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TO: Gordon Bell
    Larry Portner
    Si Lyle

CC: Steve Coleman
    Win Hindle
    Ron Cadieux

Date: 29 August 1980
From: Ken Olsen
Dept: Administration
MS: ML10-2/A50   Ext: 2301

SUBJ: Lecture at October WOODS Meeting

I would like you three to study current thinking on project management and matrix management (not Digital-style matrix management), and I'd like one of you to lecture us for a half hour or so at the October WOODS Meeting of the Operations Committee.

This WOODS Meeting is going to be two days of lectures, most of them prepared by people in-house, on current management thinking which bears on today's problems.

During World War II, and I'm sure all through the history of mankind, people learned to pick up teams of people to solve particular project problems. These people maintained a reporting relationship to their original groups and yet were part of the team and worked hard on the schedule and the goals of the team. This has been written up the last few years and analyzed, and also given the name matrix management. I'm sure people have done this in order to solve the problems which we now have in Engineering, and I think it would be good if you would lecture us on current thinking in this area.

I, of course, would like you at the same time to solve the problems of organization within Engineering. The way I would like to see us run this short-term project which I am trying to influence now would be along this line, and I'd like to see you extend it to all of Manufacturing. In project management one picks up people from the rest of the company to form a team which has all the skills and all the influence necessary to get a project done. Together they work on the schedule, commit themselves to the schedule, and work as a team to meet the schedule. In the case of our Engineering projects, there would be someone from hardware, software, packaging, power supply, field service, manufacturing, technical writing, and maybe--or maybe not--product management and marketing.

The team leader would manage the team in a good businesslike way. We would probably give him certain helps like a computer and programs so that he is always in charge of the project and has all the data he needs to run it. All the data he collects and all the red tape he does would be for his own use and almost a negligible amount would be generated to be prepared for other people. Ideally, all the financial data collected on the project would be for his use, and just a summary of that data would be passed on to the financial people, and no other financial data would need to be collected.

This project leader then would have his own meetings for schedule review on a regular basis. With his own team he would probably meet once a week, and he'd probably meet with the rest of the company once a month.

His meeting with the rest of the company would be quite different from what it is today. Today anybody can demand a command performance by an engineering leader at any time, and in any format, and in any amount of detail, and with any questions. With this way of doing things, the project leader would have his data prepared and mailed out in the form which he needed to run the project, and he would then invite those interested to come to a meeting at his convenience once a month where he would present the data verbally and listen to questions.

Today it appears that anybody can stop by and try to influence the engineering projects. And they pressure to have changes to specifications made informally. With this new system, anybody who comes around and suggests a change will get the answer: "Say, that's a great idea. Write it down and at our quarterly review, I'll introduce that with all the others and see if the group wants to make the changes."

When there is coordination needed between projects, it's relatively easy. It is the responsibility of each of the project engineers to do it, and they can call in anyone they need to help, but we don't try to get 400 people in a room and hope that a consensus develops.

No longer would Field Service and Engineering be bottlenecks. They are represented on the team, are committed to the same schedule and have the same motivation and pressure to meet the schedule on time.

/lh

TO: SHEL DAVIS

cc: OPERATIONS COMMITTEE:

DATE: FRI 22 AUG 1980   9:23 AM EDT
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

SUBJECT: LECTURE ON PROFESSIONAL CAREER PLANNING FOR NEGOTIATORS

At our Operations Committee Woods Lecture series in October, will
you prepare a half hour to forty-five minute lecture on career
growth for professional people in a negotiating environment.

During the recession in 1974, large numbers of technical people
lost their jobs and many were disillusioned and left the industry
because they were well educated and had many years of experience
and suddenly found out that they had no skills and competence to
offer. It was my observation that most of the people had good
training and a few years of valid experience and then went off to
negotiate, review, plan, schedule and visit Washington. In these
jobs, their pay scale got to be higher and higher and the better
they talked, the higher they were paid. The companies were very
dependent upon them particularly when they were negotiating with
the government and their pay scales got to be very high.

When things suddenly came to a halt and their companies didn't
need negotiators, these people went out looking for jobs and in
their resumes it was hard to explain what their skills were.
Fifteen years of negotiating didn't really seem like a skill that
anybody wanted to hire.

It seemed to me with those people I knew, that if one spent all
of his career doing something useful in his line of work that
developed him in his profession, he was able to find jobs quite
readily even in the worst of the recession. At that time, we
said that if a 69 year old power supply designer walked in the
door, we would have hog tied him and never let him out again.
Forty-nine years of experience of designing power supplies would
have made him one of the most valuable people in the country. If
he spent ten years on power supply and thirty years negotiating,
we wouldn't give him the time of day.

At that time, I resolved that we would never generate a bunch of
professional people who would be useless if their present job
disappeared. But, alas, the same things that government
organizations were doing has taken over Digital and we now spend
a large part of our time negotiating and a large number of people
spend full time negotiating. People are terrified when we
propose eliminating some of the need for negotiating like I tried
to do this last year in the decision making of Europe. When you
ask what their real problem is they always say "our problem is we
can't do all the negotiating we would like to do with field
service; everything is cut and dried and simple and we'd like to
spend the rest of our waking hours negotiating with field service
and we're frustrated because we all like to spend the same time

negotiating with them that we do with other parts of the company".

You've been watching this company for some time and I feel it's your responsibility to worry about the future of the careers of our professional people. I think it would be worthwhile if you tell us your observations and what you think of their potential for getting other jobs if they ever leave Digital or if Digital ever has to let them go.

If one of our Product Line managers went out looking for a job and had a complete understanding of the inter-relationship between profit/return assets, inventory/accounts receivable, cash flow and so forth, he would be in great demand in this company or anywhere else. The product line manager who says all these decisions were made for me and I spend all my life negotiating with Europe, Asia, Canada, finance and manufacturing and they tell me what to do, I'm not sure how useful he will be.

An engineer who spent ten years working in Engineering would be in great demand today particulary if he told what products he had developed and what processes he had worked on but an engineer who has spent ten years negotiating, and in particular negotiating ideas that he never had to write down, I think would have a tough time getting a job.

/mn
12:28

O.C.

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TO: see "TO" DISTRIBUTION
                                          DATE: TUE 19 AUG 1980   4:00 PM EDT
                                                      FROM: KEN OLSEN
cc: OPERATIONS COMMITTEE: DEPT: ADMINISTRATION
    EDWARD A. SCHWARTZ   EXT: 223-2301
                                                LOC/MAIL STOP: ML10-2/A50

SUBJECT: INVENTORY

I've decided not to analyze our inventory situation from a
corporate level. We say each product line should run as a
business with each group vice president helping them do that and
so I'd like to turn it back to the product lines and their group
vice president.

The subject of the September Board of Directors Meeting will be
inventory. You are already preparing to tell us what you are
doing to get rid of the old inventory. In addition, I'd like to
have you review your present inventory situation. This would be
the first part in a probably long series of reports to the
Directors on inventory.

I'd like Stan, Julie and Andy to report what the cash flow has
been in each of their product lines in the last few years and in
the next few years according to our plans. Then I'd like to have
you tell them what the breakdown is in the various parts of the
inventory for each of the product lines.

Then, in detail, I'd like to go over one product line. I'd like
to review how the decisions are made as to what product should be
in the product line and when things are removed from the product
line to save on inventory.

We've been measuring return on assets for the product lines for
many years and I'd like to explain to the Board how this is used
in making inventory decisions.

Jack Smith should explain his part of the inventory of the
Corporation. He should explain where he keeps inventory, how he
makes decisions and what his plans are for cutting it down (or
making it bigger when it helps business).

I think it also would be good to tell the Directors what limits
the growth in each of the product lines. In some cases, they
have big ambitions and the Operations Committee cuts it down to
size. Sometimes, there are other factors and I think we ought to
record periodically just what these are. Now, apparently Jack
Smith can manufacture more so it is not manufacturing. If it's
resources, then one will have to explain why he needs so much
inventory for the level he is operating at.

Two years ago, when we had some cancellations, the product lines
cut way back on their orders to the point where if Jack followed
it, he would have fired 80 percent of the manufacturing
department. Will you review for the Board of Directors what

happened at that time and what can we expect in cutback requests
from production if the order rate of your product lines dropped
10% and what could we expect if they dropped 20%.

/mn

"TO" DISTRIBUTION:

ANDY KNOWLES   JULIUS MARCUS   STAN OLSEN
JACK SMITH

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6. e

TO: A. M. BERTOCCHI
    *WIN HINDLE

DATE: THU 31 JUL 1980   9:03 AM EDT
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

SUBJECT: OFFICE AUTOMATION

By the nature of the job, you have a reputation for squelching
ideas and always wanting to save money instead of making
investments. In order to improve your reputation and experience,
I'd like you to be a committee of two and collect all the ideas
for an "office of the future", word processing and electronic
mail and come up with a presentation for the Board of Directors
and Operations Committee showing what we should do and how we
run it.

10.102

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INTEROFFICE MEMO

TO: Ken Olsen
cc: Bill Long
    Andy Knowles
    Stan Olsen
    Julius Marcus

Date: June 6, 1980
From: Win Hindle
Dept: Corporate Operations
  MS: ML10-2/A52   Ext: 2338

SUBJECT: WORLDWIDE MARKETING STRATEGY

Digital does not and should not have a worldwide marketing strategy,
but each Product Line should have one. The strategy should state the
market need being addressed, the proposed pricing, and the products to
be sold. Actually, a Product Line could have several worldwide
marketing strategies operating at any one time as long as they are
clear to everyone.

ps

1. Competent individuals
2. High ethical st'ds. (not set by top mgt.)
3. High st'd of perf. (not set by top mgt.)
4. Lots of trust, no surprises.
5. Positive leadership, not heavy handed.
6. Individuals took responsibility

DEC

1. Dynamic industry —
2. Ken — Quality Co.
   - We Care about customers
   - Make a Contribution
   - Have fun.
3. Financial objectives
4. Mgt. & prod. strategies —
Can set individual goals within these parameters — and then don't sub. optimize
" can we do better at structure — " if mgr is not to motivate we don't de-motivate

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TO: see "TO" DISTRIBUTION   DATE: TUE 8 APR 1980
                                   FROM: WIN HINDLE
                                   DEPT: CORPORATE OPERATIONS
                                   EXT: 223-2338
                                   LOC/MAIL STOP: ML10-2 A53

SUBJECT: ECONOMIC UNCERTAINTY

DIGITAL   INTEROFFICE MEMORANDUM

TO: Operations Committee   DATE: 4/7/80 Mon 14:25:37
       O.C. Direct Reports   FROM: Win Hindle
                                   DEPT: Corporate Operations
                                   EXT: 223-2338
                                   LOC: ML10-2/A53

SUBJ: Economic Uncertainty

It hardly needs to be reported that these are very uncertain
times in all the economies of the world. As we develop our plans
for FY81/82, we must assure ourselves that we are prudently
prepared for a wide variety of potential situations.

We are currently taking the following steps to manage these
uncertainties:

o   Al Bertocchi is leading a task force to closely monitor
      the world economies and their influence on DEC. The
      objective is early warning of impending problems.

o   Our plans for FY81/82 will meet our established profit
      goals for FY81/82 at our planned volumes to provide profit
      coverage for uncertainties.

o   Under the leadership of the Product Groups we are
      developing contingency plans for both a "mild" and "steep"
      recession. Detailed instructions are being supplied by
      Dave Packer.

o   We are expecting you to carefully manage the Q-4/Q-1
      expense ramp. The Group Controllers are working these
      expense levels directly with each Group.

I believe we have an opportunity to manage our way effectively
through these uncertainties. We can do this only with your
support and leadership.

WRH/bwf.

"TO" DISTRIBUTION:

FRANK KALWELL	GERALD T MOORE	KEN SENIOR
R L LANE	DON BUSIEK	LARRY PORTNER
JOE GAFFNEY	IRWIN JACOBS	DICK CLAYTON
BRUCE DELAGI	GERALD V BUTLER	WARD MACKENZIE
ULF FAGERQUIST	EDWARD A. SCHWARTZ	ROGER CADY
GRANT SAVIERS	DICK POULSEN	CLIFF CLARKE
BOB THORLEY	CHARLIE SPECTOR	BRUNO DURR
JOHN ALEXANDERSON	GEORGE CHAMBERLAIN	JOHN S. FISHER
JOHN HOLMAN	ART CAMPBELL	HENRY ANCONA
BILL THOMPSON	ALBERT MULLIN	PAT KRESS
STEVE SMITH	BILL JOHNSON	DEL LIPPERT
PATRICK COURTIN	JOHN SIMS	BARRY BURNS
GERRI WEATHERS	SI LYLE	ELLEN OBER
GUS ASHTON	JOHN MEYER	AL CRAWFORD
MITCH KUR	SAM FULLER	RON LEBLEU
SY SACKLER	CURT COLLISON	AL FITZ
ILAN MESHOULAM	ABBOTT WEISS àCLEM	BILL HANSON àCLEM
BOB PUFFER àCLEM	DAN INFANTE àCLEM	DAVE KNOLL àCLEM
DAVE THORPE àCLEM	DENNY BJORK àCLEM	DICK ESTEN àCLEM
DICK PASCAL àCLEM	DICK YEN àCLEM	DON HUNT àCLEM
ED KRAMER àCLEM	GENE GROSS àCLEM	HARVEY WEISS àMR16
HENRY CROUSE àCLEM	JACK MACKEEN àMR16	JEAN CLAUDE PETERSCHMITT àCLEM
JERRY WITMORE àMR16	JIM CUDMORE àCLEM	JIM PITTS àMR16
LARRY BORNSTEIN àMR16	OPERATIONS COMMITTEE:	OPERATIONS COMMITTEE: àCLEM
PETER SMITH àMR16	RON EISENHAUER àCLEM	ROSE ANN GIORDANO àMR16
WILL THOMPSON àCLEM		

C O M P A N Y   C O N F I D E N T I A L

DIGITAL   INTEROFFICE MEMORANUM

TO: Jeff Randall   DATE: 3/18/80 Tue 10:28:20
                              FROM: Win Hindle
cc: Ken Olsen   DEPT: Corporate Operations
        Shel Davis   EXT: 223-2338
                              LOC: ML10-2/A53

SUBJ: Key Manager Support

I like your objectives in wanting to provide transporation help
or special services to free up productive time for key managers.
But I want to be awfully careful about not giving senior people
"perquisites" in any sense. Whatever we do must make <u>excellent
business sense</u> and never be done only to increase personal,
non-business convenience. We should not do anything that would
be regarded by an average employee (not a complainer) as
"self-serving" on the part of a manager.

For example, I ride the company helicopter to the Airport when
going off for a personal weekend. My own thinking on this is
that the helicopter is going anyway, and it allows me extra time
for work at the beginning of a weekend and more family time at
the end. This has seemed OK to me under my own ground rules,
whereas taking a special flight would clearly not be OK.

In your memo, you requested ideas on what new services might be
needed. The only one I can think of is the ground transportation
at Logan Airport. I believe we should go back to having a van
service to take helicopter passengers to their airline.

As to who should be in the category of key managers, my own list
would include the Operations Committee, plus all people who
report to an Operations Committee Member. But on occasions,
anyone who has an urgent need should qualify. Let's leave some
room for judgment in this because we are not smart enough to plan
everything.

WRH/bwf

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TO: see "TO" DISTRIBUTION   DATE: MON 17 MAR 1980 1:32 PM EST
                                             FROM: JEFF RANDALL
                                             DEPT: ADMIN TRANSPORTATION
                                             EXT: 223-8330
                                             LOC/MAIL STOP: MS B86

SUBJECT: KEY MANAGER SUPPORT

IT IS THE INTENTION OF THE TRANSPORTATION GROUP TO BEGIN TO
DEVELOP AND PACKAGE MORE SERVICES TARGETED TO THE TRANSPORTATION
COMMUNICATION NEEDS OF KEY MANAGERS. GEOGRAPHIC DISPERSMENT,
THE INCREASING COMPLEXITY OF THE COMPANY AND THE EFFECTS OF
AIRLINE DEREGULATION SUBSTANTIALLY INCREASE THE POTENTIAL FOR
HIGH RETURN INVESTMENTS IN THIS AREA AS AN ALTERNATIVE TO THE
CONTINUED HIGH RATE OF GROWTH OF OUR HIGH-VOLUME SERVICES
OFFERED TO ALL COMPANY EMPLOYEES.

YOUR ASSISTANCE IS REQUESTED IN TWO AREAS:

1. WHAT TRANSPORTATION NEEDS OF YOURSELVES OR YOUR KEY
MANAGERS ARE PRESENTLY NOT BEING MET BY HIGH-VOLUME COMMERCIAL
OR COMPANY OPERATED SERVICES?

2. WHO ARE THE KEY MANAGERS IN YOUR ORGANIZATION WHOM YOU
FEEL SHOULD BE MADE AWARE OF THESE LIMITED, SPECIALIZED
SERVICES AS THEY ARE MADE AVAILABLE?

IT IS MY INTENTION TO MAKE CERTAIN THAT EACH OF THESE KEY
MANAGERS IS FULLY AWARE OF THE SPECIALIZED TRANSPORTATION
SERVICES THAT ARE AVAILABLE TO IMPROVE THEIR INDIVIDUAL
EFFECTIVENESS. SOME OF THESE SERVICES NOW AVAILABLE AND
NOT PRESENTLY OVER UTILIZED ARE: CHARTER AIRCRAFT, DEMAND
SHUTTLES, DEMAND HELICOPTER SERVICE AND THE MOBILE
CONFERENCE ROOM. IN ADDITION TO DEVELOPING ANY NEW SERVICES,
EACH KEY MANAGER WILL BE FULLY BRIEFED ON METHODS OF ADAPTING
OUR CURRENT RESOURCES TO THEIR TRANSPORTATION NEEDS.

THANK YOU FOR YOUR HELP IN THIS MATTER

"TO" DISTRIBUTION:

KEN OLSEN   LARRY PORTNER   IRWIN JACOBS
DICK CLAYTON   EDWARD A. SCHWARTZ   BILL HANSON àCLEM
BOB PUFFER àCLEM   ED KRAMER àCLEM   GERRY MOORE àMK12
JEAN CLAUDE PETERSCHMITT àGENBOPERATIONS COMMITTEE:
OPERATIONS COMMITTEE: àCLEMTED JOHNSON àCLEM

COMPANY CONFIDENTIAL

DIGITAL   INTEROFFICE MEMORANUM

TO: Operations Committee   DATE: 2/27/80
                                      FROM: Win Hindle
                                      DEPT: Corporate Operations
                                      EXT: 223-2338
                                      LOC: ML10-2/A53

SUBJ: Jean-Claude Peterschmitt & Geoff Shingles

Jean-Claude and Geoff have recently been offered opportunities to
take attractive jobs in Maynard. After considering these jobs in
detail, each one has decided that personal (family) reasons would
make it impossible to move at present. Both of them agonized
over these decisions and both feel that to some extent they have
let us all down.

I propose a moratorium on offering either of them jobs in the
U. S. until at least the Summer of 1981. If we keep offering
jobs and they keep feeling badly about saying NO, their morale
will begin to suffer. They are doing vital jobs for DEC now and
need our support in their current assignments.

WRH/bwf

Ken believes we should (OC n MC) formally approve major projects at the beginning.

VRP
O.C.

Tribalism = getting together and complaining about other groups.
We have family-type problems.
Lay out set of rules about how we get along.

   1. If problem arises, try to work it out before coming to O.C.. After
      you try & fail, then bring it to O.C.

   2. If something bothers you, put it on agenda.

Ideal - People work for function but live with groups they service.
Basic question - Do P/G run business or do function run business.
      Answer   P/G
Who runs strategy - PG

Worried about when members of O.C. become saturated.
Must lay out org. so that jobs are doable.

Shel's Observations   11/12/79

① Don't try to build something (high rise or low rise or anything)
   unless it __fits__ with co. norms.

② Likes it here at OEC.

③ Lots of frustrated people in O.C. - Shel is frustrated - we (O.C.)
   are unpredictable. Too many hidden agendas -
   too much win - lose in O.C. (If your idea wins, somehow I lose)

④ Why don't we have more fun + sense of accomplishment in O.C.?

⑤ Aren't we 2 groups - one with Ken, one group without Ken - how do
   we work together individually.

⑥ Is there enough optimism to change this group (O.C.) for better?
   Need better learning curve.
   Leave meetg. feeling drained?
   5% improvement would have big impact.

⑦ We underestimate the effect of O.C. on rest of co. - we should act better

⑧ Hidden agendas - got to get them out
   Terminals Div. - can Art run it?
   Can Jack and Ted collaborate if they are separated?
   Is Jack Smith a favorite of Ken?
   What does Andy do next?

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TO: OPERATIONS COMMITTEE   Date: 17 OCT 79
                                  From: Ken Olsen
     cc: John Fisher   Dept: Administration
                                   MS: ML10-2/A50   Ext: 2301

We always had a theory which said, "We have a free flow of communication between anybody at any level, but all decisions are made formally." We now have a new theory which we never formally decided upon, and we have never taken the time to say that we have given up on the old one. We now allow, or encourage, many people to informally make decisions which are imposed upon the line people of the corporation. But, we have also restricted the communication to and from the line people.

We now have the theory that a boss or supervisor loses his power or his clout if all information to those under him does not go through him. It is quite widely believed that if the information flowing down and up the organization is not limited to what can go through the boss, he is not the boss. It is also felt that if the information that goes from the top down or from his people to the top, is not filtered through his experience and prejudice and enriched with the attitudes that he developed when he was a line person, the company does not show respect for him as a boss, his position is weakened and he loses all clout.

These two theories are completely opposite. We should formally decide which one we believe in.

For the last year, we stopped having Product Line Managers meetings and all contact from the Operations Committee to the product lines and from product lines to the Operations Committee is through the Group Vice President. The financial results are lumped as groups and budgets are more or less lumped together.

Many Product Line Managers have been with the company for many years and have a large amount of experience, and some of them could have been Group Vice Presidents. However, they became nonentities in their own minds, and indeed in the mind of the Operations Committee. They had no opportunity to brag about the results or be criticized for them. Some who I used to work with quite closely through the years introduce themselves as if they think I had forgotten their name.

When we started a new Product Group Managers meeting, most of them were quite enthusiastic. For the first time they felt that the corporation listened to them and they had an opportunity to take part in decisions and to have their experience and widsom taken into account. I think that the results have been very positive and I would like to see us continue this

committee as a working part of the corporation. However, it is not uncommon for people to think that this is very immoral. They feel with religious fervor, that no Product Group Manager should get information that does not come directly through his Group Vice President. The Group Vice President after spending two days at a Woods Meeting, has to miraculously get all that information passed on to all his people without prejudice or without forgetfulness. They also feel that the Group Vice President can express fairly to the Operations Committee, the opinions of all of his people.

I do not think that the information we pass on or the information we get from line people should be limited by the time, energy, experience, knowledge, education or interest of their immediate boss. This may be a radical, heretical thought in the view of those people who have had business education. The challenge to us is how do we take advantage of the experience, knowledge and enthusiasm of the people doing the work and not have it be limited by the bottleneck of a boss who may not even be in town. One would think that there would be more freeflow of information as the corporation got bigger because a single unit can pass a smaller percentage of the information needed. However, one of the stifling things of a large organization seems to be that as you get bigger, the information flow is limited by way of a single boss.

The next group I would like to form to encourage a freeflow of information is a Plant Managers Committee. This could be a U.S. Plant Managers Committee or worldwide. They could probably meet once a quarter and work on problems such as how do we lower manufacturing costs? Today, their supervisors have a tremendous amount of presssure. Half the time they are struggling to increase production and half the time they are struggling to cut down inventory. Very rarely does the boss, with all his pressures, have time to think of such mundane things as cost saving. Meanwhile, the Plant Managers are full of ideas but they have no direct way of working on these. I am sure that there are many other questions, ideas and problems which they would like to work on but it doesn't fit into the priorities or indeed the energy or time that we can expect out of any supervisor of several plants.

Now indeed we have had Plant Managers meetings. About twenty of them attend a large conference which has about one hundred twenty total membership. Somehow, this loses the effect of a committee of just twenty Plant Managers.

Twenty Plant Managers meeting alone with maybe an outside chairman, could talk about a lot of things of common interest. They could have a fascinating meeting, develop attitudes and formulate new attitudes that are useful to the corporation and straighten out some attitudes which need straightening out. They can invite senior people from manufacuturing or the rest of the company to help them work on problems, or just educate them. If they ran it themselves, laid out the schedule and invited the participants, it would be so much more useful than "the corporation" scheduling a meeting to ram things down their throats.

We have to do the same thing in engineering. We have several thousand bright, competent, educated engineers who want to do a better job and

influence things.   They feel stifled because all information has to go
through the hierarchy. Now, we can't have a committee of three thousand
engineers, but we might have a number of comittees which help give people
a chance to brag, showoff, exchange ideas and take part in the decision
making of the corporation.

/dag

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I N T E R O F F I C E   M E M O

TO: Stan Olsen

cc: Operations Committee

Date: 10 SEPT 79
From: Ken Olsen
Dept: Administration
MS: ML10-2/A50   Ext: 2300

SUBJ: YOUR PROPOSAL FOR 12 SEPTEMBER WOODS MEETING

I would suggest that when making your proposal "separate entity," that you do not define it in terms of the power which the entity would have relative to the mother company, but rather in terms of how you would most efficiently use the help of the mother company, and how you would organize that help so that it would be most efficient.   Ford Motor Company works for ten thousand bureaucrats in Washington.   Any one of them can make requests any time for anything, make rules and enforce them.   Ford sits there never knowing what they are going to be hit with next, what the rules will be next year, or how they should plan their staffing for the year because they do not know when or what requests will be coming in.   They have to plan models for three or four years ahead and they don't know the rules until just before the year starts.

If Ford was another country, the request from the U. S. government would be collected, organized, spelled out in a systematic way and presented all at one time in a much easier to use form.   In doing so, inconsistencies, overlaps and short-term changes would be eliminated and people with an overall view of the situation would have to be cognizant of what the request was for.   Right now the top-level people could say that all those bureaucrats working for me are young, conscientious, bright, very well educated and only have the good of the country and society in mind, so they must all be right.   I have been in Washington enough to know that almost everyone of them is bright, conscientious and doing good, but in total, the results are chaotic.

I would suggest that you propose a relationship with the mother company that would define your connection with each of the services and controlling entities of the company.   First, I would suggest that you do it in terms of a calendar.   For example, at the end of every week you send specific data to Headquarters; a certain day at the end of the month you send more specific data, and do the same at the end of the quarter and at the end of the year.   This calendar is printed ahead of time and is understood that it is not to be changed at the whim of a bureaucrat some where.

Next, I would suggest that you propose a calendar for planning.   For example, the first two months of the first quarter could be for

preparation of a budget and the third month of the quarter would be its presentation and approval.

The first two months of the second quarter would be for preparation of a long-range plan and the third month would be its presentation and approval.

The first two months of the third quarter would be for preparation of a market plan and the third month would be its approval.

The first two months of the last quarter would be for something else, and the last month would be its approval.

You could have a staff to do these activities. Their schedules for the year would be clear and you would not have to keep stealing people from other parts of the group in order to take care of random demands that come up whenever the bureaucrats happen to get ready to request what ever they are looking for.

I would further suggest that you take the controlling functions of the corporation and specify the help that you want from them. If I were you, I would insist on having a specified two days every quarter at which time Gordon Bell would spend two full days reviewing all the engineering being done in this entity. I would also say I want two days of Win Hindle's time the same two days every quarter, and plan for the years ahead. During this time he would review the financial statements and the results of each part of the entity. I would also demand and have an understanding that Smith's auditing group spend so many days a quarter looking over each part of the operation and finding out those which need detailed auditing.

You may ask why we do not run the company this way today. I think it is clear that it is impossible to do so. We change the people managing each of the groups of bureaucrats periodically, and those years in between when there are no changes they have to prove what they did the year before. This means that they can not make a schedule, and whenever they see an idea clearly they have to then make all the parts of the company react immediately. It is impossible to put some new person in charge of one of these groups and not give him a free hand to improve what his predecessor had done, which of course means that within a large company there is never any stability. Every year everything changes, there is no schedule, and no one understands what is expected.

In a small entity it is possible to have a simple accounting system which is set up only to give information necessary to run that entity. As a byproduct, certain specified information has to be sent to Headquarters on specified days. When the whole company accounting is looked at in one piece, it is impossible to take a simple approach. Everything has to be considered in its inter relationship with everything else all at one time. This means that all changes have to evolve slowly.

If one has a separate entity, he could do his own order processing, and if there should be a small problem, the business could be adjusted to make order processing simple. With a large company order processing has

to be designed for the worst system, the worst order and it has to be approved by a infinite number of bureaucrats because all the managers are too busy to figure it out themselves. Hopefully, with a small organization, the top few people could set up an order processing system which is so simple there should be no problems with it.

It is well known that concentrated manufacturing plants can always out perform multi-product manufacturing plants. Hopefully, we might gain some of this advantage by concentrating plants on a small number of products and not averaging costs which make us uncompetitive on desirable products and too low-priced on the things which we would be better off if we did not sell at all.

/dag

d i g i t a l   INTEROFFICE MEMORANDUM

TO: Gordon Bell   DATE: 17 October 1978
       OOD   FROM: Ken Olsen
                                     DEPT: Administration
CC: Operations Committee   EXT: 2300
                                     LOC/MAIL STOP: ML 12-1/A50

SUBJ: Modern Engineering or How We do Engineering Faster and More
       Efficiently Than Small Companies.

When we enlarged Central Engineering our motivation was two-fold.
First of all, product lines were too close to changing customer
whims to give stable direction necessary for one, two or three
year projects and secondly, with engineering spread around so
broadly, we couldn't take advantage of the size and assets of the
corporation. It is probably time now that we review the results
of centralizing engineering. I would like to see OOD come to the
February State of Affairs Meeting and tell the senior people of
the Corporation the problems and the results of centralized en-
gineering, and after this practice session, it should then be
presented in more detail to the next Spring Stratton Mountain
Meeting.

We should concentrate on the things we do to make decision making
quick and easy and develop efficiency which can come from size and
capital.

I would suggest that we have the presentation made by the Managers
one level below the OOD.

First, I think we should present todays environment. We now have
well defined goals for reliability and we have two goals to make
the cost of our manufacturing compete with the Japanese. We have
noise and safety goals which sound confusing, but in a session like
this we can organize them so everyone understands what set of goals
we work towards.

As we go into a time when there is a shortage of engineers, we
should explain how we motivate our engineers, and how we build teams
that have pride and efficiency and the feeling that they take part
in goal setting.

I think we should squeeze all this into a one day session for the
State of Affairs Meeting for the Corporate people, but should ex-
pand it to two or three days for the Engineering Managers at
Stratton Mountain.

It probably will be good for us to generate a document that will
be a guide to tell our engineers how decisions are made. We should
make it clear who can propose, who makes the decisions, and who
proposes and passes on changes to decisions.

We should explain how budgeting is done, how we weigh the difference between expense money, capital money, people and space, and we should give direction as to how much safety factor people should include in their budgets.

The outside world sometimes seems to think that engineering measures their output by numbers of people rather than results. It seems obvious that the output of an individual can vary by some large factor, and getting these factors of improvement from individuals should be the main measure of success, not how many people we can fit into a budget. It would be good to present to the people how we do and how we should measure and reward output.

I was surprised at the reaction at the last Operations Committee Woods Meeting where it was claimed that there was a corporate policy that you cannot make a model unless you first make a marketing plan. It will be good for everyone including engineering management, to write down a policy which explains when you build models and when you have to make marketing plans first and how far you go in design before you get certain levels of approval and how much freedom one has or could claim to make variations in this policy.

sm

digital

INTEROFFICE MEMORANDUM

TO: OPERATIONS COMMITTEE

DATE: 14 AUG 78
FROM: Ken Olsen
DEPT: Administration
EXT: 2300
LOC/MAIL STOP: ML12-1/A50

SUBJ: HELPING OUR MANAGERS

When we promote a carpenter into a supervisor with responsibility for many stock rooms, or when we promote a secretary to a Cost Center Manager, or when we promote a salesman to a District Manager, we seem to feel that with that promotion comes miraculous knowledge and experience of record keeping, inventory control, accounting and personnel procedures. If this miraculous and instant infusion of experience and knowledge is not thorough and they miss up on some factor of management which has not been defined but are suppose to know, we are very critical of them.

When I saw the parking lot one-third full in July, I thought everyone was on vacation. When I see the parking lot one-third full in August, I am wondering how many of our employees take the whole summer off. I wonder how many of our supervisors see this happening but have been told that that's the way at Digital and it is not their respon-sibility to be sure that people work in the summer. Now my question is, whose respon-sibility is it to make sure our supervisors are educated and have a simple, obvious set of standards for managing.

If in our Woods Meeting on Tuesday and Wednesday we run out of things to say, I would like to bring up the question, who has responsibility for laying out a simple account-ing system for each of our managers and who has the responsibility for a simple set of rules and techniques for managing the people? Is it the Senior Vice President or is it Personnel and Finance?

When we were a 20-man company, we had enough accounting to keep track of all the hour-ly time, we reconciled the number of hours every quarter versus the 40 hours people were suppose to work, and we knew by how much it did not reconcile every week. We knew each week how our expenses were going and we knew how much our income was; we knew where we spent the time, we knew how much was overhead and we had pretty much everything under control. It seems to me that now that we are a giant corporation, each of the pieces could still be run the way that Digital was run originally. I know that we have the idea everything has to go into one big glob into one monstrous computer system, but I would like to know why we can't teach managers to understand their business in the same way we used to understand our business. I sometimes think that we tell people that we understand your business and we will send you the data six weeks afterward and you don't have to understand a thing.

When we were small, we knew all the Personnel rules. The State Inspector came around, he would talk to us and it was easy to make changes. We could understand them all, and there was no need for a massive document the size of a dictionary in order to in-clude all of the rules. Now the most important thing was that we understood those that were important. I am not sure we trust our managers today to understand things, so we never bother telling them.

I would like Al and Shel to take along to the Woods Meeting, in the event that we do have time to discuss this subject, the list of records and accounts a new district manager, a new subsidiary manager or a new supervisor is given so he knows what we

expect from him. I would like Shel to bring the list of responsibilites a dis-
trict manager, subsidiary manager, office manager and supervisor is given so
that he knows what his job is with respect to his employees.

dag

Clear thoughts -

1. Specify responsibility - OM says whether we will be in
   a business in his district

   P/L makes investment decision on
   how much to invest in each district

2. Stop wasting time -
   Rule - no discussion or criticism of groups without
   a representative of the groups present.

3. Can't guarantee unchangeable plan for 18 months -
   must learn to absorb 6 month changes - it's
   a part of the risks of the business

4. <u>Digital scenario</u> - preach decentralization - preach saving
   money by developing system once, then spreading it out. ~~But~~ Good DEC
   decentralized managers want to cooperate with this.
   But, ~~this~~ takes time, and in meantime, decentralized units suffer.
   <u>Answer</u> - have schedule for centralized systems - decentralized
   units have to exist and grow - let them invent their own
   systems by defining inputs needed by central group -

1. We don't listen carefully and pay more attention to each other. <u>Shell Paris' comments</u>

2. Say more positive things about each other in public.

3. Be more supportive of one another, be more accepting of support, accept each other as colleagues, not adversaries —

4. More enjoyment needed —

5. Ken be more consistent —

O.C.

OPS COMMITTEE SURVEY/SOME ESSENTIAL THEMES

I.   Use of Sub-groups

     - Comprised of committee members

     - As a replacement for committees in some cases

TO SCOPE OUT OR RESOLVE CERTAIN ISSUES, THE USE OF SUB-
GROUPS AS OPPOSED TO THE FULL COMMITTEE SHOULD BE
ENCOURAGED

II. Preparation

     - Members

     - Presenters

     - Staff Work

INCREASING THE QUALITY OF PREPARATION WILL ASSIST THE
COMMITTEE TO RESOLVE QUESTIONS MORE EFFECTIVELY AND
MORE EFFECIENTLY

III. Agenda Management

     - Strategic material

     - Messages from Ken

     - The warm-up period

STRATEGIC ITEMS - SI!   TACTICAL ITEMS - NO!

IV. Working Together

- Listening

- Understanding

- Trust

- Discipline

THE OPERATIONS COMMITTEE IS A VISIBLE MODEL TO THE REST
OF THE ORGANIZATION. AS SUCH, ITS DESIRE AND ABILITY
TO WORK TOGETHER SENDS CLEAR MESSAGES TO THE SYSTEM.

V. Committee Charters

PERIODIC REVIEW OF CHARTERS BY MAJOR COMMITTEE CHAIRMEN
AND COMMUNICATION OF THESE CHARTERS TO THE ORGANIZATION
ARE CLEAR SIGNS OF YOUR PERSONAL INTEREST IN MAKING THE
COMMITTEE SYSTEM WORK.

VI. Marketing Committee/Operations Committee

THE ACTIVITIES OF THESE COMMITTEES SHOULD BE CLEARLY
DELINEATED AND COMMUNICATED TO THE ORGANIZATION.

SUGGESTIONS FOR THE FUTURE

> CONTINUALLY BEAR IN MIND THAT YOU ARE A VISIBLE
> MODEL TO THE REST OF THE ORGANIZATION

. PERIODICALLY REVIEW THE ACTIVITIES OF THE COMMITTEE

. SAY "NO" TO MORE POTENTIAL AGENDA ITEMS

. BRING YOUR LIST OF RECOMMENDATIONS FOR THE IMPROVEMENT
OF THE COMMITTEE PERFORMANCE TO FORTHCOMING MEETINGS
AND CHECK IT PERIODICALLY.

. TAKE THE FIRST FEW MINUTES OF EACH OPERATIONS COMMITTEE
MEETING FOR EACH INDIVIDUAL TO DISCUSS SIGNIFICANT
ACTIVITIES OF THE PREVIOUS WEEK AND GET REACQUAINTED.

. TAKE THE LAST TEN MINUTES OF EACH OPERATIONS COMMITTEE
AND WOODS MEETING TO CRITIQUE YOUR MEETING.

Ken:—

1. Have a trusting organization
   a. People are too much afraid of making a mistake

   b. P/L's don't trust central group.

2. Get mkt + eng. organizations working on products - from customers pt of view

3. Efficiency -

digital

INTEROFFICE MEMORANDUM

TO: Operations Committee   DATE: April 28, 1978
      Jean-Claude Peterschmitt   FROM: Win Hindle
      Gerry Moore   DEPT:
      Al Crawford   EXT: 2338
                                     LOC/MAIL STOP: ML5/A53

SUBJ: Decentralization of Functions

It is time to insist that decentralization be carried out at no greater cost than would have been incurred if the function or service remained centralized. Decentralization is supposed to achieve greater productivity by putting the function or service closer to the user. We should insist that these productivity increases be greater than any cost increases so that the net cost per unit of service is lower. Otherwise, let's leave the function or service centralized.

Specifically, I believe this principle should be applied in decentralizing Field finance functions, both in NORAM and in Europe. Then, it ought to be applied to the EDP decentralization in Manufacturing, in the Field functions, and in the Product Lines.

bwf

digital

INTEROFFICE MEMORANDUM

TO: Win Hindle
  CC: Operations Committee
        F & A Committee
        A. Crawford
        G. Moore
        J. C. Peterschmitt

DATE: 8 MAY 78
FROM: A. M Bertocchi
DEPT: Finance
EXT: 3-5311
LOC/MAIL STOP: PK 3/A56

SUBJ: <u>DECENTRALIZATION</u>

Win,

You indicate that we should insist that decentralization be carried out at no greater cost than if the function remained centralized. In general I agree and also believe that in the long run the costs of either method will be about the same.

This is difficult to prove because we cannot quantify the benefits of making better decisions sooner and being in better control.

The important issue is when to decentralize. It is my opinion that now is the time. In fact, if we don't formally control decentralization it will be accomplished in a de facto manner.

This is an important strategic move which should not be delayed because of a "cost issue." Obviously, there are some up front costs which will be incurred during the transitionary period. These will be kept to a minimum in light of budget constraints; however, they should not be the gating factor in the decision to decentralize.

/mo
attachments

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TO: SHEL DAVIS

cc: AL BERTOCCHI

DATE: TUE 2 MAY 78 4:57PM
FROM: KRAMER, EDWARD A.
DEPT: ADMINISTRATION LDP/MDP
EXT: 6850
LOC/MAIL STOP: MR2-4 A67

SUBJ: YOUR MEMO ON COST OF DECENTRALIZATION

I was interested in your comments, that I essentially interp-
reted as being in favor of operational decentralization.

I am clearly in agreement with your views. There are lots of
us at DEC, who grew to where we are today because, in part,
we were given the opportunity to work with a high degree
of professional freedom. I equate profeessional freedom with
loose controls, and allowing people to try and do "the right
thing" for the company. I believe in order to let people "do
the right thing", we have to allow them to exist in an environ-
ment that lets them have a broad view of the operation, and
this clearly occurs when a business is operationally decent-
ralized.

Being able to work alongside financial, engineering, marketing,
personnel, and manufacturing people, has enabled them all to become
significantly less insular in their thinking and resulting
actions. If anything, we should all be pushing more in this
direction.

