR STARTED TO DEVELOP MUCH LATER. ON THE OTHER HAND, THEY NEED TO APPRECIATE THEIR SPECIAL STATUS THROUGH SOME SORT OF GUARANTEE TO THE CORPORATION THAT BOTH INTERESTS WILL BE ENHANCED BY THE INTRAPRENEUR'S ACTIVITY.

THE CONCEPT SUGGESTS A VARIETY OF QUESTIONS AND PROBLEMS.

- HOW MANY EMPLOYEE INTRAPRENEURS CAN A COMPANY WORK WITH, AND HOW DOES IT CHOOSE THEM?

- WHAT ABOUT THE "GETTING RICH" POTENTIAL WHICH AS NOTED EARLIER, IS THE EXPECTED INEVITABLE REWARD OF ANY ENTREPRENEUR'S GREAT NEW IDEA?
O HOW DO YOU STRUCTURE THE BENEFITS TO THE INTRAPRENEUR, AND HOW MUCH SHOULD THE COMPANY INVEST IN A GIVEN PROJECT?

O WHAT SUPPORT WOULD A CORPORATION GIVE IN TERMS OF FLEXIBLE SCHEDULING, IN-KIND SERVICES, AND RELIEF FROM OTHER RESPONSIBILITIES?

O WHAT ABOUT THE LINE MANAGERS WHO HAVE WORKED LONG, HARD, AND LOYALLY FOR THE COMPANY OVER THE YEARS WHO NOW SEE A BUNCH OF PEOPLE GETTING SPECIAL CORPORATE SUPPORT? CLEARLY, MANY QUESTIONS NEED TO BE ANSWERED ABOUT INTRAPRENEURSHIP. BUT JUST AS CLEARLY, THE ANSWERS ARE WORTH PURSUING.

AND WHILE THERE ARE NO PAT ANSWERS TO THESE QUESTIONS. BUT THERE ARE A COUPLE BASIC CONCEPTS WHICH PROVIDE THE FRAMEWORK WITHIN WHICH ANY COMPANY CAN SHAPE ITS OWN INDIVIDUAL STRATEGIES AND POLICIES TO FOSTER INNOVATION AND INTRAPRENEURSHIP.

THE UNDERLYING ORGANIZATION CONCEPT FOR A CORPORATION TO SUPPORT SUCH AN APPROACH IS ONE OF A NETWORK. AT THE HEART OF THIS NETWORK ARE THE TRADITIONAL LARGE ORGANIZATION UNITS ESSENTIAL FOR ECONOMIES OF SCALE IN MANUFACTURING, MARKETING, ADVANCED RESEARCH AND SO ON. ARRAYED AROUND THIS CORE ARE TWO
LEVELS OF SMALL BUSINESS UNITS. ONE IS A WHOLLY OWNED BUSINESS WHICH, OTHER THAN THAT, FUNCTIONS AS WOULD ANY INDEPENDENT BUSINESS. THE SECOND TYPE IS A LEGALLY SEPARATED BUSINESS IN WHICH THE COMPANY HAS ONLY A MINORITY OWNERSHIP BUT WHICH STRATEGICALLY IS CLOSELY ALLIED. THIS LATTER TYPE OF BUSINESS -- SUCH AFFILIATED COMPANIES -- PLAYED IMPORTANT ROLES IN THE EARLY GROWTH OF SUCH COMPANIES AS SEARS AND JOHN DEERE AS WELL, OF COURSE, IN THE AUTOMOTIVE INDUSTRY.

THIS NETWORK CONCEPT OF THE CORPORATION EMBODIES A PRINCIPAL, HOWEVER, WHICH IS NOT ONLY ESSENTIAL TO FOSTERING THE INNOVATION WE SEEK, IT IS A GROWING PHENOMENON OF EVERYDAY EXISTENCE -- WHETHER INDIVIDUALS OR NATIONS -- AS WE NEAR THE 21ST CENTURY. THAT PHENOMENON I CALL "INTERDEPENDENT INDEPENDENCE." THIS IS NOT THE PLACE TO DEAL AT LENGTH WITH THE CAUSES OR RESULTS OF THIS PHENOMENON IN TODAY'S WORLD. SUFFICE TO ILLUSTRATE IT BY NOTING THAT, ALTHOUGH THERE ARE 170 INDEPENDENT NATIONS IN THE WORLD TODAY COMPARED TO 79 FIFTY YEARS AGO, THERE ARE NONE WHICH ARE TOTALLY SELF-SUFFICIENT IN THE ESSENTIAL ELEMENTS OF EXISTENCE -- ENERGY AND FOOD. IN SHORT INTERDEPENDENCE IS A FACT OF EXISTENCE; INDEPENDENCE IS ESSENTIAL TO CREATIVITY AND INNOVATION. A NETWORK OF STRATEGICALLY AFFILIATED COMPANIES IS A NATURAL MEANS OF ACHIEVING IT. EVEN MANY TRADITIONAL CORPORATE OVERHEAD OR STAFF FUNCTIONS CAN BE SET UP AS REVENUE PRODUCING SMALL BUSINESSES.
IN ANY LARGE CORPORATION THERE ARE LARGE EXPENSES IN PERSONNEL ADMINISTRATION, REAL ESTATE AND THE LIKE. A ROSTER OF CLOSELY ALIGNED INDEPENDENT CONTRACTORS BRINGS THE ADVANTAGES OF RESPONSIVENESS, COMPETITIVE PRICING, AND SO ON. IT'S JUST THAT WE HAVEN'T TRADITIONALLY THOUGHT ALONG THOSE LINES WITH REGARD TO SUCH STAFF FUNCTIONS.

THE FINAL CONCEPT AND THE DRIVING FORCE BEHIND ACHIEVING GENUINE INNOVATION, CREATIVITY AND ENTREPRENEURSHIP IS A TOTAL DEDICATION TO QUALITY AND PRODUCTIVITY. IT HAS BEEN WELL DOCUMENTED AND DEMONSTRATED THAT PRODUCTIVITY AND QUALITY COMES FROM TAPPING THE VAST RESERVOIR OF KNOWLEDGE THAT RESTS IN THOSE ACTUALLY PERFORMING DAY-TO-DAY WORK. WE ALL KNOW THAT AT THE HEART OF OUR OWN JOB SATISFACTION AND WILLINGNESS TO "GO THE EXTRA MILE" LIES THE FEELING THAT "WHAT I THINK AND DO MATTERS." A MANAGEMENT PROCESS BUILT AROUND THAT CORE BELIEF WILL TAP THIS RESERVOIR OF KNOWLEDGE THAT IS AVAILABLE IN EVERY ENTERPRISE. IT WILL RESULT IN POLICIES AND PROCESSES TO PROMOTE QUALITY AND CONTINUOUS GROWTH IN PRODUCTS.

IT IS THE KEY TO ENTREPRENEURSHIP AND INTRAPRENEURSHIP FOR ALL BUSINESSES -- LARGE AND SMALL.

THANK YOU.