I firmly believe there are no real costs associated with this
type of decentralization, in fact I believe the resulting
efficiencies of "doing the right thing" result in a net gain
for the overall operation.

digital

TO: F & A Committee

DATE: 26 April 1978
FROM: Shel Davis
DEPT: Corp. Personnel
EXT: 3-2838
LOC/MAIL STOP: PK3-1/C21

SUBJ: COST OF DECENTRALIZATION

The minutes of your meeting of April 4, 1978, refer to a discussion about the cost of decentralization. As you and others examine this subject, I think it is equally important to have in the equation the costs of not decentralizing. Some of these costs may be a bit difficult to quantify, but they still need to be addressed. I am thinking of things like unnecessary delays in decision making, not developing enough people with real management ability because they don't get enough of a chance to really manage, the amount of frustration associated with the involvement of multiple levels and committees of management in getting approvals, the complexity associated with having a large number of items either getting looked at at the top or coming together at the top (e.g. having one payroll in the U.S.). In a very large organization such as ours, I do not think these costs are trivial and when you couple that with the growth that is expected in the next several years, there is, in my opinion, even a greater need to keep moving ahead with "operational decentralization."

SAD:dh

digital

APR 2 1 1978   *Jack O.C.*

INTEROFFICE MEMORANDUM

TO: Bill Thompson

cc: Gordon Bell   Stan Olsen
    Jack Smith   Andy Knowles
    Ted Johnson   Ken Olsen
    Jack Shields

DATE: April 19, 1978
FROM: Win Hindle
DEPT:
EXT: 2338
LOC/MAIL STOP: ML5/A53

SUBJ: Funding Major Programs (i.e., VAX, DECNET, and
      Corporate Systems as a Group)

In the future, I suggest we fund new programs, at the very beginning, for the TOTAL costs we expect. These costs include Engineering expenses, Manufacturing Start-Up expenses, capital needed, Field Service Spares, Training Field Service and Sales people, Product Promotion for first several years.

The Product Manager would have responsibility to manage this entire enormous amount of money, and suggest trade-offs (i.e., more engineering would result in less spares, etc.).

The funding for the program would be worked out at the beginning as to which product lines absorb the expenses in what proportions (or we could use our new, as-yet-undecided-but-simple algorithm for assigning central engineering expenses).

The product promotion plan would be worked out at the beginning and would be visible to the product lines. If a product line felt they needed more "vertical" promotion, they would pay for it.

bwf

great, I like it!

cc. FMC

digital

INTEROFFICE MEMORANDUM

TO: Operations Committee

DATE: February 13, 1978
FROM: Win Hindle
DEPT:
EXT: 2338
LOC/MAIL STOP: ML5/A53

SUBJ: Excellence

George Plowman has written a very good memo (attached) on a recommitment to excellence. I propose we take up his idea and establish a number of long-range programs, then make them very visible to the whole company. I believe one person (probably a member of the Operations Committee) ought to have responsibility for each of the programs to drive it to completion.

The 8 programs I propose are:

1.   Establish Small Systems program that is fully integrated across Engineering/ Manufacturing/Marketing/Sales.

2.   Establish fast, accurate, decentralized Customer Information System to handle quotations, order processing, scheduling, order status reporting, and invoicing.

3.   Establish simple, fast, easy-to-change budgeting system.

4.   Achieve "Customer Merge" products for 50% of total shipments in five years.

5.   Establish decentralized accounting and control systems which feed essential data monthly back to a corporate control system.

6.   Achieve software quality that customers will rate excellent.

7.   Establish a program that automatically feeds back data comparing actual results to plans for engineering projects and marketing programs.

8.   Maintain our open environment where all employees have the opportunity to propose ideas and have those ideas accepted or rejected quickly so that they feel they can influence the company.

bwf
Attachment

digital

INTEROFFICE MEMORANDUM

TO: Win Hindle

DATE: 31 January, 1978
FROM: George Plowman *George*
DEPT: Distributed Systems & Components
EXT: 3/3329
LOC/MAIL STOP: ML5-5/E97

SUBJ: Commitment to Excellence

Win, the other day I was pondering your memo on software product quality when I was reminded of something that was basically instilled in me early in my career - something entitled "a commitment to excellence." This may be a little off the specific topic you had in mind, but I believe it is apropos to many of the problems we face today. Anyway, I'd like to share these thoughts with you.

How does the issue of product quality relate to a commitment to excellence: if we hire good technical people (and we do); if we have experienced managers who know how to build quality products (and we have); and we want to do the right thing for ourselves and for the corporation, then why is it so hard to do what is natural and self-fulfilling? Let me give you a personal perception:

1. First, you are right on with your observation of having too many products. This is a fact in both hardware and software. We would be far better off with fewer products and more focus on what solutions we want these products to provide. But this is in itself a symptom of a more serious problem that we must understand, and that is . . .

2. We do not have a clear focus on what our priorities are and how we plan to achieve them. You cannot treat everything as top priority and expect anything more than mediocre results, not at the continual growth rates we are experiencing and . . .

3. We have not clearly defined (top down) what a commitment to excellence really means in today's context. When the company was smaller and less complex, it meant hiring high quality people and letting them "do the right thing." In today's complex environment, this is not enough. Today we must provide a clear interpretation of what commitment to excellence means, we must define where we cannot afford to be second best, and we must guarantee that our behavior is consistent with this interpretation. Given we have done this, we then have to educate our people at all levels. This implies both management change and cultural change.

4. We expend a lot of effort treating symptoms without understanding the underlying problems. As a result, problems do not really get solved, they just get worked - over and over again.

5. We tend to operate in constant turmoil and rationalize this be-
    havior as a necessary part of the environment. It is not natural
    nor necessary. It is destructive and will eventually bring us to
    our knees unless checked.

What's the bottom line to all this? Basically, it all boils down to
the following:

    We as a company have become large and very complex in a relatively
    short period of time. We have evolved from having a captive mar-
    ket and a leading edge on the technology to a company in many
    markets with many products and no real technology ownership. To
    put it bluntly, we are in the big pond with all the other fish,
    large and small. We must now compete like never before. We must
    compete for market share; we must compete on a product-for-product
    basis; we must compete in the areas of service; and finally, we
    must compete to hire and retain the best people. Today we have
    become mediocre in too many of these areas. We do not have a
    visible plan in place today to compete and win, and very simply
    this is exactly what I believe needs to be done now. I view this
    as a basic survival issue.

I could go on, for these are only perceptions and in themselves serve
little purpose other than to make one ask the following questions:

1. Why does a senior manager merely three levels removed from Ken
    Olsen, and responsible for a major part of the future of the com-
    pany, feel that way?

2. How many others have similar perceptions?

3. Does it need corporate attention?

I propose a simple top down process to bring ourselves back to reality
in terms of a commitment to excellence:

1. Define the top goals of the corporation over the next five to ten
    years and make them visible to everyone in the company. I believe
    Ken Olsen in conjunction with the Operations Committee can do this
    very easily.

2. Identify the top ten corporate problems and their priorities that
    we believe we have to solve to achieve our goals. Make these
    collectively visible to every organization in the company.

3. Require that each major organization at the vice president level
    provides an assessment of related problems to ensure that it is
    understood and a plan for how the problems will be solved. If
    more understanding is required, then effort should be expended to
    gain that understanding. This should result in a very small list

of high impact problem areas that will get full management atten-
tion. Nothing must dilute their priority and no extended list of
problems "thrown over the wall" until these are solved.

4. Stick with the plan long enough to give it a chance to succeed.
    We have to continually push back on our desire to find another
    solution before giving the previous one a chance to work. I be-
    lieve that this results from a poor understanding of the problem
    in the first place.

5. People perceive problems today; what they are not sure of is whether
    anyone else sees them and is doing something about them. Establish
    clear channels of communications with people at all levels so that
    they can be a part of the solution as well as part of the problem.
    This is not easy in today's environment, but if we make this a
    corporate program, we can do it.

6. Let's market the concept of a commitment to excellence at every
    level in the company. After all, that's what got the company this
    far. Ken Olsen and a handful of people marketed this concept be-
    fore when we were smaller. We need to reinstall this message from
    the top down and establish a mechanism for communicating it.

In summary, I am proposing a major corporate program with everyone
participating. I believe it would be exciting and extremely effective.
I don't believe it can be put off.

GWP:cmg

digital

INTEROFFICE MEMORANDUM

TO: <u>Win Hindle</u>

cc: A. Bertocchi

DATE: March 3, 1978
FROM: John S. Fisher
DEPT: Finance
EXT: 4515
LOC/MAIL STOP: PK3-2/A93

SUBJ:

I have just read George Plowman's memo on "Excellence" and your 8 point Proposal. My guess is there isn't anyone who would disagree, and many believe the situation is critical.

Even more concerning is some good people have given up trying to solve the problems. I see individuals and operating groups turning inward -- accepting failure because they can't change anything outside their sphere of direct control. I hate to beat up the senior management because they have done a lot of wonderful things. But, this is an organizational problem and the responsibility can only lie with senior management.

In addition to the things you and George said, I think we need to focus on two additional points:

1. <u>Span of Attention</u> -- Management simply does not have the time to understand many significant issues well enough to favorably influence them. This is recognized and understood by many lower level people in the organization and it discourages some of them from pursuing solutions to company problems. Many sense there is just no objective, rational and calm "court" to hear facts and make decisions and them implement them.

2. <u>Lack of Teamwork</u> -- We are a functional organization that requires integration of the functions to succeed as a company. The trend is just the opposite, I think a good bit of it starts at the Operations Committee. We regularly try to solve "corporate problems" by <u>separately</u> defining the responsibilities of Operations Committee members. They, in turn, go back to their groups and separately define their part of the problem and <u>their</u> solution. We should go back to the text books -- functional organizations can't work this way! The functions need to be drawn together but they are drifting further and further apart.

Win, I fully agree with your 8 point list and the need for a focused, long-term commitment to achieve each of them. For whatever it is worth, I think that Al Bertocchi's Phase III Project is working Items 3, 5 and 7 and it's planned that this will be discussed at the March 20th OC Meeting.

JSF/fh

digital

INTEROFFICE MEMORANDUM

TO: Operations Committee

DATE: December 1, 1977
FROM: Win Hindle
DEPT:
EXT: 2338
LOC/MAIL STOP: ML5/A53

SUBJ: Criticism

There is a big time-waster in the company - criticism of another group when no one from the other group is present. There are countless hours spent knocking some department for its stupidity when there is no one representing that department in the discussion.

I propose that we discipline ourselves not to do this, since such discussions can't change anything without the group that is being criticized present to listen and discuss the problem.

bwf

GSG   Q2   RESUME

	FORECAST	BUDGET
BOOKINGS	$ 3.0	$ 3.8
MLP (OTD)	$ 2.4	$ 2.7
NOR	$ 2.8	$ 2.8

OTD	$ 2.4
PIPE LOSS	1.2
PIPE GAIN	1.5
NET	$ 2.7

Si Lyle

Uses — Selection of Products, Within a Product Between Functions, Review Pricing Alternatives.

Leverage in Break-even time:

Systems (VAX) — Work in Process Inv.

~~MTBF~~ (VT100)

Component — MTBF —

— Inventory —

Benefits — Push multi-functional planning

— Systematic decisions

— help analyze functional vs. program goals

— illustrates key sensitive issues in program

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TO: Operations Committee

Date: 6 March 1980
From: Ken Olsen
Dept: Administration
  MS: ML10-2/A50   Ext: 2301

SUBJ: BOONDOGGLE

I am again hearing complaints that at the peak tourist season our foreign subsidiaries get overwhelmed with visitors from the US who have to be entertained, to the detriment of the local operation. Because the local offices can see no business reasons for these trips or for the timing of these trips, and because of the obvious costs to the corporation, the time of the people making the trips and the time of the people entertaining those making the trips, the management in Maynard is loosing the respect of parts of the company.

I am sure that the situation is not as bad as it appears, but I think we ought to look into it. Everyone who takes a trip works for someone on the Operations Committee. Sometimes our managers think that watching these things is the responsibility of the Office of the President or Personnel, but I think it is the responsibility of the group vice president. I would like each of you to make a list of those people who are going to Japan this Cherry Blossom season and those going to Ireland or Scotland during the coming tourist season, with a few words describing the reason for the trip.

Will you send these lists to Bill Long to be summarized, and then discussed. We will then have Bill send the lists to each of the countries so they realize that these trips are important, the Operations Committee does want them to be taken, and these people are worth the time it takes to entertain them.

I think one hundered people went to Japan last year, most of them during the Cherry Blossom season with their wives. I think for good business reasons and to avoid outside criticism, we should have some justification on record for these trips.

DIGITAL   INTEROFFICE MEMORANUM

TO: Ted Johnson   DATE: 1/8/80 Tue 9:41:33
        Jack Smith   FROM: Win Hindle
        Jack Shields   DEPT: Corporate Operations
        Gordon Bell   EXT: 223-2338
                             LOC: ML10-2/A53

cc: Operations Committee
        Larry Portner
        Dave Knoll
        Dick Pascal

SUBJ: Relationships between Functions and Product Groups

I recently spent time with the Product Group Managers in the
Commercial Group. It became evident to me, once again, that each
major function must have a person (or group) dedicated to making
sure each Product Group has a voice within each function. That
person should be a part of the Product Group staff (probably
resident there) and have enough influence within the function to
get things done for the Product Groups.

I encourage you to see to it that each Product Group has a strong
representative in your function.

WRH/bwf

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TO: STEVE COLEMAN   DATE: FRI 21 NOV 1980   9:43 AM EST
    OPERATIONS COMMITTEE: FROM: KEN OLSEN
                                     DEPT: ADMINISTRATION
                                     EXT: 223-2301
                                     LOC/MAIL STOP: ML10-2/A50

SUBJECT: RESOLVING OPERATIONS COMMITTEE DISPUTES

At the Dec 2nd Operations Committee, I'd like to have a formal
decision on our way of having disputes between Operations
Committee members resolved.

When there are disagreements between two Operations Committee
members, it seems to me there are three alternative ways of
having them resolved.

   1. They can talk to each other until it's resolved and if
       this takes forever, just say that's the Digital way.

   2. Another way is to have each party talk to Ken Olsen, let
       him make the decisions and whoever wears him down the
       most will get their way. Ideally, without ever hearing
       the other side.

   3. The third way is to have a formal presentation to
       the Operations Committee. Here, all the arguments will
       be presented and the Operations Committee can make the
       decision.

After we decide the way which this should be done, I would assume
this is the way all conflicts will be decided upon.

I hear from a number of people who work for Operations Committee
members that the Operations Committee can never make up its mind
and is not the way to get decisions.

The Operations Committee members have examples of when we haven't
given answers to questions that have been asked, I'd like to have
them brought out so that we can go back and assure all of the
people that work for us that the Operations Committee is the
place to get decisions.   It seems to me whenever there's a
question asked in a formal way that can be answered yes or no, we
have always given an answer with no more that two hearings. We
do not give answers to proposals that are randomly brought up on
the spur of the moment. If you don't see it this way, I would
like to get it clarified.

KHO/em
13.3

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TO: MARCUS DIR REPTS: DATE: FRI 17 OCT 1980   1:11 PM EDT
                                               FROM: JULIUS MARCUS
cc: *WIN HINDLE   DEPT: COMMERCIAL GRP/ADMIN
    BILL THOMPSON   EXT: 264-5362
                                               LOC/MAIL STOP: MK1-2/C37

SUBJECT: COMMENTS BY KEN

Ken's comments at recent meeting which bear repeating:

     P6 Mahould

    1. Love measures –

       Because they help you make decisions.

    2. If you can't figure it out – don't do it.

    3. If you can't explain it, don't sell it.

JM:DW

CHANGE

Ben Shapiro -

4 things to change - Watch out for logical incrementalism - compromise

   1. Structure - Why? because it becomes insular - calcified -

   2. People - Why? Fear of inadequacy

   3. Formal Systems + Processes - Hard to change

   4. Informal Social Systems & Structures - Tribal mentality - folklore - what won't work

Challenges

   1. Size

   2. Complexity

   3. Diversity

   4. Mgt. Succession

Change - Prevent bureaucracy ~~process~~ from running co.
      - Fight insularity

BOLDNESS -

   Structure - Division -
         - Reorganize PG's

   People - Send someone ^{m.O.C.} away for a yr. & bring some
        Rotate O.C. member

   Formal Systems - Do real L.R.P. - send 2 O.C. members away to prepare 1990
        - Far out idea - Fund

   Informal Social System - centralized toilets

Shel Davis — Negotiating

Why is it bad?
- Demotivates
- Lose good people
- Makes antagonistic the pursuit of common goals
- Erodes entrepreneurial spirit
- Makes work less fun & less fulfilling

> We're not that easy to deal with negotiating a contract

Statistics — ~~People~~ Mgrs. say <u>20-75%</u> of time negotiating — weighted to high end

Mgrs. say <u>20-75%</u> of negotiating is dysfunctional — weighted to high end.

Problems — Consensus dreams 100%.
- I am never finished negotiating — decision apparatus not clear — takes forever
- Everybody has to buy-in to everything.
- If I become corporate, I add 25 more interfaces.
- No trust ~~between~~ functions.
- ~~Perhaps~~ Everyone feels their group is a main entity.
- Morale is best when direction is clear.
- More zinging than helping.
- Resolve through personalities rather than system.
- Easier to negotiate with another Co.

Tension — Between <u>Freedom</u> & <u>Order</u>

<u>One process</u> — ruled by right, convention or courtesy; a series of actions that bring about a result

<u>System</u> — conditions of harmonious, orderly interaction.

- ~~Patience~~ Patience & persistence needed to work this problem.

<u>Answers</u> — Become executives — delegate more, clarity of process — make appeal route clear.
- Make larger objectives clearer
- Become less personality dependent
- Be responsible to each other — self discipline

Larry Portner   Project Management

Ron Cadrieux

Can org. by project or by function, or try to get advantages of both.
  Program Management - one program mgr., min. reviews,
        responsibilities clear;
      Advantages - clear, fast, team,
      Disadv. — duplication of effort, specialists may be out of date,
                  & "lessons" might not get learned

      Problem if one project is part of two or more programs
      Then, use Contract —

Problem - carried matrix too far - too many solid lines, resp. to differ.
Need - more project/grid structure, have as many functions report to project mgr.
      as possible, constraints written down early.
      FOCUS on Project team - get functions to commit to project structure
            Make phase Mgt. Process work.

| Jerry Witmore | Subsidiary Budgeting |

P/&G plan by Geography for LRP, but budget by area only.
Funding is very complex.

What's new today? — Better resource allocation (LRP), 2 yr. budgets (not on-g.),
ability to manage trade-offs, decentralize

Build on strengths — strong functional thrust, P/G thrust, effective cross-
functional mgt at area & country, evolution not revolution

Move ahead on: Subsidiary Local Contribution Margin by P/G - local metric -
More subs. participation in LRP - early submission
Simplify P/G interface for small countries.
More trade-offs -

Al Crawford

Information Systems
(Inf. Resource Mgt)

What's needed
- Accelerated decentralization
- Segmentation
- Continued Interdependence
- Keep Product Groups

Small Business Unit - Needs quick response, simple processes (have lean & mean staff)

    Implications - Transaction Control near ~~input source to~~ support local unit.
        - Summary Flow upward

    Requires - Applications segmentation
        - Network -
        - Disciplined Data Mgt.
        - Test for Simplicity & Cost

TO: AL BERTOCCHI

cc: OPERATIONS COMMITTEE:
    EDWARD A. SCHWARTZ
    RON SMART

DATE: MON 20 DEC 1982 11:40 AM EDT
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5185339399

SUBJECT: FINANCIAL MODEL

I would like for you to present at one of the Operations
Committee meetings, and at the January Board of Directors
meeting, a simple financial model of each of our major products.
The Board has shown continued concern that the new personal
computers are not going to be as profitable as our traditional
products, and our answers are always guesses, and it doesn't seem
that we know.

I am sure that your people have a model for each of our
businesses, and I think it would be good to put them all
together. In fact, each of the members of the Operations
Committee should have a set of all the models so that they always
have something to work with.

The model should be very simple. It should identify the
discounts, the marketing costs, the selling costs, advertising
costs, literature costs, and other special engineering and
software costs, etc. They should be summarized to make it a
simple model that people can remember.

Now, that is very simple. To start with, we should let it go at
that. It gets complicated because we do not sell simple
products.   Our disks are sold with many central processors along
with all our other components. These are such major items that
they should be identified separately. It may be impossible to do
this, and maybe we should just make these models by computer
type.

If we could have a measure of return on assets, even though it is
very approximate, this would be good also.

Return on investment gets particularly hard when you consider the
engineering investment we put in the products. However, it would
be nice to have this also, because we are going to be asked by
the Board or the Operations Committee.

I think you ought to do the easy part first for the next
Operations Committee meeting, and then we might want to figure
out how we would do the more complicated questions.

I find that some of our senior managers are doing funny things
that a model would catch. For example, some of them think the
goal is to sell no matter what it costs us. They are willing to
spend the costs of selling something ourselves, and then give the

order over to a dealer or distributor who will add another 30% to 40% to our costs. If we get all our senior management to understand the different models, I think it would do wonders in making them act like businessmen.

KHO:ep
KO2:S3.43

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TO: JACK SMITH

cc: RICK CORBEN
    OPERATIONS COMMITTEE:
    RON SMART

DATE: FRI 10 DEC 1982   2:45 PM EDT
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5184326341

SUBJECT: LOW-END STRATEGY DESIGN

PORTABLE COMPUTER

I cannot conceive of our customers wanting a portable computer
with many of the features that we normally offer. Until somebody
can prove otherwise, I do not have any interest in a portable
computer that does not have a reasonable size cathode ray tube,
and a reasonable size keyboard, and pretty much all the computing
capacity that we now enjoy. This machine also should run the
software we now have.

I do see the need for a salesman's terminal to interrogate
inventory and to place orders. I think we should have these in
the hands of each of our salesmen, and in each of our stores, and
each of our dealers. The Japanese already use them when they
sell cameras and motorcycles, and someday, we should catch up
with them. However, most likely, we have nothing to contribute
in this area and we should use our capital in other places.

The computer I am encouraging is a small box that includes a
cathode ray tube almost as wide as our standard monitor but only
two-thirds as high, but includes the computer, monitor, and power
supply all in one box with a separate keyboard. This box is
about 5 to 6 inches high, 17 inches wide, and about 12 or 14
inches deep. It would fit nicely into a briefcase and would look
beautiful on top of a desk, or on a laboratory bench, or in a
home. When used in a fixed position, it probably should use our
standard 22 inch wide standard keyboard, but when we put it in a
suitcase, we should use the 18" keyboard or offer a special 17"
ones that would make both pieces fit into a 17" briefcase.

1)   I believe this package could be the basis of our low-priced
     word processing system and, in fact, the first one is
     designed to take all the standard DECmate circuit boards.
     It would take less room and would be easier to carry around
     and also could be put in a closet when not used because
     there are only two pieces; the box and the keyboard.

2)   This should also be our portable computer and it might
     match very well with the LA12 particularly if they both go
     in the same kind of luggage.

3)   This box could be our entree into the educational market.
     It will be somewhat less expensive, and could be a lot more

rugged, and easier to use from the mechanical point of view than other computers. This box should take the DECmate II, the Rainbow, or the small Professional circuit boards.

4)   This box should be relatively easy to make fit the Tempest standards. I would guess this is badly needed in the industry.

5)   This small computer would also fit in a regular size box and make a shop floor computer.

Q-BUS STRATEGY

I think we should offer a complete Q-bus line of products. I would like to see us re-package the LCP-5 and the mini-VAX so that, in addition to the LCP-5 package of today, which looks good on a floor rack and looks good in many rack-mounted situations, we would offer a slight re-do of that package using all the same complements but it would be only 17" wide, 8-3/4" high, and 14" deep. It would contain a floppy, a Winchester, and maybe a stringing tape or a second Winchester.

This unit would be rack-mounted on a 10-1/2" slide and underneath the 8-3/4" high panel would be another slide that holds the keyboard so the unit could be used as a personal computer by pulling out the keyboard. When it sits on a laboratory bench or a desk, it would look like many personal computers which are not terribly beautiful, but in this case, would be very functional, and the display would be a VT192.

When it sits on the floor, it would sit on top of two Aztec disks.

I would like to do this with all haste for several reasons:

First of all, I would like it all done and ready to go before the mini-VAX is finished. This will put some pressure on the people in Seattle, and it will also save us an enormous amount of time as compared to the other way of waiting until the breadboards work and then starting the packaging and all the decisions related to it.

And, secondly, I would like to offer it as a Q-bus personal computer. For personal computing, it is not as good as the Professional, and not as good-looking, but for OEMs and people who want to add a lot of things available only with the Q-bus, and for those who want to have a multi-user machine, we can take care of their problems. I am afraid that we may lose a big segment of the personal computer market to people like Fortune who can do things we could only do with a Q-bus.

MATURING PRODUCT STRATEGY

As our managers and marketers have gotten farther and farther away from the customer and the product, we keep measuring our development in terms of central processors. These are the things

we sell and it turns out that more and more, the customer does
not care what is in it, but just how easy it is to buy and adapt
to his application. I am encouraging the 11-Group and the
DECmate group to publish a handbook which contains everything we
know about the machine, every variation of peripheral available
with it, and every odds and ends of things that make it easy to
use. As our marketers get more professional, they tend to
develop jingles about the processor and forget all the things
that we have invested in to make it easy to use, and I would like
to press these.

On to this, I expect us to see holes in our Product Line which
are not new central processors, but things which limit our
customers from making it easy to use our computers. I think as
we develop these books, we will quickly work to fill the holes.
The cash register is one of these which I predict we will
immediately rush to fill when we see how important that hole is
in our Product Line.

Then, as a result of this book, I expect our marketers and sales
people to realize how much we have to offer and the pressure will
be less on more central processors and more on things to help and
service the customer.

KHO:ep
KO2:S3.21

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* d i g i t a l *          INTEROFFICE MEMORANDUM
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TO: Marketing Managers   DATE: December 3, 1982
     Field Managers   FROM: Win Hindle
                                        Jack Shields
cc: Operations Committee   Jack Smith
     Larry Portner   DEPT: Corporate Operations

SUBJ: THE TRANSFORMATION OF THE OLD TO THE NEW DIGITAL

1. SEPARATING BUSINESS OPERATIONS FROM MARKETING

    The OLD Product Group role is being refocussed onto leading
    the company's world wide strategy for targeting and
    penetrating markets. The tactical business decision making
    is moving to the field, close to the customers for more
    efficient operations.   The company's NOR budgets will be
    set by the geographies and manufacturing.

2. SEGMENTATION OF MARKETING ROLES

    Four different kinds of marketing have been identified (Base
    Product, Applications, Channels and Industry) as a basis for
    ensuring we have strong focussed marketing which is done
    only once and thoroughly.

3. REDEPLOYMENT OF SOME P/G PEOPLE WITH THE ROLE CHANGES

    The transformation will free up some people now distributed
    among the Product Groups and make them available for
    redeployment into very high priority marketing activity,
    into focussed base product marketing, into new market
    thrusts such as PCs, Office and Small Business, into USA
    business operations and into selling etc. However we do not
    want to lose our strong market position in the traditional
    segments such as Laboratory, Engineering, Education and
    Manufacturing applications.

4. HOW TO EVALUATE POTENTIAL CHANGES

    The NEW DIGITAL changes are intended to be done so as to
    develop marketing expertise more rapidly, to reduce cross
    functional negotiating and policing, and to concentrate
    responsibility for proposing plans in writing and for
    performing against them.

5. COMMUNICATING AND AGREEING ABOUT STRATEGY AND PLANS

    Each marketing group is responsible for communicating
    directly with other marketing groups and with geographies to
    explain and test their strategies and plans. The groups
    must work together. The NEW DIGITAL encourages and depends
    on this collaboration.

6. CLARIFYING THE DETAILS AND INTERPRETATION

A set of working documents written to describe more details of the transformation are provided in this manual. These documents are for the guidance of those planning and implementing the NEW DIGITAL. Residual questions should be referred to the appropriate Operations Committee members for answers.

REVISION: RGS 11/30/82 Tue 14:44:54

NEW DIGITAL OPERATIONS MANUAL

MARKETING

LIST OF CONTENTS

o   FUNCTIONAL RESPONSIBILITIES CHARTING IN THE NEW DIGITAL

o   PRODUCT/MARKET GROUPS IN THE NEW DIGITAL

o   MARKETING-FIELD ROLES AND INTERFACE STATEMENT

o   WHAT MARKETING DOES IN THE NEW DIGITAL

o   COMMITTEE REPORT ON MEASURING MARKETING

o   BASE PRODUCT MARKETING (to come)

o   SALES LITERATURE AT DIGITAL (to come)

These documents should be read in the context of their creation.
Questions of clarification of what the authors meant could be
addressed to the respective authors.   Expect corrections and
additions from time to time. Above all don't do the wrong thing.

                                    Ron Smart 12/5/82 Sun 15:36:08

ADMINISTRATION AND BUSINESS MANAGEMENT

CORP	ENG	MKTG	GEO	MFG	
		BASE		x	Product forecasting – new products
		BASE		x	" " – over 9 months
		old	x	x	Prod. forc. up to 9 months except new prods.
		old		x	Finished product inventory
		old	x	x	Order administration
		old	x		Proposing Bookings plan (was joint P/G – Field)
		old	x		Making the Bookings plan (was joint P/G – Field)
		old	x		Proposing the NOR plan
		old	x	x	Making the NOR plan
		old	x		Pipeline inventory and receivables
		old	x		Credit checking
		old	x		Allowances and discount administration
		old	x		Account servicing
		old	x		Revenue accounting
		old	x		Distribution P&L
		old	x		MIS to support field ("old" P/G) administration

NOTE: "old" means the job moves from P/Gs to Field or Manufacturing

PRODUCT/MARKET STRATEGY & MARKETING PLANNING

CORP	ENG	MKTG	GEO	MFG	
	x				Proposing corporate WW market strategy
		x			Feedback to marketing on strategies and plans
x					Product strategy
	BASE				Base product investment (ROI) business plan
	BASE				Base product strategy and marketing plan
	BASE				Base product USA pricing
	APPL				Applicns products, strategy and marketing plan
	APPL				Applicns unique product investment (ROI) plan
	APPL				Applications unique product USA pricing
	CHNL				Channel strategy and marketing plan
	CHNL				Channel Ts&Cs, + business relationship planning
	IND				Industry(major E.U.) strategy & marketing plan
	IND				Industry (major end-user) Ts & Cs
			x		Local country variations on World Wide Ts & Cs

TECHNICAL AND PROMOTIONAL LITERATURE & ADVERTISING

CORP	ENG	MKTG	GEO	MFG	
	x				Basic product literature & product positioning
		x			Product/Market literature, advert. & promotion
		x			Product/Market inputs to Press Relations
		x	x		Promotion and lead generation programs
			x		Local advertising and sales promotion
CORP					Integrating Product & Market messages & advertising programs

SALES TRAINING AND SUPPORT

CORP	ENG	MKTG	GEO	MFG	
		x	x		Sales training materials(products, markets, programs)
			x		Sales training
		BASE	x		Technical back-up sales support on products
		x	x		Technical back-up sales support on applications
		x	x		Tactical support for sales

Note that some marketing responsibilities are focussed into groups doing respectively BASE, APPL, CHNL or IND marketing. Some of the BASE product marketing units are in the Engineering organisation.

This document describes the relationships among the different
kinds of marketing and identifies the planning groups among
whom the marketing is managed:

BASE PRODUCT MARKETING

The objective of Base Product marketing is to develop
strategies and do the marketing for the products developed by
Engineering. This is the product marketing which is generic,
i.e. relevant to any Application, Channel and Industry.

The quantitative marketing success measures for base product
groups include market share of their competitive product and
product price-band market segment.

The planning groups are:

* TERMINALS, Printing and Video (including ROBIN)
* VAX WORKSTATIONS, graphic/computing workstations
* RAINBOW, industry standard PCs
* PROFESSIONALS, DEC architecture PCs
* PDP-11, systems, boards and chips
* MICROVAX, small VAX systems, boards and chips
* VAX, large systems
* 10s & 20s systems
* NETWORKS & COMMUNICATIONS products, hardware and software
* BUSINESS & OFFICE SYSTEMS including WORD PROCESSING
  (Horozontal Office Applications products)
* STORAGE, (marketed through systems groups for now)
* TPL

APPLICATIONS MARKETING

The objective of an Applications group in to build DEC's
position as pre-eminent supplier of computing to the group's
target community.   All our products and services and all our
channels are focussed into their target market by the
marketing activities of the Applications group. Where it is
advantageous to DEC's market position with the community,
additional products are added by the group over and above the
base products and services.   These are developed and
supplied by DEC or third parties as appropriate to our
strategies.

The quantitative measures of marketing success include our
total revenue penetration rate into the segment.

The marketing focus and expertise for a product in an application can be provided from either the Base Product or the Applications group but not both. The decision is an agreement between the relevant groups. Where the marketing of a product applies to several applications areas it would generally be done in the base product group. Any additional marketing required in an Applications group is then funded only for its added value e.g., a supplementary brochure. Thus the marketing of the packages of products and services builds on the marketing already done by the Base Product Marketing groups.

The target applications groups are described in terms of broad communities of users:

* Education depts; educators in all institutions
* Engineering departments; designer's and developer's applics
* Laboratories; laboratory researcher's applications
* Manufacturing departments; manufacturing applications
* Medical centres and departments; medical applications
* Vertical Office Applications including high powered Word Processing.
* Small Businesses; Small business applications

CHANNEL MARKETING

The objective of channel marketing is to develop the business strategy and plan for marketing appropriate products through target kinds of channels into applications segments. Some channel strategies are world wide while some are country specific. The added value of channel marketing includes the development of effective models for our business relationships with third parties who are adding value (technical, business) in moving our products into applications segments.

Quantitative measures of channel marketing success include our revenue share of the channel's purchases.

The channel planning units are:

* OEM, technical value adding third parties (incl data services)
* DISTRIBUTERS/DEALERS/WHOLESALERS, for PCs and Terminals
* DEC Business Product centres, (DEC stores)
* End User direct has no dedicated channel marketing unit.

INDUSTRY MARKETING

The objective of industry or customer marketing is to develop
the business strategy and plan for marketing our products
through all channels and for all applications in the target
industry or customer. The industry marketing builds on but
does not repeat the product, applications and channel
marketing described above.

Quantitative measures of industry marketing success include
our total revenue penetration of the opportunity and our
sales efficiency.

The Industry planning units are:

* GOVERNMENT, country government business
* TELECOMMUNICATIONS, communications utilities and suppliers
* Other Industry segments (SICs) have a lower level of
  marketing need beyond what is done by account management in
  the field. This vestigial industry marketing is
  accomplished by consortia of marketing groups. Examples:

- Large industrials: Manufacturing, Engineering, Laboratory,
  Business & Office, and some Education applications plus
  PCs, Networks & communications base products.

- University: Education and Laboratory applications plus
  10s/20s, Networks & Communications, PCs base products.

MARKETING — FIELD ROLES & INTERFACE STATEMENT

MARKETING AND FIELD ROLES:

The Product/Market groups and the Geographies have both strategic
and tactical responsibilities in the future DEC organization.
Product/Marketing groups have primary responsibility for
developing worldwide strategic programs for the direction of
DIGITAL'S market penetration. Geographic units have primary
responsibility for making strategic plans for their geography
which take optimum advantage of their geographic market potential
per the corporate marketing strategies and programs. Once
corporate strategic directions are set and LRPs developed by both
Product/Market groups and Geographies, tactical support plans are
developed by both to ensure that adequate resources are in place
at corporate and in the field to ensure effective implementation
of the plans and budgets.

The interface process is:

1. ## CORPORATE STRATEGIES:

    Product/Market strategy statements and marketing plan
    summaries are reviewed by the O/C (Oct. Nov.) and when
    approved become corporate strategy.

2. ## LONG RANGE PLANS:

    Geographic units develop their LRPs based on the corporate
    strategies as do the Product/Marketing groups. Geographic
    LRPs include NOR and implementation programs for their major
    Product/Market segments. First pass LRPs are due January.

3. ## COMMUNICATION ABOUT PLANS PRIOR TO BUDGETING IN THE FIELD:

    The Geographies and Product/Market groups take the initiative
    to work together in developing mutually supporting plans.
    Significant disagreements are settled in front of the O/C if
    necessary, at or before the time that the LRPs are reviewed
    and approved (Mid March). Geographies and Product/Market
    groups with approved LRPS proceed to budgeting.

3. ## DEVELOPING GEOGRAPHIC BUDGETS:

    Geographies prepare their budgets from standardized detailed
    budget worksheets. The budgets are substantially an
    automatic translation from the worksheets. If the budgets
    are wrong then the worksheets are corrected and the budgets
    recomputed to maintain implementation plan integrity. These
    budget worksheets are made available for management and
    marketing information concerning the Geography's account and

Product/Market programs for strategy implementation.

4. GEOGRAPHIC BUDGET CONTENT:

While these worksheets contain considerable detail, the geographic budgets have relatively few items (e.g. NOR mix by product, NOR plus expense and assets by channel, NOR for specially focussed businesses — PCs etc). The Geographic budgets set the corporate NOR budgets.

5. QUANTITATIVE GEOGRAPHIC PERFORMANCE MEASUREMENT:

Quantitative geographic performance is measured against the geography's budget. Only two or three measures are critical (e.g. total NOR, distribution expense and assets, product mix).

6. RECORDING AND COMMUNICATING ACTUAL GEOGRAPHIC RESULTS:

Actual performance data is recorded in a standard chart of accounts. It is made accessible as after-the-fact marketing feedback to Product/Market groups as well as being used for field management.

7. ON-GOING MARKETING-FIELD INTERACTION:

Product/Market groups continue to work with the geographies as partners in supporting the implementation of their mutual strategies and LRPs expressed in the Geography's business plans.

NOTE: The geography's budget worksheets and performance chart of accounts are designed for local management of the business plans which are implementing the corporate Product/Market strategies. Marketing feedback is a by-product of this local management data. The worksheets and performance feedback conform to a standard chart of accounts to facilitate quality management.

PRODUCT/MARKET SEGMENTS FOR GEOGRAPHIC PLANNING

The Product/Market segments relevant to Geographic planning are a subset of the following corporate Product/Market segments. For example some of the Base Product marketing groups will be represented in other marketing strategies.

	BASE PRODUCT MARKETING	APPLICATIONS PRODUCT MARKETING	CHANNEL MARKETING	INDUSTRY MARKETING	
E	TERMINALS	ENGINEERING APPLICNS	TOEM/MICRO	GOVERNMENT	
N	VAX WORKSTNS	LABORATORY APPLICNS	COEM		S
G	DECMATE	MANUFACTURING APPLICS	DATA SERVS	TELECOM IND	
I	RAINBOW	EDUCATION APPLICATNS			A
N	PROFESSIONALS	HEALTH APPLICATIONS	DEC OUTLET		
E	PDP-11	VERTICAL OFFICE APPL	(BUS CNTR)		L
E	CHIPS/BOARDS	SMALL BUS. APPLICATNS			
R	STORAGE	WORD PROCESSNG APPLNS			E
I	NETS & COMM		PC RETAIL		
N	10s & 20s		-WHOLESALE		S
G	VAX SYSTEMS				
	OFFICE/BUSNSS				
	TPL				

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O.C.

INTEROFFICE MEMO

TO: Operations Committee

cc: Ron Smart

Date: 27 September 1982
From: Ken Olsen
Dept: Administration
MS: ML10-2/A50   Ext: 2301

SUBJ: NEW YORK TIMES ARTICLE

COMPANY CONFIDENTIAL

Attached is a copy of the article in Sunday's New York Times. I was disappointed that they did not pick up the theme which I tried to get across, but instead they listened to our customers and dealers.

They said that we are so big, ponderous, and filled with overhead that it is unlikely that we will survive in the commercial environment. I tried to get across the idea that we are fast, bright, alert and would overwhelm that market. However, if you look at what we have done in the last year, you can see how they get this picture. If you look at what we promised a year ago in Office and in Word Processing, and if you look at the services we give our dealers, customers and sales-people, you see where they develop these concerns.

We are still defending the massive overhead we have which generates, besides all kinds of expense, all kinds of delays and red tape.

I still hear from the Field that they do not mind the Product Line spending sixty million dollars, but it does not say very much when they do hit upon a piece of literature that is useful. Everyone wants it, and the Product Lines do not have enough money to re-print it and distribute it. They have rooms filled with literature but would love to have enough quantities of the few pieces that are used. However, our red tape system does not allow this, and our financial system does not ever find the weakness.

We still cannot get literature to our dealers nor can we get software. For a fast-moving outfit that is going to dominate the personal computer business and the business business, we certainly have got to get rid of a lot of overhead and get people who get things done.

We still tie up a manager from the Field operation for years trying to get all the organization, all the steps and all the red tape people on board if he wants to build a building. It would seem to me that one man or one group reviewing a new building would be all that is necessary. With all the layers and levels and travel and hours and things we call controls, must substract an awful lot of energy from the people doing the work and makes work for many overhead people.

Sometimes I think we are too well educated and too sophisticated. A simple-minded outfit that did a few simple things, for instance, have sales plans and literature, simple sales training and simple goals could run circles around an outfit that has massive, elaborate, expensive plans that cannnot get the details worked out, because everybody is boss and everybody has overhead, and the workers who are left are too frustrated to get simple details done.

KHO:ep
KO2:S1.65

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SUBJECT: SAYINGS OF CHAIRMAN KEN

PRAYING AND WRITING MEMOS

Some people think that writing memos is like praying. Some
people pray when they are in trouble, but when they have time
they never stop to figure out who they pray to or why, or any
theory, or logic.

Memo writers are often the same; they write a memo with an idea
or an observation or proposal, but never think about who they
send it to or who they expect to take action. In addition, they
do not feel they have more responsibility than writing the memo.

When I was on the President's Science Advisory Committee a few
years before the first oil crisis, I wrote a memo suggesting the
danger and suggesting a way of avoiding the danger. I didn't do
any more than write this memo. It may have gone to the right
people, but I in no way encouraged them to read it. I didn't sell
the idea, I didn't take any risk in trying to push the idea and
there is no reason to believe that anyone took it seriously.
It would be stupid of me to rant and rave saying that people
never listened to me when I proposed what they should have done
to avoid all these problems. It takes more work, more risk, more
energy to introduce and propagate an idea than simply writing a
memo.

People who can prove, or claim they can prove that they wrote
memos on each of our problems over the last ten years proposing
every possible solution deserve as much credit as I deserved for
avoiding the energy problem. Who in the world did I ever expect
to take a memo and do all the work proposed?

If someone has a good idea it is his responsibility to verbalize
the idea and to strategize the marketing of it. If it is a good
idea and he fails, he failed and it wasn't the people who
received the memo who failed.

KHO:ml
KO2:Sl.43

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TO: Shel Davis   Date: 3 February 1982
                                       From: Ken Olsen
cc: Win Hindle   Dept: Administration
                                       MS: ML10-2/A50   Ext: 2301

C O M P A N Y   C O N F I D E N T I A L

SUBJ: OPERATIONS COMMITTEE MEMBERS' REVIEW

As you make a formal review of Operations Committee members, I think
there are a few things that we want to measure people by that are not
on the list, that have been part of our rules for operation. Some are
common sense and it would be good if you made an issue of each one of
these and put them on your record.

We very firmly agreed that everyone in the Operations Committee would
not make changes in the personnel organization below him unless it was
formally discussed and decided upon by the Operations Committee.

When John Leng was promoted from a Product Line Manager to a Group
Vice President, he immediately wanted to abolish the product lines and
combine the whole group into one large product line. I think it was
very clear that this is not the way we operate.

We also suggested that people always hire the very best people for
every job. Implied in this is that one will not always pick only his
old cronies. When one does take over a new job has he immediately
disposed of the people who were there and taken in his old friends?
This may not be clearly specified in our policies, but I think that
this should not be the approved way of operating.

When the Operations Committee makes a decision, or the President gives
a clear order, does each member do his part or does he think he is
freed from these decisions or orders if he feels he knows a better
way?

Does an Operations Committee member promise people jobs before he gets
approval of his organization or a particular person, with the
Operations Committee?

If he does not go through the official sequence of getting approval
for changes, does he at least keep the rest of the Operations
Committee updated as to what his freewheeling organization changes
are?

KHO:ml
KO1:S9.25

September 15, 1980

Meeting, Tues October 14
to discuss this

Mr. Kenneth Olson
President and CEO
Digital Equipment Corporation
146 Main Street
Maynard, MA 01754

Dear Ken:

This letter is unsolicited in the sense that you didn't ask
me for the opinions that I am offering here, and it is not the
direct subject matter of my Bill Long or Al Bertocci projects.
But a whole series of conversations, reading of company documents,
and further reflection on the European Task Force project lead me
to define a problem that I would like to discuss with you as my
ultimate client.

For a lack of a better set of words, let me summarize my theme
with the phrase "an institution is not necessarily a bureaucracy".
All great organizations that live beyond the work of their founders
are institutions. Critical aspects of successful institutions are
simple (though often profound) purpose well understood by the member-
ship; clear organization -- preferably simple; and well-understood
process for managing relationships among the organization's parts.

Purpose, organization, and process must be a coherent pattern.
In great institutions, the patterns -- like good laws -- frees the
membership to work hard and creatively in relationship to each other.

I believe that Digital demonstrates extraordinary excellence in
individual aspects of its approach to business. But creating a co-
herent pattern means weeding out policies that are useful and sensible
taken individually, but disruptive in their impact on the pattern.
My observation is that the pattern is weak at Digital -- you say
"we can't tell a new hire how we manage" -- and that the reason is
a tendency to treat issues one by one rather than as interrelated
parts of a total system.

The strategy, the structure, the accounting, the personnel
system, and the history of the company are all related.

JOSEPH L. BOWER
SOLDIERS FIELD STATION
BOSTON, MASSACHUSETTS 02163

Mr. Kenneth Olson
Page two
September 15, 1980

Two examples:

1. Product groups are a marvelously creative way to use profit as a
   force to integrate strong functions. But, given your growth rate
   and profit objectives

   --some product group strategies cannot simply be contracted out
     to the functions in quantitative terms; they must shape the
     functional strategy.

   --some product group strategies must be built in cooperation
     with other product groups -- the customer wants to buy capability
     that crosses boundaries -- e.g. CSI, the Telco, and Word Processing.

   --it remains brutally difficult for young product group managers to
     develop product group strategy by country (I have yet to read a
     good international plan).

   --the constant turnover in staffing makes it hard for people to
     remember what wasn't in the short term numerical commitments.

   --the role of control and personnel staff is especially important,
     but these roles tend to be filled by newcomers to Digital,

   --and consequently there is very little institutional support. The
     pattern isn't there.

2. Rotation is a very effective way of broadening the management skills
   of those you seek to make generalists but

   --the only true generalist position at the top of Digital is yours
     (and maybe Win's).

   --the product managers are the ones who really need the breadth and
     and they are almost all ex-sales people. (Why not rotate there
     instead of at the top?)

   --the top functional officers of Digital provide continuity in an
     organization of constant flux. While some 'people change' might
     make sense, there cannot be too much until the pattern is not
     totally dependent on people.

   --But I believe that a lot of rotation right now could really
     weaken the organization.

Mr. Kenneth Olson
Page three
September 15, 1980

--Or, rotation is good, but only as part of a pattern that is
well-understood.

I believe that the task of building an institution that is
creative -- that cherishes the ambitious, energetic, inventive,
entrepreneur -- is your challenge for the next decade. Today too
much of the stimulus to creativity is experienced as tension :
profit versus growth, Ken versus the organization. Just as you
once had to build organization to transfer profit responsibility
to others, so today you need to build organization that transfers
responsibility for balancing the drive for efficiency against the
need for entrepreneurship.

The answer must lie in somewhat simpler organization. In my
thinking so far it looks as if the engineering resource allocation
decisions, the European strategy decisions, and the product prolif-
eration issues can all be helped with simpler organization derived
from study of what Digital wants to do with its customers. It is
around a chosen vision of a company-customer relationship that
the Digital institution should be built.

With the hope that I can provoke your curiosity further.

Cordially,

Joseph L. Bower

JOSEPH L. BOWER
SOLDIERS FIELD STATION
BOSTON, MASSACHUSETTS 02163

September 15, 1980

Mr. Kenneth Olson
President and CEO
Digital Equipment Corporation
146 Main Street
Maynard, MA 01754

Dear Ken:

If you are thinking about rotating, I am intrigued by:

Johnson-------------------→ Marketing
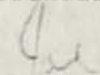
Hindle--------------------→ Europe

Shields-------------------→ Field

Peterschmidt--------------→ A 12 month assignment based in Maynard
to develop a European strategy working
with Julius and Andy and you.

Cordially,

Joseph L. Bower

Group Vice President and Product Line Manager

The Group Vice President and Product Line Manger are responsible
to be sure that all details of a Product Line are taken of. He
does not have authority over all the factors that count, but he
is responsible. He can only be excused from allowing other than
perfect quality, perfect efficiency and perfect satisfaction if
he raised problems to the highest level of the Company, and after
they were completely understood, they were formally rejected.

①

Most Product Lines are very large. All groups are very large,
and it is clear that the job of the Product Line Manager or Group
Vice President is, above all, to manage.

②

There are times when he has to do selling, and because of his
high level, it is sometimes important. However, it is even more
clear that the marketing and strategy, and selling plans are to
be laid out, and their success is to measured by the degree to
which they are so simple and straightforward that anyone can do
the selling, and that everyone would remember the strategy and
the selling plan. Never should they be so complicated that only
the top man can sell.

When the top man in an organization has to show creativity,
salesmanship, design capability, he should be embarrassed to
admit it because his job is to make sure it is easily done by the
rest of the organization.

The job of Product Line manager and Group Vice President is, to a
large degree, to communicate and work out problems with the rest
of the Company. Intergroup and interpersonal problems do not get
solved with power, they get solved by being right, being patient,
being generous and communicating.

The primary task of the Product Line Manager and the Group Vice
President is to make sure that the tasks for every individual
under them are defined, that their goals are set, and that they
are reviewed often and regularly. These tasks should be
separated by individuals, or by small groups, in order that each
group understands what their task is, and is motivated to
accomplish it, and learns from the mistakes they make.

It is particularly important that the Group Vice President keep the Product Lines separated and independent. This is one reason why we want all changes in organization, under a Group Vice President, to be formally proposed to the Operations Committee, and formally accepted. It is commonly observed by Professors who make studies of companies, that companies are not able to enter into more than a very small number of markets and products. That is because an individual can only be interested, and only be expert in a small number. When the top planning group, or the top manager of a company, or the top manager of a division, or the Group Vice President does not isolate each Product Line, and does not operate them as separate businesses, he does limit them by his own interests and enthusiasm, and expertise. They invariably end up concentrating on one or two and failing in the others.

One's own pride and the search for efficiency keep pressuring one into being king and running everything. Digital is set up on the premise that no one is that good, and we have broken down into Product Lines to allow us to succeed in many areas. The Product Lines, in turn, should break down into many pieces. The Product Lines are now many, many times bigger than Digital was when Digital had to break into Product Lines. For example, in education, each area of education should have one or two people assigned to it. They should lay out plans for that area, have them approved, and then should be measured on the success of their plans.

COEM should be broken down into a number of groups. Each group should be managed by an individual and a team. They should lay out plans and be measured on them. We should eliminate the need to invest heavily to collect data to maintain these measurements. Measure on common, obvious results.

The small business computer group should break down by application, and each individual or team should be responsible for the application even though there is a huge number. Having one boss and one very large team responsible for 50 or 100 applications means that the group can only be expert in a very tiny number of applications.

Some of our most striking failures are because the Group Vice President or Product Line manager has not assigned responsibility for some of the major decisions. When we invested very heavily in products and then ordered large numbers and put them in inventory and they never moved, the top people were too busy or too committed to other things to expend the energy and effort to market the products and get them moved. If, before the products were planned for, someone was responsible for that project, he then would automatically have the responsibility to making it work afterward.

When responsibilities are not broken down, and are not clear, as with all organizations, the tendency is for people to see how much money they can spend, and how big they can get, and how many people they can acquire, and measure their success by status symbols. When responsibilities are clear, the Group Vice President and Product Line Manager can concentrate by understanding the strategy and the financial plans of each of the pieces under him. He then can, at all times, understand why we are doing better or poorer than other Product Lines, or the competition. He then can insist on economy which you cannot insist on when he is the focal point and has responsibility for a huge collection of pieces which should be individually managed.

When a Group Vice President or Product Line manager has his operation organized, all tasks are assigned, and all he has to do is look at the overall view and to solve those problems which cannot be solved at a lower level. He is then free to take his Product Line problems to the top of the organization and make sure they are reconciled. He has time to work out the strategic problems with the rest of the Company at his level which he has never been able to do, and he has all the responsiblity for all the detail planning and budgeting and selling concentrated on his own shoulders.

Top level selling, representing the group, the Product Line, or the Company publicly, or the committee, working out top level problems are all part of the job. The main part of the job is managing, organizing and reviewing the projects under him.

KHO/ep
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O.C.

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INTEROFFICE   MEMO

TO: OPERATIONS COMMITTEE

CC: Don Gaubatz
    Mike Gutman

Date: 9 March 1983
From: Ken Olsen
Dept: Administration
MS: ML10-2/A50   Ext: 2301

SUBJ: <u>CHART OF PRODUCTS, CHANNELS OR PRODUCT LINES</u>

I think we should make a chart out of our products and our channels or product lines. With this chart I think we will be able to see in which areas there are things missing, and in which areas there are conflicts and maybe accomplish some product changes to get rid of conflicts.

Attached is the start of the chart I propose. It is not complete, but indicates some of the things we can do. In this chart I have proposed the Q box, which is the computer we agreed to have studied for a month. That study will be over a week from Monday and we should get a proposal from the group soon after. This Q box is basically a simple, fairly large box to hold variable sizes of Q-BUS. The same box will hold four, eight, sixteen, or twenty-four slot Q-BUS and will hold the appropriate power supply to go with each one. The box, therefore, is expandable if one buys a completely new Q-BUS and a completely new power supply to drive a bigger system. This Q-BUS will take F-11 and J-11 and sea horse and MICRO-VAX computer boards and maybe a number of others. It has complete freedom and, with a Q-BUS, the few modules that allow you to do anything you'd like to do.

To differentiate it from what our OEM group is planning to sell, and to differentiate the terminals from what the Terminal group is selling, and to make it easier to install for our own selling groups, I am suggesting that we drive these with Standard 422 twisted pair wire, instead of a twenty-five pin connector Standard 232.

Standard 232 is the de facto standard of our industry. This is why you see huge numbers of twenty-five pin connectors behind our large multi-user systems and why you see relatively large numbers of connectors behind our personal computers and behind IBM's. The 422 is an official Standard and has a lot of engineering appeal and is used extensively, (but not for terminal driving), by most manufacturers. In fact, looking at magazines and at shows, I can't see anyone who is doing 422 on a computer product today, although I am sure someone is.

If we go to 422 it means that we will be using two systems within the Company, and that we will have two sets of terminals. The differences are relatively unimportant and a small adaptor would convert from one to the other, but it will mean that after we make the conversion we will be able to hook our systems quite easily and they will be

differentiated for awhile from what the rest of the world, including what our OEM's are doing. I think it is reasonable to keep 232 for our OEM's and for our terminal dealers because they would be roaring if we try to change them because the world that they sell into is definitely 232 and probably will stay that way for a long, long time.

The workstation I would propose would be the same box as we proposed for the business computer. I think it would be a catastrophy to have three different groups make the three sizes of workstations for universities and for engineering. If we have the Rainbow group make the $4,000 workstation and the Professional group make the $8,000 workstation and the 32 bit group make the $16,000 workstation, we are going to have a family of workstations that are incompatible, and fiercely competitive with each other, vying with inconsistent features and options and each one driving to get a bigger share of the market for themselves. We will look like jerks to the customers.

I think it is much wiser to say that we will have one brochure and one family. It is easy to understand, easy to sell, and it consists of one box which uses a four-slot Q-BUS, a small power supply, and an 11 computer on a board with a small number of options. The $8,000 machine has more options, including a WINNI in the same box, and the $18,000 machine uses a floppy, a WINNI, and an AZTEC and has sixteen slots and room for a lot of options. The rest of the product line would be a set of two, four, or six or so display units. These would range from fairly high quality, low price, to very high quality, very high price, in both color and black and white. This would make a beautiful brochure, when you have a set of computers that are modular and can be bought and added on to, and a choice of display units so that you can make an inexpensive educational computer, or a very sophisticated engineering workstation, all with the same family and what you do in one area is built upon to go to the next higher step.

This Q box today is proposed to have, besides variable sizes of busses, with appropriate power supplies, slots for up to three tapered disk units of the size of an RX02. This means they could have none, or an RX02, a Winchester and a MAYA. The unit is on wheels and approximately the width of an AZTEC tape, so that it could then be sold with or without an AZTEC tape on the top. The unit may be slightly wider than an AZTEC so that panels can be put on the side, including the AZTEC, to make it a little quieter.

Besides putting AZTEC on the top, it will be designed so that we can put an RL02, an RA60, or any one of the new disks that we have of this size.

This box claims to do everything for everybody for all time, almost. The price to be paid in order to accomplish this is that the box is bigger than necessary for almost all jobs except one that has a complete set of twenty-four modules, three small disk tapes, and a large one on the top. But, because things are relatively small now, it is proposed that this cost is well worth the generality we obtain.

For the case where only the four slot Q-BUS is necessary, I think we

approved that we can build this very nicely into the base of a 350
multi-box. This means that for the simple unit in this family it would
look the same from the outside as a 350 and take advantage of the
beautiful design we have propagated and also take advantage of all the
tooling and the hardware we have inventoried.

KHO:ml
KO2:S6.25
ATTACHMENT: (1)

Small Computers

	Dec m'mate	Ram bus	Profess indul	Reprocess CAM	LCRS	LCP8	LEPuvop	QBox *	Termino 232	4
OEM-COEM	X	X	X	X	X	X	*		✓	
dealers	X as term.	X as term.	X as term.					X	X	
Retail Stores (big users)	X	X	X as term.	X				X	X	
BOOS (dealers)	X –	X as term.	X as term.					X	X	
Work Stations (+ choice of Durbag)		X	X					X	X	
LOD	X te	X te	X te					X	X	
Edu									X	
Terminal Distributers										

* QBox – 4, 8, 14, 24 Slots
E Board J Board Sea horse board
for Vax Oprend
clave of field memory, Winni, Maya, Asta, LLo2, MAGO ITC

Ken Olsen 8 March 83

TO: OPERATIONS COMMITTEE: DATE: WED 9 JUN 1982   3:01 PM EDT
                                             FROM: KEN OLSEN
                                             DEPT: ADMINISTRATION
                                             EXT: 223-2301
                                             LOC/MAIL STOP: ML10-2/A50

SUBJECT: JUNE WOODS MEETING (A WAY OF DOING BUDGETING)

I'd like to see us do budgeting in three places in the Company:
Engineering, Marketing, and Sales.

I think each Engineering Group should do their own two year and
five year budgets which could be used for planning and proposals
for funding. The budget would not be approved by the Marketing
and the Sales people, but should be based on what's going on in
Marketing and in Sales, or they may have a tough time justifying
it when they look for funding.   Funding would be proposed once a
year to the Operations Committee with the budget and the product
plan. It would be justified in their presentation by what they
know about the marketing plans and the needs of the customers.

The second two year and five year budgets come from the Marketing
Group. The Marketing budget is really a product plan which
allocates how much would be spent on each factor including how
much would be spent in Sales. It too is independent and not
necessarily consistent with the Engineering and the Sales budget.

The Sales budget would be done for two years in each district and
based on their enthusiasm for the marketing and the products
developed by the other groups. The Sales budget would be used
for ordering parts and materials, and would be the business plan
of the Corporation. If the Sales plans are grossly different
from the Marketing plans, they may have to justify the
differences. However, they only have to offer to sell those
products which they believe are correct for their market and
those which they have confidence in.

The process is relatively simple. There does not have to be
agreement between large numbers of people. Each group doing the
budget is held responsible not only to understand the factors
that immediately go into their own plan, but they are also
responsible to find out the thinking and the plans of all the
other people who are involved.

This system is not unlike the system by which most people in
business operate. At Polaroid the marketers lay out a business
plan. They do this by keeping close contact with the selling
groups. They are held responsible even though they have no
direct control over the selling groups. It motivates them to
market well, and to be very helpful to the selling group. They
stay very close to the selling groups and have a lot of
influence, but they are not in a postion to tell the selling
groups what to do.

copy in both

O.C.

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I N T E R O F F I C E   M E M O

TO: Jack Shields
    Bill Long
    Ed Kramer

CC: Operations Committee
    Ed Schwartz

Date: 24 November 1981
From: Ken Olsen
Dept: Administration
MS: ML10-2/A50   Ext: 2301

SUBJ: WHY DIGITAL WILL NOT BE ABLE TO SELL DIRECT

Digital will never be able to sell a significant amount of equipment
to small businesses because we don't think like a small business and
what is worse, we don't know that we don't think like a small
business.

We take forever to do things. We think a few weeks or a small number
of months is fast. We make selling simple equipment very complicated.
We have no end of red tape for a simple order and we leave the
customer with a feeling that our bureaucracy is as sensitive to the
small businessman's needs as the OSHA inspector.

We teach our salespeople a few of the small business words, such as:
general ledger, inventory package and payroll.

A manufacturing customer can tell if the manufacturing salesman knows
anything about manufacturing the minute he walks in the door. The
small businessman can tell, even with his back to the door, whether
the salesman walking in knows anything about a small business. Tricky
advertising, hidden charges and surprise charges seem great to the
marketers sitting in their big buildings far from the small
businessman, but they make the small businessman suspicious. Getting
different prices at different times from different parts of the
company for the same equipment makes a small businessman very
suspicious, even though it gives the salesman great satsifaction to
know he is in control of these factors.

At Digital we go through a whole recession with a large part of the
Sales Department, and many parts of the rest of the Company, never
even knowing that the Company went through a recession. A small
business knows every day, every week, and every month what his income
is and how close he is to going bankrupt. (When all the officers at
Digital knew how the Company was doing every day and what dangers
there were, we didn't have the red tape that we have today.) When the
key plans of a small business are felt to be dependent on the whim of
a bureaucrat at Digital, the distrust and anger can make a small
businessman irrational.

Digital, like all big companies, puts people in the field who are not experienced and feel victims of the system. Management sits back at headquarters and looks at numbers with no inclination to find out how the customer thinks. When they make visits they do all the talking and learn nothing. When they send out questionnaires they rig the questions so that the real problems never show up.

It is interesting to think of IBM's problems in entering the Small Computer business. Sitting in their awesome building in Connecticut, it is easy to see how they would lack feeling and sensitivity to the small business. They have acres and acres of bureaucrats doing good things for IBM but driving the small business people up a tree. It is disturbing to realize that we are no better, with the exception that our buildings are not quite as awesome. IF you were a consultant, the obvious advice you would give to IBM would be, don't try to sell to small businesses. Use small businesses to sell to small business and be careful to treat them with great dignity, sensitivity and care. Small businesses must be treated with rules and discipline. Red tape only keeps you out of trouble because it cuts down the amount of business you do.

I think our insensitivity to small business is indicated by our DEC Dealers Program. I understand that we have been holding several hundred applications for many weeks. We tell our customers we don't know what our decision will be or what the algorithm is. Every time we meet with them we have different ideas. This behavior drives our customers up a tree, particularly when some of them know that it takes forever for Digital to make up it's mind. An infinite number of bureaucrats are in the channel and a year without selling a product doesn't make any difference to a big company. The final devastating blow to a small businessman is when we tell him a committee will pass the final judgement on his application to be a DEC Dealer.

There are times when it seems as though the management of this Company is committed to proving that amateurs can do everything. If the managers are amateurs they must continue to prove that amateurs can do it all. Picking agents is not a new activity. Many companies have done it in many ways and there are a lot of experienced people available. We can find those who will teach us or who have done it before and are aware of the pitfalls and how to do it smoothly and nicely and not offend others.

Sometimes at Digital it seems like the process, and the ritual is more important than the order. When Stan first opened the stores he claimed if you had money in your pocket and a station wagon you could go to the store, put the computer in and drive away. Now there is a whole flow chart* of steps that have to be gone through that can take several weeks. Even if you do pick up the unit there are surprise charges involved.

This deterioration and how we sell small computers may just be the way big companies operate and we should know better than to try to sell to small businessmen. The sad part is that the deterioration doesn't bother anyone.

*flow charts attached

I don't think it is worth trying to straighten out the Sales Department because I am not sure that any big company can do it. It is the nature of the people we hire, it is the nature of the management we have and we can't change anything this big. This is why I suggest that we drop all direct sales to small businesses and shut down our Stores. In addition, that we sell to all outside channels and pick those channels by an algorithm which we publish to everyone ahead of time. We must sell to everyone with exactly the same terms.

This news is going to kill some people because their whole career at Digital has consisted of manipulating and maneuvering the customers by changing pricing, discounts, having Sales pass judgement, and in general acting like an OSHA inspector. The way we did things worked well when we didn't need the business and we had a trivial number of stores and a small number of salespeople. We need a more businesslike approach if we are going to capture a large part of the market.

Catalog sales can be very popular. I must have received forty expensive gift catalogs in the mail recently. Part of the popularity is due to the problem of traveling. More importantly, many of us don't want to talk to a salesman. We don't want to explain why we want an item. Sometimes we don't want to admit that we don't know what we are doing. When we are ready to buy, the last thing we want to do is go to a salesman who is going to pass judgment and decide whether he will let us buy the product.

KHO:ml
KO1:S7.63
Attachments: (2) Flow chart - Cash Sale
              Flow chart - Credit Sale

CASH SALE

COMPANY CONFIDENTIAL
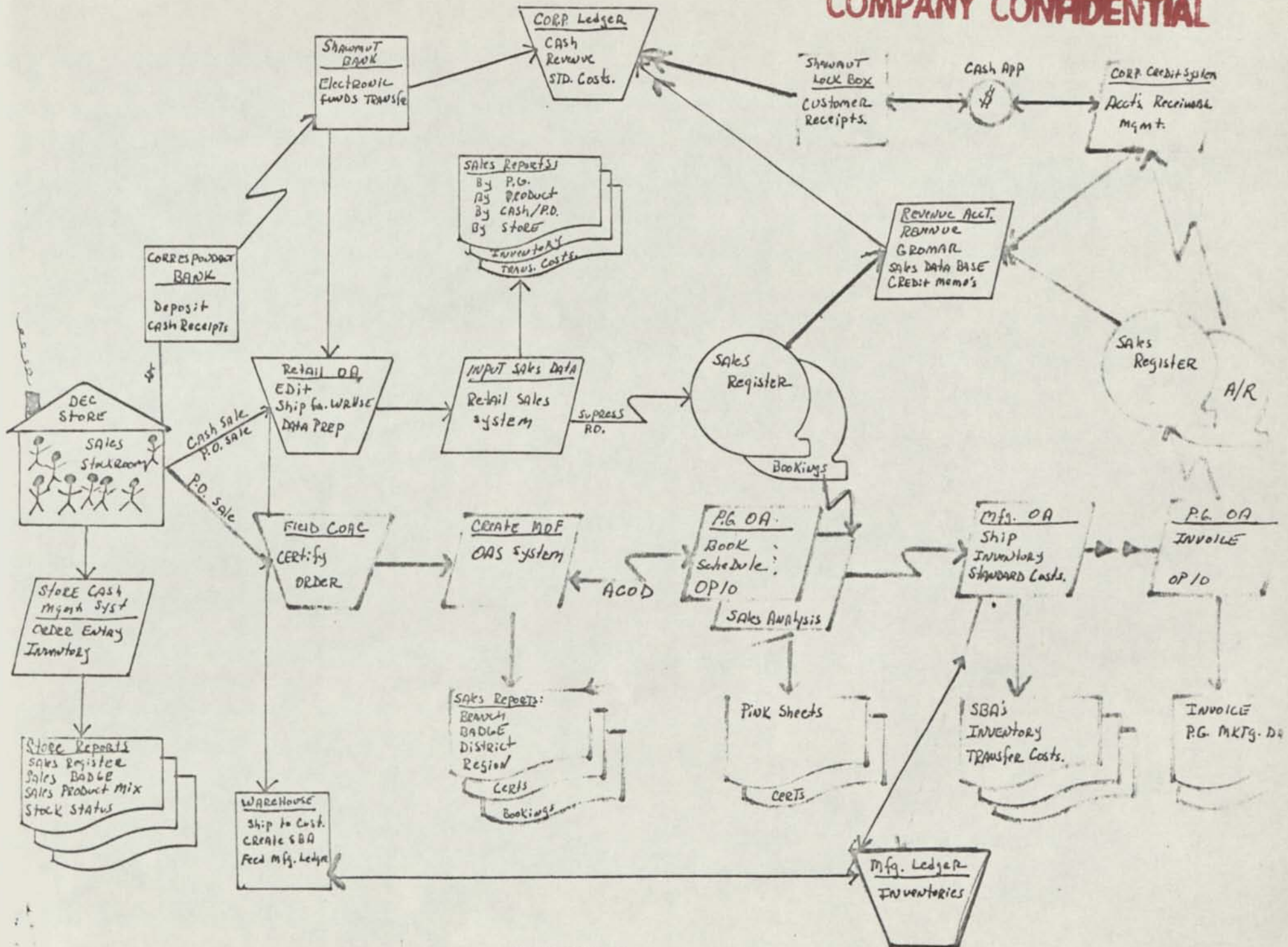
CREDIT SALE

O.C.

TO: SHEL DAVIS
    JOHN SIMS
cc: OPERATIONS COMMITTEE:
    RON SMART

DATE: WED 24 MAR 1982 12:26 PM EST
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

SUBJECT: JOBS WITH GOALS AND MEASURES

During the early 70's recession, when large numbers of technical
people were unemployed, I had the unhappy job of interviewing
many of them. I concluded that those who had worked at a trade,
such as engineers, or real marketers, real financial people, or
technical writers who were good and had a number of years
experience, had little trouble finding a job. Those who were
devastated because of lack of interest in their qualifications
invariably said that at one time they were something, but since
then they had become paper pushers, expediters, or committee
members. They were very much appreciated, their pay went up and
they worked hard and took part in interesting activities.
However, when there was a cutback they couldn't explain what they
were good at and they did not have years of experience that
developed skills that were marketable.

At that time I vowed that we would never get into that position
with any of our people. However, human nature seems to drive
people into jobs which have title and apparent power, and where
they, as an individual, don't have immediate goals and immediate
measures which will identify success or failure.

When I am in the Field I sense disappointment in some people, who
have been looking forward to the day when they could come to
Maynard and have one of these well-paying jobs with a good title.
However, I don't sense that they have a feeling of professional
ambition, or that they know what they want to be, and what they
have to learn or train for in order to get there. It is almost
like saying," I want to be a prince". A prince doesn't need
education, learning, or experience, nor does he get measured,
rewarded and developed.

Now that outplacing is getting to be a well-developed
institution, will you survey the outplacing organizations to find
out which categories of people are hardest to outplace at this
time? If it is true that we have allowed people to get into
positions where it is hard for them to find other jobs, we should
discuss this and decide how we should change our policies. If
you find interesting information, let's make it a point of
discussion at the April WOODS.

This idea developed over the weekend, when I read about
outplacing people from Honeywell. The article pointed out that
the one person who had difficulty finding another job held the
title of Marketing Planner. I worry about how many titles we
have generated like that one, and about the people who would find

it difficult to find another job.

In our discussions with Personnel, we always assume that things are going to stay like they are today. But, the nature of our business is that everything goes in cycles. Right now there is an enormous demand for people that come from Digital, because risk capital money is flowing so freely that many companies are being started that need any kind of experience. However, risk capital money is more cyclical than almost any other factor, and when it dries up we may see a different pattern in needs for professional people. One thing is sure, this world does not need very many personal computer makers or terminal makers, and when the risk capital people realize this there is going to be a fast turning away from certain segments of our industry.

KHO:ml
KO1:S10.34

COMPANY CONFIDENTIAL

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: d i g i t a l :            I N T E R O F F I C E   M E M O
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TO: OPERATIONS COMMITTEE   Date: 23 February 1982
                                       From: Ken Olsen
CC: Ed Schein   Dept: Administration
                                       MS: ML10-2/A50   Ext: 2301

SUBJ: SONY

Attached is the story of a Japanese company from which we may learn
and perhaps develop more formal ties with.

We used to have some of these ideas. Almost everything we did that
was successful in the early years of the Company were successful
because we were different from everyone else. We built facilities in
places no one else ever thought to go to, we made products that no one
else ever thought of, and we used names and advertising and promotion
and marketing ideas that were different from all the rest.

Now we don't want to move into a place unless everybody else is there
first. We don't want to work on a product until both IBM and Apple
have done it and we don't want to pick names that aren't the same as
Apple's and IBM's. Our facilities have to be what we imagine
facilities are for a company of our size and we are not willing to
deviate from that image. We are willing to hold on to facilities for
years, leaving them empty, until they match what we think reflects our
status in life.

It might be that SONY, in a few years, will go the way of all the
other Japanese companies. It might also be predestined that Digital
will be like RCA and General Electric and it may not be worth the
effort to fight it. Maybe we should just grow old graciously and
enjoy what we have while we have it. However, there is the suggestion
that perhaps we and SONY may preserve our ideals if we cooperate a
little bit.

KHO:ml
KO1:S9.60
Attachment: (1) SONY Article

'We never follow,' the motto at Sony

By Richard Bill
Associated Press

TOKYO — Akio Morita says the smartest business decision he ever made was turning down his first large order — and with it a chance to break into the US market. That was 25 years ago, when Sony was an obscure Japanese firm struggling for survival.

Today, Morita, chairman, co-founder and controlling stockholder of Sony Corp., presides over an empire that last year rang up $4.2 billion in sales, has 35,000 employees and is a household name worldwide, its trademark registered in 176 countries.

"We do what others don't," says the 61-year-old Morita, eldest son of the 14th head of a sake brewing business that dates back to the 17th century. "We never follow."

That, he says, has been the company's motto since it opened for business in May 1946, less than a year after the atom bombings of Hiroshima and Nagasaki. Its business then was repairing radios on the third floor of a fire-bombed Tokyo department store.

In 1957, Morita set out to conquer America, although his first try ended in failure. Approached by a US company to distribute 100,000 "Soni" transistor radios, Morita agreed — but only if he could use the as-yet unknown brand name. The Americans said no, and so did Morita.

A few years later, Sony had established its reputation and was ready to challenge the market. Looking back on the original decision, Morita says, "We couldn't have done it any other way."

Morita has been in the vanguard of consumer electronics for two decades, but the history of the firm that started out as Tokyo Telecommunications Engineering Corp., is a true rags-to-riches story.

In the early days, Morita recalls, he and his partner, electronics buff Masaru Ibuka, kept umbrellas propped on their desks to keep out the rain. Their first product, a rice cooker, was not a trailblazer for a long line of successful products. They made 100, sold none.

Ironically, Sony's first commercial success, a tape recorder, almost was its undoing. Like the rice cooker, it wouldn't sell. Tape recorders were unheard of in Japan then — there wasn't even a word for it in Japanese — and the $400 price tag was beyond the reach of most consumers.

Morita then did what he may do best: He created the market, although in this case somewhat unwittingly, by translating into Japanese a US pamphlet entitled "999 Uses for the Tape Recorder." The boom that followed is history.

There now are 10 major Sony plants, with more than 1000 employees in each, and about 30 smaller plants in Japan. Sony also has a plant in San Diego, Calif., one planned in South Carolina, and others in West Germany, Great Britain, France and Spain.

Two years ago, Morita again demonstrated his marketing flair when Sony unveiled the "Walkman," a lightweight portable cassette player with earphones. It was quickly imitated by others.

"We do not market a product that has been developed already, but develop a market for the product we make," Morita
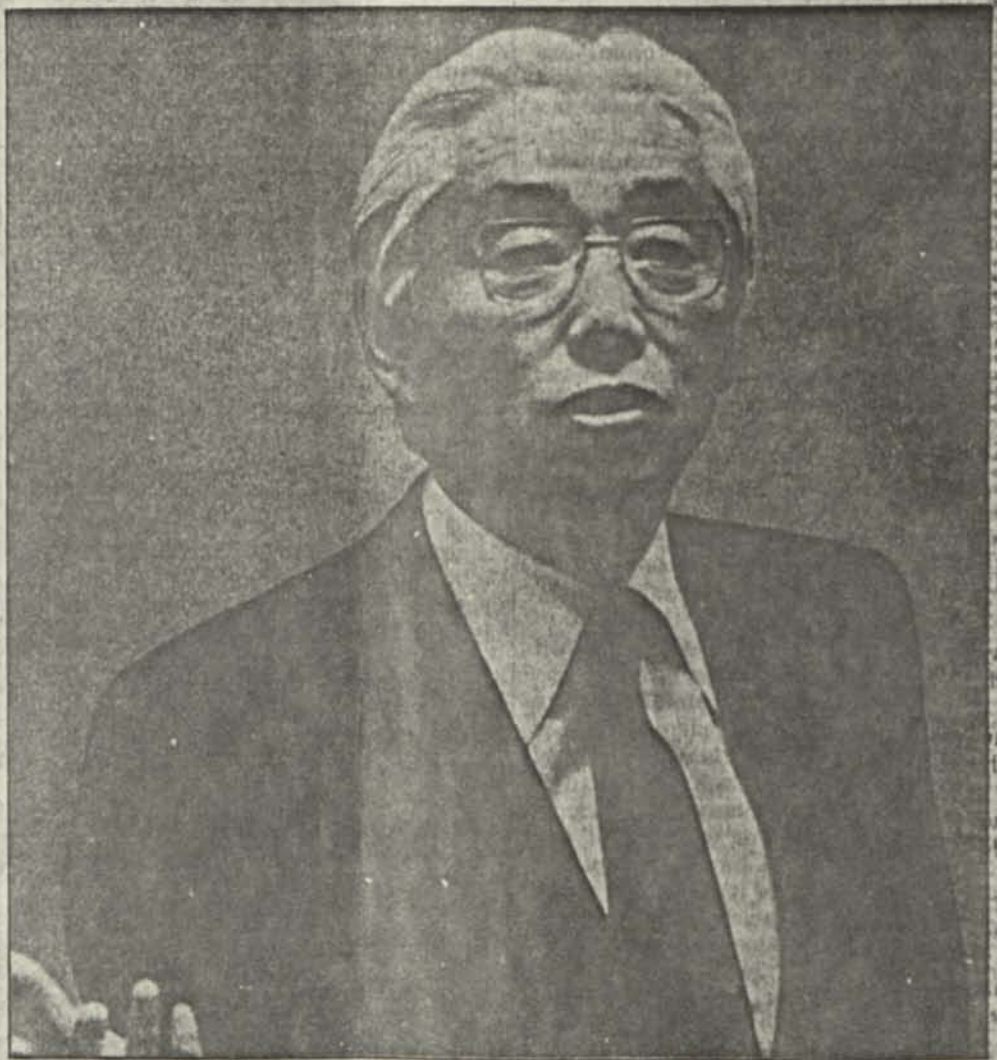
Akio Morita . . . "Japan is not No. 1.

says. "The Walkman offered mobility. It allowed its user to walk around. But there hadn't been anything like that until we introduced it."

Morita, with his shock of silver hair, looks like the tycoon that he is. According to one acquaintance, he has imbued the company ranks with the idea that he is "No. 1," and has no heir apparent. Yet,

like other employees, he wears a plain work jacket with a plastic badge reading "I Love Sony."

Like many Japanese executives his age, he served in World War II — as a naval lieutenant. He is an avid golfer and skier. Unlike the workaholics for which Japan's business world is noted, he spends only

'We never follow' is the motto at Sony

eight hours a day at work, entertaining friends at dinner parties at home. He doesn't pursue business in restaurants and geisha houses, as is the custom.

Morita lives in Meguro-ku, one of Tokyo's oldest and wealthiest districts, about a 15-minute drive from the office — by chauffeur in a dark blue Mercedes-Benz company car.

According to a company biography, his 26-room house has an indoor swimming pool and traditional Japanese-style bath, but only one Japanese-style "tatami" room.

Mt. Fuji, 60 miles to the west, can be viewed from a rooftop observation post. The main dining room is done in black and white, so that guests dressed in any colors will not clash. A profusion of audio equipment, presumably all Sony, is connected to 200 loudspeakers throughout the house.

Morita is a collector of piano rolls and guests routinely are greeted with George Gershwin's "Rhapsody in Blue" wafting through the hallways.

His office, on the other hand, is described by aides as "not very gorgeous, very simple in fact."

Among Japan's top business leaders, Morita is perhaps the best known outside, and may have helped, more than any other, to bridge the gap between East and West. A frequent visitor to the United States where he once lived briefly, he prefers to use his nearly-fluent English in interviews.

His unconventional style has caused the leaders of older firms, some with roots in Japan's feudal age, to criticize Morita as a maverick and an upstart. He scoffs at this, replying

that Sony is the "most internationally-minded" of Japanese companies.

But Morita does not disagree with the standard litany of Japanese business, that Japan is a resource-poor country that must export to survive. "As a business organization we know we must be competitive. That's our basic principle. We are very specialized. If we veer away from that we will find it very hard to compete," he says.

Morita decries the mood of protectionism apparently rising in the West against Japan's export onslaught, but roars with laughter when asked if he believes Japan truly offers an open market to foreign competition.

"Of course we do," he says, "but there are differences in the way we do things here."

The most marked difference is, he says, is Japan's "lifetime employment" system, under which school graduates joining a company — a 22-year-old joining Sony today can expect to earn $10,900 a year, including eight months in bonuses — are likely to be still working there 25 or 30 years later, as highly-valued employees.

"The older ones have gone through the whole range of company operations," Morita says. "They have the experience you can only get with age. That's why all members of the company are willing to work hard. They all share the same fate. And that's why we're willing to invest and spend more — for the future."

Morita, however, is critical of the Japanese practice of judging job applicants by the schools they attended. In the 1960s he threatened to burn the school records of employees who had been at Sony more than two years. Instead, he wrote a controversial book challenging the idea that the "right" university is a passport to an easy career.

Another advantage of Japanese companies over foreign ones, Morita says, is that they do not have to face shareholders' every quarter and show a profit. That, he says, can only stymie business. Japanese firms are more willing to risk losses in the short-term, expecting that profits will come eventually.

Sony is no exception, having several times invested in development of products — among them a color television system, a wristwatch-radio and a camera with built-in voice recorder — that fizzled, sometimes at huge cost.

Morita, ever the maverick, does not subscribe to the view that Japan, after years of being regarded as an imitator and student, is now the place where the West must go to learn.

"We don't think that," he says. "Japan, whatever people say, is not No. 1.

"Whenever we face a problem we try to get new information from the outside. Just like you go to school. Naturally, if we go to school we have to pay tuition, and if we go to school we have to digest what we learned there.

"Only then can we combine our technical knowledge with what we've learned. That way we can create new business. We're willing to go back to school any time."

Although not highly optimistic about the business outlook for the next decade, Morita says, he thinks Japanese industry will continue to flourish "at least until the end of this century."

"As I said before, whenever we hit some crisis the Japanese people will work very hard to overcome that problem," he says. "We Japanese excel at crisis management — we've had enough experience."

O.C.

TO: OPERATIONS COMMITTEE:

DATE: MON 8 FEB 1982   1:00 PM EST
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

SUBJECT: SAYINGS OF CHAIRMAN KEN-FALSE BELIEFS

1.   In the olden days, everything was easy (of course, we
        were 100 times smaller).

2.   If it all worked for me, it would automatically be
        integrated and there would be no need to plan and
        review.

3.   "Marketing cannot be measured."

4.   "Education makes no contribution."

5.   "No organization and systematizing can be done."

6.   "A step by step check list of marketing cannot be done."

K01:S9.33
Dictated (2/7/82) but not read.

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* d i g i t a l *
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TO: ANDY KNOWLES

cc: GORDON BELL
    OPERATIONS COMMITTEE:
    JACK SMITH

DATE: FRI 22 JAN 1982 10:45 AM EST
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

SUBJECT: LOW END MARKETING

I am resending this memo. Please disregard the memo sent
earlier this morning on the same subject.


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TO: ANDY KNOWLES

cc: GORDON BELL
    OPERATIONS COMMITTEE:
    JACK SMITH

DATE: FRI 22 JAN 1982   9:33 AM EST
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

SUBJECT: LOW END MARKETING

I was pleased with what we accomplished at the WOODS meeting.
However, we didn't accomplish the major goal I had in mind, which
was to organize so that the low end can concentrate on Marketing
and nothing else.

I would like to keep a steady conversation going on the marketing
of the low end. Please come, during the short-item session at the
Operations Committee next Tuesday, prepared to discuss what you
have so far on Marketing organization and Marketing plans. At
each future Operations Committee meeting I would like to have you
continue the dialogue, updating us on your accomplishments and
your thoughts.

I don't think that people realize that the secretaries and Mike
Weinstein did the seminars and that film independent of the
product lines because they were impatient with a lack of
marketing. This has gone on too long and I don't think we can
afford to wait.

There are many loop holes in low end marketing, particularly in
the 278. For example, we don't have literature to give to the
DEC Dealers. We have had a committee of fourteen people
controlling them, but nobody marketing for them. They not only

are without literature, but no one has thought out, or asked
them, what they need in the way of a product line in order to be
in business.

I don't want the product lines to tell Subsidiaries and Sales what they are
going to sell next year, because the product line doesn't have time for a
marketing plan. Instead, I want them to have a marketing plan and I will
see how well the marketing plan works by how many units each Subsidiary
wants to ship next year.

On Tuesday, I would like you to bring the person responsible for
marketing, and Gordon and Jack to bring the person responsible
for engineering to that session. I would like them to tell us
what their product plans, literature plans, software plans, and
the rest of their marketing plans are.

Sometimes I have the very strong feeling that our men are
terrified by WANG and only the girls are willing to face up to
them. Our men get so involved with the CT, which won't affect
our business for a year, that they have an excuse not to get
around to marketing and facing WANG with a 278. If we can't find
men who are willing to learn the product and learn what the
customers need; give the customers what they need, and do a
thorough marketing job, I think I know where I can find people
who can do it.

KHO:ml
KO1:S8.63

O.C.

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I N T E R O F F I C E   M E M O

TO: Ted Johnson
    Al Bertocchi
    Shel Davis
    OPERATIONS COMMITTEE

Date: 11 January 1982
From: Ken Olsen
Dept: Administration
MS: ML10-2/A50   Ext: 2301

Jan 21
2:30 PM

SUBJ: DIGITAL'S PHILOSOPHICAL BUSINESS BASIS

I would like you three, Chaired by Ted Johnson, to be a committee working almost full time to define the philosophical business basis for our Company and to outline the alternative basis on which we could be organized.

We have lost much of the basis upon which we were organized during our years of great strength.

We used to believe that every person and every group had goals that were clear between himself, his peers, and his boss. The goals were reviewed and measured regularly and often.

We also believed that each manager had the responsibility to work out a plan to accomplish his goals, taking into account all the constraints and limitations that were imposed upon him. Charter limitations and resource limitations were not excuses because they were part of the plan.

Now, unfortunately, large numbers of people don't feel they have a goal. They don't feel they are measured, and don't even feel that their boss knows that they exist.

Our managers often don't feel they have a responsibility to develop a complete plan and to make that plan work. They feel that when they propose a plan to the Operations Committee, the Operations Committee has the responsibility if it doesn't work.

For example, if the Word Processing Product Line proposes no demonstrations and no sales calls because of the low price of their product, and the Operations Committee accepts their plan, the product line is not responsible. It is not responsible if it is absolutely impossible to make a large number of sales because we direct every inquiry to one of twenty stores in the country to receive the sales pitch, demonstrations, and have questions answered. In the old days a product line would be responsible if they proposed a plan that could not possibly work, even if it was accepted.

We spend almost a third of a billion dollars in Engineering. Almost all of this is overhead, (if you define overhead as money that will never contribute to a product that will be in production in the next two or three years.) Currently, any time you want a product quickly

it takes extra funds. The ordinary budget is almost all overhead and any products we want requires extra funds. It is our responsibility for no products if we don't contribute.

Some people think the problem is that the Operations Committee takes part in too many decisions. That is not the problem at all. The problem is that we don't have managers who take responsibility. If each Engineering Manager took the responsibility to make sure we had products that would be competitive with the market every minute of every year, the Operations Committee would just have to show appreciation for the work. At the moment, there are many projects which have been stopped because Engineering Managers feel the Operations Committee has been asked a question and it can't make up its mind. The Operations Committee doesn't know it was asked, doesn't know it is holding up things and the Engineering Manager doesn't feel responsible, one way or another, to get the product out to fit the market need.

This is also true of Product Lines. They think that their question has been asked of the Operations Committee. They are spending money on all the things they spend money on, but if we really want to succeed the Operations Committee is supposed to figure out some implied question and donate money to get the answer for it.

One example is the small, simplified 11/23 with RLO2s. This question has never been asked clearly and is not one that goes on from Agenda to Agenda. However, engineers and product line people seem to think that the Operations Committee has delayed the donation of money for it.

If certain product lines and certain engineering groups had really put their minds to it for the past year, we could have had a simple, inexpensive, 11/23 with RLO2s that could really overwhelm the market. In the last year it is hard to imagine what all the money went into because we have little to show for it in this key part of our market.

Product Lines seem to think that whenever there is a Charter question they are not happy with, it excuses them from all obligation to make a success of their product. They are then allowed to compete more inside than outside.

I think there are a number of issues here and I think it is important that we attack them very seriously. I would like this committee to report to the Operations Committee once a month. They should plan to report to the Board of Directors in June, telling them how we are organized today and what our choices are in the future.

RUNNING THE COMPANY FROM THE CONTROL PANEL

At times, the Operations Committee talks about running the Company using the "Control Panel." This is like driving a dog sled, with dozens of dogs, from a long distance behind the sled and facing backward. All you are going to learn from the control panel, or the financial data, is where the sled has been. In no way will you know

where it is going, except by extrapolation. It is a delusion to think you are driving the sled.

Sometimes someone on the committee turns around and sees a tangled harness and the yelling and yelping, barking dogs and yells a command. As one might guess, he has little effect on the dogs.

MATRIX MANAGEMENT

The sled does get somewhere, sometimes very well, and onlookers say it is the result of matrix management. Look at the results. Everybody is boss over everyone. There must be a secret way of managing. Of course, any good results come about because the dogs have had many years of experience and enough of them know where they should go. They succeed in spite of matrix management, not because of matrix management.

Unfortunately, some of the dogs are developing new and dangerous habits and traditions. For example, some say they have long-range plans which have been set by the golden rule, and they refuse to take part in today's needs. They feel they would be wrong to corrupt their long-term goals by cooperating today.

ALTERNATES TO "MATRIX MANAGEMENT"

It has been proposed that we break this big dog sled, with hundreds of dogs, into divisions which would just contain dozens of dogs. Behind this division would be another committee driving another control panel. This would be handled the same way, except that there would be a new head man in charge of the committee watching the control panel, and that of course would, without any change in the way business is done, make everything fine, it is claimed.

Of course there are many ways of breaking the dogs into teams. One thing is clear, each smaller team has to know where it is going and have the planning and skills to get there. They have to know their limitations in dogs, and in the environment and resources, when they lay out their plans and make commitments.

The boss of several of these teams, in turn, must be able to direct them and to see where they are going and sometimes even look backward at the control panel to see where they have been.

And their boss, in turn, has to be able to keep track of where they are going, give direction, and once in a while look back at the control panel and see where they have been. He must measure their progress on their way to the plan.

And they, in turn, need a boss who can keep track of their progress, give direction, and make sure all the pieces fit together to accomplish the common goal. He, too, looks ahead most of the time. However, once in a while, on a regular basis, he must look behind to keep track of where they have been and to make sure they are all progressing toward their common goal.

It should be clear that everyone who at one time could drive a good sled, and who had, at one time made a good leader of an ice party, will not have the knowledge of management, the technical knowledge, or the interest to drive a large number of parties or groups of parties. They will naturally fall into being history collectors and history reviewers or will fall into driving small pieces of a large organization in great detail and allow all the others to go without direction. It is clear from the history of warfare, exploration, or business, that one has to try younger people. These younger people can lead, direct, manage, inspire and not limit the enormous enthusiasm, capability for work, and creativity that those groups and subgroups have who want to pull the sled.

We are competing with very experienced, hard-driving, smaller teams who are better, and have an easier job of leadership. At the same time, we are competing with huge organizations who have many more resources. We have to organize to get the best out of our people and have them enjoy their work and be satisfied with their work and challenged with the potential for growth, because we plan to be doing this for a long time.

KHO:ml
KO1:S8.43

d i g i t a l   INTEROFFICE MEMORANDUM

TO: Operations Committee   DATE: 7 January 1982
                                    FROM: Win Hindle
                                    DEPT: Corporate Operations
                                    EXT: 223-2338
                                    LOC: ML10-2/A53

SUBJ: High Potential Managers and Affirmative Action

At the Woods Meeting on January 20th, we will be discussing high
potential managers from each of our organizations. Hopefully,
these are the people we can count on for leadership of the
company in the long term.

I have been struck recently by how few DEC senior managers are
minorities or women. My worry is that we may not even have any
minorities or women in the high potential category. After the
Woods discussions, this will be clearer.

It seems to me that affirmative action on our part at this time
is having some high potential managers who are minorities or
women. If we don't have them now, we'd better face the issue and
bring them in. I believe we will all be highly embarrassed five
years from today if almost every senior manager is white and
male.

WH/CC

WH1:S.4.118

Win

Certainly Rose Ann is in the high
potential category. Maybe we
should make here a vice president
now to signal our intent.

Andy 1/11/82

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SUBJECT: ASSIGNING RESPONSIBILITY

When we consider ways of assigning responsibility and for passing
judgement on plans, we should compare the old simple-minded way
we used to do things with our new professional way of doing
things.

We used to have the Product Line plans judged by other Product
Line people. We complained that this was not fair and had our
outside consultant lobby with me to change this.

Now, we have professionals with no responsibility passing
judgement on each other's plans. I am not sure that this way is
any better. The professionals cannot help but develop feelings
that they have been blessed by God, and in detail, tell people
how to do things. When others with responsibility passed
judgement, they did it with significant humility. They usually
only pointed out serious stupidity, and did not feel the
obligation of having their pet ideas included in every plan.

KHO/aj
KO1:S7.20

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*  d i g i t a l  *
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TO: GEORGE A CHAMBERLAIN   DATE: MON 19 OCT 1981   11:31 EST
                                            FROM: KEN OLSEN
cc: A. M. BERTOCCHI   DEPT: ADMINISTRATION
    OPERATIONS COMMITTEE: EXT: 223-2301
                                            LOC/MAIL STOP: ML10-2/A50

SUBJECT: TREASURER'S FUNCTION AT DIGITAL

We've been trying to broaden your experience by giving you
different jobs and functions for a time.

Maybe we ought to consider a different approach. The Treasurer's
function and the financial function of other corporations is
broader than it is at Digital, and maybe we should set about to
do the same thing. In other places, the Treasurer's function and
the financial function take responsibility for understanding the
economy, the risks and predictions of the future, and making sure
that all the capital, growth and financial plans are integrated
into their view of the future.

At Digital, we tend to put a box on the Treasurer's function, and
say our inputs come from the Product Lines and from the Long
Range Plans, and our responsibility is to just process the
numbers within our box, and if the results are wrong, it's
because we are given wrong inputs.

We do well in currency hedging, because that group takes complete
responsibility, and they do a good job. Maybe you should aim the
Treasury function toward taking complete responsibility for our
future plans.

This would mean that the Treasury Group could no longer say: We
don't know if the capital budget is wise; we don't know what's
going on, and it may be stupid and catastrophic, but our input is
the Long Range Plan, and we'll do our part to make sure the Long
Range Plan is done.

KHO/er
KO1:S6.73

digital

TO: Operations Comm.
Leadership Group

DATE: 6 October 81
FROM: John Sims
DEPT: Pers. Stf. Mgr.
EXT: 6633
LOC/MAIL STOP: PK3-1/C20

SUBJECT: ATTACHMENT

Notes on ~~Japan~~ *OEC* from Eli Ginzberg, Director, Conservation

of Human Resources at Columbia University, New York.

You received this in august.

August 24, 1981

Mr. Sheldon A. Davis
Senior Vice President
Digital Equipment Corp.
129 Parker Street
Maynard, MA 01754

Dear Shel:

It was great to see you in M.V. Here are the notes that I prom-
ised to send along.

I hope your trip to the Far East was a big success.

I am enclosing a copy of my short piece on Japan.

After I get back to New York City I'll call and arrange for
George, you and I to get together.

I would be interested in your reactions to my notes, especially
where you think that they are lacking.

Sincerely,

Eli Ginzberg

Enclosures

CC Sims
OEPD, etc. —
Perhaps whole
leadership group
Betty,
please have
this distributed
to the leadership
group.

Memorandum for Shel Davis

Discussion on Martha's Vineyard, August 7, 1981

Eli Ginzberg, August 8, 1981

1. Here are the notes that I agreed to send along encompassing my
   reactions and reflections on the issues that surfaced. Of course
   what follows represents my views, not yours, but I thought that a
   written record of many themes that emerged might be of some use to
   you.

2. CEOs:

   a) The U.S. is probably unique among developed nations in the amount
      of power it entrusts to one individual.

   b) Since many of those who rise to the top usually get there via
      operations, they prefer to continue to devote themselves largely
      to current operations and short-run problems.

   c) This gets accentuated in the U.S. because of the continuing
      concern of the stock market with quarterly earnings.

   d) The long-range strategic planning issues tend to get slighted.

   e) In companies experiencing rapid growth it is almost certain by
      definition that the established structure and ways of operating
      will become increasingly ineffective unless changed. But CEOs
      are likely to be slow to recognize this phenomenon because
      their subordinates try to be responsive to their wishes.

   f) When the strain between the old structure and the new realities
      gets very great some of the abler people near the top if unable

to bring about real changes, are likely to move, thereby con-
tributing to short-run quiet but actually adding to the difficulties
of working out long-term solutions.

g) As is true in political life, power corrupts and more power
corrupts more. It takes an unusual CEO, especially if the
company continues to benefit from its momentum, to recognize that
all good does not necessarily stem from him.

h) The larger the organization the more important for complaints,
dissatisfactions, frustrations that may be accumulating below to
be recognized by those at the top. But most CEOs don't like to
"hear" about things that are wrong--and if they do they are likely
to look for a culprit who is responsible. It is a rare CEO
who would look at what he is doing--or should be doing--as the
source of the trouble down below.

i) In terms of Presidents I have worked for--nine in all--only
FDR actively sought out information of what was not going right
in the several departments and was willing to act on what he
learned including by-passing the regular organization when he was
unable to change it.

j) Given the danger of isolation of people at the top it is desirable
to explore how information about the "climate" of the organization
can be assessed at regular intervals and equally important how
the information that points to trouble gets the attention of the
people at the top so that corrective actions are taken.

k) I have long believed that CEOs should put aside some of their
limited time to talk with key people, one or two rungs down the

line, usually in and around some project to learn what they are encountering daily in getting their work done. In the absence of such inputs, the CEO becomes that much more dependent on formal reporting systems or on filtered information from his close associates most of whom don't relish upsetting him.

l) Closely related to the above is the question of how the "succession" issue is being handled, overtly or otherwise. In recent years I have become appalled at the number of times that the CEO at the top has tried to play the game so coyly that action is delayed, too many competitors become involved, the need for a tough assessment of the heirs apparent is avoided, etc. Admittedly, there is nothing easy about this process but that only means that it should be structured with care-- and in plenty of time.

m) If the CEO insists on not releasing any real power until very late in the process, no real judgments can be made of the potential of those who are in the line of succession. This in turn often leads to dire results.

n) A board of directors worth its salt should be looking at this problem early and continuously but most boards are dominated by strong CEOs and therefore fail in this, their most important responsibility.

3. KO and DEC:

   a) KO continues to dominate the company at a point that is making for trouble re succession.

   b) KO and the OC do not hear as much as they should be hearing about the "noise" in the system reflected in a growing number of resignations at the middle level.

   c) Even worse, there is quite a lot of discontent quite high in DEC if one listens carefully.

   d) There is ground for believing that the tensions within the organization are getting worse, not better. If this is true, and all the evidence points that way, the potential losses of key people could enlarge from a trickle to a stream.

   e) Clearly the continued growth-profitability of the company has helped to keep some of the noise within bounds. But if the company should experience even one bad year the latent tensions could exacerbate rapidly with dire consequences.

   f) It seems to me that DEC is underestimating the extent to which competitors in the US and abroad will seek to pick off good people if, as and when the opportunity offers. Hence the growing importance of attending to the growing internal hassle.

4. Structural Changes Under Way:

   a) The growing efforts of Engineering-Manufacturing to relate to each other more effectively is clearly an important move in the right direction. The extensive fencing which KO has nourished and supported must be extracting ever higher costs in a structure in which cooperation among design, manufacturing, and markets is the long-term key to success.

b) A second favorable development is Jack Smith's tour abroad. He is certain to learn about lots of trouble that cannot possibly be papered over and which must sooner rather than later be faced and remedied. In my shorthand, the question is does DEC seek to remain a US manufacturing company with an important export division or does it transform itself into a multi-national company?

c) One of these days DEC will probably decide to enter the low end of the market. To do so and to win a significant place in that market will likewise require major realignments. This too will help to force the issue of adapting the inherited structure to the emerging reality.

5. Metrics:

a) A major source of organizational tension is the ways in which operations are measured. With everybody being given specific objectives and goals, each unit is preoccupied with meeting them, come hell and high water what that might do to other parts of the organization or to DEC as a whole. Clearly there is need for many subsidiary goals and measurements geared to their performance. On the other hand, the failure to establish goals for joint activity, the accomplishment of which is critical for the success of DEC in the marketplace is a serious shortcoming.

b) Although we did not discuss the resolution of the afore-mentioned difficulty it appears to me that the following steps

would be worth considering: identification of known shortcomings of the extant system of measurement which leads to hoarding of materials, shipment of faulty parts, high cost actions to meet specific reporting dates, lack of adequate contribution by product lines to common elements (software), delays in getting products to market, overrefinements of products, etc. With such specification having been made, it should be possible to explore how organizational reassignments with appropriate readjustments of budget and metrics might be instituted to the advantage of the company as a whole.

c) There is something, probably a whole lot, to be said for KO's belief that the best way to manage is to set specific goals for specific people and then to warn them that they must meet their targets, no matter what. But an R&D company such as DEC can't really figure out how to accomplish its work solely through multiple units going their own way. And the scope for inter-unit cooperation must be growing all the time as the company gets bigger and more diversified. The organizational-metrics issue here identified suggests the urgent need not to keep assuming that what worked in the past is working in the present. The P&L statement suggests that it is, but if the organizational-personnel strains are excessive then some day down the line the P&L statement will show it.

6. Risk-Taking - Trust and O.C.:

a) There appears to be a big gap between the proposed interest of KO and the OC with innovative proposals and the way in which

they are treated when submitted. Many people lower in the organization see the OC as the place where almost every proposal is turned down.

b) There are able people in the field who contend that instead of encouraging people who deviate from the new, DEC is getting to be more and more uptight about individuals who don't go along with the "party-line".

c) The most serious challenge involves the issue of "trust". If DEC goes out and hires good people on the basis of promising them scope to perform--and rewarding the good performers--it is galling to see repeated evidence of Maynard holding everybody in the field on a very tight leash fearing to let them exercise their judgment about situations concerning which they are probably better informed than anybody else. What this comes down to is the rising tensions between the few at the top and the many able people down the line, most of whom resent not being trusted to use their brains effectively.

7. Compensation and Rewards:

a) KO has always had objections about using money as a key motivator believing that opportunities for promotion and stock were more important. Query: at present and in the future it looks as if these two preferred motivators will have less and less scope for being useful. If that is true then the compensation and benefit issue needs to be addressed more seriously.

b) My impression is that DEC is still getting something of a free

ride on its earlier emphasis but that reality is not really giving it credence. When newcomers join DEC they find that movement up the ladder is not that easy, even if they are good and stock is hard to come by.

c) My impression is that unless DEC introduces more scope into its monetary reward structure (and also in its benefits which in periods of high taxes are important) it will simply find itself in the 1980s losing large numbers of good people.

d) While there must be company-wide rules and regulations governing compensation, the more DEC becomes involved in operations overseas, the more important that it provide for some reasonable discretion to local management so that it can stay competitive.

8. Human Resources and Personnel:

a) There is little evidence that I have found which suggests that the key people in DEC appreciate the extent to which its future fortunes depend on the recruitment, development and retention of talented individuals. In the past DEC has been able to attract from the outside the additional persons it needs to staff for expansion and the belief that it will be able to keep doing so runs deep. However, the odds are strong that the opposite will soon be the case. DEC will become a source of trained people to which smaller firms will look for recruits.

b) Under consistent and severe pressure from Maynard to meet its quotas most line managers have relatively little time for or interest in longer-range personnel considerations. They look

to their personnel staff to help them over a particular hump, usually connected with speeding up recruitment. Unless the line learns first hand about the strategic importance of personnel and how much the future depends on how people are treated today, the broad support for a strong HR policy will not be forthcoming.

c) The present plans of Personnel to get much of its staff out into the field; to have the corporate staff deal with strategic issues; to have Shel Davis find more time to visit in the field are all moves in the right direction. But serious challenges remain. As far as I can see, the members of the OC are not particularly interested in or supportive of the Personnel mission. In fact, that may be because they believe that it has not been contributing as much as it should have. But the large part of the explanation probably reflects its short-term orientation to operating results rather than long-term strategic issues.

d) One way for Personnel at corporate level to gain allies would be to arrange for small numbers of middle managers from the line to spend a couple of years helping to solve key personnel issues and then returning to their own branch. Not only would such "detached service" help to broaden their horizons but in turn they would bring to the top Personnel staff a better understanding about how line people think and react to personnel issues.

e) The recruitment goals for DEC in the years ahead, even if one takes the middle range assumptions, are very large. The situation is compounded by the gross discrepancies between the demand and supply for electrical engineers that loom ahead and the ever large number of bidders that will be in the market (compare proposed expansion of defense sector). DEC has need for some careful alternative approaches to meeting its staffing needs involving the conversion of people after they come on board through special training. Such an approach would necessitate careful identification of different sources of supply--students of mathematics, language, logic, science or non-electrical engineering--and preferred transitions into different lines of work in DEC (software, marketing, etc.) with appropriately designed and focused transition courses.

f) While DEC has had good relations with selected educational institutions it has not linked in with an optimal number of such potential sources of supply. The rapid establishment and expansion of computer science departments need to be carefully monitored; key DEC representatives must visit and appraise these newer institutions; DEC needs to pursue a program of support for the better ones and similar corporate efforts must be pursued if DEC is to gain the inside track on finding more good people among this college-trained population.

g) At the technician level, similar linkages with various training institutions should be pursued and new relationships explored.

For instance can DEC by making machines and teaching manuals available persuade some good for-profit institutions to train students whom DEC by prior review and agreement will hire once they complete their course of study.

h) Corporate Personnel staff should be on the alert to identify successful personnel efforts in the field, especially those which have new dimensions, so as to call them more broadly to the attention of other major units.

i) Although the corporate personnel staff recognizes that during the 1980s for both offensive and defensive reasons DEC should show more progress in the hiring and particularly the promotion of women and minorities the performance record to date is really not much better than mediocre. Personnel might consider how to launch sound R&D efforts with an aim of uncovering some useful devices for speeding progress. Specifically could it get three different field units to participate in a joint experiment aimed at providing bridging training for females out of clerical-semi-technical work into technical positions which if monitored and successful could then be used by others. Clearly one of the principal challenges for Corporate Personnel is to lead the way.

j) Another Corporate Personnel effort should be carried out with F/A aimed at reviewing how the present metrics fail to reflect adequately the long-run consequences of following, or not following, sound personnel policies and programs with an aim of revising the present metrics to do a better job of reflecting long-term consequences.

k) Other tasks that Corporate Personnel should undertake or strengthen relate to a close monitoring of resignations. Preferably the good people who leave should be exit interviewed by at least two people and what they had to say abstracted and reviewed with an aim of feedback and correction. Along this same line, Personnel should aim to develop a corporate-wide pool of middle managers who should be watched--sent to school, reassigned, etc.--so that they are not overlooked when good assignments open up; and that they are not permitted to stagnate.

9. Management Development:

a) Apparently DEC has made a policy commitment that every manager will be afforded an opportunity for 2 weeks of training every year. This is a good beginning and if carried out will represent a move in the right direction. Because of the relatively low level of such activity up to the present this commitment, if it is one, needs to be carefully monitored not only in terms of numbers but also quality. Just what kind of learning opportunities will be opened up. How much planning by the individual, his supervisor, corporate staff will go into the process?

b) I feel very strongly that the real hurdles in the path of an effective Management Development program lie elsewhere--in KO's strong support for viewing HR and all other resources as the capital of the product line, not as an actual or potential corporate resource. If this interpretation is correct it will

continue to be difficult for Corporate Personnel to leverage
the assignment/reassignment process across product lines and
functions. But such a process is at the heart of successful
career development. One thing that Corporate Personnel might
do is to develop a reserve bank approach and assure the line
that for each person who is tapped for training, someone of
approximately the same quality will be made available from the
corporate pool. Admittedly such a balancing act will not be
easy and the books might have to be balanced every two years
instead of every one but the intention of proceeding along such
an axis might get the line to cooperate--at least to give the
new approach a chance.

c) In order to launch such an effort SD should pick up an old-timer
who knows DEC well and is respected by the line. It will be
hard even for a seasoned veteran to make the pitch required to
get the program going. Without such leadership and strong
backing from SD and KO it probably can't work.

d) One of the more encouraging developments is the beginning
interchange between Maynard and Europe. Admittedly it is only
a trickle and many of the assignments are short-term but still
it is an important beginning.

10. Miscellaneous Personnel and HR Issues:

a) Significant improvement in Personnel and HR will depend on
parallel actions to modify the organization. The matrix
structure has resulted in making for great difficulties in

effective coordination: too much talk and too few decisions. As a result there is an undue amount of hassle.

b) The European situation must be altered, preferably sooner than later. I assume things will begin to happen when Jack Smith gets back. The present relations among Maynard, Geneva, the countries, and the country staffs are hopelessly complex and inefficient and above all else frustrating.

c) Despite KO's strong desire to run a clean organization without favoritism, etc., many people in DEC believe that gossip and infighting are now substantial and getting worse. To complicate matters one finds the old-timers with their network against the newcomers who find it very difficult to break through.

d) Much of DEC's culture makes good sense but there is also a strong element of provincialism and naivete about some of it. Moreover, as DEC becomes a world-company there must be more scope for local variations. The fact that people in NYC are looked upon as strange is a clue to the problems that DEC faces in getting a broader framework into place.

e) If the OC moves very slowly to bring about significant changes in how the organization is structured and how it operates, then the next best approach is to follow along such lines as the current efforts of Engineering-Manufacturing to work things out more effectively between themselves; to get a new structure that makes sense into place once a decision is made to enter the lower-end of the market; and to do something, hopefully a whole lot, to improve Maynard-Europe relations.

f) Personnel will be able to strengthen its hand if it succeeds in making progress along the following axis in the near and middle term:

1) Improves the compensation-reward system.

2) Makes real progress with management development among other ways by bringing in a strong person to give it leadership.

3) Accelerates its decentralization moves by getting more of its staff out to the field.

4) Works out a system of getting line people to spend a year or two in Personnel.

5) Develops a corporate pool of able middle managers that can be drawn upon to fill some key openings as they occur.

6) Improves exit interviews and analyzes the results as prelude for corrective action.

7) Makes sure that the new employee opinion survey is well constructed and analyzed and the results widely addressed.

8) Develops corporate demonstrations with F/A to improve metrics.

9) Undertakes some R/D in HR to show long-term leadership as for instance how to deal with older workers.

10) Contributes to modernizing the DEC culture and basic principles to make sure that they reflect not only a small New England company but a large world-wide organization.

COMPANY CONFIDENTIAL

d i g i t a l   INTEROFFICE MEMORANDUM

TO: Operations Committee   DATE: 28 September 1981
                                    FROM: Win Hindle
                                    DEPT: Corporate Operations
                                    EXT: 223-2338
                                    LOC: ML10-2/A53

SUBJ: FY'82 Programs

The order rate for Q1 and the September Forecast both show that we
have economic problems for FY'82. We will clearly not make our
FY'82 BOD plan. Next Monday at the Operations Committee we will
formally decide what actions to take.

As an introduction to next Monday's meeting, we need to pull out
all the stops on selling more and on cutting out all the extra
programs that are nice but not necessary. I would like each Oper-
ations Committee member to put the word out in his organization
that times are tough. The message should be a simple one and can
have a positive bottom line:

1. The economic slowdown has slowed our order rate.

2. We must do everything we can to sell what we've got in FY'82
    (not sell FY'83 futures). Everyone should concentrate on
    selling.

3. We must cut out unnecessary programs and cut out spending on
    all but the essentials. No frills, no travel except to sell,
    no off-site meetings, keep everything simple.

4. If we are smart now, we will have excellent company perfor-
    mance for this year.

WH/CC

WH1:S.3.55

Tom Stockebrand
7 Oct 81

General Observations This Trip

1. Mediocrity is more acceptable. Risk taking is less OK.

2. In-fighting and politics is more the order of the day.

3. Ken is as usual sending out words and music but the latest round of new folks is (purposely?) not hearing and akting on the music, only the words.

Problems

1. Mid-Managers are not. Even tho there is love at the top and quality all around, example seems not to be enough to promulgate the message. As Art Williams put it: "We've got so many Goddamn Mgrs around that what we lack is Mgmt!"

Its the quality. In this as in everything else 10-20% are any good, but we've got to increase the precentages by some selection processes.

2. "No Charter" (Do whats right) used to be OK and helpful but now it tends toward disaster with lo-riskers.

3. Ken, sending out the word that Mgrs should pay attention to the doers (short circuiting the "overhead" of the managers in between) is being interpreted literally with the result that the necessary "good" managers are being undercut and are sometimes bullshit. Further, Kens measurement of DO is as an engineer, not as a manager sensing subtly the actions of other managers and feeding back on that higher level; even though he is a good (visceral) one himself. Mayber the reason Gordan, Clayton, Picott, Haney fail in similar ways is that they dont have guidance/role models from the top. Why don't you provide it?

Solutions

1. Wander around to each of your people and ask:

"What are you RESPONSIBLE for?"

If you get a good answer, say: "I'll check on your progress in X time" If you get a bad answer then: "Why should we pay you so much for that little bit?"

"Who have you fired for bad management?"

The selection process must go on and must be done locally. (I'm not sure a lot of people recognize good and bad management when they see it however.)

"Who have you loved lately?"

The key is variable response to variable situations/people.
The winners, especially, are sensitive to love. . . Art again:
"The biggest reward is a pat on the back from Ken".

"If you haven't taken a risk for us (DEC) then why should we
risk raising your salary?"

This is the most important one, as far as I can see at this
time. We seem to be swimming in warm milk soup, playing our fun
games, relatively safe from the world while the lions and tigers
our there are sharpening their claws on the woods and rocks
around. . . ."Well, we're a billion dollar company now and we
can't take a risk because we'd lose millions".

One Liners

1. Reward Failure

2. Reward Risk

3. Don't reward anything else (the money saved in the vast middle
will pay for 1) and 2) many times over).

4. Find somebody who can keep up with Gordan to do his
administrative work.

5. The ratio of Quits to Fires should be much lower.

Commentary

The fighting must be stopped. How about getting all the low
end people in a room and throwing away the key a la Kaufmann?
Have it out and come out cooperating. The main thing is that

The world is NOT a zero sum game (as Clayton, and apparently
Avery, now seem to think). Love flows forever and if you and I
can get together we can cooperate against the larger adversary
above. This process continuing will finally get us as far as we
need to: "Its IBM, etc. . . "

It is a fact that the Mgrs around here must be TECHNICAL and
HUMAN both. Its a tall order but its mandatory for us as a
strong, proud, technical, winning corporation.

We need all the diversity we can find and need to find out
how to nurture it all . . .The short view is winning again even
while the long view takers, needed desperately, are diving
underground or going up the palm trees to avoid the press.

I'll explain anything, with examples, just ask.

WRS USERS - Enter HP mode and then type <CR>
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*****************
* d i g i t a l *
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TO: TED JOHNSON

cc: STAN OLSEN
    OPERATIONS COMMITTEE:

DATE: MON 4 MAY 1981 12:28 EST
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

SUBJECT: STAN'S TIMELESS MODEL

I agree that we should give Stan a chance to present his timeless
model, but I think he should do it very soon because we've got to
make some decisions. I think we should present it as a possible
way of running a project and compare it with a more traditional
way, and decide if this is the way we want to run the Company.

I believe Stan's timeless model is a formalizing of the way
people expect to run projects at Digital today. It is one way of
having contracts with everybody who has responsibility in the
project, in this case, Word Processing.

There are several things I worry about in a system like this.
First of all, it is hard to imagine that contracts would be so
complete that they would cover all the details. I also worry that
people will not remember the contracts as they carry out their
part of the task.

Secondly, the starting of a new business and a new product
involves a lot of creativity and is very much like doing a piece
of art.

Doing a large piece of art often involves a team of people and
the artist often gives and gets much feedback. The result is
often the result of many people's work, but the artist struggles,
suffers endures, tries, fails and spends long hours on his piece
of art and often it's a failure. When it is a success, it is
often the result of improvements after many, many failures.

Running a project with contracts, however, is a completely
different way of doing it. In this case, it is assumed that all
the pieces in the creation can be defined well enough to be
assigned to other people, and that there is no struggle, no
travail, no cutting and trying and doing again, no long hours, no
wee hours in the morning, no waking up early, no coming to work
in the middle of the night, but instead, the piece of art is a
masterful piece of business management. It's like cutting the
trees down in the forest. The supervisor can be in New York
City, and just needs reports and with measurement, punishment,
and reward, gets all the parts of the job done.

The alternate way, which is close to the way we used to operate,
and the way most of our successful product projects have been
done, is a team that works closely together. Now people may come

from other areas and maintain relationships to the other areas, but with a team, jobs are very clearly spelled out and each person succeeds or fails. The difference is they are one group. They live together, struggle, suffer, criticize and live or die as a whole. All the pain of a creative person is endured and enjoyed by every member of the team.

Another problem with the contract basis for doing creative work is that people may not have the same goals. For example, you can imagine that some day we may make a product which the product line is aiming toward the very low end with a specialized computer about the size of a CT25 or smaller. They look at Lanier as the competition.

In this same project you can imagine the hardware people, because they want broader usage of this computer, aim for a much larger computer and put a hard disk on it and grow it so that it would also be used for some of the customers who need larger computers. Their goal is to aim for the high end of WANG.

Now the software people are far away on their hill, and they really understand the problem. They are challenged to do everything for everybody and they try to compete with PRIME. In order to do all the things that everybody else does in software, they need a VAX.

To the Operations Committee, it would sound like they are all working on the same project. The Operations Committee would be convinced that people were working together because they know that people have, at times, visited each other. Visits might be the way to solicit funds for the United Way. The fact that they visited does not mean that the plans must be in agreement. To the financial people it is clear that they all have a contract. However, some day when these things have got to fit together, it is unlikely that the end product will be competitive, if it works at all.

I suspect that at business schools they never teach anything about the travail of creativity. I also suspect that an overwhelming number of people at Digital today have no idea the amount of emotion that has gone into every successful product.

Unfortunately, most of our engineering products are proposed by the engineers, such as the VAXes, and the 20 and the VT100. They formally, or informally form a team, and when they do it well, they have the positive results that come from a team.

When we consider the possiblility of doing formal contract creativity throughout the company, I think we should consider it very carefully and be sure that we really know what we are talking about.

KHO:ml
KO1:S4.6

d i g i t a l   INTEROFFICE MEMORANDUM

TO: Julius Marcus   DATE: April 16, 1981
        Andy Knowles   FROM: Win Hindle
        Stan Olsen   DEPT: Corporate Operations
        Jack Shields   EXT: 223-2338
        Jack Smith   LOC: ML10-2/A53

cc: Operations Committee

SUBJ: Asset Performance Measurement

We are committed to an aggressive improvement in asset
utilization. The Board of Directors is extremely critical of our
inventory performance and we have promised significant inventory
improvement in FY82.

Our direct reports need to be sure we are serious about this
emphasis on assets. Therefore, I would like to be sure that you
use performance around assets as one of the major measurements of
your direct reports in FY81 and 82.

The first place to use these measurements is the Direct Report
Salary increase and Stock Awards which we will decide at one day
of the June WOODS meeting this year. Performance on the
following metrics should be included:

1. Weeks of inventory

2. On-time deliveries

3. Material forecast performance

4. Order acknowledgement time

Your direct reports should understand we are putting heavy
emphasis on these issues and that their future compensation will
be influenced by their performance in these areas.

If you have any disagreement with this list or this emphasis at
the June Salary Review, please mention it right away.

WRH/ep

bcc: Abbott Weiss
      Barry Burns

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+---------------+
: d i g i t a l :
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I N T E R O F F I C E   M E M O

TO: Ted Johnson

CC:

Date: 11 March 1981
From: Ken Olsen
Dept: Administration
MS: ML10-2/A50   Ext: 2301

SUBJ: MARKETING PLANS

It seems to me that it should be possible to have a very simple,
readable, understandable, and, therefore, easily checked upon,
marketing plan for each of our product lines, and I think you have the
staff to do this and help, encourage and educate where necessary.

It might be time to immediately develop one for our display terminals.
It seems to me that we designed a terminal to fit on our own
computers, and then happened upon two selling techniques to sell
these, and that is all we've done. We've sold them through our own
product lines; we've sold them through re-sellers who have sold them
to our own customers, and when we couldn't make enough, we were very
bold and thought the world was limitless. When the market filled up,
it leveled off very suddenly because both channels were selling to the
same customer. The marketing plan that I think a professional
marketer would have in this area would list all the major applications
of CRT terminals and list all of the variations which we can readily
make and have a competitive advantage in, and then, line up the two
and have a program to go after those areas where they do line up.

It seems to me that every product line should do this in their area.
Usually the Digital tradition of marketing was just a form of one or
two pet ideas and one or two pet channels. We suffer when we these
slow up a little bit, and we don't have a list of places to go after
it.

We have tremendous plans for making VT100's. We also have the
capacity for making variations of them. All we need is a list of
ideas and a plan, and we should be able to take over the whole market.

KHO/er
KO1:S2.95

ATTACHMENTS

DIGITAL EQUIPMENT CORPORATION

MAYNARD, MASSACHUSETTS

KENNETH H. OLSEN
PRESIDENT

[handwritten note, top right:] Meeting with Ed Schein Thursday, July 9 Operations Com.

10 March 1981

Prof. Edgar H. Schein
Massachusetts Institute of Technology
50 Memorial Drive, E52-583
Cambridge, Massachusetts 02139

Dear Ed:

We've developed this strange organization in our Company. We call it matrix management, but it does not describe what we do.

We have set up an organization where everybody has two bosses, in fact, sometimes has several. This is not un- common; I don't think there is anything wrong with that. However, when there is a problem, he can never go to his boss and get a yes or no answer. He has to go to that large number of people who work for his boss. There is little relationship between him and his boss. The boss's staff are the ones who make all the decisions and the ones who keep people in line, keep them terrified, and who supposedly give answers.

The result, of course, is obvious. There are thousands of people who can say no, and no one who can say yes.

Last year, we hired Joe Bower from the Harvard Business School to make a year long, detailed, expensive study on how we do things in Europe. He concluded that things are pretty good, that we just have to give people more responsibility, and indeed, there were some small changes, but he never noticed the problem.

In Geneva, we have 800 people. All of them can say no. We have 18 product lines represented in Geneva working with each of the offices. Each of the product lines have many staff members. Each one supervising the product lines. Now, one would expect the staff in Geneva to do marketing, selling, market planning, et al. Instead, they are all there, it appears, to discipline, say no, correct, repri- mand, and allocate resources. Why we need so many people to allocate resources, I have not the slightest idea.

Most of these product line people are from the States, and
they sit in Geneva, and I don't know why they don't sit in
the States and do it from here. However, with this so-
called matrix organization, in which people hold in awe as
being the mysterious secret for our success, is something no
one wants to touch because it is successful.

I'm terrified at what I see in the Company today. Things
take longer and longer to do. People have been so beaten
down that no one will show any initiative to do anything
new. I ask people why they don't propose something, and
they say, "Well, I mentioned it to a dozen people, and they
all said no." I said, "Why don't you bring it up to the
boss?" They say, "Well, I have to go through all of his
staff, and, of course, they don't even have the time of day
to spend with me, much less think about my problem, and, of
course, they say no." There's apparently no relationship
between people and their boss, and all the work is done by
the staff.

Now, this goes on in Engineering too. With an engineering
force of several thousand people, you would expect us to
have at least 10-30% of them so interested in their jobs,
with such burning desire to get things done, that they would
be working on a Saturday. Now, it is a Saturday morning,
and I'm here, after coming back from Europe, and there is no
one in the Mill. The reason is obvious. There's no reason
to hurry. Every project takes three or four years, and very
little of that time is spent on engineering. Most of it is
red tape, because there are hundreds and hundreds of people
to say no, to convince, to test, to approve, and everything
else. Most of them think that people are uncreative, don't
have any goals, and are just put there to protect their boss
so he doesn't have to get involved and make decisions.
Indeed, he doesn't have to, because nothing ever comes up to
him.

Of course, there is no formal definition of this organiza-
tion. I asked Win and Bertocchi to look into it, and they
said they can't find any communication paths or decision-
making system here that could be discussed. Most of our
people have worked only here, and they don't see anything
wrong with the system; they think it came from heaven, and
when it takes three years to do an engineering project, they
figure we should just spend more money, hire more people.
Meanwhile, our engineers leave, are frustrated, and projects
don't get done.

Our Senior Vice Presidents are very concerned about our
competition with the Japanese. They see no relationship
between our being able to compete with the Japanese and the
red tape in their own organization, and the fact that people
show no initiative to get things done quickly.

Sometimes, I think people don't want to change the organi-
zation because with this red tape, they always have excuses
for failure. I'm very reluctant to ask any more professors
to come and look it over because they hold our results in
awe, and think there must be something wonderful in the way
we do things. I'm terrified, and I'd like to ask you if you
have any ideas how you might help us see a better way.

When we started the product line organization, the key tenet
was that everyone lays out his own plans, and there is no
staff telling him what to do. Harlan Anderson was sup-
posedly the last staff member without responsibility but
telling others who have responsibility what to do. Since
then, we have developed two-thirds or three-quarters of the
Company, who have no responsibility, but are free to tell
other people yes and no. This number, of course, grows on
itself, because the more people you have like this, the more
people you need to support them, which makes more people who
can say no.
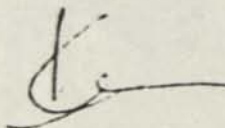
I'm sometimes so depressed, because people complain how long
it takes to do things, and how much red tape there is, but
they never show the slightest bit of initiative, or interest
in straightening it out, or interest in finding out what the
problem really is.

Sometimes, people want to form a division, because they
think that would take care of all the problems. I will not
do this until people show some understanding of what the
problem is.

If you do have ideas as to how I can get some help in re-
gaining the creativity, the enthusiasm, the spark which we
once had in all parts of the organization, please let me
know. I wouldn't mind paying the price of these extra
people, if they'd only go skiing and leave the useful part
of the company to do what they have to do.

With best wishes.

                                Sincerely yours,

KHO/er
CC: Operations Committee

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TO: ANDY KNOWLES   DATE: FRI 27 FEB 1981 14:05 EST
    JOE MEANY   FROM: KEN OLSEN
cc: OPERATIONS COMMITTEE: DEPT: ADMINISTRATION
                                          EXT: 223-2301
                                          LOC/MAIL STOP: ML10-2/A50

SUBJECT: EDUCATIONAL MARKET

Sometime soon, I'd like to have you present to the Operations
Committee, or a small number of us, or the Board of Directors, an
analysis of the educational market.

I think there are 30,000 privately owned, money-making schools in
the country. These include secretarial schools, business
schools, art schools, technicial schools, etc. I think you
should outline for us what type of computer each of these
categories should have for their programs.

For each of the public schools, there are probably different
categories of computers for different applications, and I think
it would be very worthwhile to chart these out.

For the large number of applications of computers in colleges and
universities, it would be very useful to us to have each of the
types of training, each of the applications outlined, and which
computers are needed there.

This might be the outline for a brochure on education; it could
even be a professional paper presented for publication somewhere.

The professional approach to marketing education would be very
thorough and very complete and would not be in the usual way of
marketing where we wait and see who comes in the door. Because
education breaks down into readily identified categories, it
might be a good model for how we should do marketing in other
areas of the company.

KHO/er
KO1:S2.64

THE ORIGIN AND MEANING OF MILES' LAW

Miles' Law says: "Where you stand depends on where you sit."

Maxim #2:   The responsibility of every manager exceeds his authority, and if he tries to increase his authority to equal his responsibility, he is likely to diminish both.

Maxim #3:   Managers at any level think they can make better decisions than either their superiors or their subordinates; most managers therefore seek maximum delegations from their superiors and make minimum delegations to their subordinates.

Maxim #4:   Serving more than one master is neither important nor unusually difficult if the servant can get a prompt resolution when the masters disagree.

Maxim #5:   Since managers are usually better talkers than listeners, subordinates need courage and tenacity to make their bosses hear what they do not want to hear.

Maxim #6:   Being two-faced - one face for superiors and one for subordinates - is not a vice but a virtue for a program manager if he or she presents his or her two faces openly and candidly.

Maxim #7:   Dissatisfaction with services tends to rise rapidly when the provider of the services becomes bureaucratically bigger, more remote, and less flexible, even if costs are somewhat lower.

SHEL DAVIS
2/9/81

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TO: OPERATIONS COMMITTEE: DATE: THU 5 FEB 1981 16:32 EST
                                         FROM: KEN OLSEN
cc: NORMAN BECKER   DEPT: ADMINISTRATION
    PAT KRESS   EXT: 223-2301
    ROBERTA BERNSTEIN   LOC/MAIL STOP: ML10-2/A50

SUBJECT: SUMMER SCHOOL

I have asked the people working on the curriculum for our Summer
School on "How to be a Product Line Manager", to interview
Operations Committee members during the next 2 weeks to help
define the job of the Product Line Manager and Group Vice
President. It might be particularly useful to do these
interviews at this time, because people are thinking about the
subject and it might also help Operations Committee members to
clarify their thinking.

It seems to me that there are two different jobs that the Group
Vice President has to do and people like to divide the Product
Line into groups according to which job they feel is most
important.

I think it would be good for us to define both jobs and to
consider ways to have two sets of management; one that would be
strong in one area, and another that would be strong in other
areas.

The aspect of the Group Vice Presidents job that most people   ①
emphasize is the need to co-ordinate markets that are somewhat
alike to eliminate conflicts and to make unnecessary,
communication between Product Lines by having them work for the
same boss. It also seems important to some people that they be
grouped in order to keep enough size to have clout with the rest
of the organization.

The other aspect of the Product Line and Group Vice Presidents   ②
job which is less emphasized but, from my point of view is very
important, is the planning, documenting, communicating, managing,
organizing, market research, product definition and so forth for
a half billion to two billion dollars business which takes large
staffs and very professional people and much detailed work. It
takes people who are skilled, patient and lucky in communicating
with team members and the rest of the Company.

I think we should, individually, in getting ready for the
discussion, make notes as to how big each Product Line can be in
2 and 5 years, so that we can estimate the size of the job in
these areas. We can then plan on the type of people we need to
run them. This weeks Business Week points out that a
$600,000,000 business is more than deCastro can run by himself.

Sometimes, people say we can eliminate all communication problems
if we all work for one person. I could not do that when I ran a
$20,000,00 operation. I have difficulty visualizing that anyone

is so much brighter than I am that they can run a 2 billion
dollar operation and have the communication problems disappear
because everyone works for them.

I think we should also make a list of the people in the Company
who have the potential for being successful in those jobs that
require planning and communicating. We should list those who
have been successful in getting projects done by others, by their
skills in communicating, encouraging and motivating and by the
clarity of their ideas.

It might be that the people and the organization we have had for
the last few years will carry us to several times our present
size, but I think we should assume that we are going to need the
large number of professionally trained, experienced managers with
the academic skills that you read about in books about large
companies, and not just people who came from the Sales Department
and learned on the job here.

KO1:S2.24
Attachment

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TO: OPERATIONS COMMITTEE:

                              DATE: MON 2 FEB 1981 8:48 EST
                              FROM: KEN OLSEN
                              DEPT: ADMINISTRATION
                              EXT: 223-2301
                              LOC/MAIL STOP: ML10-2/A50

SUBJECT: LET'S CHECK BEFORE WE CHANGE DIGITAL

Here is a note outlining how I think Digital works. It works
pretty well and we do well so the system must be fairly good.

Where it does not work, let's check in detail to find out why
before we change the whole Company.

Each group has a part and it is important that each part have
100% quality or none of the plans will work.

We also ought to outline the responsibilities of the Operations
Committee when the plans are not working exactly as planned. We
should specify who brings these issues to the Operations
Committee.

For those plans which are in trouble today, I think it would be
worthwhile to go through them in detail and find out why they are
not gaining full potential market share, or why they are not
doing the plan they originally proposed, or why there are areas

in which the customers are not happy, or why the product level is not what it should be.

HOW DIGITAL WORKS

1. Product Lines set goals dependent on products Engineering promises. Goals are to maximize profit, or maximize market share, or develop new markets. Goals are approved by the Operations Committee.

2. Product Lines make plans to meet approved goals. Engineering, Manufacturing, Field Serivce, Sales and Finance are team members to carry out parts of those plans. Operations Committee approves or modifies one and five year plans to match ability of Product Line or team members.

3. When a plan does not work, one can usually assume the plan was not complete or sufficient, or the plan was not clearly communicated, or a team member did not do his part.

4. When a team member does not do his part, he (they) were incompetent, did not understand their part, or refused to do their part because;

   a. They did not like the plan.

   b. They never bought into the plan.

   c. They had a better idea.

   d. The Product Line was too small or lacked quality.

   e. Their goals were different.

   f. They refused to listen.

KO1:S2.20

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TO: OPERATIONS COMMITTEE: DATE: MON 2 FEB 1981 8:48 EST
                                             FROM: KEN OLSEN
                                             DEPT: ADMINISTRATION
                                             EXT: 223-2301
                                             LOC/MAIL STOP: ML10-2/A50

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K01:S2.20

DIGITAL   INTEROFFICE MEMORANDUM

TO: Gordon Bell   DATE: 1/9/81 Fri 9:46:39
        Steve Coleman   FROM: Win Hindle
        Ted Johnson   DEPT: Corporate Operations
        Andy Knowles   EXT: 223-2338
        Bill Long   LOC: ML10-2/A53
        Julius Marcus
        Ken Olsen
        Stan Olsen

SUBJ: Measuring the Marketers

In talking with Ken recently, I think I understood what he has
been driving at when he complains that we never measure the
marketers. In his view, a marketer should take responsibility
for selling a given number of units of a product over its
lifetime. Measurement is simply how he did against his plan on a
year by year basis.

I think Ken would like to see each Product Group Manager segment
responsibility by product within the Product Group (X has
responsibility for VAX11/780, Y for 11/750, Z for 11/70, etc.).
Each responsible person should make a plan which says how many
units will be sold each year. Measurement against these goals is
easy and clear.

If I am hearing Ken clearly, I believe we should strongly
encourage each Product Group Manager to organize this way with a
responsible person for every product.

WRH/bwf

d i g i t a l   INTEROFFICE MEMORANDUM

TO: John Sims   DATE: 11 December 1984
                                       FROM: Win Hindle
                                       DEPT: Corporate Operations
                                       EXT: 223-2338
                                       LOC: ML10-2/A53

SUBJ: IBM

I listened to tapes today by Thomas Watson Jr. who said some
interesting things about IBM:

  1. The three "Beliefs" of IBM are:

      a. Respect for the individual.
      b. Service to customers is top priority.
      c. They expect superior performance from every
          employee.

  2. These beliefs are the cornerstone of the company. They
      come before policies and before profits.

  3. There are seven levels of management between a Produc-
      tion Worker and the President - six levels in Sales.
      Though this is too many levels, they do not know how to
      reduce them and therefore need to communicate despite
      the levels.

  4. Parallel paths of communication up and down the
      organization are essential. IBM has twelve functional
      newsletters.   In addition, there are Executive letters
      from the President once a month to all employees, and an
      all employees telephone call from the President about
      twice a year on very important issues.

  5. In there Branch offices, IBM has a "Family Dinner" once
      every two years. A company Vice-President speaks and
      they show a current future on the State of the Company.
      Spouses are included.

I found the ideas very similar to our philosophy. There were a
few ideas (Executive letters, family dinners) that we should
consider.

WH:dc
WH1:S4.23

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TO: OFFICERS:
    PRMGMT:

DATE: FRI 7 DEC 1984   4:03 PM EST
FROM: JOE CODISPOTI
DEPT: CORPORATE PR
EXT: 251-1031
LOC/MAIL STOP: 'CF01-1 M18'/

MESSAGE ID: 5257129830

SUBJECT: SONNY MONOSSON "TESTIMONIAL"

For those of your who could
not attend the DECworld press
reception, and for those of you who would like to reflect on the
unprecedented action which took place there, here is a transcript
of Sonny Monosson's impromptu remark at the podium before the
assembled worldwide press This followed Jack Shield's talk in
which he quoted from one of Sonny's newsletters.

"Fourteen months ago, when DEC was in the middle of all its
problems, I said that DEC had become a second tier computer
company. In the last 14 months, I have watched DEC very, very
carefully. They have overcome their administrative problems. I
can attest to that. Now, I get bills promptly. They have made
very substantial progress in the reorganization of their company
to keep up with the stupendous, rapid growth that they've had.
These show - there are new people that have been brought in and
its working. Most important(ly), they have made strides in
technology. The superiority of its products, more important, the
inovation of its products - the fact that the products are really
here and can be used and sold and bought - have made them in a
class by themselves. Consequently, I would humbly like to
re-phrase my previous quotation to the following: DEC is the
number one computer company that is only number two in size."

Sonny Monosson, December 5, 1984.

7-DEC-84 22:31:40 S 07843   MREM
MREM MESSAGE ID: 5257132166

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   ! d ! i ! g ! i ! t ! a ! l !       I n t e r o f f i c e    M e m o
   !___!___!___!___!___!___!___!
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TO: see "TO" DISTRIBUTION

DATE: MON 4 JUN 1984   3:56 PM EDT
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5238585527

SUBJECT: A CORPORATE EMERGENCY

When a pilot says he is in trouble and needs some help, he is
asked, would he like to "declare an emergency." He is often
reluctant to do this; he will try to get by without that formal
act.

When he declares an emergency, all resources are available to
help him, everything in the neighborhood comes to a halt, and the
highest priority in that area is to get him safely to the ground.

This is expensive, and after it is done there is a formal, legal
inquiry into how it all happened. This, of course, makes people
reluctant to "declare an emergency."

I am about to declare an emergency at Digital in the world of
small computers. There are a number of reasons why we did a
terrible job in the personal computers and why we do poorly in
the small business. We have discussed some of them, but they are
relatively unimportant. We built too much quality into the
product, we announced them before they were done, we took orders
before the products were completed, and we spent more money on
advertising than we did on servicing the customer.

These problems are survivable and we have already proved this.
We have a good product and the customers love them, but we are
missing two things that we set about to do as initial goals and
the stated goals all along the program. Management feels its job
is budgets and finance, and that, miraculously, technical goals
should be taken care of by someone else and management will not
take part in these goals.

Corporate management spends a lot of time squeezing budgets so
that on paper we make a profit, and Engineering management spends
a lot of time squeezing budgets so that they can get all the
projects they initiated done, even though none of those projects
solve the basic Corporate needs.

We are missing two basic things that we have said many times in
the several years we are going to accomplish.

We still have no plan, no techniques, and no ambition to be able
to tell a small customer how he can integrate his small computers
into a system for running a business, his agency, his brokerage

company, his small hospital, or his store.

We still have no plan to make a system which is so simple that anyone can understand it, anyone can sell it, anyone can install it. We do not need another wheel-around computer that has more options, more freedom, more complexity than we have ever had before in any of the computers we have ever built.

Our plans are still to insist that the customer figure out if he wants to have serial or parallel communications, synchronous or asynchronous lines, buffered or unbuffered lines, RS232, RS423, RS422, RS449, or 20 ma. loops. Then, to top it off, the customer has to decide which combination of the above he wants in funny sounding modules.

We do not know the difference between distributed processing and time sharing, but we expect the customer to figure it out and order all the parts he needs to do what he wants to do. Of course, we won't have the software to help him, but we will have a vast number of pieces which our salesmen, of course, cannot figure out how the customer should use, but with all of that stuff, the customer surely should be able to figure out something.

I am about to declare an emergency.

Most of our small business marketing groups came from the OEM world, which insists on all this freedom. To them, systemness means they have never forgotton anything the customer may possibly want in some weird set of conditions or in some state of ignorance. I do not think they could sell a product which was so simple that anybody could install it and use it.

I am about to declare an emergency which will set about to develop a naive, limited, simple minded J-11 Q-BUS smart server that would integrate distributed small processors in an organization. The same box would be a disk server when ETHERNET is necessary.

I am about ready to contract outside, a small business plan that would have naive, simple minded, limited set of computers and hardware that would allow a small number of configurations that anyone could understand, and software which is naive and efficient, but readily understood by everybody and that are hooked together with our new RS423 serial lines that are so easy to use anyone can do it, but then not allow in this system, people to use any other system for interconnect. If people want a special system, they can go somewhere else or buy it through an OEM, or through special systems.

I want to be able to say that with our system we can integrate anybody's PC, but only in a very simple minded way.

Gordon insisted on dropping the Q-BUS for small computers, because installation was so expensive as compared to a personal computer. Part of this was illusion, because our marketers then offered all the software that was standard within the industry

and never got around to integrating into a system necessary to run a business. I thought it was clear for years that we made a mistake, and that we should have, and that we should solve the office, the business, the organizational problem, but do it with a traditional computer system, but limit them severely, but not as much as we have when we limit ourselves to off-the-shelf, bubble-pack software. However, we are in worse shape today than when we started, because we have learned a lot more complexity in our Q-BUS machines. We have made it more complicated for people to use them, and we made the machines even more expensive than they used to be because we know more options and freedoms to build into them. In the personal computer area, we are still trying harder and harder to get more standard software off-the-shelf, but still not trying to accomplish what the customer wants, and not fully realizing what we are missing.

KHO:blk
KO3:S10.34
DICTATED BUT NOT READ

.

"TO" DISTRIBUTION:

GEORGE CHAMBERLAIN   PETER F CONKLIN   BOB DALEY
DON GAUBATZ   DOM LACAVA   OLLIE STONE
STRATEGY COMMITTEE:

Strategy Com.

I n t e r o f f i c e   M e m o

TO: STRATEGY COMMITTEE:

DATE: FRI 18 MAY 1984   11:29 AM EDT
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5236862504

SUBJECT: GOAL FOR 1985 - SALES AUTOMATION

We have done well in introducing automation to the office, to the
factory, and to engineering design. We have changed the jobs,
changed the red tape, changed how we do things, and the results
have been very good. We have removed much of the frustrations
and drudgery in these jobs. People are more efficient and have
time for more important things.

I would like to make the goal for 1985 to be to introduce
automation into sales. Every part of the company is getting
more efficient by very significant amounts and we are doing a lot
more with a lot fewer people almost everywhere except Sales. The
main reason, I think, is that we are interested in doing things
the way we used to.

I proposed that we carefully analyze everything involved in
getting an order and taking care of the customer, that we change
the red tape and our techniques, and that we introduce computers
and communications. We should do whatever is necessary to make
the job fast, efficient, productive, satisfying and fun. If we
cannot do better than L. L. Bean, Sears Roebuck, or my camping
catalogue store, we should hang our heads in shame.

Salesmen, or an approved customer, should be able to order from a
terminal and immediately have serial numbers of the product
assigned for straightforward products. Salesmen should have a
portable terminal that can be plugged into any telephone.

For orders of simple equipment, no paper should ever be produced.
The order should go into the computer and stay there until
shipped and the bill of lading, packing list, and invoice are
produced.

Simple orders should be acknowledged easily and immediately, and
status of orders that are not instantly billed, should be
instantly available, accurate, with no hassle.

Our products should be so simple and such complete systems that
they can be simply described in the literature so there is no
need for customers to ask questions.

If we cannot describe a product so that it can be ordered from
the description, let's take it off our price list in 1985.

I would encourage having several order points for each different type of product, so that one order point doesn't get too large. One of these is custom systems. I do not care how long it takes to fill those orders.

If we do not know how to do the software for this, I am sure we have OEM's who can do it for us, or we might simply buy a package that one of the big mail order houses use. I am also sure that we will have to simplify our demands for information if we want to accomplish this.

On Monday, I would like to commit to the Board of Directors that we will accomplish this in 1985.

K03:S9.92

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TO: see "TO" DISTRIBUTION

DATE: FRI 1 JUN 1984   4:09 PM EDT
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5238282793

SUBJECT: CORPORATE 1985 GOALS - JUNE WOODS

I would like to take the two days we had put aside for the June
WOODS to discuss our Corporate goals for 1985. The three goals I
would like to discuss are:

1. Develop a simple set of standard products for all product
    lines in the Corporation.

2. Automate sales

3. Automate literature

I would spend the first day discussing our future products. I
would like a presentation of the product needs for each market
area which sometimes includes more than one product line. I
would like to match that with the engineering plans to develop
those products.

I would like Jack Smith to collect the data on the market needs,
and Engineering's response to it, and the results of the Strecker
Committee, and be prepared to present the data necessary for the
first day's discussion.

I expect, in most cases, each product line needs one or all of
the standard simple set of products that we will be developing.
The factory application would need some of these products put in
steel boxes and a laboratory might need a slightly different
configuration and some ETHERNET versions will be rack-mounted
without a cover. But in general, they will be the same products
and definitely they will use the same software systems for all
product lines.

I expect that, in addition to the standard simple set of
products, the OEM group would additionally want to offer a large
number of modules and probably a few more central processors. I
assume that, at this meeting, we will separate out the OEM
Marketing Group and those engineering groups who service them, so
that we will look at the whole OEM business and the chips and
board business as a separate business entity. Each of the
products not on the small list of products will be evaluated from
a return point of view. We will then watch the total
engineering, total manufacturing, and total inventory of the OEM
business and make sure that we charge less when it is justifiable

and charge more when it is necessary.

I would like Jack Smith and Jack Shields to present a plan for automatic sales. I would like the Group Marketing Managers to prepare a list of that data that they think we should ask the customer or the salesman to include when they type in an order. We can assume that the computer has the base data of every salesman and every customer who is allowed to place an order once they put their code number into the computer, it could immediately produce that individuals name, address, the name of the company, and all pertinent data for his review, and then he does not have to enter in. The question then is, "what specific data does he have to put in, in order for us to get the information we need for market reasons?"

Automating sales will be relatively easy when we have a standard set of products. The products will all use the same hardware, and all will use exactly the same software system. We will decide what compromises we have to make, so that the salesman and certain customers can order from a terminal or a Radio Shack hand-held calculator, any of our products and immediately get an acknowledgement back, even by the serial number of the product, and an exact delivery date. The salesman will also be able to make inquiries about delivery and price. The same system will also allow him to make inquiries about status of orders that do not get instant delivery.

For automatic sales, it will mean that most products will have to really be available for shipment within 24 hours. This means that we have to have a very simple set of products because the number of item types in inventory will have to be small and we will be able to inventory quantities that are necessary to give instant delivery.

In the automatic sales system it is assumed that orders that do not fit in the standard, simple product list, but that involves special configuration, will not fit in the automatic system and it will have to be done manually, and delivery will be significantly later.

I would like to define in that meeting, exactly what data we want from each order. I am sure everyone will agree that in order to collect data, we are not willing to sacrifice automatic and fast delivery, and we therefore, are going to have to, at that time, decide exactly what data we want to collect from every order. We have to assume that in order to collect that, the salesman or the customer is going to have to type that information in, and it has to be so simple that he can do it sitting at the customer's desk.

I would like Dick Berube to propose, the last half day, a system for automatic literature, and for a catalog which could serve as the only document we send out to our customers.

I would like to spend the last half day on automatic literature. The basis of the automatic literature is going to be a catalog that we will print once a month. This will be a catalog of literature. We will list by market and then list also by product

the standard sets of literature that we have for each section.
There will be two categories of literature. One is a colored
brochure which is expensive and glossy with little information,
and a handbook which is relatively plain, but filled with
information. In those areas where we have no literature, it will
be very clear. There will not be a position for product lines to
redo standard product literature because there will not be a
place to offer this on the chart.

All literature printed from now on will have a large date on the
front cover and on the heel when there is a square heel, so that
everyone can tell exactly the age of that literature. This will
be stated in the catalog, so customers can tell if the literature
they have is out-of-date compared to the literature being
offered.

This catalog probably should be magazine quality, and it should
be the thickness of a magazine. This should be the vehicle, and
the only vehicle, that the Company and all it's product lines use
to contact customers. There will be articles about the Company,
news items, and ads.

We will send a copy of this to everyone who has ever been a
customer and everyone of whom we can find the name that should be
a customer.

Each mailing will cost about $1 million. It will probably be the
most efficient way to get our message out that we can possibly
do.

KHO:blk
KO3:S10.25

"TO" DISTRIBUTION:

DICK BERUBE   GEORGE CHAMBERLAIN   SAM FULLER
ROSE ANN GIORDANO   BOB HUGHES   ED KRAMER
WARD MACKENZIE   JOEL SCHWARTZ   PETER SMITH
STRATEGY COMMITTEE: BILL STRECKER

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Strategy Com.

Interoffice Memo

TO: MANAGEMENT COMM:
    STRATEGY COMMITTEE:
cc: BILL HANSON

DATE: TUE 3 JUL 1984   9:38 AM EDT
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5241428832

SUBJECT: STANDARD SYSTEMS

*******************RESTRICTED DISTRIBUTION*********************

Sometime ago we established a strategy and a plan for standard systems. I don't beieve we have made any official change, and I think we should continue with the original plan.

The goal of the original plan was to have a list of standard systems which would take care of most customer's needs, and which could be ordered with a simple code.

For each of these standard systems there would be: a packing list, wiring diagram, and all the information needed to connect it, as if it were a standard, off-the-shelf product that anyone could put together. Every cable, screw, cabinet, every piece of documentation, and software would be itemized and listed, the way it is for any product you buy from Sears Roebuck that has the comment, in parenthesis, that says: (Normal tools are needed for assembly.)

The salesmen would encourage customers to buy the standard systems because delivery would be so fast, and everything would be so simple and straightforward. However, they would not be included in their budget or in their commitments.

Our plan was to have the salesmen only commit to average systems. They would commit to get so many average 780 systems, or so many average LCP-5 systems in a period of time, and that would be the commitment.

Manufacturing then is responsible, with history and with sophisticated mathematics, to have the right number of peripherals, cables, pieces of software and documentation, cabinets, screws, nuts, and washers in inventory to take care of 99.9% of any combination of standard systems that are ordered.

Standard systems would not be assembled ahead of time. Sales would not make commitments to buy standard systems, but only to buy CPU-type. Manufacturing would take the responsibility for having components available.

I believe this is the plan under which the Company is working, and any variation or any lack of commitment to this should be

formally presented to the Strategy Committee.

KHO:ml
KO3:S3.22
DICTATED BUT NOT READ BY K. H. OLSEN

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TO: Marketing Finance Staff   DATE: 23 May 1984
CC: Win Hindle   FROM: BILL STEUL
    Al Crawford   DEPT: MARKETING FINANCE
                                  EXT: 223-9719
                                  LOC/MAIL STOP: MSO/L9

SUBJECT: Ed Schein's Thoughts

Ed Schein wrote down the attached comments in 1977. They are still
still relevant to what we are trying to do to positively influence the
Company's performance.

Regards,

SOME THOUGHTS AND GUIDELINES ON "SLOWING DOWN" OR

"CUTTING BACK"

1.   WHY IS IT DIFFICULT TO DO?

   A.   Ease of Succumbing to Emotional Responses vs Rational Diagnosis

      1.   DENIAL of Problems... "We are basically OK"; "Let's emphasize the positive"; "Things will be OK"; "Let's wait it out".

      2.   SCAPE-GOATING, BLAMING OTHERS FOR PROBLEM... "They overbuilt"; "Sales isn't pushing the right products"; "You guys overordered".

      3.   DEPRESSION, BLAMING SELF for problem... "I blew it"; "I guess I don't really don't know how to manage"; "OK, I'll cut way back (without considering effect on other parts of company)".

      4.   OVERPERSONALIZING... Hero or bum complex, false bravado... "I'll do it all, I'll give up my building".

      5.   "IMPULSIVE" REACTIONS: "Cut out all hiring"; "No more travel"; "Everyone cut by 10 percent".

   B.   Difficulty of Making RATIONAL, SHARED DIAGNOSIS

      1.   What is the REAL, UNDERLYING PROBLEM, and how do ALL parts of the company contribute it?

      2.   What basic STRATEGIC GOALS can be identified to guide action?

      3.   How can we avoid OVERREACTION and causing new set of future problems?

1.   SOME GUIDELINES FOR HOW TO DO IT

   A.   Review or achieve CONSENSUS on BASIC STRATEGIC and CURRENT OPERATIONAL GOALS

   B.   Spend enough time to reach CONSENSUS on RATIONAL DIAGNOSIS...WHAT IS HAPPENING AND WHY? Requires RE-EXAMINATION OF SOME BASIC ASSUMPTIONS about space, people, markets, etc.

   C.   Achieve COMMITMENT to diagnosis and the need to do "something" requires high degree of mutual understanding and sharing of assumptions.

   D.   Develop plan for communicating "THE PROBLEM" down in the organization so that next level or two down can develop "ownership" of the problem and commitment to do something.

   E.   Develop feeling of "we share the problem" in all parts of the organization. Avoid use of "I" or "You".

ED SCHEIN
14 December 1977

F.   Develop <u>COORDINATED</u> plan and work toward real <u>CONSENSUS</u> on what <u>EVERYONE</u> will do.

G.   Develop <u>ACCOUNTABILITY PLAN</u>...Reporting back on what everyone is doing in a regular and disciplined fashion and what results are being achieved.

H.   Develop <u>CROSS-GROUP TASK FORCES</u> to work those parts of the problem which involve two or more groups, with task force managers who are accountable for results.

I.   <u>RE-PLAN</u> and <u>MONITOR</u> on a regular basis how the "Program" is going: High degre of self and group <u>discipline</u>.

ED SCHEIN
14 December 1977

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Interoffice Memo

TO: PATRICK COURTIN
    PETER SMITH
cc: JACK SMITH
    STRATEGY COMMITTEE:

DATE: MON 30 APR 1984   4:07 PM EDT
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5235033964

SUBJECT: PRODUCT LINE ENGINEERING

For a number of years, most of the product line engineering
projects have not had a good history at Digital. Gordon Bell
used to get quite emotional over the subject because product line
products often did not have the very critical, continuous peer
review that Central Engineering projects had. They sometimes
suffered from not having all the details worked out, or
integrated with the critical parts of the Company. Yet, the cost
of introducing them was as high as a standard product, and in
many cases, we lost a lot of money on them. Product Line
Managers in the old Digital used to argue that, "it was their
money," and they had a right to spend it any way they wanted.
They felt no one had a right to review or criticize them, and
they could bypass all the review processes. Andy Knowles used to
argue that if he made money on VAX it was his money to spend on
GIGI, even if GIGI lost money.

The engineering projects presented by the factory group to
the Strategy Committee last week were, in some ways, very
attractive. However, the amount of work to be done, and the
amount of tooling to set-up, and documentation to manufacture
them was overwhelming. Unlike Central Engineering projects, they
were not under the continuous, critical, sometimes withering,
review of peers within Engineering.

Somehow, we have to get our product line engineering to the point
where it is reviewed regularly, and open to the parts of the
Company that would be duly critical. We cannot expect anything
useful to come from the Strategy Committee because they do not
have the time to spend or the details to do much good in passing
judgement.

My concern is not only with this group, but for all product line
engineering.

KHO:blk
KO3:S9.37

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TO: see "TO" DISTRIBUTION

cc: ELI LIPCON
    RON SMART

DATE: FRI 20 APR 1984   8:43 AM EST
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5234020034

SUBJECT: FIELD COST FOR AN INDUSTRY STANDARD PC

I feel that we can make a completely compatible, industry
standard personal computer as inexpensively as anyone, without
compromising our ideas on quality. "I must say I do not know
what they are doing in the future in the way of integrating large
parts, and so this may not be true in the future."

I believe that the strategy would be to evolve our Q-BUS
machines, our PRO, our RAINBOW, our industry standard computer,
our small MicroVAX computers, and our workstations into two sets
of physical packaging. First, would be Q-BUS that could make a
large and extensive machine, all the way to a very simple machine
that would make a competitive device out of Q-BUS modules. The
second would be a box that used IBM-shaped modules, and we could
take full advantage of the Intel Bus. The latter would have a
lot of advantages for many laboratory and shop floor uses, and
would be needed for many business software packages, and many
educational applications.

It is commonly believed that regardless of what we do in the way
of manufacturing costs and intelligent engineering, the field
costs would make it impossible for Digital to market them.

Part of the original proposal by Jim Cudmore, Ed Fredkin, and
Barry Folsom was that this system would work only if we set up a
completely separate organization to do the marketing and the
selling. This organization would not have the large staff and
headquarters in the area, in the region, in the district, and in
the office. It also did not have very high priced people whose
ambition was eventually to sell VAX's. Implied, of course, is
that much of cost of selling low-end items is the cost of
training people for selling large systems, and it is charged to
the low-end.

Everyone is afraid to propose a model for this end. They feel
they will always be beat-up because they do not understand the
total field cost and what is involved. Yet, they have no access
to this information. Will you immediately propose a model for
the industry standard machine that will play third-party
software? For the sake of this model, have two units. One model,
which does no more and no less than the simplest IBM PC. And, a
more elaborate one which will hold a MAYA tape, a large WINNI,
and a single floppy. It also would have a faster central

processor, and room for significant growth. Whether or not the cathode ray tube is built into the box or not, is still up in the air.

Please do the model for two or three channels. What would the field cost be if we did sell through Computerland? What would the field cost be if we sell through our Centers? What would the field cost be if we sold them direct? For each of these models, please make your best guess as to what the IBM model is.

I think we can match any reasonable manufacturing costs. Anywhere we want to we can add features, and charge more for them, but we can do this as a marketing/engineering/sales team. However, we have to work out the model of an exactly comparable machine.

This discussion will be much more fruitful than the ones we have been having because we have started off sharing the same field data.

KHO:blk
KO3:S8.95

"TO" DISTRIBUTION:

JIM CUDMORE   BARRY JAMES FOLSOM   JACK SHIELDS
STRATEGY COMMITTEE:

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Interoffice   Memo

TO: JACK SMITH
    STRATEGY COMMITTEE:
cc: see "CC" DISTRIBUTION

DATE: FRI 30 MAR 1984   8:46 AM EST
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5231986559

SUBJECT: NONCOMPETITIVE PRODUCTS

Everywhere I go, Digital engineers, marketers, or salespeople,
beat me up because so many of our products are completely
noncompetitive in speed, features, price, and size.

It is commonly agreed that we do medium well in the important
base products, such as: central processors, certain LSI chips,
and some of the major disk systems. However, we do not have a
system which forces competitive and modern products, and all the
details that make a system work. Our system seems to assume that
we will always be late, always be poor, always be big, and always
be expensive. We do not expect our people to ever be equal to,
or better than the large number of competitors we have.

I would like to have a Strategy Committee meeting early next
week, to review where we sit competitively on a number of our
products, which are normally too detailed for interest by the
management of the Corporation. I would like to do it early next
week, for two reasons. One, I am getting tired of being beat up
on the subject. Secondly, because I am scared that we will have a
Micro-VAX chip in production by the first of the year and have
noncompetitive products. I feel we would have noncompetitive
products because the detailed pieces are many, many years old,
their specifications are many years old, and some of them will
not even be done. I would like to have this meeting early next
week because there is a DEXPO show in Boston, attended by a large
number of people who make a living by supplying the less
exciting, but critical parts, to our systems. They make a living
by adding to the basic parts that we do well. We have
noncompetitive products because of those parts that we never
planned to do well, never staffed with the best people, and
always took for granted that engineering red tape would never
allow us to do a good job.

I would like to review how our people feel about each of our
products in these areas, compared with our competitors, so that
when the Strategy Committee members go to DEXPO, they can see for
themselves, how we sit. If, for some reason, we do not have the
meeting before DEXPO, we could encourage Strategy Committee
members to go to DEXPO, and when the presentation is made, it
will be much more meaningful to them.

The items I would like to review, and for which I get beat up all
the time, are:

1. How do our Q-BUS disk controllers, or small, five inch
   disks, and our large disks, compare with those available
   outside? Even though I am not asked the question, we
   probably should ask same question for UNIBUS disk
   controllers.

2. What high-capacity WINNI disks are available, and how does
   our offering compare, and how will our offerings in the
   future compare?

3 We committed ourselves, many years ago, to an approach to
   connecting onto ETHERNET with tranceivers and interfaces.
   Meanwhile, there have been less expensive approaches.

   How does our approach compare with the other approaches
   that are available, or will be available?

4. We have not changed the way we connect asynchronous serial
   lines to our computers and distribute the wires and hook
   to terminals for many, many, many years. Our techniques
   are expensive, take a lot of room and a lot of cabinet
   space, and cause no end of trouble at installation. Our
   attitude has always been, "that is the customer's
   problem."

I would like to review how other people do this, and what our
plans are for the future.

KHO:blk
KO3:S8.25

"CC" DISTRIBUTION:

PETER F CONKLIN   DON GAUBATZ   GEORGE HITZ
JESSE LIPCON   ART PARKER

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INTEROFFICE MEMO

TO: Jim Cudmore
    Barry James Folsom
    Win Hindle
    Jack Shields
    Jack Smith

CC: George Chamberlain

Date: 24 January 1984
From: Ken Olsen
Dept: Administration
  MS: ML10-2/A50   Ext: 223-2301

SUBJ: BUSINESS PROPOSAL

I was very disappointed with the formal business proposal presented
last Friday in preparation to go to the Board of Director's. It was a
very difficult meeting, it took a lot of time, because there was none
of the data presented that one would need to make a business decision.
It did not present the data that was requested, nor did it present any
of the format that one would expect to be presented in any business
proposal.

A proposal does not consist of a statement saying how nice it would be
to have something, but rather a proposal of how to get there better
and cheaper than the competition, a statement of the costs and risks
in getting there, and a statement of the expected strategies and
reactions of the competitors.

This procedure is done all the time in business, is quite well
developed, and is often assumed to be so obvious, you don't often see
the procedure outlined.

At Digital, I would like to see us improve on this traditional
procedure just a little bit. I would like us to make small gambles,
and small investments, with little red tape, and then big gambles,
with big money, with a lot of proposing and controls.

With the CT project, we asked to have the preliminary design work done
before a proposal was made. The plan was then to propose and schedule
a very fast unit with little risk and little gamble, using almost no
tooling, to see how it played. We were going to bend parts out of
steel in our own shop, and we were going to use the F11 chip with
traditional PDP11 software.

Central Engineering took over, gave a blank check, refused to make a specification, a plan, a budget, or identify risks. Without this formality, there was no control, and we even dropped the Q-bus with the traditional 11 software without a formal decision because there was no list of features to budget, schedule, and check on because the list grew and contracted every day.

With a CT, the belief was that either you were all for it, and it received the highest priority, or if you said anything against it, you were a heretic, and against the wave of the future. There was no such thing as financing, planning, scheduling, reviewing, or being businesslike.

The CT is the last project at Digital that is done that way. We still want to be able to do enough work to make a proposal without much red tape, and we want to make projects that involve little risk, and little money, with little red tape, but gambling large money, large risks, large commitments, take large amount of formality.

Before we have another meeting, I'd like to see it written down in the formal proposal, a list of specifications for the RB50, with specifications for each component, each piece of software.

Each commitment to an outside vendor, should be put on a schedule, with the dollars involved. Each commitment to buy standard components for inventory should be identified on the schedule with dollars.

By now, almost every drawing should be scheduled. If we are going to have a mechanical design out in a matter of weeks, we should, by now, list every single part that has to be formed without tooling, for every metal forming dye, for every plastic mold for each of these should have, the time of release, the dollars involved, and the debugging time schedule. If we expect a faster reaction than we have seen in previous designs, we should put a footnote explaining what they were previously, and why we expect to do significantly better this time. Every piece of software that we need, every piece of software and every piece of firmware that we need should also be scheduled with dollars, dates, testing and re-doing.

By now, we should have every printed circuit board identified, and scheduled. Their complexity, difficulty, and risks should somehow be simply identified. The time and the costs also should be footnoted to explain if we expect faster than normal delivery of these items. If we are going into production quickly, the testing for each printed circuit board should be identified.

The staffing and all the services should be scheduled for all the other Digital engineering services for manufacturing, training, publishing, literature generation, etc.

It should be clearly included in the proposal what priority is
expected. It is not clear if the Rainbow proposal implied that, it,
like the CT, would suddenly receive the highest priority, and all
other projects would stop when there is a need by the Rainbow 50, and
that the best people in the company would be drafted to work on the
Rainbow 50.

ALTERNATIVES

Alternatives should be listed, and should not wait to see if the
decision-makers are smart enough to think of them. They should
include our recommending that our customers buy an IBM machine, or
recommending that they buy certain clones.

It could mean that we simply put our name on a clone, or it could mean
that we could put our keyboard and our own monitor on a clone, so that
it looks very much like the rest of our equipment (we could sell the
IBM PC with our keyboard and our monitor).

We could buy the IBM Peanut as an OEM, add our keyboard, and our
monitor, and expand the extension bus to add the features that we
think are important.

COMPETITIVE STRATEGIES

We should list what we think the competition could do, and what
assumptions we are making about what they will do, in our planning.

What did IBM have in mind for the Peanut in the long run? What will
their new, big machine look like? Has IBM assumed that, in addition
to having a lot of third party software, they, in order to survive,
and keep customers happiness there, are going to have to offer
software with their name on it, that they will support, with all the
support that IBM and Digital traditionally gave to software?

What assumptions have we made as to the breadth of capability that
will be available in clones from Taiwan and Japan, and the U.S.? What
assumptions have we made about the wholesale price of clones from
Taiwan to Computerland, and Digital, and what will the street price
be?

If a clone costs a certain amount for us, and Computerland can get it
for exactly the same price from Taiwan, can we make any contribution
in reselling it to Computerland? What do we assume that price would
be? How would that price compare with the price we would charge
Computerland for a Rainbow 50?

What are the plans for the future? If we make a significant
investment now, we have to propose exactly how we see the future.
Do we get in deeper and deeper, into a more and more competitive
market, by making one more commitment?

KHO:blk

TO: see "TO" DISTRIBUTION

cc: see "CC" DISTRIBUTION

DATE: THU 12 JAN 1984   1:24 PM EST
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5224161054

SUBJECT: INDEPENDENT BUSINESS UNITS AND GROWTH

We now have, or will have soon, the products to double our size
in a very short period of time. In order to do this we probably
need two or three billion dollars, which is probably way beyond
feasibility. We, therefore have to decide how we are going to
allocate our resources to grow in the future.

The Company has, for many years, been based on product lines as
independent business units, on which we make the resource
allocation decisions. It seems clear to many people that IBM has
studied our way of doing things and has seized upon this
technique, with their independent business units so that they,
too, can give independence and measure and allocate resources
according to the success of the independent business units.

Meanwhile, the product lines deteriorated somewhat at Digital and
people argued over measurements, forgetting why we made the
measurements in the first place. The Financial Department started
averaging results, which lost much of the usefulness of
measurements, and so in the last year we lost much of the
usefulness of the product lines.

At next week's Strategy Committee WOODS Meeting we will make a
new pass at putting together business plans which we can then
evaluate for investment decisions. This time we will slice in
several ways in order to obtain wisdom for business decisions. We
will not review items only as product lines, but also review them
as product investment. We will work over and struggle with the
business models and from this gain information that will help us
make investment decisions.

Please make a list of all the groups preparing the presentations
for the WOODS Meeting and, in tabular form, identify what you
guess their return has been in the past, and what they claim it
will be in the future, and include a very simple statement of
their strategy.

If a groups says they are going to make a commodity item, request
engineering, cheaper manufacturing, and more efficient selling,
with a lot less profit than dozens of other companies, they would
probably have a tough time getting the resources to grow.

The group that can plan ways to get a significantly higher price
than anyone else, with costs low enough to give unusually high

profits, and still take care of our expensive taste in product
development, will have a much easier job in getting investment
money.

KHO:ml
KO3:S5.33

"TO" DISTRIBUTION:

AL BERTOCCHI   GEORGE CHAMBERLAIN   BILL HELM
BRUCE RYAN

"CC" DISTRIBUTION:

PIER-CARLO FALOTTI   DAVE GRAINGER   BOB HUGHES
BILL LONG   CHICK SHUE   PETER SMITH
STRATEGY COMMITTEE: KEN SWANTON   HARVEY WEISS
JERRY WITMORE

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TO: JACK SMITH

cc: SAM FULLER
    *WIN HINDLE
    BILL STRECKER

DATE: WED 4 JAN 1984   8:39 AM EST
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5223346315

SUBJECT: STRATEGY FOR 1984

Our main strategic thrust this year, should be to cut out
projects and product lines which we are never going to exploit,
or which will never make money for us. We should aggressively
continue to work over models for each of the products and product
lines, until we are sure that we can justify being in each
business and can be sure which ones we can get out of.

My intuition says that we are making too many VAX's, but the nice
thing about studying and redoing a model again, is that your
intuition gets polished and it may come out completely different
from what your intuition was before you made the model. My
intuition on VAX's comes from no model work at all, and therefore
I would not push my intuition until we have studied models quite
carefully.

My intuition says that we are also into very many things that
don't fit into product lines and that no one has any inclination
to sell, and they are just things that we have read about and
decided that we should be doing also, even though there is no
idea of what we will do with them, if we ever got a product
completed.

I feel the most important bit of technology for this year is
ETHERNET. I think it can, if we exploit it, uncork most of our
product lines and many of our products. In each of our product
areas, a simple, elegant networking pitch would attract a lot of
attention, and in the product area, a simple, elegant ETHERNET
strategy would cut costs tremendously, particularly when you
count the cost of installation.

I believe that VAX's and 20's should not be built with serial
lines anymore, but should only include a BI interface. In an
option where real ETHERNET is not needed, they can hook directly
to a terminal server.

We went into the personal computer business because it was an
important part of our strategy to take care of our traditional
customers and our traditional business and it was an important
part of Gordon's statement of overall network strategy. We still
haven't networked our personal computer and there is no overall
plan yet to do it. I believe we should immediately do this as a
subset of our ETHERNET strategy. We probably can use our terminal

server without ETHERNET, when we want to just hook up personal
computers and hook that up to ETHERNET, when we want to make a
much broader net. This has the beautiful characteristic that it
uses the same equipment both for a small local network, and for a
large local area network.

KHO:ml
KO3:S5.2

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TO: STRATEGY COMMITTEE: DATE: TUE 3 JAN 1984 12:21 PM EST
                                         FROM: KEN OLSEN
cc: AL CRAWFORD   DEPT: ADMINISTRATION
    RON SMART   EXT: 223-2301
                                         LOC/MAIL STOP: ML10-2/A50

                                         MESSAGE ID: 5223244783

SUBJECT: JANUARY WOODS

The January Strategy Committee WOODS is to be the first step in
the clarification of a straightforward, practical strategy.

I want to cut out all the Engineering projects and all the
Marketing projects that we cannot afford, and that will not
contribute to the profit and long-term development of the
Corporation. I would like to eliminate those for which we do not
have, or cannot have, the skills to pursue, and those that we do
not have or are not about to get, the leadership to win.

It is probably going to be hard to cut out those that we know are
losers, but at least we ought to have two categories of
Engineering and Marketing projects. The two categories are: those
that we are going to staff, finance, manage and plan to win with,
and those that we are doing for sentimental reasons or old times'
sake, or because we read about them in FORTUNE magazine.

In the first week of January I would like to have the Strategy
Committee make a list of characteristics which are needed to win
for Engineering and Marketing projects, and which we will use to
measure whether the projects we hear about in the WOODS meetings
are going to be winners or not. It might be that when we cut out
all the losers, our growth plan will be less than what we had
originally thought. On the other hand, it may still be much
bigger than what we think we can possibly do, in which case we
will then have to cut out some of those projects which are
winning less.

We have developed some funny, religious ideas. They are believed
with a passion and a sense of morality which is inconceivable.
One of these beliefs is that all the numbers in a budget have to
absolutely add up. There is no need or desire that the budget be
useful, mean anything, or help run the Company, or that it cut
out projects or unnecessary expenses, or that we learn anything
from it. The only important thing is that the numbers add up.

For this WOODS meeting, I would like our model building, our
calculations, and our proposals to be there to generate wisdom
and to help us decide whether projects should be continued or
not; it is absolutely unimportant whether they add up correctly.
I expect some people to be absolutely indignant with the
immorality of putting numbers down on paper and adjusting them so
that they add up, but please don't let this happen. Let's find

out the wisdom of every project, whether it is a winner or a
loser, and whether it is staffed and managed to win - and for
now, I don't care whether it adds up or not.

One of the characteristics that should be documented for every
project, is whether the manager and the manager's manager, and
maybe even the manager's, manager's manager, have a vision and
enthusiasm and emotional involvement, competence, experience, and
a history of success. If any project is missing these things, we
probably can say that it is a loser. The success rate of an
Engineering or Marketing project which has a Group Manager above
it who doesn't care about it, is probably only one out of ten or
one out of twenty.

KHO:ml
KO3:S4.83

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TO: AL BERTOCCHI
    BRUCE RYAN
    STRATEGY COMMITTEE:

DATE: TUE 27 DEC 1983 12:09 PM EST
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5222539386

SUBJECT: HOW TO LOSE CONTROL OF A COMPANY

A large percentage of the population seems not to be able to have
their personal finances under control, and it appears that a
relatively small percentage of small businesses can truly be said
to be under control. It seems quite clear that financial
controls are not intuitively obvious, and do not come directly
to an individual from his Mother. For the most part, they have
to be taught, and come about only with great discipline, systems,
and organization, and have to be consistently and regularly
checked upon, or they will disappear.

In spite of this commonly observed situation, it is very common
for managers to measure their authority by how much money they
can spend without approvals, without documentation, or without
keeping records. Of course, the truly competent manager would
look for as much help in these areas as possible.

As a company gets larger, the professional financial managers at
the top of the company, keep striving for simplification by
allowing larger and larger amounts of money to be committed by
various levels of management without any controls. This seems so
reasonable, and so neccessary, but it is often done without any
measure of the experience and capability of each of the managers
who controll expenditures. It is also done without first setting
up financial controls that the Corporation will impose on these
managers. The controls have to be standard within the company,
consistent, and sufficient, and even though people have freedom
to spend money without telling anybody, the documentation and the
approvals within that management group are consistent throughout
the whole Corporation.

Much of my frustration with the financial controls at Digital,
comes about because the financial department believes that, with
title, automatically comes experience, knowledge, and ability to
set up a control system equal to the size of their
responsibility.

This problem compounded itself as time went on. Managers with
all this authority, and without control, were more and more
important in their own eyes. Without the responsibility that
should have gone with their authority, they got into trouble,
and they blamed other parts of the company. The Finance
Department became more and more frustrated because these people
did not institute controls. Central Finance had no direct

influence. The Finance Department expected me to take care of
these problems, and I, of course, expected them to take care of
it, and this allowed things to degenerate even worse.

It is believed by many managers in engineering, that I am the
bottleneck to their creativity, because I insist on having plans,
budgets, proposals, and approvals.

The Board has been asking to hear the advertising plans, but we
keep saying we are not ready, and then we never have plans; we
are always so late, that we have to spend these huge amounts of
money on the spur of the moment without even having goals that
can be explained ahead of time.

Starting January 1984, I want complete financial control of the
Corporation. This should not slow down things, this should
facilitate decision making, and speed up all activities, and make
it much more efficient.

I want every unit of the business, no matter how small, to have a
budget, a plan, a review. I want every financial commitment of
significance to be approved, signed, and filed by the local
hierarchy. A Vice President may be able to spend a million
dollars without telling anybody, but he is not going to be able
to do it without records. To spend any amount of money, the
records and the proposal has to be filed, the formal reviews and
the approvals have to be filed, even if it never gets beyond that
Vice President, it always has to be there for anyone who wants to
look at it.

No one, even a President, should approve his own proposal.

Every unit will have an approval system equal to its size, and
every unit will have a record of those approvals which are
pending, and at any one time, anyone in the Corporation can look
at these and see whether the proposal has been completed, at what
stage the proposal is sitting, and who is holding it up.

This may slow down some large commitments that are hobbies of
certain people, but it ought to make very obvious those proposals
from less important people that have to wait year after year
because their proposals get lost in the system. This way,
nothing gets lost in the system.

I also want all informal commitments documented. If we are
making informal commitments for a floppy disk that can be used on
the RX50, I want this formally approved by the appropriate level.
I feel we have been grossly mislead, if we are committing the
company, at least morally, to the RX50, before the project is
ever presented as a project.

I want all, space, facilities improvement, organized by groups,
and documented in a way that we can easily see what our backlog,
and what the most important projects are, and how they sit, and
how far along they are in the approval system.

I want, at all times, an advertising plan. As with space,

advertising can be changed as times develop, but if we make up our mind at the spur of the moment, we, for sure, will not have a consistent facilities plan, or a consistent advertising plan.

In Summary

I want to no longer assume that as soon as someone is made a manager or a Vice President, that he has the education, the experience, the inclination, and the time to set up his own financial control, his own planning, and his own review system. Instead, I want the controller's function to assume that even if a manager does have all this background, he does not have the time to invent his own systems, and monitor them, and if he did have all of those, and the time, they would not be consistent enough with the rest of the Corporation.

Therefore, I want the controller's function to set up a system that will provide the controls, approvals, and reviews, for every group in the Corporation. Then we can give the local controllers the authority to carry them out, and it will be so well done that every manager will feel they are a help instead of a hinderance.

For each department, I would like to have a summary, in chart form, of all the projects that have been approved, and those that are waiting for approval. If I can glance through them and see the status of plans, I will then be confident that the manager responsible, will also be in the same position. This also means that those projects that have been waiting for approval, will be very evident, and those projects which we are slowly making commitments that have never been formally documented for approval, will be evident.

KHO:blk
KO3:S4.55

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O.C. ~~Happy ~~

SUBJECT: KRAMER'S NOTE ON ADMINISTRATION

Here is a note from Ed that shows what has happened to the
administration of the Company; what devastates me is that it
doesn't seem to bother any of you.

The Operations Committee did not decide to drop Newspapers. It
was proposed by someone and we went along with his proposal. He
should be held responsible for his proposal and for how we phased
out of Newspapers, and how we take care of our friends.

The idea that I will now run the Newspaper business, by telling
them what to do, and that I will take the responsibility for, is
absolute nonsense.

We used to have every piece of the Company under someone's plan.
This piece was proposed, budgeted and approved and the person was
held responsible. Now it seems that anybody can run anything and
not feel responsible.

As far as I can determine, Ed Kramer took Bob Schmidt off
Newspapers and gave him ETHERNET, without a plan, without a
budget, without approval, and without anybody being held
responsible. And, with the usual answer: "Oh, Ken, you can do
anything you want with it", which shows an absolute disrespect
and an absolute misunderstanding of how we run Digital.

Marketing, above all, means being sure we have a complete
product and figuring out wants, and getting the two together.
Without plans, budgets, and responsibility, we have no one tying
the products together. Even as we turned Marketing over to Ed
Kramer, I am quite sure that he did not understand the key part
of traditional marketing, which came first, which is to make sure
that we have a product. I am afraid that he is falling into the
same trap that Andy Knowles did: which was to start advertising
and use gimmicks, not knowing whether we had a product or
figuring out what the product would do. For example: the base
marketing of the PRO was to get as many kinds of UNIX and as many
kinds of options on the PRO as possible. True marketing would
figure out which is the best UNIX, be sure it works, and sell one
form of UNIX, but be sure it is complete, and then get that
message across.

Right now no one takes responsibility for the complete marketing
job, and everybody just wants to define it himself, without

proposing, budgeting or taking responsibility. If a person is free to draw a fence around what he thinks his job is, and then do this after the fact, we have all kinds of valid excuses for failure.

KHO:ml
KO3:S3.74

ATTACHED: MEMO;44

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TO: KEN OLSEN   DATE: SUN 27 NOV 1983 7:43 AM EDT
                                       FROM: ED KRAMER
cc: JACK SHIELDS   DEPT: CORPORATE MARKETING
                                       EXT: 278-4575
                                       LOC/MAIL STOP: UP02-4/

                                       MESSAGE ID: 5219510085

SUBJECT: RE: NEWSPAPERS

To my knowledge, the remants of the newspaper marketing group
is being helped to find other jobs, and that we are trying
to turn much of the business over to our OEM's. Patrick Courtin,
and then Bob Schmitt was left with that task when we split up
the old CIG Product Line. The Newspapers would continue to be
called on by the local sales folks as usual, and in fact are
major potential users of our Office Solutions. It's just that we
(I believe it was the OC last year), decided not to focus any
further marketing and engineering efforts specifically at the
Graphics Arts business.

Bob Schmitt is the Marketing Manager for the "Communications
Marketing Group" (approx. 25 people) that reside in MK2. Bob
has been the Sales Program Manager for communications for
several years, and in my opinion, is a knowledgable and creative
individual. If we tell him where we should be focusing his efforts,
I'm sure he will do well. He is currently acting as a resource
to the other marketing groups as well as being our Communications
Mkt/Industry expert. He does not view himself as a "business",
but instead as head of a group to support the field and the other
marketing groups to help THEM get the business.

P.S. He also spends a lot of time working with engineering as well
as the other functions to insure our communications expertise.

27-NOV-83 8:30:59 S 01601 MREM
MREM MESSAGE ID: 5219403701

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Interoffice Memo

TO: see "TO" DISTRIBUTION

DATE: WED 23 NOV 1983   2:17 PM EST
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5219108222

SUBJECT: SAYINGS OF CHAIRMAN KEN

SAYINGS OF CHAIRMAN KEN

WHO IS TRYING TO DO IT ALL BY HIMSELF?

We insisted, for a long time, that the people in our European
Headquarters document every pay review for professional people
and send it to the U.S. for approval. They thought this was a
serious affront to their ability and their authority; besides,
the Operations Committee always approved what they requested.

What really happened was that by having it all documented and
brought before us, we were confident that the reviews were done
regularly, on time, systematically, and thoroughly. When this was
done, we usually had complete and absolute confidence in their
judgement and approved everything en masse.

The more they requested and insisted that they be able to
arbitrarily, and without our review, give pay raises, the more we
would worry that they were not, on a regular, consistent and
systematic basis looking at the reviews or that good records and
documentation were being kept.

This is the way much of the business world works. When a
presentation is done well and thoroughly, a Board of Directors
usually has complete confidence in it and approves the project.
However, when a Board senses that it is being railroaded, and
that the proposal was done based on emotion, and not thoroughly
analyzed, it immediately insists on a more thorough review.

When I ask that all the requests and data from each subsidiary
and each district be reported to the top of the Company, and when
I request that all projects be reported and reviewed at the top,
and when I request that all marketing plans and justification be
reviewed at the top, that does not mean that I want to do it all,
and it does not even mean that I am going to look at them all. It
does mean that I want the top committees of the Company to be
assured that someone on the next level below is not arbitrarily
making all the decisions himself, without a systematic, detailed,
documented, regular and thorough approach, using all the inputs
from the experts below him.

For a poor manager, it always seems a waste of his time to report

above him. He feels he can make all these decisions efficiently, by himself, without enlisting the help of anyone above or below him. The poor manager feels the reporting is unimportant, because of his personal competence.

A very thorough manager is so competent and self-assured that he gets all the projects under him reported and reviewed nicely and easily, so that the people at the top feel complete confidence. He is invisible in this process, and he spends his full time taking care of problems and encouraging creativity and developing managers.

KHO:ml
KO3:S3.63

"TO" DISTRIBUTION:

AL BERTOCCHI	BILL HANSON	*WIN HINDLE
ED KRAMER	WARD MACKENZIE	JACK SHIELDS
JACK SMITH		

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TO: WARD MACKENZIE   DATE: THU 17 NOV 1983 11:22 AM EST
                                          FROM: KEN OLSEN
cc: see "CC" DISTRIBUTION   DEPT: ADMINISTRATION
                                          EXT: 223-2301
                                          LOC/MAIL STOP: ML10-2/A50

                                          MESSAGE ID: 5218596277

SUBJECT: PRODUCT LINE ORGANIZATION

*****************************CONFIDENTIAL*********************

Our meeting on Wednesday was good. I understand things more
clearly now.

We decided that it was impossible to make major changes in
anything that we are doing, including two-tier profit, or
changing our basic structure.

We decided that we should collect data and make measurements to
help measure the different activities. There is no such thing as
credit for sales and profit made in a category of customer, but
instead, the results collected for each marketing activity, so
that we can measure that activity. For example, OFFICE marketing
is measured for OFFICE products sold in Education. OEM is
measured for the results of their marketing of OEM and Education.
LDP is measured for the results of their LDP marketing in
Education, and the Education group is measured for their
educational marketing activities in the Education field.

The local Sales team owns the customer, not the Marketing group
who has the closest title that matches the customer. For example,
New York Institute of Technology is an educational organization,
but they buy products from many different marketing groups in
Digital. We keep one face before the customer, because we have
one Sales team, who is there at all times.

Each product line, as they make out their plan for the year, will
show its investment in marketing by product or application. There
are probably two more categories of investment that the product
lines will make; one is called Miscellaneous, which will be those
activities which are not marketed by plan, but by which
investments are made as they come up. The other one would be
investments to help other product lines or help the Sales
Department in those areas in which they have contact.

Every Marketing Group and every service will be a product line,
and they will be budgeted, and the sum of these will be their
budget for the total Corporation.

In addition, each District or Subsidiary will budget volume and
profit, and the total of these will be equal to their budget for
the total Corporation.

Later on, when they have this under control, we will also add up the budget equipment and services to be sold, and these too will be the total of the Corporation from the equipment point of view.

There will be no consistency between product lines. Sometimes it will be by product, sometimes by channel, and sometimes by customer-type, but when we add them up, they will be the total of the Corporation.

We will then have two independent summations of the Company Plan. They, of course, will not agree, but both pieces of data, and later a third by-product will be used to select, in each sector, what the plans are for the following quarter or year.

Each product line and sales geography should promise to make the desired Corporate profit level, but where there are temporary circumstances, or when they are starting an area or product line, little or no profit can be budgeted for that unit.

Much of the new product/new market development, and much of the future growth of the Company, will come out of the activities of the product line. We will schedule detailed reviews of the marketing plans twice a year. This will be time-consuming, and a lot of work, but because of its importance to the Corporation, we will take the time to thoroughly understand and review the Marketing activities. We will probably spread these reviews around each of the twelve months of the year.

Each product line will have a model for its part of the Corporation. We will demonstrate how we will make a good profit with the products, services, and expense levels, being proposed. Prices will be fixed by taking into account the models from each of the product lines, so that we will allow different product lines to have different models, but still be sure that we have a high enough price to make the profit.

There are a number of problems unresolved, but with what we have, we can immediately, and with all enthusiasm, go ahead with the planning, marketing, and selling, with the organization as we see it today.

Some of the questions still to be resolved are:

1.   How do we rationalize the four or five groups each selling to the Small Business market, or small minicomputers?

2.   How do we rationalize the selling and marketing of the high-end?

Local area networking and personal computers have to be marketed as products for each of the market areas that need them.

Things are changing in our industry very quickly, and we have to spend less time making our detailed plans and more time carrying them out and updating them.

KHO:ml
KO3:S3.37

"CC" DISTRIBUTION:

HENRY ANCONA	AL BERTOCCHI	ART CAMPBELL
AL CRAWFORD	ROSE ANN GIORDANO	DAVE GRAINGER
BILL HANSON	DICK HEATON	*WIN HINDLE
BOB HUGHES	BILL KELLY	ED KRAMER
BILL LONG	JACK MACKEEN	JOHN O'KEEFE
JERRY PAXTON	BOB ROCKWELL	JOEL SCHWARTZ
JACK SHIELDS	CHICK SHUE	RON SMART
PETER SMITH	JACK SMITH	BOB TROCCHI
HARVEY WEISS	JIM WILLIS	JERRY WITMORE

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Interoffice Memo

TO: *WIN HINDLE
    ED KRAMER
    JACK SHIELDS
    JACK SMITH

DATE: TUE 8 NOV 1983   2:11 PM EST
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5217678041

SUBJECT: DEFINITION OF MARKETING GOALS

There is a major question which I think we should formulate and
present to the Board of Directors, and publish to the Company. It
should be a definition of our marketing goals. Our tradition has
often been to be just a service to everyone else and have them
get all the business. Our goal has been: to give everything away,
make it easy for everyone to copy and exploit our equipment; we
end up selling a reasonable amount of equipment in the long run.

If this is the goal of the Company, I think we should: publish
it, present it to the Directors, tell the Public, put it in our
Proxy Statement, and in our Annual Report, and assume that the
Company will shrink in size.

If we want to: be aggressive and go out and get part of the
business world, go out and get the interconnect and
communications business, go out and develop new markets and grow,
I think there has to be a major change in our strategy and in our
thinking. This is not easy because it has been our goal, through
all of our engineering and most of our marketing, to give
everything away; if we happen to make money, that is a side
issue. We religiously believe that the money comes for free when
we give everything away.

For example, if we want to sell ETHERNET, and be the interconnect
Company we have to consider Gandolf, one of our good friends, and
the PBX company as a good friend. We can't say that we will help
them in every way and hope that in some mysterious way that we
will make money while doing so.

The question is: "Are we going out into the market and compete
with outside companies?" or, "Are we going to shrink in size, and
get smaller and smaller as we offer hardware and competition with
people who are more efficient because they offer less and have
less commitment to technology?"

We can't have each part of the Company have different goals for
the Company. This makes decisions very slow and very difficult.
We can't have people say: "I won't go along with any decision the
Company makes on goals because I know what is right for the
Company, and I won't cooperate."

I am thinking of having a very powerful, senior professor force
the questions of the Corporation and to ask, "What business are

we in?" Many professors have wanted to do this for us because
they believed in the magic of the question, but I never thought
it was valid until now.

KHO:ml
KO3:S2.90

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TO: *ROBERTA BERNSTEIN   DATE: TUE 8 NOV 1983 12:11 PM EST
    JOHN SIMS   FROM: KEN OLSEN
                                 DEPT: ADMINISTRATION
                                 EXT: 223-2301
                                 LOC/MAIL STOP: ML10-2/A50

                                 MESSAGE ID: 5217637130

SUBJECT: BUSINESS MANAGEMENT III HANDOUT

INTRODUCTION

It has been the tradition at Digital to always look for a
different and unique approach to a product. It seems to me that
every time we have done the same as everyone else, we have
failed, and we have only had successes when we have been unique
and different.

It has also been our goal to, at all times, have products which
are current, highly technical, but yet simple enough for anyone
to understand. Above all, our goal is not to reach so high for
technology that we have gaps of time in which we did not have a
current product.

Each manager obviously should have a clear, explicit strategy for
those areas that he is responsible for. Each step in this
strategy should be measured and reviewed regularly, and changes
should be proposed and approved by appropriate managers or
committees.

There is no room for sloppy management or secrecy in an
organization which is so inter-dependent and which has to
cooperate at so many levels.

Strategies must be reviewed and modified as competition develops,
particularly with the aggressiveness of IBM. They have set about
to copy many of our traditional ways of doing business, while we
have lost many of them.

In those areas in which we have been most successful we have had
simple open plans which were reviewed and criticized and argued
by much of the Company. This interchange, struggle and travail of
decision-making is what made many of our products great.

Our original strategy said that we cannot do everything, we cannot exploit every technology, and we worked hard to pick those areas which are most important to us and which would give us a unique position in the market. And, we would not follow everybody into everything. We were often publicly ridiculed because we were not doing everything that everyone felt we should do. We now have to be sure that the fear of public ridicule does not force us into trying to do everything, with the result of doing nothing well, or uniquely.

My theory of management is very simple, the boss or a committee cannot know enough to make a strategy or to make a product or to make a plan. Their job is to approve plans, integrate plans, add wisdom to the plans, and make sure they form a Corporate plan and strategy.

It seems clear to me that a supervisor or manager, or executive cannot generate the strategy or the plan for every group and every individual under him. He has to make sure that there are plans and goals, measures, checks, and enthusiasm and support, and controls for each of the pieces under him. He also has to tease, coerce, cajole, and tolerate, in order to get good proposals from his people.

It is clear that within a corporation like ours, the top management cannot understand the latest multiplexing LSI chips and how they will influence our Corporate plans, nor can they be expected to understand the influence of the latest spread sheet, software on personal computers. They can, however, be expected to be sure that there is a consistent set of well-thought-out, well-supported plans. Good proposals and good plans are the key to the success of a fast-moving, high-technology company. New products, new markets, new approaches, new techniques all have to be proposed.

The first question isn't how a decision is to be made if we had a good proposal, the first question is, "How do we get good proposals?"

We should work to make good proposals. First of all, we can't accept all proposals and all ideas, and all products and all markets. There is no natural law that says every good idea has to be accepted, anymore than a family can have an obligation to take care of every money-saving sale at Sears Roebuck or every truly great vacation trip. Money, time, energy and wisdom just aren't available to take advantage of every idea. However, it is a pretty good assumption that truly great ideas get accepted right away, and ideas that are hard to accept usually need wisdom that comes from arguing, redoing, and re-presenting.

Often, when someone says he doesn't know how the decision-making operates, he really means that he was turned down by the correct group and doesn't know how to get overruled. He should continue to fight for something that he thinks is important, but he should usually make the assumption that his presentation was not good enough. He should be sure that he considered all factors, that he did a complete analysis and that he presented the thing simply and clearly, and he should make the assumption that if it really was as great as he said, and if he really did a good job, that he would have sold his audience.

Some things are hard to sell. If one's proposal is that somebody else be made to change or take on responsibility for a major job, that is hard to sell. It is usually a lot easier to sell an idea that you propose to take all responsibility for, and that you will work and live with the results. It is asking a lot to ask the boss to take this idea and do the work to impose it on someone else and then the boss or committee takes the responsibility for the idea.

When the budget is fixed and underway and groups are working with a full load, it is difficult to talk a committee or boss into taking budget money away from one group and start a new one.

All good proposals should be written so that they can get a yes or no answer. And, if the answer is yes, it should not mean a commitment of the boss to take over the idea and take the responsibility for it and show the initiative.

Here is a list of don'ts and do's:
Don't:

1. Don't be dishonest in the slightest way. Don't mislead, don't oversell, don't avoid facts or data. Individuals will never trust you even though they will not publicly raise the issue.

2. Never say there is unanimous agreement with other groups unless it is absolutely true. Be sure to present other points of view.

3. Never intimidate the committee or the boss, and never intimidate other groups to agree to your proposals so that you have a unanimous presentation.

Do:

1. Do read the Peters & Waterman book, "In Search of
    Excellence."

2. Do make simple, straightforward proposals that require
    little risk until the ideas and the competence of the
    people are proven. It is sometimes easier, cheaper,
    and safer to build a model of a product rather than plan
    the whole product thoroughly before the model is built.
    Never ask for a commitment to huge numbers until each
    step is proven along the way.

3. Do keep original proposal and promises, and do keep
    documentation of changes and modifications of goals and
    plans.

4. Do assume that commitments over a certain value have to
    go to the top committee of the Corporation and those
    over another value have to go to the Board of Directors.

    And, assume that it is not only polite, but wise to get
    them on board with the idea well before they are asked
    to make a decision.

5. Do remember that ideas that make us unique can give us a
    unique position more easily than ideas that say we
    should now do what IBM did two or three years ago.

6. Do consider all the implications of your proposal on
    personnel, facilities, inventory, staffing, and other
    projects.

7. Do remember that if we have a product idea that is too
    complicated for our salesmen to understand, or our
    customers to understand, and too complicated for us to
    build, hopefully that idea would not be accepted.

    Above all, remember that our future is dependent on good
    ideas, original ideas, unique ideas, and people who
    think them out so that we can be successful with them.

TRAPS IN MAKING PROPOSALS

There are many individuals or groups who have often, by
self-appointment, become bureaucrats who have to approve
everything before it is included in a proposal. Many of these
individuals or groups make up their own rules and enforce them
themselves, but take no responsibility afterward. In general,
they do good, and we don't want to eliminate them, but they are a
frustration to people who are preparing proposals.

We owe it to those who make proposals to make a list of who these
groups and individuals are and what areas they pass judgement on.
In doing so, we should give each of these groups a contract to
look out for the Company's interest in these specific areas.

We should then tell each proposal-maker who in this group he
should send a copy of his proposal to. Then, when the proposal is
being presented for decision, each of these groups should be
requested to send along, to be presented with the proposal, their
comments from their area of expertise and responsibility.

This would eliminate the necessity for each proposer to get
approval before he makes his proposal. It would mean that the
ideas of each group are formally proposed and documented and it
would mean that everybody who makes suggestions would feel
responsible for his suggestions because they have to be written
down.

This bit of formality and proposal preparation and presentation
would, I believe, speed up things and get rid of a lot of
frustration and would make the sequence much clearer.

The Board of Directors, or an executive committee of the
Corporation, does not have to be technically expert. They are not
to be technical leaders. Their role is to ask: "How much money
have we put into this project?" And, "What are we getting out of
this project?" "If we put more in, what will we get in the way of
shipments and profit?"

People often feel that driving a car, making budgets, and making
plans are skills that they are born with and their macho image of
themselves is destroyed if they ever have to admit that there is
something they can learn about driving, or budgeting, or
proposing. However, it is clear that the best drivers have been
taught formal skills, and the best planners and proposers have
had help in laying out plans and proposals in a way that they
understand them and that they can make them good, and valid, and
that they can be understood by those who listen to them.
Therefore, individuals should feel free to get whatever help they
need within and outside of the Company in making plans and
proposals.

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Interoffice Memo

TO: see "TO" DISTRIBUTION

DATE: WED 2 NOV 1983   11:30 AM EST
FROM: ILENE JACOBS
DEPT: TREASURY DEPT.
EXT: 288-6464
LOC/MAIL STOP: AK01-3/B10

MESSAGE ID: 5217067321

SUBJECT: STANDARD & POOR'S RATING

Howard Goldberg, of Standard & Poor's, called me this morning to tell
me that Digital's debt rating had been downgraded from AAA to AA+.
They believe that this is appropriate because of the recent earnings
volatility of the company, the internal problems that have been
evidenced in Q1, as well as by the competitive pressures that we have
experienced over the last year and a half. However, they
believe the AA+ reflects the basic strengths that the company
has had in the past and that are still there. He went on to
say that the AAA rating, which was reconfirmed the day before
our announcement on the Q1 results, had not been without
qualification. They felt that our expectations (which were
expressed in our two meetings) of better earnings performance
and increasing market share in personal computers and office
automation could offset the concerns that they had.

While they do believe that the migration of users of standalone
personal computers to networked micro/mini computers will work in
DEC's favor over the next few years, they feel that those years will
be difficult ones for the company. Product life cycles continue to
shorten, uneven earnings patterns will be experienced by the industry
as a whole, and Digital has an uphill climb to position itself in the
markets that we need to capture. Were it not for the strength of
Digital's balance sheet, and the company's past financial performance,
they would have downgraded our rating even further. The decision to
downgrade was not based on our recent manufacturing or administrative
problems since they feel that we will overcome those within the next
two quarters.

I then asked Howard what indices would they use in making a decision
to upgrade us again to a AAA. He said that they discussed that at
their internal meeting yesterday and agreed that it would not be
financial indicators that they would be looking for. Even if we were
to return to our previous earnings performance, and even again
experience a Return on Capital of 22-24% (which they feel are a
requirement of any AAA company) that it would not be sufficient for an
upgrading. Instead, they would be looking for Digital to gain a
significant market share in office automation and in the converged
micro/mini markets. The gain in substantial market position must be
in other than the super/32-bit mini market, that is, they must be
gains in markets outside of our traditional markets. They do not see
that happening for Digital for the next 2-3 years, although they do
feel that the company is positioned well, because of its networking
capability, to capitalize on the convergence of the micro-mini market.

Howard then indicated that a press release would go out somewhere
between 10 o'clock and 2 o'clock on November 2 and that they would
appreciate us allowing them to make the announcement before any
discussion outside the company took place.

"TO" DISTRIBUTION:

DICK BERUBE   BILL HELM   PAUL MILBURY
JOE NAHIL   OFFICERS: MARK A. STEINKRAUSS

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Interoffice Memo

O.C.

TO: see "TO" DISTRIBUTION

DATE: WED 26 OCT 1983   8:50 AM EDT
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5216354725

SUBJECT: COOPERS' OFFER OF HELP

Elaborating on Coopers' offer last week to help in solving some
of our problems, they suggested that we have them come in and
make an audit of our personal computer business. I think we
should immediately hire them, and I think we should do it before
we make any commitments to Rainbow 50 in Japan. They are afraid
that we are going to have catastrophic write-offs at the end of
the year if we don't organize our planning now.

It appears that we have already made our commitment to building
the DECmate III in Taiwan, without going to the Board of
Directors or the Strategy Committee. It is probably too late to
do anything about that. Besides, one can argue that it at least
uses our present monitor and our present disks even though it
doesn't use our tooling and manufacturing facilities in this
country. Rainbow plans are to drop everything here and to use
nothing from today's investments. Before this decision is sneaked
into, I think we should definitely have our orders make a review
of its implications.

I also would like to contract with Coopers to educate our
engineers and marketing and management people about pricing.

I was told by a senior engineer that he was beat up so much on
transfer costs that he is convinced that it is the only thing
that counts and that is why he would like to have the Rainbow 50
made in Japan. No one ever points out all the other costs so he
is sure that it is the only one that counts at Digital; that is
the only goal that he will work for.

We also seem to believe in some magic formula that the sales
price is a multiple of manufacturing costs. This is not true and
in our world of manufacturing goods there is a wide range of
mark-ups dpending on how much other costs are applied to the
products.

I would also like Coopers to audit our marketing from a
mechanical point of view. I would like them to report to us
whether or not we supply our direct sellers, our business
centers, our dealers, and our OEMs with the product, the
literature, and the services that one would normally expect from
a manufacturer. What are the major gaps in our marketing
services? There is no way I can get this done with in-house
groups and I think it would be good to have a cold, objective,

outside group make this review.

"TO" DISTRIBUTION:

AL BERTOCCHI	GEORGE CHAMBERLAIN	*WIN HINDLE
ED KRAMER	JACK SHIELDS	JACK SMITH

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I n t e r o f f i c e   M e m o

TO: MANAGEMENT COMM:
    MKTG/SLS STRAT COM:
    OFFICERS:
    PRODUCT STRAT COMM:

DATE: TUE 18 OCT 1983   4:48 PM EDT
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5215541278

SUBJECT: PRELIMINARY FIRST QUARTER RESULTS

Today, Digital announced that preliminary operating results for
the first fiscal quarter indicate sales and earnings will be
substantially below expectations. Because of the variance with
our expected earnings, a public announcement was necessary.
Final results are scheduled for release on Tuesday, Oct. 25.

The public release explained that, "A shortfall in revenues
resulted from lower-than-planned personal computer shipments and
the non-availability of certain new products. The shortfall in
revenue is likely to result in reported earnings per share in the
range of 25 cents to 35 cents as compared to $1.02 as reported
last year in the first quarter."

I want to assure you that I am confident about Digital's
long-term success. As you know, we have great products--as seen
this summer at the Sales Symposium. We also have magnificent
products planned in the near future, and have just announced the
first MicroVAX product today along with the VAX-11/725, an
inexpensive, multi-user office system. These are the start of a
line of new computers that lead us into an exciting future. We
are confident these products will be accepted enthusiastically by
our customers and that we are well on our way to our usual profit
levels.

I am pleased and enthused about Digital's product strategy, which
ranges from chips to VAXclusters. We have the networking
capability to connect these products and the technology to make
the best semiconductor and storage products in the industry.

We are confident in the future of the company.

                    * * * * *

Please convey this message to your employees.

KHO:blk
KO3:S2.7

WPS USERS - Leave HP mode and type <CR>

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Interoffice Memo

TO: ALL CORP OFFICERS:

DATE: TUE 18 OCT 1983 1:49 PM EDT
FROM: CORP INFO DIST SYS
DEPT:
EXT:
LOC/MAIL STOP: /

MESSAGE ID: 5215541156

SUBJECT: THIS MSG IS FROM MARK STEINKRAUSS

FOR FURTHER INFORMATION:
MARK A. STEINKRAUSS
(617) 493-7182

DIGITAL EQUIPMENT CORPORATION

ANTICIPATES LOWER

FIRST QUARTER RESULTS

MAYNARD, MASS. - OCTOBER 18, 1983 -- DIGITAL EQUIPMENT CORPORATION

(NYSE:DEC) SAID TODAY THAT PRELIMINARY OPERATING RESULTS FOR ITS

FIRST FISCAL QUARTER ENDED OCTOBER 1, 1983, INDICATE THAT SALES AND

EARNINGS WILL BE SUBSTANTIALLY BELOW CURRENT FINANCIAL COMMUNITY

FORECASTS.

THE FINAL RESULTS ARE SCHEDULED FOR RELEASE TUESDAY, OCTOBER 25,

1983. DIGITAL DOES NOT PROVIDE SALES AND EARNINGS FORECASTS.

WHILE THE COMPANY WOULD NOT COMMENT IN DETAIL ON THE UNOFFICIAL

RESULTS, A SPOKESMAN SAID THAT A SHORTFALL IN REVENUES RESULTED

FROM LOWER-THAN-PLANNED PERSONAL COMPUTER SHIPMENTS AND THE

NONAVAILABILITY OF CERTAIN NEW PRODUCTS. THE SHORTFALL IN REVENUES

IS LIKELY TO RESULT IN REPORTED EARNINGS PER SHARE IN THE RANGE OF

DLRS 0.25 TO DLRS 0.35 AS COMPARED WITH DLRS 1.02 REPORTED IN THE

FIRST QUARTER A YEAR AGO.

18-OCT-83   16:05:56   S 05795   MLCG
MLCG MESSAGE ID: 5215542213

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TO: *WIN HINDLE
    ED KRAMER
    JACK SHIELDS
    JACK SMITH

DATE: FRI 7 OCT 1983 2:26 PM EDT
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5214423857

SUBJECT: TRADITIONAL DIGITAL VALUES

At an Engineering Woods Meeting, yesterday, it came out, in an
offhand way, and with an attitude of resignation, that we have
given up our traditional attitudes in Sales. The traditional
attitudes are: taking care of the customer first, and always
taking on the obligation of supporting what we have promised and
what we have delivered.

It was suggested that now that we have put measurements first,
and values second in the Sales Department, we have to take this
environment into account in our Engineering planning.

We were also criticized for investing so much effort and concern
and creativity in time and money in taking care of our old
PDP-10/20 customers, when there was too little money in it for
us. I don't know if they have caught the spirit of the new
Digital, putting the money first, or, if they were teasing us
about our new values.

One thing is clear; changing the values at Digital was not one of
our goals in the new Digital. We have to do everything to get
back to our old values and still make our numbers.

When you are at the DECATHLON Meeting in Europe, please, in your
speeches, and in all your contacts, emphasize the fact that we
have not changed our values.

Also, in preparation, will you contact those senior people going
to the meeting, particularly the Product Line Managers, and make
sure that they, too, believe we have not given up our traditional
values? Be sure to communicate that we will not tolerate areas in
the Sales organization that will not support the Corporation
because they feel they are not measured by particular areas.
Furthermore, that we will not tolerate people who will not stand
by the obvious obligations we take on.

Above all, we are one Corporation, and everyone works for the
Corporation. We have certain traditions and values that we are
not going to give up, regardless of the pressures our
measurements put upon us. If, with our changes, we just develop
new bad habits in other areas, we have to set about to change
them quickly, without reorganizing the whole Company.

In our Commercial, Engineering, and Marketing areas, we have not

had a tradition or a significant length of experience of
supporting products and not abandoning products and software. We
don't have the tradition of being open to our customers and our
resellers. Please assure the Sales people that this is not part
of the new Digital, but rather that we have not yet developed the
old attitudes and values and traditions in these newer groups.

KHO:ml
KO3:S1.48

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TO: ED KRAMER   DATE: WED 28 SEP 1983 10:20 AM EDT
    KEN OLSEN   FROM: WIN HINDLE
    JACK SHIELDS   DEPT: CORPORATE OPERATIONS
    JACK SMITH   EXT: 223-2338
                                       LOC/MAIL STOP: ML10-2/A53

                                       MESSAGE ID: 5213505963

SUBJECT: ORGANIZATION PACKAGE

For your convenience, the entire package is enclosed.

SUBJECT: NOTES FROM WOODS - SEPTEMBER 22-23, 1983

Notes from WOODS - September 22-23, 1983
Attended by Win Hindle, Ed Kramer, Jack Shields, Jack Smith.

1. Inputs from Ed Schein:

    A. DEC Culture - his view

        1. Individual is the source of ideas.
        2. Buy-in, ideas must be sold and survive debate "Truth
            through Conflict", talk it out.
        3. We are a family and take care of each other.
        4. Keep things simple and clear (Ed commented we do not
            succeed on this one, though it remains a goal).
        5. Authority (rank) has no intrinsic value.

    B. New Environment and Growth Have Resulted in:

        1. Complexity
        2. Large size
        3. Competition
        4. New people who don't know the culture.

    C. Needs:

        1. More structure
        2. Quicker decisions
        3. Discipline and coordination.

2. Order Processing/Delivery System:

    A. What's Changed?

        1. Customer assistance resources/responsibility
            transferred to field - NOT up to speed yet.
        2. Resolution point for customers was Product Line

Manager, now it is Area Manager.
3. Point of Manufacture (POM) process not working well.
4. Old order and delivery process assumed process would not work, new process assumes process will work.

B. Resolution:

As the highest priority, Jack Smith and Jack Shields, along with their senior managers (Kalagher, Grainger, Hanson, Melia), will meet to understand personally the fixes we have for our current severe problems. Jack and Jack will assure themselves that we have the programs in place to achieve customer satisfaction as rapidly as is humanly possible.

3. Workstation Group:

(Please see Attachment A - sent under separate cover via EMS).

4. Financial Results for Q1:

Because the exact NOR is still in question, we will meet at 9 a.m. on Monday before the Board Meeting to agree on our Party Line.

5. Changes in Organization:

(See chart prepared for Board of Directors Presentation - being sent under separate cover).

6. Organization Plan for Digital:

(See EMS sent Friday, September 23, 1983 - entitled "Organization Plan for Digital").

7. Problems We Agree We Have to Solve:

A. Customer Satisfaction Problems

1. Delivery lead times inaccurate and in some cases too long.
2. Delivery status reporting to customers poor.
3. Accuracy of delivery dates poor.
4. Need for Management Report on Performance.

B. Reporting of results - Not done so far in Q1

1. By market group
2. By product.

C. Market Group Managers Feel Powerless

1. Our belief is that the Organization Plan for Digital that we are proposing will solve this.

WH:dc

SUBJECT: WORKSTATION GROUP/ATTACHMENT A

******************** RESTRICTED DISTRIBUTION ********************

At our WOODS meeting, Ed, Jack, Jack, and I agreed there should
be a Workstation Group, and we recommend the group report to you,
as a second choice, it could report to Jack Smith. The group
should include marketing and engineering but it does not have to
be called a division. The group should have business responsib-
ilities for all workstations in order to get focus on this key
area. The group manager will have to be sensitive to the work-
station needs of the other market groups and work very closely
with them.

Because workstations are a generic product, they should even-
tually (2-3 years) be marketed by all the groups. Therefore, the
group manager should have as part of his plan to phase the
marketing over to the market groups at a specific point in time.

Jerry Butler is everyone's candidate to do this job. We do not
want to impose our ideas on Jerry. Therefore, you (or one of us
if you prefer) should ask Jerry to make a proposal very soon on
starting Workstations Group. Our opinion is that if we ask Jerry
to take on only engineering, he will not want the job. There-
fore, we should ask him to propose a group that includes
marketing.

WH:dc
WH1:1S5.23

SUBJECT: CHART FROM BOARD PRESENTATION

CHANGES IN ORGANIZATION

1.   MOVED OPERATIONS TO FIELD

- REVENUE BUDGETS

- SALES DEPLOYMENT

- PRODUCT FORECAST TO MANUFACTURING

- ORDER PROCESSING

- CUSTOMER ASSISTANCE

- TECHNICAL SUPPORT

2. ORGANIZED SALES FORCE BY ACCOUNT AND APPLICATION

3. CREATED INSTALLED BASE MARKETING ORGANIZATION

   - ADD-ONS AND UPGRADES

4. REFORMED SEVERAL MARKET GROUPS

   - BUSINESS AND OFFICE SYSTEMS

   - PERSONAL COMPUTERS

   - ENGINEERING/MANUFACTURING

   - NOW CONSIDERING WORKSTATIONS GROUP

SUBJECT: ORGANIZATION PLAN FOR DIGITAL

This EMS is from Win Hindle, Ed Kramer, Jack Shields and Jack
Smith. For discussion.

Organization Plan for Digital

1. Base Product Development Plans

   - Proposed by Engineering.

   - Reviewed and Approved by Steering Committees that have
     members from Market Groups, Field, and Senior
     Engineering Consultants.

2. Product Schedule Reviews

   - Held in each engineering group.

   - Slippages reported.

   - Major programs (i.e. VENUS) regularly reviewed by
     Senior Manager from outside Engineering plus a small
     group of Senior Consulting Engineers.

3. Business Plans for six Market Groups

    -   Includes products, both base products and directly
        developed products.

    -   Proposed to and approved by Strategy Committee.

4. Geography/Country/Plan/2-Year Budget

    -   Includes NOR by six Market Groups.

    -   One copy of original proposal sent to Strategy
        Committee.

    -   Reviewed by a "New" Committee made up of six Market
        Group Managers and five Field Managers.

    -   Final Budget Approved by Management Committee.

5. Geography/Country Reports

    -   Bookings and NOR monthly by six Marketing Groups.

    -   Bookings/data on products.

6. Geography/Country Forecasts Product Requirements to
    Manufacturing. Manufacturing commits to product availability
    schedule.

WH:dc

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;--;--;--;--;--;--;--;
!d!i!g!i!t!a!l!      I n t e r o f f i c e    M e m o
!__!__!__!__!__!__!__!
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TO: *WIN HINDLE   DATE: TUE 27 SEP 1983   9:45 AM EDT
    ED KRAMER   FROM: KEN OLSEN
    JACK SHIELDS   DEPT: ADMINISTRATION
    JACK SMITH   EXT: 223-2301
                                   LOC/MAIL STOP: ML10-2/A50

                                   MESSAGE ID: 5213403318

SUBJECT: STATUS OF MARKETING PLANS - 19 APRIL MEMO


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;--;--;--;--;--;--;--;
!d!i!g!i!t!a!l!      I n t e r o f f i c e    M e m o
!__!__!__!__!__!__!__!
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TO: CLIFF CLARKE   DATE: TUE 19 APR 1983   10:40 AM EST
                                   FROM: KEN OLSEN
cc: see "CC" DISTRIBUTION   DEPT: ADMINISTRATION
                                   EXT: 223-2301
                                   LOC/MAIL STOP: ML10-2/A50

                                   MESSAGE ID: 5197337000

SUBJECT: STATUS OF MARKETING PLANS

We have lost an important part of the ideas we had when we
originally started the new Digital. Product lines were to lay
out plans and were to keep track of how these plans were being
worked out in sales, manufacturing, and engineering. We have
gone so far that some people think nothing is tied together and
everybody does their own thing with no integrated plan.

It is of utmost importance that the product lines lay out a plan,
that they keep track as to how these plans are going, and that
they solve or raise problems that are occurring.

The fact that we do not collect vast amounts of data and give it
to the product lines does not mean that they are not to keep
track of the status of their plans. In fact, one of the reasons
for not collecting vast amounts of data is to be sure that they
find out what is really going on and not wait for the long delay
for data to be collected, and then to be dependent on the data
which is usually not very valid.

Our whole system falls apart if the product lines do not have
plans and if they are not in a position to find out how things
are working at all times.

I would like to see us at every meeting or every other meeting of
the Marketing/Sales Strategy Committee, a report from each of the
marketing groups as to the status of their plans in sales,
engineering, and manufacturing. I would like to see us start

this at the meeting which has been re-scheduled for April 25th.
This should be done on short notice and will be very informal,
but will be a start on getting this discussion and reporting
going.

KHO:ep
KO2:S7.66

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         TO: Charlie   Date: 21 September 1983
               Tom   From: Sammy
               Dick   Dept:
               Harry   MS: Ext:

         CC: Billy

SUBJ: ORGANIZATION CHANGES AND THE NEW DIGITAL

******************************CONFIDENTIAL**************************

The goals for a new Digital were to do what we did in Europe, in the
states, to the product lines and Sales groups. They would again have
their chance to plan and propose their segment of responsibility that
would not be edited or edicted by the bureauracy. And, we would
simplify things so that they could understand, exactly, their
responsibilities.

We have so often lost track of what we are doing, and we are doing the
same thing while going on to the next step, which we call forming
divisions.

We seem to have a backlog of emotional and personal hangups with
people or things that have happened in the past and we insist on
making gross changes way beyond what we understand and can tolerate,
when our goals for the new Digital are relatively simple.

Our goals for forming divisions are very simple and we not only make
them impossible to obtain when we add changes that are gross in nature
and irrelevant to the subject, but we confuse ourselves and everyone
else involved.

The big features of the new Digital turned out to be de-specialization
of the field, completely redoing the centers of budget and profit
responsibility, completely redoing our reporting system, and running
headlong into all other changes that we could possibly think of, and
completely forgetting our goal, which was to give product lines the
feeling of responsibility.

As we ran ahead headlong, we rejected many of the things over the past
twenty-six years. Instead of assuming that we evolved into many
concepts and ideas that were wise because they were learned through
experience, we rejected them wholesale, simply because we didn't
understand them.

We are running headlong to further reject the things we have learned
in the past twenty-six years, in the name of divisionalization. It has
nothing to do with divisionalization. It is just that we want to

reject the subject at hand and the reason for why the meetings are called, and no matter what the meeting is called for, we use it as an excuse to make more changes.

We had learned how to have OEMs trust us. Very few companies have done this; in fact, it is almost unique in the industry. The OEM naturally distrusts the people who are competing with him. One of the things that has devastated massive parts of the Company is that this was so thoroughly understood, even by people like Stan, Jake, and Andy, and now there is no sensitivity to it at all. If we don't understand it, it can't be true.

We may never recover from the changes we made and the history that we rejected in the name of the new Digital, but that were really made in the name of ignorance and arrogance and we disposed of that whole infrastructure that used to take care of the customer. And sadly and inexplainably we have gone many steps backward away from the goals of the new Digital.

Most of this was done with the claim that it would relieve Ken Olsen from much work mediating between group. If it was all done in one group, Ken Olsen would not have to get involved. This too does not bear with history. If two groups have a problem I can normally have it worked out by my secretary. What I have to do myself is relatively easy. The thing which frustrates me and that wakes me up at four every morning, is when it is all under one person I have no access to it and the only answer to a problem is to fire him and start over again. Putting everything under one person is not one of the lessons we learned from history.

Another lesson we learned from history was that you had to talk over subjects for long periods of time, particularly subjects that involved changes, because it takes a long time for people to understand. This can be proven by the fact that it takes a Strategy Committee a long time to understand what we are talking about. Now the Strategy Committee wants to impose changes instantly, and without discussion. I think the foolishness of this is obvious because the changes they want to impose bear no relationship to the subject under consideration, and without regard to the lessons learned from history. This will soon be taken care of because there is no one around who remembers our history anyway.

To: Ken Olsen

Win Hindle

Jack Shields

Jack Smith

Geo. Chamberlain

Al Mullin

Bill Helm

I thought this might be of interest to you.

Al Bertocchi

A. M. BERTOCCHI

Lehman Brothers Kuhn Loeb
Incorporated

55 Water Street
New York. N.Y. 10041

September 7, 1983

Mr. Alfred M. Bertocchi
Vice President, Finance &
  Administration
Digital Equipment Corporation
146 Main Street
Maynard, MA 01754

Dear Al,

As follow-up to our recent conversation, we have studied the recent decline in Digital Equipment Corporation's stock price and have compared this decline to the behavior of various stock indices and stock prices of selected computer equipment manufacturers. As indicated in Table I, from 2/15/83 to 8/15/83 Digital's stock price fell 23%, while the Dow Jones Industrial Average rose 9%, the S&P 400 increased 11% and an index of selected computer equipment manufacturers fell 2%. Over this same period, the Moody's AAA Bond Yield increased a modest 34 basis points from 11.64% to 11.98% and the prime rate held steady at 11.00%.

The decline in Digital's stock price since February has been attributed largely to the fact that earnings and order levels were not up to earlier expectations. Whereas we do not mean to infer comparability in the following situations to Digital, it is interesting to note that Apple Computer, Prime Computer and Texas Instruments fell 24%, 48% and 36%, respectively (although each decline was associated with a specific business reason). It is also interesting to note that Digital's stock price declined significantly during the six months immediately following the Company's public offerings in 1970 and 1977 which did not prevent successful offerings in 1972 and 1980, respectively.

Historically, the market's perception has been that Digital has chosen to finance in anticipation of a period of strong growth (therefore a period requiring additional capital). Such growth has, in the past, in fact, occurred with a resultant increase in the stock price. In the current case, however, a decision to finance in February would not, as it has turned out, have been followed by a period of growth in the near term (six months). Thus, it is possible that some

P.S. D.G. STOCK INCREASED 32% ALBIET FROM A LOW POINT

WANG DECLINED 5%
IBM INCREASED 22%

auE.
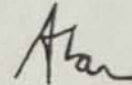
institutional investors might have felt mislead because they may have assumed that a financing decision in February was a signal by the Company of an anticipated pickup in operations. The result might have been that in future financings the anticipation of growth, which Digital offerings have typically triggered, might not be present in the perception of certain investors.

Nevertheless, we do not believe the nature of the recent decline is such that had Digital done an offering in February, it would have had a measurable negative impact on Digital's ability to finance in 1984 or 1985 as earnings growth resumes.

Please give us a call if you have any questions.

Best regards.

Sincerely yours,

Alan R. Batkin

ARB/ddt
Enclosures

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I n t e r o f f i c e   M e m o

TO: *WIN HINDLE
    ED KRAMER
    JACK SHIELDS
    JACK SMITH

DATE: MON 1 AUG 1983 12:06 PM EDT
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5207706813

SUBJECT: COMPANY PHILOSOPHY

        E X T R A   C O N F I D E N T I A L

There are several bits of company philosophy I would like to have
worked out before the August Sales meeting, and I would like to
make a clear statement of our philosophy.

Will you get answers to the following questions before the next
Strategy Committee meeting? I would like to go over the answers
to make sure that what is going on in reality matches what we
really want to happen.

1) Are we, by formal policy or by attitude, freezing out
   resellers by giving them poor service and by competing with
   them with lower prices and faster delivery?

   Have we lost the morality we used to have when Ted Johnson ran
   sales where we were exceedingly careful to protect an OEM or a
   reseller that we made a commitment to.

   Are our quotas are more important than moral commitments we
   have made to resellers?

2) Is our policy, not to mention to the sales people things that
   are yet to be made ready for sales, an excuse to have
   engineering projects go on forever without committed dates
   that would make us competitive?

3) What facelifts, new features, new exciting applications, or
   new exciting technology have we introduced into our three
   personal computers in the last seven months, or the last
   fifteen months since we announced them?

   Are we continuing our policy of neglecting a product as soon
   as it is in production to make production easier, and wait a
   few years until we have a new one to replace it?

4) Is our engineering philosophy and engineering program viable
   to keep us in the commercial business or should we plan to
   phase out of the business now?

5) Can we, with a clear conscience, say that we are leaders in
   interconnecting computers?

Do we have a list of products that we can tell our customers they can apply to small computers, medium size computers and large computers, and can we tell them we have a commitment to deliver in the next six months?

6) Are we, in this area, more interested in dabbling in every bit of technology but little interest in satisfying product needs?

7) Are we dilettantes in the area of commercial software and hardware? We can brag about all the wonderful things we have done, all the wonderful things we will do but can we assure our sales people that we will have a product.

8) We have contracts with the major educational institutions and we have a contract with Trilogy. What technology can we tell our sales people we have to offer today which is new or even current, and what can we say we will have in the next six months.

Is our investment in new technology, and in high technology organizations for academic satisfaction, or do we really expect to have products, and if so, when and what, and is there a commitment, or are these experiences going to just separate us more and more from products.

KHO:ep
KO2:S10.76

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Interoffice Memo

TO: ED SCHEIN

cc: AL BERTOCCHI
    GEORGE CHAMBERLAIN

BCC: ✓Win Hindle
Jack Smith

SUBJECT: MANAGEMENT THEORY STUDY

DATE: WED 4 MAY 1983   3:36 PM DST
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5198863088

********************SENSITIVE AND CONFIDENTIAL********************

I have asked you to visit with the product lines and see what has been bothering them. Now, I think it would be more important to visit with George Chamberlain and Al Bertocchi to see if you can find out what their theory of management is.

For years I have had the feeling that they have considered me and the rest of the technical people in the Company as unwashed, uneducated, and unappreciative of the fine art of finance. As a result, they have never been sensitive to, or listened to, or understood, or believed in our theories of letting people propose their goals and then hold them to it.

They seem to believe, and hold to an independent course of bringing all questions to the top and let the top make decisions because it is faster, easier, more efficient. Often the preparation of the questions is very shallow and wise decisions cannot be made.

I have been trying to maintain the tradition we have had since we were a 14 million dollar company, of having people who know how to do the work take part in setting the goals. When the key part of the operation doesn't believe in this philosophy and is off marching to a different drummer, it is a losing fight. We now have a frustrating situation where the administrative and financial people are trying to run an efficient, fast, decision-making operation by raising ill-defined, ill-prepared questions for immediate, fast, efficient answers. The people who have the knowledge are frustrated because they are not taking part in the decision and the decisions are made without the necessary information, or without the motivation that comes from participation by the people who are to carry out the plans.

When we were a fourteen million dollar company we were too big for me to run things in an autocratic way. I would like you to sit down with George and Al and try to find out how they think we

should run a six billion dollar company.

I often feel that they raise these ill-defined, ill-prepared questions to test me and the Operations Committee to see if we are brave and competent enough to make these decisions one at a time, without due preparation, without due information, and without a summary of how all these multitude of decisions fit together, and without a feeling of the consequences of making them one at a time, and without anyone responsible to make sure they all fit together.

The change we have largely accomplished in Europe has been to let individual groups take part in their own goals and then be responsible for them. I am not sure that Al and George have understood what we did there and have understood how it should apply in this country.

For many years I have been frustrated with the Accounting system. It has not been designed to help the individual managers make decisions. I think this is because the Finance Department feels that accounting is done for the top men and the top committee to make grand decisions. I am, of course, completely of the other mind, and believe the accounting is there to motivate and help the individual managers run their operation.

As you know, I have a theory that if managers run things well and all questions are prepared and formulated well, there are no serious questions to be answered from the top. The only time there are hard questions is when someone falls down on the job. Most of those questions are hard only if the preparation is poor. For a six billion dollar company, a small staff at Headquarters cannot know enough to formulate those questions in a useful way.

Because the finance people always look at the rest of us as though we are uneducated, I don't feel I get very far in discussing these matters with them. They just know I am a heathen and tolerate me. If you sit down with them for awhile, you may come away with a coherent understanding of what their theory is and share that information with me.

KHO:ml
KO2:S8.26

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TO: OPERATIONS COMMITTEE: DATE: MON 11 APR 1983   1:44 PM EST
                                        FROM: KEN OLSEN
                                        DEPT: ADMINISTRATION
                                        EXT: 223-2301
                                        LOC/MAIL STOP: ML10-2/A50

                                        MESSAGE ID: 5196523892

SUBJECT: THE NEW DIGITAL

When we formed the new Digital, we had a number of goals that
were very critical. We wanted to cut out unnecessary jobs,
unnecessary policing, unnecessary data collection and unnecessary
metrics.

When we instituted this we added a few other things which seemed
good ideas at the time but were not critical to the original
theory, like de-specialization in the field, removing the
customer from the product lines and having the field make all
discount agreements, and I am sure, more things.

Many of these peripheral decisions have devastated the marketing
people and some people have concluded that they are not wanted or
important. It has been almost a year since we made the decision
and I would like to spend the June Woods, maybe far away and
maybe for 3 days, reviewing all the peripheral decisions and
planning how we can integrate marketing and selling.

We might have groups of people, or committees, work on this
question before the Woods meeting so that we have a good idea of
what we want to accomplish.

KHO:S7.35
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TO: ED KRAMER   DATE: TUE 5 APR 1983   3:16 PM EST
                                      FROM: KEN OLSEN
cc: OPERATIONS COMMITTEE: DEPT: ADMINISTRATION
                                      EXT: 223-2301
                                      LOC/MAIL STOP: ML10-2/A50

                                      MESSAGE ID: 5195914203

SUBJECT: P&L RESPONSIBILITY, ETC.

*********************************CONFIDENTIAL***********************

SUBJECT: P&L RESPONSIBILITY, ENTREPRENEURSHIP, MANAGEMENT,
LEADERSHIP, AND GROUP VICE PRESIDENTS

I enjoyed listening to your ideas for your group of product
lines. I think you have caught the sense of the new Digital and I
think you are planning to show the leadership needed. In the past
we have been confused as to what some of the words mean.
Management is not a goal, it is almost something we should take
for granted in the senior management of the Company. It is what
keeps the mechanisms going normally and the red tape smooth and
keeps the place going.

A group vice president should contribute leadership; like a
military leader, he has to know what the goals are, what the
resources are, and the strategy to use to accomplish the goals.

Management is done by the clerks of the army. The leader has to
know what the goals are and keep them in mind all the time. In
our case, the group vice president and the product line manager
should eat, sleep, dream, and have visions of products and
applications and customers and how we get them together. All the
management tasks are chores he has to take care of but they are
not the job he is hired to do.

We sometimes talk about entrepreneurship and P&L responsibility.
Entrepreneurship is hard to find even in the world of risk
capital today. An entrepreneur gambles everything on the success
of his idea. He is emotionally involved, almost to a morbid
degree, in his product, his marketing, and his customers. When
things go wrong he hangs on to a degree which is almost
devastating to him. This is hard to find in a big company because
when his ideas go wrong he just quits. It is even hard to find in
a risk capital organization because risk capital is pushed on him
in almost the same way it is at Digital and when things go wrong
he quits and does another job.

A manager who leads a set of ideas is emotionally committed to
them and sells those ideas, even though they may not be his
invention. He can get committed intellectually and sometimes
contrary to the tradition and ideas of the rest of the
organization, to the point where he has as much of the motivation

and the satisfaction and the danger and the learning experience
that an entrepreneur can have in his own business. This may be
the closest thing available to entrepreneurship in our modern
high technology field.

Profit and loss responsibility is also spoken of as a goal.
However, most people don't understand what this means. Profit and
loss responsibility means that you go to bed scared and you wake
up early scared because your expenditures may be outgrowing your
income. P&L responsibility means constant worry, constant
concern, and always looking out for every extra penny that has
been expended. Sometimes onlookers think that P&L responsibility
means the freedom to spend money without telling someone. They
don't see the worry and concern that goes with it. Having P&L
responsibility and the overwhelming feeling of economy that goes
with it is hard to simulate in a big company. However, a leader
who lays out a plan and gathers people behind him and the
resources to carry his plan out does make an intellectual
commitment to certain costs and certain income and it does give
him much of the satisfaction and the feeling of P&L
responsibility.

We, in our Company and in our modern society, are often afraid of
leaders. We sometimes think of leaders as people who do not
listen to others, and who do not get information and suggestions
and inputs from the levels of society or the organization where
the knowledge is to be found. Or, we equate leadership with
people who carry on their own ideas without taking advantage of
modern management techniques or traditional ways of finding the
right solution to problems. Or, we feel that leadership means
propagating ones own invention, idea or theory, regardless of
what the results indicate. Indeed, leadership in the wrong
direction is bad, but that does not mean that we don't need
leadership.

In the product line area we, at times, have had people who felt
that they were great leaders and managers because they had their
organization broken down into many pieces and each piece was
staffed and they just made sure the organization held together.
There was a group who told Engineering what to do, there was a
group who told Manufacturing what to do, and there was a group
who told each part of the Sales force what to do. This did not
make them leaders. This is an army in which each piece had
authority but didn't know how to share a common goal.

I think the group vice president should be overwhelmingly and
emotionally involved in product, software, applications, fields
and customers. He should know which way each field is going with
regard to hardware and software systems and he should know what
they need beyond the direction that the rest of the world is
already heading.

He should also be completely involved in the techniques of
formulating our message and getting it across, and always
worrying whether advertising or other techniques are the way to
accomplish this.

I don't think he can do the job by having a dozen young engineers
in each product line telling Engineering what they should do and
telling Advertising what they should do. I don't think leadership
is that easy.

In order to have leadership a corporation must address questions.
We cannot afford to wait for answers to come from heaven. Some
of the questions are: How do we differentiate between end user
and OEM products? How do we have a simple, understandable, easy
to remember set of re-seller terms and conditions, rules and
regulations? How do we reconcile the future of the 10/20 business
with the technological realities?

KHO:ml
KO2:S7.15

DICTATED MONDAY, 4 APRIL 1983

Robert Woods? O.C.

APR 08 1983

TO: JIM CUDMORE
  *JACK SMITH   } To
cc: GORDON BELL
   OPERATIONS COMMITTEE; }

From Smith 4/5/83

DATE: TUE 5 APR 1983 3:02 PM EST
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5195974093

SUBJECT: INVENTION, MANAGEMENT AND LEADERSHIP

****************************CONFIDENTIAL**********************

The business press lately has been discussing the difference
between management and leadership. Naval Captain Grace Hopper
spoke to our people in New Hampshire last week and ridiculed
management and emphasized the need for leadership. She said, "You
don't manage your troops into a battle, you lead them into a
battle."

I think it is critical that you show leadership at the April   } *a given*
WOODS meeting, when Engineering plans are being decided.

We sometimes confuse invention with leadership. Leadership is not
inventing a product and then selling it as the greatest thing
since sliced bread.

It is almost as foolish to bring all the eager Engineering groups } *I don't know*
before a large committee to list all of the wonderful projects   *where this came*
they want to carry on with huge funds and huge staffs over long   *from. Not what*
periods of time, with no reference to what the competition is   *we will do at*
going to do and what the customer wants and what problems we are   *the April woods*
going to solve for the customer. This may seem like good   *(see below)*
management, but we know what happens. Committees almost always
say yes to everything and when they say no it is based on
personality, not on technical or competitive reasons. They don't
even take into account the group's past history.

I don't think an Engineering committee should make these
decisions either. They are even less interested in the
competition and the business reasons for a product.

I suggest that you make a very careful statement of the Company   } *The second day*
strategy for the low end. This would include what markets we are *of the EMC was*
going into, what pricing level, what quality level and whether or *for EMC to develop*
not we want to go into the consumer business at all.   *this not only at*
                                                                 the low end
Then, I suggest you use committees to help you formulate two or   *but all ends*
three alternate product strategies. → *yes, the products committee*
is scheduled to do this mid-may
One strategy would be that each group has the right to do
everything themselves. This would include the packaging, the
power supplies, the disk controllers, the display controllers,
the CPU's and the software. They would be required to justify

their motivation to propagate their invention, and for the ideas that they put forward several years ago.

The second alternative would be to say everyone will use the same hardware and the same bus structure and the only differences would be those parts which allow us to use different software and different operating systems.

It is natural for any leader to feel that he has to predict exactly what is going to happen in the future and then plan accordingly, but this is foolishness. A manager in an automobile company may feel that if he is a good leader he must predict whether the public is going to demand small cars or big cars, front wheel drive or rear wheel drive and his plans have to be 100% committed to whatever he has predicted. Then, he must justify his belief, and, because of his leadership the world will go that way; of course it never does. A military leader cannot tell from which direction the enemy will come and what is going to happen to the environment. He has to lead and yet prepare for all possible alternatives. His leadership is not dependent upon his predicting exactly what will happen.

Our strategy has been, and probably should be, to say we don't know whether the world is going to go to DOS, UNIX, VMS, CP/M, IBM CP/M or any other. It seems to me that a little leadership will make us independent of which way the world goes and we will not have to convince the world that what we said was going to happen is what will happen.

I think it is clear to everyone outside of Digital that the very small computer software is going the way of the IBM personal computer. Our individual product lines are so committed to proving that what they planned years ago is the only way that we should go, that they are usually blind to this fact. Leadership should be above the emotional commitment which groups may have to the ideas they have been pushing for years, and should face the reality that IBM has set a standard for low end software that we all have to be at least able to use.

I think Jack and Jim should come before the group and probably later on, the Board of Directors, and say, "Here is the strategy we propose." Or, "Here are the two strategies that we can pick between; here is the way we see the competitive world going, and here are the needs we plan to fill, and the competitive niches which the rest of the world is not planning to fill, and here is how we can do it with the minimum cost, in the minimum length of time, with the minimum risk."

I think it is ridiculous and unfair to have four groups parade before the committee and propose their own favorite projects and go in with huge financial and emotional investments and long schedules that the competition will not wait for.

It may seem unfair to ask the leaders to take on such a complicated and hard to understand task, but I think the answer to that is clear. If it is too complicated for someone to explain to a senior committee of the Company and to the Board of

(handwritten margin notes:)
good idea. Let's get on it.

scheduled for Products Committee. mid-May. Board would be OK anytime after this
→ Agree

what we get paid for.

Directors, it is too complicated a strategy for the Corporation to carry on and for the sales and marketing people to sell. *Right On*

Leadership is not calling large meetings and waiting to see if unanimity is achieved to solve a problem. Leadership is finding the answer and leading it through to success. *" "*

Participatory management does not mean everybody participating in everybody elses project. Participatory management means being allowed to participate in the setting of your own goals and not someone elses. *" "*

We, in our Company and in our modern society, are often afraid of leaders. We sometimes think of leaders as people who do not listen to others, and who do not get information, suggestions and inputs from the levels of society or the organization where the knowledge is to be found. Or, we equate leadership with people who carry on their own ideas without taking advantage of modern management techniques or traditional ways of finding the right solution to problems. Or, we feel that leadership means propagating ones own invention, idea or theory, regardless of what the results indicate. Indeed, leadership in the wrong direction is bad, but that does not mean that we don't need leadership. *Super*

KHO:ml
KO2:S7.14

5-APR-83 15:35:13 S 04563 CORE
CORE MESSAGE ID: 5195914177

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Interoffice Memo

TO: OPERATIONS COMMITTEE:
    LARRY PORTNER
    JACK SMITH

DATE: TUE 1 MAR 1983   3:49 PM EST
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5192453629

SUBJECT: ENGINEERING REVIEW

I have a few suggestions for our Engineering Review in two weeks.
I suggest first, that we request that we get a head start by
having summary data written for us for next Monday's Operations
Committee. I suggest that we request a summary budget for the
last two years and a summary budget for what is asked for this
next year. The sum of these budgets should approximately add up
to the total Engineering budget for the year and it should
include product lines, Manufacturing Engineering, and all the
services and maintenance projects going on in Central
Engineering.

Then, I suggest we ask each Engineering Manager for a copy of his
organization chart and a listing of who is in charge for each
project and a statement of his organizational philosophy. Does he
make all the decisions and does he represent all the projects at
meetings and is he the one that all inquiries from the rest of
the Company have to go through? Are the individuals, whose names
are in front of each project, the ones who feel responsible for
the generation and the maintenance of the schedule and is he then
in a position to review them very often and regularly? We also
ought to have for next Monday a statement as to what he
understands is base marketing and how he plans to accomplish
this.

My understanding of base marketing is that it is simply the
generation of technical sales literature, which we have gotten
very little of from a bureaucracy who are not technically
inclined. If the Engineering Manager plans to set up another
bureaucracy staff by non-technical writers, I think we have added
to the total cost to the Company and received nothing. I thought
the technical team and engineers who did the work were going to
finish their job, which is to write down what they had generated.
We could readily have a centralized group or contract with
someone outside to put it in reasonable order and edit it for
grammar and spelling for publication. It is the generation of the
technical material for the sake of the customer and the salesman
that we have been lacking and we want done in the product line.

Another part of the job which we have started to define, which I
don't call technical marketing, is that we want the engineer on
the project to be responsible for filling the needs of the
customers in each market group and we expect the Engineering
Manager to make sure that all those pieces fulfill all the needs

of the customer areas. I think it would be very helpful if we
insist on a clear statement for next Monday's meeting before the
major review from each Engineering Manger.

The second idea I have is that we ask every person taking part in
the Engineering Review to answer a written questionnaire on each
engineering project he reviews. I don't think it is right to ask
these participants to listen to a sales pitch on the budget and
then ask for a voice vote. And, I don't think it is right for
them to take two days of their time and get nothing more out of
it. The questionnaire should be fairly simple and largely yes and
no answers and it should outline what we think should be there. I
would like Jack Smith and Larry Portner and their crews present a
questionnaire like this for review next Monday. The questionnaire
should ask questions like: How are they organized? Does the boss
do everything? Do the people feel responsible? Do the people feel
that they have to leave the Company in order to get responsi
bility? Is the boss the only one who speaks for the project? When
the Engineering Project Leader speaks does he speak like it was
his schedule and his responsibility? Is it run like an American
company or a Japanese company or like the old Digital?

Do we have reason to believe that they will make the project
based on the history of that group? Have they looked over the
alternatives, like buying the unit outside and buying most of the
parts outside and getting by without the product altogether?

Have they looked at alternative ways of doing the project? We
took two and one half years to make our personal computers and we
planned every single detail all to show up at the thirty month
period and then instantly go into a massive production schedule.
IBM did theirs in thirteen months and then started production on
a low scale, learned about their problems, fixed them and grew
into massive production in about thirty months. I don't think
there is any rule of thumb that says which is the best way, but I
do think that people who see only one way are usually too narrow.

As we look over the large maintenance parts of the budgets are
there alternative ways of carrying on these things and is it all
necessary?

Do the engineers show interest and do they spend the time and
show the sensitivity necessary to know what the customer and
product lines need? I don't mean that they change their plans
every day, depending upon who talks to them last, but rather are
they confident that when this project is done it will be better
than what is then available?

Another question we should ask is: in these new gadget and new
technology areas, do we believe that they wind up being useful or
do we believe that in the tradition that we started in the last
years that we have to invest a certain amount of money in every
technology and every idea, even though we don't really believe
that it will ever be important?

Of the eighty-five projects coming out next year, what was the
decision process to put them into production? When we agree on a

budget at this time of year, does that mean that no matter how long it takes Engineering to finish the project that we have already committed the many, many millions of dollars necessary to produce the item and to sell the item? If we are, at this time, making the commitment not only to invest but to continue investing until the project is done, no matter what has happened in the competitive field, and if this decision also implies a commitment to manufacture the product when it finally comes out, we should take a particularly serious view of what we decide on.

Do the engineers understand the importance of the costs involved in manufacturing a new product? Do they understand the cost of tooling, the cost of inventory during manufacturing, the cost of inventory and preparing for selling after a product is introduced? Do they understand the cost of disbanding the tooling for the old product and do they compare the cost of improving things in the old product, as compared to starting from scratch?

KHO:ml
KO2:S6.3

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 _._._._._._._._.                              (low [emedium] strategy) O.C.
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TO: *WIN HINDLE   DATE: THU 31 MAR 1983   8:36 AM EST
                                         FROM: KEN OLSEN
cc: see "CC" DISTRIBUTION   DEPT: ADMINISTRATION
                                         EXT: 223-2301
                                         LOC/MAIL STOP: ML10-2/A50

                                         MESSAGE ID: 5195405906

SUBJECT: CORPORATE STRATEGY

When we decided to build three separate computers in the same
plastic box as our approach to personal computers, I think it was
a good strategy. With relatively little cost we are able to hedge
our bets and wait and see which one plays the best.

It is assumed that Ken Olsen, or the Operations Committee, has
the obligation to prove to each one of these groups that anything
they want to do is beyond the financial capability of the
Company, (or else they have a right to do it.) I would like to
change this and say that we must have a Corporate strategy which
says there is a simple, consistent, easy-to-understand hardware
plan and that each of our software approaches fit into that plan
and with great detail, prove that there is good reason for them
not to share the same hardware.

I propose that after a machine grows beyond its original
definition as a personal computer that went into the original
plastic box, that every small computer system be based on the
Q-BUS.

We have, for years, been building pieces for the Q-BUS and now we
have all the pieces for a Q-BUS 11 going into production in the
LCP5. We have an ETHERNET module which will be in production, we
have the Seahorse, which will be here in August, and we have a
Q-BUS MICRO-VAX coming soon after. We are also ready to make a
built-in modem on a dual board and a telephone controller on
another dual board. We also have ideas for making multiple-user
connections straightforward and easy for business applications.
When you add these to the huge number of Q-BUS modules that we
already have, it seems clear that the Corporate strategy should
be: All personal computers will be Q-BUS when we get into
multi-user and larger systems. The Rainbow and the Professional
will use Q-BUS for machines bigger than todays personal computer.

A personal computer normally is less expensive than a mini
computer because it is designed with a limited growth potential.
Each of the future options is designed into the unit so that a
price is not paid for future expansion. When you get beyond that
initial set of options, growth gets to be more expensive than the
general, tradition, minicomputer. For this reason I suggest we
keep our present personal computers and keep a major program to
make them better and less expensive. We should keep them in their

initial boxes and continue to set about to make them the world's
leader in industrial, commercial, and personal computing.
However, for larger and multiple-user machines, I would suggest
we have a Q-BUS Professional, and a Q-BUS Rainbow, and that we
never grow the DECmate beyond the single-user personal computer
that it is today and that we concentrate on making it the world's
standard standalone word processing machine.

I also suggest that we start with this assumption and that people
who want to duplicate things already done in Q-BUS prove that the
investment is worthwhile.

KHO:ml
KO2:S7.2

"CC" DISTRIBUTION:

RICK CORBEN   JIM CUDMORE   MIKE GUTMAN
OPERATIONS COMMITTEE: RON SMART

d i g i t a l   INTEROFFICE MEMORANDUM

TO: Bob Hughes   DATE: 30 March 1983
        Andy Knowles   FROM: Win Hindle
        Ed Kramer   DEPT: Corporate Operations
        Ward MacKenzie   EXT: 223-2338
        Chick Shue   LOC: ML10-2/A53
        Harvey Weiss

SUBJ: Marketing Tasks in FY84

In working through the transfer of operations responsibility from
the Market Groups to the Field, Owen Brown and the Transition
Task Force developed a good list of marketing responsibilities.
At a meeting on March 4, the list was refined by the Market Group
Managers. That list is attached.

Now that we are in the position of having to decide on marketing
expenses for FY84, it seems wise to use that list to develop
appropriate expense budgets. I am concerned that marketing
groups will be budgeting functions that are no longer done by
them.

I suggest that you ask each marketing group to lay out its FY84
budget by showing how much is budgeted for each kind of activity
in FY84. This list may help review that.

WH:hb

WH1:S3.119

Attachment

+------------------------------------+
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| d | i | g | i | t | a | l | | interoffice
| | | | | | | | | memorandum
+------------------------------------+

TO: Ron Smart   DATE: 31 MAR 1983
                                         FROM: WARD DAVIDSON
                                         DEPT: WACS-OPS
                                         EXT: 231-5657
                                         LOC/MAIL STOP: MR03-3/J19

SUBJECT: RESPONSIBILITY CHART

Attached you will find an updated responsibility chart and detail
support statements for the relationship between Operations and the
Marketing groups. During Woods A, one of the subgroups received a
list of support activities that the Marketing groups wanted from
the AMC OPS (see attached). Since this was an ad-hoc list created
that moment and not based on marketing responsibility chart - the
Marketing groups were asked to provide a more specific support
description for each task.

Although not complete - it might serve as a starting point for the
Marketing groups.

The process is not complete until the Area Management Teams
receive and responds to written support statements from the
Marketing groups on what support they need from AMC OPS.

WD:dm

Attachments

Crisis management - number four, the first sentence was stricken. Section number four now reads there must be management support for the priority nature of crisis response, etc. This was done in order to clarify the fact that Operations was not expecting SMUs to staff specifically for crisis management.

The next discussion centered around the functional descriptions of the operations jobs. The first change was under the geographic team, page 14, F was added to read "Input to the Redbook Process".

No changes were made to technical projects function.

Under technical support function was the addition of F. Provides support to OPS.

The final segment was devoted toward getting inputs from the marketing groups as to what support they wanted from the AMCs. The following tasks were listed:

Feedback of marketing plans

o Page eight of the minutes of February 16th, 17th Woods meeting numbers five and six.

o Access to technical support

o Equipment (Resources) placement

   . seeds
   . demos
   . benchmarks

o Account Info

o Sales Skill Info

o Account Portfolio

o Territory Strategy

o Competitive - loss sales reports/competitive activity reports

o Steering Committee Representatives

o Successful installations

o Customer accesss with or without sales involvement/Marketing research

o OEM/End User, applications

TASK	AREA OPERATIONS	MARKETING GROUPS	SHARED RESPONSIBILITY
PROPOSE NOR	R	S	
MAKE NOR	R		
BUSINESS PLANNING	R	S	
TACTICAL SUPPORT "DEALS"	R		
DISCOUNT ADMIN	R		
CREDIT LIMITS	R		
ALLOWANCES	R		
GEOGRAPHIC PROMOTION	R	S	
PRODUCT FORECASTING	R	S	MFG.
CUSTOMER SER INTERFACE	R		
MIS SYS DEF	R	S	
OA SYS DEF	R		U.S. F&A
TECH PRODUCT SUPPORT	R	S	
TECH APPLICATION SUPPORT	R	S	
MARKETING DIRECTION	R	S	PROGRAMS (AMC)
COLLECTIONS	R		REGIONAL SALES MGR
CRISIS MGMT	R	S	
INDUSTRY/CHANN. TRAINING	S	R	
3RD PARTY APPLICATION	S	R	
CUSTOMER VISITS	R	S	
STRATEGIC ORDER DELIV	R	R	
LOCAL ADVERTISEMENT	R		PROGRAMS (AMC)
STANDARD T&C	R	S	AMC MANAGER

THIS TASK LIST:

    IS: INTERACTION BETWEEN AMC OPERATIONS AND MARKETING ONLY.

    IS NOT: - ALL OPS TASK (RESPONSIBILITY) RELATIVE TO OTHER GROUPS
             - ALL TASK FROM OTHER GROUP REQUIRING (SUPPORT) FROM OPS

AMC OPERATIONS NEEDS TASK LIST FROM MARKETING SHOWING REQUIRED SUPPORT
FROM OPERATIONS.

PROPOSE NOR

Support needed from Marketing:

o Ensure that strategic marketing plans are understood by selling centers for development of bookings plans.

o Participate in an iterative process to develop the NOR plan utilizing bookings plans, strategic marketing plans and manufacturing opportunities and constraints.

o Provide information on marketing, opportunity, competition, product focus, application focus and risk.

BUSINESS PLANNING

Support need from Marketing:

This responsibility describes the planning associated with the receiving and shipping of orders up to and including the payment of invoices across all time dimensions assigned to the MC's (i.e., monthly, quarterly, annual, LRP). Also included is the expense planning associated with the doing of these tasks.

Primary Responsibility to see that it is done: OPS

Supporting - As follows:

Programs -- Anticipated results and costs of programs to stimulate business.

Regional Manager -- Investment plans and costs to achieve expected results and evaluation of trade-offs between alternative solutions. Control of allowances and expenses to achieve the margin goals of AM.

GSG/TIG -- Expense planning and justification as well as longer range planning of revenues and investment justification.

Market Groups -- Provide marketing plan and describe needed support from the geographies. Describe the support that marketing groups provide to the selling function. Additionally, MG's will be asked primarily in the annual and LRP time slices to provide anticipated results of the product and marketing programs as one input to the revenue and margin planning broken down by geography. They will also be expected to give the information on any geographic specific investments, particularly where the geography will be expected to pick up the expense later on such as the Application Support Centers.

-1-

GEOGRAPHIC PROMOTION

Marketing groups will propose promotional programs where appropriate and support the field activities. AMC program is not a filter for marketing group ads or promotions. Local ads and promotions driven by AMC would be supplemental to any programs developed by the marketing groups.

PRODUCT FORECASTING

Suppport needed from Marketing (for Market specific products only):

o To provide clear and comprehensive product information.

o To communicate a clear strategy for announcing new products and phasing out old products. To recommend a back-up product strategy in the event of delayed product announcements or product availability.

o To provide competitive cost performance data in advance of new product announcement or price changes.

o To assist in sizing market demand (opportunity) by geography and/or industry based on market knowledge.

o To propose geographic or account allocation strategy for new product/market introduction.

MIS SYS DEF

Market groups will provide listing of their data needs. Special MIS tools used by the product groups today should be provided to the OPS managers.

TECHNICAL PRODUCT SUPPORT

Support needed:

o Futures information on a non-disclosure basis to key customers at request of sales. Product bulletins and spec sheets (detailed and promotional quality).

o Provide information for training of sales and field support personnel.

o Technically oriented people available to meet with customers either on site or in headquarters.

TECHNICAL PRODUCT SUPPORT (CONT'D.)

o   To provide backup to first line technical product support
    resident in geography.

o   Base Product Marketing to provide for STD corp. product.

o   Marketing groups to provide backup support for any applications
    specific products. Note that these are different levels of
    product support; yet to be defined by the AMC's.

TECHNICAL APPLICATIONS SUPPORT

Support needed:

o   Futures information re: application direction at request of
    sales.

o   Applications notes and promotional information.

o   Provide information for training of sales and field support
    personnel.

o   Leading edge applications expertise available for sales use on
    an exception basis.

o   Applications oriented demo and benchmark development and plans.

o   Competitive information.

o   Referral catalogs.

MARKETING DIRECTION

Support needed:

1. Marketing strategy statements must clearly describe:

    A. The specific marketing target.

    B. The hardware, software and application products to be
        provided to attack the target.

    C. The skills and training necessary to implement the
        strategy and how the sales people will get these skills
        and training.

    D. The type and quantiity of ongoing support the Marketing
        group will provide to the Field units.

MARKETING DIRECTION (CONT'D.)

2. The Marketing groups should describe the actions and support they expect from the Field to implement the strategy.

3. The Marketing groups should provide the quantitative and qualitative measures of success of the strategy.

4. The AMC Operations groups will implement the strategies that are appropriate to each geography. We will tell them our implementation plan, and we want people in their groups to help us to understand whether or not we are on track.

5. Working with the Programs group and the Regional Managers, we will be proposing new opportunities which we will want the Market groups to consider in their strategies.

6. Feedback to Operations on the implementation of marketing programs.

CRISIS MANAGEMENT

Support needed:

1. Since the nature of a crisis is that it is unplanned and unexpected, we want the Marketing groups to react quickly and responsively when the crisis occurs.

2. The Marketing groups should provide the names and roles of the people to be contacted in the event of a crisis.

3. The AMC Operations groups will be attempting to minimize these situations. We request that the Market groups provide early warning to us of any problem situations that may be known to be brewing.

4. There must be management support for the priority nature of crisis response. We will want people who are customer-oriented and able to "put on a corporate hat" in these situations.

5. We want them to provide the technical product or applications resources that are unique to their groups.

CUSTOMER VISITS

AMC owns the process and qualification of corporate visits. Marketing groups participate for content purposes as requested. AMC's owns the process as of July 1.

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I n t e r o f f i c e   M e m o

TO: JIM CUDMORE

cc: DON GAUBATZ
    OPERATIONS COMMITTEE:

DATE: MON 28 MAR 1983   9:26 AM EST
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5195198892

SUBJECT: WHAT I KNOW ABOUT MICRO AND MINICOMPUTERS

I am not sure anybody in our industry knows everything about what
our industry builds. But, I would like to pass on to you what I
have learned about mini and microcomputers. I am sure this is not
complete and I am very sure it is general in nature. In addition,
for every statement you make on a subject like this, someone will
prove there is an exception.

Minicomputers, as defined by Digital over a period of many years,
is not defined by the size of the computer, but rather by the
resources built into the computer that allow it to be put
together in an infinite number of combinations and sizes to
accomplish all sorts of tasks. There is a price to be paid for
this generality, but it allows a very small number of machines to
do a very large number of tasks.

Miniframes were designed to handle, in an efficient way, large
amounts of data in minidisks or drums and in large memory. But,
they usually lack the freedom to make up special combinations and
to be hooked up to special equipment.

Microcomputers, or personal computers, on the other hand, were
designed to be a very limited minicomputer. In order to save
money and space, we sacrificed generality and freedom to expand
and to add large numbers of options. Most of the machine is put
on one board and, in general, all options are thought of at the
design time so that they are very easy to install, with very
little extra equipment involved. They are, therefore, cheaper
but, of course, they are more difficult to make into large
systems and to inter-connect.

Personal computers are usually optimized to have a fast response
between the keyboard and the display. Because they are personal
computers, the personal interaction is optimized. In any
computer, the general applications are optimized and often
several or many terminals are used, with some sacrifice in
reaction time. Some of the software has been magnificent in its
cleverness and efficiency. Personal computers don't have large
amounts of storage and often the people who write it are one or
two men companies without the money to use the large computer to
help them. The result is that most of the very good software for
personal computers has been written in machine language directly
in the computer memory by very bright, clever, hardworking people
and they, at times, have done a magnificent job in generating

efficient programs. Word processing on the DECmate is an example of very efficient, very clever, very well-developed and polished and improved and detailed program that can be run on a machine with just floppy disk storage.

Most of the software for mini and larger computers are written with the aid and automation of large computers. This makes it easy and efficient to write quite complex programs. In addition, the programs are often written in a high-level language so that they can be used on different machines. The wonderful things that we see computers do today have been made possible by the aid and automation computers make possible in the generation of software. However, software generated this way usually takes large amounts of disk storage and central computer storage.

Because personal computers are normally optimized for one individual's use, they are not basically optimum for business applications where there is a need for several users or input devices. Because most minicomputers have been designed for many users, it is normally better suited for business. It is sometimes argued that personal computers clustered in a network would make an efficient multi-user system, and while the cost of each terminal isn't high, the cost of most networks is high. And, the software to accomplish all this has not yet been demonstrated. The advantages of clustering many personal computers might also be obtained by putting several one-board computers in a Q-BUS so the communication is done through the Q-BUS, and each one-board computer talks directly to its own set of terminals.

Life is not as simple as I have stated, but one thing becomes clear, and that is that no one machine organization is optimum for all applications.

KHO:ml
KO2:S6.62
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Interoffice Memo

TO: OPERATIONS COMMITTEE:

DATE: TUE 15 MAR 1983   9:17 AM EST
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5193877499

SUBJECT: GENEVA ORGANIZATION

With the limited sample of people I talked to yesterday, two
problems were clear.

When we dismantled much of the Geneva organization we got rid of
not only the policemen but the technical experts, who were expert
in markets and in products. People believe we need these experts
centralized somewhere in Europe.

People now pick their budgets from listening to enthusiastic
Group Vice Presidents giving their pitch but, they badly need
direction from the U.S. as to how much to count on these pitches
and how to allocate resources between them.

K02:S6.39

1 Strategy 14 March WOODS

I n t e r o f f i c e   M e m o

TO: OPERATIONS COMMITTEE:

cc: DON GAUBATZ
    JIM WALLS

DATE: MON 14 MAR 1983   2:10 PM EST
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5193775939

SUBJECT: Q-BUS COMPUTER ALIAS GAUBATZ

CONFIDENTIAL****************

The team proposing a Q Box computer is close to finishing its
four week study and soon will have a proposal.

The workstation strategy and the business strategy have evolved
to a hodgepodge of different computers.

This one box is a low, floor-mounted with casters machine that is
the width of an AZTEC. There are probably two other boxes that
will be built. Someday we will want one with more than sixteen
slots and we will wait until we need it before we work on that
one. The other box we will probably make right away because it is
so easy and that is the one that fits in the present Professional
table top box. This is easily done because we can use the same
power supply, the same Winchester, the same sheet metal and the
same plastic. It holds three quad boards and three dual boards.
It would contain a single board 11/23 with memory and four or
eight users. The second quad slot would be a controller for the
Winchester and the floppy. One of the dual slots would be a
built-in modem and the other would be a telephone controller.
This leaves a spare quad and a spare dual. One of the quads could
be used for an extender, which would extend the unit to either an
additional sixteen or an additional twenty-four users.

This box would make a nice small workstation, particularly when
it has a MICRO-VAX or a sea horse built in. However, when we sell
it for business, we would like to have it on the floor and we
would like to convince the customer that it will grow as his
needs grow. We could then put several processors or a J-11 or a
sea horse, or a MICRO-VAX, or any combination, or multiples of
the above.

The one in the PRO box we could call the Q-BUS Professional. We
could sell this in the Professional marketing group and use it
for direct sales. I wouldn't sell it to outside stores, in fact
I would use this machine only for direct sales. It would be
particularly useful for those customers who want to grow or want
to have a machine which has the freedom of the Q-BUS. If this
worked out, and if we are luckly with the software, we could
offer two PRO's that run the same software. One would be
appropriate for some applications and the other one would be
appropriate for other applications. This one is different from

the original PRO because it won't have a display generator and instead of a simple monitor it will use a VT-220 as its monitor. That is the reason why it will be so easy to make this simple machine.

I would also like this machine to accomplish what we have dreamed of doing for many years, in having a separate line of computers that support direct sales and for end users and resellers. I'd make the differentiation by using Standard 422 for communications between terminals and our direct sales system for workstations and business. This is a better system, much nicer from an electrical engineering point of view, but it is rather drastically different from the twenty-five pin connector that everyone else is using in their small computers. We would have a terrible time trying to convince our OEM's to use 422 and it would just fit in nicely if we never tried, and converted all our own direct sales machines to 422. We then could have different pricing, different discount schedules, and we wouldn't have terminal dealers underpricing the terminals we want to use in our systems.

In order to accomplish this we would immediately take our VT-220 and make a special model of it that would take 422 signals. This wouldn't be very hard to do and probably would make the unit so much cheaper than the traditional twenty-five pin connector. The other big advantage of this system, using the 422, is that it would be a lot easier to hook up many terminals. This is designed assuming that, for business applications, there are many terminals not to be hooked up in a local area network, but tied in a traditional sense of the computer. These could be hooked up with 422 in a very easy, simple way, just like hooking up telephones.

This one computer, that grows from very small to very large, will exploit the advantage we have over almost everybody else, in that we have, or we ought to have, a very simple 11 up to a fairly good sized VAX on single boards. This gives us a tremendous spand that very few other people can accomplish and we should exploit this as one of our big competitive advantages.

KHO:ml
KO2:S6.37
DICTATED BUT NOT READ BY K. H. OLSEN

CUSTOMER VISITS (CONT'D.)

MG's believe that Operations will need to have dedicated resources
to execute professional customer visits. Many visits with Product
Groups in the past involved business decisions and commitments,
hence, AMC management presentation must accompany future customer
visits. The Operations Managers will need to spend more time
defining their role versus the Sales Managers role in corporate
customer visits.

STANDARD Ts AND Cs FOR MARKETING

AIC Marketing groups will be expected to participate in the
standard Ts and Cs for selling most efficiently to their own
market. Exception to Ts and Cs will be the responsibility of the
Area Managers/OPS. Ts and Cs are implemented by Operations.
Changes to standard Ts and Cs will be made by a corporate process
with both Marketing groups and AMC's participating.

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INTEROFFICE MEMORANDUM

TO: Larry Portner
     Dave Knoll
CC: Win HIndle

DATE: April 13, 1983
FROM: Ron Smart
DEPT: OC Secretary
LOC: MLO10-1/F41
EXT: 223-7011

SUBJ: RECOVERING MARKETING'S STRENGTH

Win believes that Marketing managers in general do understand their
role in the New DEC but that they feel blocked in the following three
areas. Ken has asked for the June WOODS to focus on this problem (see
attached).

Problems

1. The overlapping marketing is hurting, not helping.

2. They perceive real difficulty in communicating with the field to
    get their jobs done.

3. They perceive difficulties in getting the products they need.

Some Solutions in the Works

(a) The customer segment teams meeting (e.g Hughes 4/19) could help
    solve (1), particularly if the marketing expense budgets are tied
    to team effectiveness (How to do that?)

(b) Some actions are clearing away obstacles to (2), some remain.

    - The mapping of after-the-fact NOR back to the P/Gs is almost
      settled so as to give better market information than in the old
      DEC. (*)

    - The field's budgeting categories which map back to P/Gs in the
      New DEC, giving before-the-fact focus and field expertise
      centers for groups of P/Gs is also almost settled (*Ron, Paxton,
      Management Sciences, etc., the problem is OFFICE).

    - It remains for Jack Shields and field managers to convince
      Marketing that they are wanted and valued by them. (June WOODS?)

(c) Marketing will be much more effective at influencing product
    investments if the customer segment teams pre-process their
    prioritization (as planned) and if we can come up with a corporate
    market strategy (how to do that?)

mr

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TO: OPERATIONS COMMITTEE:

cc: RON SMART

DATE: WED 9 FEB 1983 10:29 AM EST
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5190418675

SUBJECT: WOODS:MANAGEMENT

At the WOODS meeting I would like to have a thorough discussion
of how we manage. I would like us to define what we believe in:
delegation, goals, budgets, and reviews.

Let's try a few specific cases. Let's ask the person who is
responsible and has the authority for the engineering, and the
person with the authority and responsibility for the marketing,
and the person who has the authority and the responsibility for
the manufacturing of the LA-100 to come and tell us how
delegation, budgeting and reporting works at Digital. Let's do
the same thing with the group of three who have the same
responsibilities for the LA-12.

It would be good to review the last two years of these projects
because they were a long time getting into good production and
now that they are about to run well there is concern that we
won't market them anyway.

There is concern that with modern management theory, or lack of
theory, all our managers try to take all of this responsibility
themselves, and therefore, the authority and responsibility are
not delegated. We suffer when one person is responsible for
several things, because they can't all receive his complete and
full attention.

KHO:ml
KO2:S5.41

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TO: GEORGE CHAMBERLAIN   DATE: TUE 8 FEB 1983   2:00 PM EST
    *WIN HINDLE   FROM: KEN OLSEN
    LARRY PORTNER   DEPT: ADMINISTRATION
    RON SMART   EXT: 223-2301
                                LOC/MAIL STOP: ML10-2/A50

                                MESSAGE ID: 5190316959

SUBJECT: ANNUAL BUDGET MEETING

I gather we are having our annual budget meeting in March. I am
often disappointed with this meeting because it seems to have
little influence on our corporate planning. We have people
propose numbers that get ground and processed so much that when
we go over the budgets there is really very little of interest,
and very little we can influence. The goals and markets and
channels and investments expressed in those budgets seem to have
little influence on what is done through the year.

I would like to spend much of the WOODS meeting identifying, in
general terms, and then documenting very clearly, what space each
product line is working in and what engineering projects are
being done to service them. I want to make very clear which
areas the four small computers are going into. I also want to
make very clear the separation between business and personal
computing and all the other applications, and I want to make sure
that we use our resources wisely.

I would also like to, in general terms, tie our major enineering
projects into these. I get the impression that the Professional
350 has lost interest in the personal computing market, for which
it is priced and aimed toward, and which would be competing with
LISA and APOLLO and is going after the low end business
applications, like everybody else. If this is true, we should
analyze the engineering expenditures we are making for that high
end, such as the very expensive cathode ray tubes. I think all
projects like the expensive cathode ray tube should be looked at
relative to what market they are going after. Too often they are
ends in themselves, or they are going after some goal which was
stated a long time ago for a product line, but which the product
line has long sinced dropped, and the project keeps going on. It
would be nice if, in that informal presentation, we could chart
out expenditures, goals, and gambles in such a way that we all
can understand and then leave the meeting and all work together
without conflicts and fears and jealousies.

Please present at the WOODS meeting, a simple statement as to
what the budget has been in Advertising, Engineering, Marketing,
etc. for each of the groups during Q3 and Q4 of '83, and what it
looks like it will be for FY '84.

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O. C.

I N T E R O F F I C E   M E M O

TO: George Chamberlain

CC: Win Hindle

Date: 4 February 1983
From: Ken Olsen
Dept: Administration
MS: ML10-2/A50   Ext: 2301

SUBJ: RESOURCE PROBLEM

********************VERY CONFIDENTIAL-DO NOT COPY******************

The Operations Committee and myself have often made the mistake of
assigning someone a job and then not making sure that he had the
resources to accomplish it. Often even old timers are reluctant to
stir up any conflict with some of the other senior people in the
Company and don't set about to request the resources they need to
succeed. This was probably the source of Stan's problem and it is
probably the key to a number of problems that we have had in the last
year, and right now is a serious problem with Bob Hughes.

We gave Bob Hughes the job but left his advertising budget under the
control of Andy. It is like leaving the chickens guarded by the fox.
We gave him the responsibility for a whole new product line, but his
engineering had to be done by Bill Avery and Mike Gutman, who are too
busy satisfying the traditional product lines and he has to wait weeks
to get a short appointment with them. Bob was left with only those
people who were left over after others picked over the group.

I asked him why mechanical engineering were working on a very
expensive approach to the equivalent to the DECmate III, but for the
Rainbow, after the Rainbow received such enthusiastic response and was
relatively easy to get, and was almost unanimously approved even
though maybe not officially budgeted. His answer was that the Rainbow
has money and the DECmate doesn't. It is just so commonly believed
that any of Andy's projects have top-priority, have money and the
Rainbow and Bob Hughes' operation has none, rates way down on the
priority list, and by influence and intimidation all priority first
goes to the 350 and way down the list comes Rainbow and if any
resources are left over they can go to the business group.

It is even believed, sincerely, by many people, that Dick Berube has
been bought by Andy and that all the advertising goes to him because
he is treated so well by Andy.

All our financial controls and budgeting have no influence on the
running of the Company. We do these only for tradition's sake and as
part of our full employment policy and it in no way influences the way
we run the business. Even Jack Smith's elaborate planning system has
only a gross approach to how things are done.

I probably make things worse, because as I try to add a little
rationality to it all and a little fairness, it appears that I am
playing favorites in the other project. This probably polarizes
matters. Of course all of this should readily be taken care of by
budgeting, by financial controls, and by financial review of plans.
However, no one expects anything useful from our financial and
budgetin system. We do all of this because it is one of the burdens of
a big company, and it never dawns on our people that these are useful
tools to help us keep control.

You may, in your new job, solve these problems. I think you should try
to immediately solve some of the gross problems and in the long run
you may get us to, in both the product line area because of its close
relationship to engineering and, in engineering, add some rationality
and wisdom and true financial controls.

I would recommend that you immediately visit with some of the people
who work for Bob Hughes. He is such a salesman that he will never
complain himself, and most of the people below him have worked so long
in the system that they take it for granted and probably won't trust
you because you are part of Andy's operation, but if you spend the
time, eventually you might be able to help and you might solve some of
our most serious problems.

I understand that Bill Avery has been working on a $400 computer for
educational use. This should go through a very serious scrutiny. I
haven't heard the proposal myself yet, but it sounds like it is an
APPLE computer eight years after everyone else has decided to copy
APPLE and a year or two after IBM has set out to do exactly the same
thing. It is approaching the market in a way that is opposite from the
way we said we would.

The rumors also say that they are going to demand almost all of our
resources to get this thing out before Summer. This, of course, should
be reviewed from many points of view. Will it once more wipe out our
approach to business and any possibility of getting some business
computers? Is there any wisdom in going headlong after those people
whose speciality is sweatshops and lost cost of manufacturing, and
whose skill of marketing we could never match and whose distribution
systems are efficient and high-pressured?

We also should look at Texas Instrument and see what happened to them
when they decided to go from the commercial, industrial, and military
market into the consumer market. They have had no end of trouble since
then, and it took them a while to realize that from their tradition
it took them longer to generate a product than what was the normal
product life in the consumer market. The traditions in that market
were such that they were just about incompatible with the market TI,
(and Digital) understand.

KHO:ml
KO2:S5.27

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TO: OPERATIONS COMMITTEE: DATE: THU 3 FEB 1983   4:48 PM EST
                                             FROM: KEN OLSEN
cc: RON SMART   DEPT: ADMINISTRATION
                                             EXT: 223-2301
                                             LOC/MAIL STOP: ML10-2/A50

                                             MESSAGE ID: 5189810485

SUBJECT: HOW TO PROPAGATE PERPETUAL WAGE INCREASE DELAY

*****************EXTRA CONFIDENTIAL - DO NOT COPY*****************

Years ago, when product lines were operating, the Product Line
Manager kept in mind the products and activities of the
competition, the technology available, and above all, made sure
that as we changed products there was a smooth transition for our
customers as new products were introduced. We never abandoned or
forgot about customers as new products were developed.

Over the last few years we have lost this. It is believed, by
some people, that we lost it two years ago when a major goal of
the Corporation was only to raise the profits of each product
line.

Unfortunately, the New Digital hasn't helped this. We no longer
have marketing groups to tie the business plan together to make
sure that we use the technology, and that we do not ruin the
customers as we change products. I have been hearing for three
years, and still hear today, "Why hurry, Ken, with a new
product?" or, "Why make it consistent with what we had before?"
or, "If we start all over again, do everything differently, and
take advantage of the new disks in California, in two or three
years we will be able to do a much better job than we have
today." No one cares about the customer, and no one cares about
the wage freeze, and no one takes an overall view.

Unfortunately, with the New Digital, I am afraid that the new
marketing groups, who should be worrying full-time about this as
a key part of their marketing job, tend to look at T.V.
advertising and colored literature generation as the goal of
their marketing group.

Two and one half years ago we were going to build a CT in nine
months. It was decided to make it a two and one half year
project without raising the question within the Corporation, and
without bringing it to the Operations Committee, or the Board of
Directors. It was also decided to change all the software and
all the modules and all the designs, so that none of it was
compatible with the 11's we have been making. Therefore, it was
not compatible with anything that our customers had been doing
and added many, many, millions of dollars to the delay. In
addition, we did not have a product during the recession; at a

time when we could have taken a large chunk of the personal computer market. Now the recession is ebbing and we won't be able to make enough product, (hopefully), and we have lost our chance.

Even today there is little worry about getting new products as soon as possible, with as little change as possible, that are as easily adapted to as possible by the customer and our manufacturing. It is always, if we wait two, three, four, five, years we can do things better and that, of course, is the best course of action for any individual without any overall view.

I would like to see the Operations Committee put down on paper who has responsibility for looking out for the customer, and looking out to make sure that we have competitive products as soon as we need them, and who will make sure that all these people that want to do their own job differently than has ever been done before, without cooperating with anyone else, particularly our customers, don't get away with this method of operation.

KHO:ml
KO2:S5.5

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TO: Jack Smith   Date: 31 January 1983
                                  From: Ken Olsen
CC: Julius Marcus   Dept: Administration
    Bob Hughes   MS: ML10-2/A50   Ext: 2301

SUBJ: COMPUTER PRICE RANGES

I think that the goal of having a computer in each price range is a
naive goal for engineering. Someone has to have a logical, systematic
approach that shows we have an answer to the problems we want to solve
and an answer to each of the competition in the area we are entering.
I don't know who that is, or who it has been in the DECmate, and I
think we have suffered with it for many years and we are worst off
today than we have ever been. We have so much red tape and so many
managers and no one with responsibility, that it is no surprise that
no one can explain to me where we are going.

Andy's group, who has no particular enthusiasm for the DECmate, sets
the price and they set it higher than the Rainbow. Bill Avery's
organization, who has no particular love for the DECmate, make the
hardware decisions and it appears that the software hobby shop in New
Hampshire makes the software decisions to meet their artistic desires.

Within Engineering, under Bill Avery, there was Dick Loveland, and
under Dick Loveland there was John Clark, and under John Clark there
was John Kirk, and under John Kirk were the engineers who did the
work. Needless to say, John Kirk is frustrated because of the lack of
influence he has on decisions.

We made Dick Loveland Marketing Manager and he decided he didn't like
the job. I don't blame him because the hodgepodge we have there is
untenable, but there is nobody who worries about it because everybody
has a job and a good salary and a secure position and no one has to
make a logical argument or presentation.

Our marketing groups have blind faith in engineering and software and
feel their duty is only to sell whatever is made.

DECmate I has fine business softare but we, for some mysterious
reason, decided to do it all over again for DECmate II, and did it in
CP/M. This means those who have been selling DECmate have a terrible
time taking care of the customers who have they sold on the advantages
of DECmate I. What do they do? And then, if they tell them the
wonderful advantages of CP/M they have no argument for DECmate I, in
fact the Company has no argument for DECmate I. We charge extra for a
DECmate over a Rainbow when the Rainbow has many features and

significantly lower price than the DECmate. How can anyone with a
clear conscious sell a DECmate to do a CP/M job when they can get the
lower price, (indeed not at a Digital Store), a Rainbow that does much
more.

I am sure that nobody has an overall plan to kill the DECmate, but I
am also sure that no one has a plan from the 278 to DECmate I to
DECmate II to make it a successful product. Each decision is made by
separate groups for their own artistic reason and no one has a plan,
and I don't expect the people have a plan today.

Maybe we should cancel the DECmate II and say that the organization
has killed it and it might be wrong to sell it to anybody to do
business applications.

Will you and Julie come to the Operations Committee on Monday,
February 7th and propose that we either keep going with DECmate II or
we cancel it. Maybe we should stop all DECmate II's and just wind up
as many DECmate I's as we can. All our advertising is in pushing the
Rainbow and Professional and it may die anyway. Again, people in the
Company may feel that Rainbow and Professional and even 11 software
for word processing is better than DECmate. Whether or not this is
true is irrelevant.

It was Engineering and Software who made the decisions and should have
had a plan so I think you two have to make a proposal as to what we do
with his machine in the future.

KHO:ml
KO2:S4.88

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I N T E R O F F I C E   M E M O

------VERY CONFIDENTIAL------

TO: Bob Hughes

CC: Julius Marcus
    Barry Cioffi
    John Clark
    Jack Smith

Date: 31 January 1983
From: Ken Olsen
Dept: Administration
MS: ML10-2/A50   Ext: 2301

SUBJ: HAVE WE KILLED THE DECMATE?

Have we killed the DECmate by not having a Marketing Manager and not
having a simple, easy to understand plan that covers the general
principles?

It seems that someone from the software hobby shop has decided that
they will drop all the good business software we have in the DECmate I
and change everything over to CP/M. The small computer group decided
to charge more for DECmate than for the equivalent Rainbow. This means
that for two CP/M machines one is significantly better because it has
many CP/M features that DECmate doesn't have, but is quite a bit lower
in cost. It is commonly stated within the Company that the Rainbow
software on CP/M is better than DECmate.

Is it your plan to slowly abolish the DECmate? If so, I think we owe
it to our dealers, who have no other business, and we should plan to
phase out our Stores.

It appears that the group that is most aggressive in their marketing
plans in the Company wins hands down.

Marketing is not advertising and techniques in selling alone.
Marketing, aboveall, is a simple strategy, which includes factors of
pricing and product content and evaluation of how it fits with the
competition.

KHO:ml
KO2:S4.87

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I n t e r o f f i c e   M e m o

TO: see "TO" DISTRIBUTION

cc: BOB HUGHES
    JULIUS MARCUS
    OPERATIONS COMMITTEE:

DATE: FRI 28 JAN 1983 12:54 PM EST
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5189200237

SUBJECT: PRELIMINARY REPORT TO OPERATIONS COMMITTEE

Here is a copy of a note I sent to the PC people asking for a
preliminary discussion that might lead to a swat team on PC's.

I think it would be a good idea if you did the same thing and
quickly gathered the information you have about all the
significant competitors in word processing, small business, and
the office and chart them out for us in the same way. Please show
us which areas we are aiming for and where we are making our
investments.

I know this doesn't give you much notice, so don't spend much
time in the preparation of the slides. Any handmade chart will
do, and remember this is just a preliminary introduction to a
more serious effort on the subject.

KHO:ml
KO2:S4.82

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I n t e r o f f i c e   M e m o

TO: see "TO" DISTRIBUTION

cc: ANDY KNOWLES
    OPERATIONS COMMITTEE:

DATE: FRI 28 JAN 1983 11:53 AM EST
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5189200007

SUBJECT: PROUCT FIT AND THE COMPETITION

When the Company feels somewhat confused as to how our products
fit relative to the competition, and when we need a list of
advantages that we have relative to the competition, and we need
a list of the disadvantages they have, and when we have to
identify those specific areas in which we have developed
strengths in, the Operations Committee has called for a swat team
to accomplish this job.

I'd like you to make a preliminary presentation to the Operations Committee that may be the first step in the development of a swat team.

I'd like Bill Avery to chart out all of the competition for the personal computer area and identify their strengths and then show which markets each of our three personal computers are aimed at and in which areas our future developments reach the three personal computers or are aimed at.

Then, I'd like Joel Schwartz to do this in detail for the Professional.

I'd also like Joel to identify each of the people who are competing with us for the high-quality, high-performance, personal computer and workstation. Then I would like him to identify where we sit relative to each one of these competitors and explain where we are investing our software and hardware development funds. I would like him to tell us where he expects the competition to be in the future and where he expects us to be.

I would like to do this during the Operations Committee Meeting on February 7th. I realize this doesn't give you much time. However, I think because this is really a preliminary session to help lay out plans for future analysis, it would be worthwhile to take whatever information you have readily available and present it.

I am told that preparing material for this type of presentation, is particularly well done on a personal computer, and that these kinds of charts can be done graphically and in full color by locating the various components on the screen, (where you want them), and adjusting them until you are happy with them. They are then photographed, and result in the viewgraphs needed for the meeting. If the mechanics are not yet fully developed, just do it by hand, with what you have.

KHD:ml
K02:S4.81

"TO" DISTRIBUTION:

BILL AVERY   AVRAM MILLER   JOEL SCHWARTZ

"TO" DISTRIBUTION:

HENRY ANCONA   BARRY CIOFFI   JOHN O'KEEFE

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TO: see "TO" DISTRIBUTION   DATE: FRI 28 JAN 1983 11:53 AM EST
                                   FROM: KEN OLSEN
cc: ANDY KNOWLES   DEPT: ADMINISTRATION
    OPERATIONS COMMITTEE: EXT: 223-2301
                                   LOC/MAIL STOP: ML10-2/A50

                                   MESSAGE ID: 5189200007

SUBJECT: PROUCT FIT AND THE COMPETITION

When the Company feels somewhat confused as to how our products
fit relative to the competition, and when we need a list of
advantages that we have relative to the competition, and we need
a list of the disadvantages they have, and when we have to
identify those specific areas in which we have developed
strengths in, the Operations Committee has called for a swat team
to accomplish this job.

I'd like you to make a preliminary presentation to the Operations
Committee that may be the first step in the development of a swat
team.

I'd like Bill Avery to chart out all of the competition for the
personal computer area and identify their strengths and then show
which markets each of our three personal computers are aimed at
and in which areas our future developments reach the three
personal computers or are aimed at.

Then, I'd like Joel Schwartz to do this in detail for the
Professional.

I'd also like Joel to identify each of the people who are
competing with us for the high-quality, high-performance,
personal computer and workstation. Then I would like him to
identify where we sit relative to each one of these competitors
and explain where we are investing our software and hardware
development funds. I would like him to tell us where he expects
the competition to be in the future and where he expects us to
be.

I would like to do this during the Operations Committee Meeting
on February 7th. I realize this doesn't give you much time.
However, I think because this is really a preliminary session to
help lay out plans for future analysis, it would be worthwhile to
take whatever information you have readily available and present
it.

I am told that preparing material for this type of presentation,
is particularly well done on a personal computer, and that these
kinds of charts can be done graphically and in full color by
locating the various components on the screen, (where you want
them), and adjusting them until you are happy with them. They are

then photographed, and result in the viewgraphs needed for the
meeting. If the mechanics are not yet fully developed, just do
it by hand, with what you have.

KHO:ml
KO2:S4.81

"TO" DISTRIBUTION:

BILL AVERY   AVRAM MILLER   JOEL SCHWARTZ

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I n t e r o f f i c e   M e m o

TO: JACK SMITH

cc: OPERATIONS COMMITTEE:

DATE: MON 17 JAN 1983   11:23 AM EST
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5188180000

SUBJECT: BUSINESS COMPUTERS

I am afraid we'll never be able to compete with WANG and small
companies who specialize in business computers. We have such
trememdous overhead when we have to be able to sell all our
computers to both business and OEM's and everything else.

There is, of course, a certain advantage in selling the same
machine in many places. We believe this, and have therefore done
all the engineering in one place and tried to sell exactly the
same product in all of our product lines. In general this is a
good idea, but I am now convinced that there is so much overhead
that we won't survive doing business this way.

Mike Gutman is overworked and his people are overworked. They
have so much to do that they are terrified at the idea of a new
project or new idea. I think this is because every time they
have a new product they have to adapt all of that infinite number
of modules and ways of doing things that we have for all the
various product lines and this just overwhelms them.

Will you consider for me the possibility of a completely separate
business hardware engineering group? This group would have a
very small number of options and would be designed for easy
connection within the office and would not have the enormous
overhead involved in moving machines adaptable to all our other
product lines. I believe a separate product line could take an 11
and make a beautiful machine for the office quickly and
economically and one that would be easy to connect by the people
in the office. I don't think it is ever going to be possible, if
we have to do it with a group that has the burden of adapting
every product idea to every product line in the Company.

If we do this, we also could have separate accounting. The
business group shouldn't be charged for all the engineering that
goes into making the 11 general for everyone else. If the
business group sells a large number of their machines their
engineering should be divided proportionately.

KHO:ml
KO2:S4.35

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TO: *WIN HINDLE   DATE: WED 12 JAN 1983   2:22 PM EST
    JACK SHIELDS   FROM: KEN OLSEN
    JACK SMITH   DEPT: ADMINISTRATION
                                       EXT: 223-2301
                                       LOC/MAIL STOP: ML10-2/A50

                                       MESSAGE ID: 5187672763

SUBJECT: POWER, SUCCESS, AND OBSOLESCENCE


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TO: ED KRAMER   DATE: WED 12 JAN 1983
2:10 PM EST
                                       FROM: KEN OLSEN
BCC: Win Hindle   DEPT: ADMINISTRATION
      Jack Smith   EXT: 223-2301
      Jack Shields   LOC/MAIL STOP:ML10-2/A50

                                       MESSAGE ID: 5187672720

SUBJECT: POWER, SUCCESS, AND OBSOLESCENCE

***************************FOR INTERNAL USE ONLY*******************
**************************RESTRICTED DISTRIBUTION******************
**************************CONFIDENTIAL*************************************
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One of the sad things in my life is to meet with some of my old
friends, who at one time made significant, noteable contributions
to Engineering or Marketing and other fields, but have since
become obsolete. I meet with some of these people every several
years, and others I see every day.

We often read and hear about technical obsolescence in engineers,
and hear proposals that they be retread. The ones I have seen
didn't become obsolete because they were busy doing engineering,
but because they lost interest in engineering. They became
interested in power, status, influence, and being boss.

People who become obsolete spend all their time reminiscing and
complaining about limitations today and about the limitations of
red tape.

They become obsolete because after success and a taste of power
they stop learning. Instead of realizing that maybe their
immediate success was partly the result of happenstance, partly
the result of other people's work, and perhaps because everything
was easier then and there was so little competition. Also, partly

because the competitors would take poor marketing and poor documentation and often mediocre engineering. If they wanted to stay useful they would have to work every day and every hour to get better and better.

Instead, too often my friends have seized on the need for power and influence and status. I have concluded that those who are interested in power and status are running away from technical competence. How can someone use power and influence and status when he has stopped learning years ago and doesn't read everything, including current literature, or understand what is going on in his area today and know everything about the resources available to him?

With your new job I would suggest that you immediately set about to take inventory of the management technical marketing skills of the people you inherit. I would immediately worry about those who are interested in power and concentrate on those who want to accomplish the job. They are willing to do the work to find out what resources are available in the form of products and technology and manufacturing and selling and laying out plans to make a significant contribution using all these resources.

We stopped measuring group vice presidents and product line managers years ago. We now define profit and loss responsibility as the power to make arbitrary decisions with no measurements. The manager, through Profit and loss responsibility tells others what to do and nobody measures him. I would be very suspect of anyone who laments the loss of P&L responsibility because to me that means he wants arbitrary power and to be in the position of complaining and criticizing and never being measured.

Some people feel they need a product which is half the price of anyone else's and has twice the capability, with every kind of software and they feel they have made a contribution by requesting this. This of course is not marketing. Marketing is taking what you have or can get and selling it.

Four years ago we had a PDT-150. It was one of our nicest computers and one which is very well liked by those who use it. At that time, if we had marketers who analyzed the resources available and understood the market and had some technical knowledge, we could have dominated the educational personal computer market, the business personal computer market and supplied all the stores with the best machine available. However, our marketers were so caught up with power and complaining they didn't have the time to be an expert on what we had or expert on what the market needed.

The outside world looks at Digital and says that we are now in a new era and we have to learn to market. We have never acknowledged this publicly, but it is true. Our old ways of marketing, where we often spent money on useless literature on one thing and sold something else and claimed we did great marketing has to come to an end and it is your responsibility in these new areas to make sure that we do.

When it is said about someone, he did great things ten, twenty, twenty-five years ago, be very suspicious because this too often means he retired on his laurels and hasn't done anything lately and hasn't kept up, however we owe him power because of what he did many, years ago. This, of course, is very unfair to the people who work for him and unfair to the stockholders and the customers.

KHO:ml
KO2:S4.2

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Interoffice Memo

TO: DAVID STONE

cc: see "CC" DISTRIBUTION

DATE: MON 3 JAN 1983 1:47 PM EDT
FROM: AVRAM MILLER
DEPT: CT PROGRAM OFFICE
EXT: 223-9441
LOC/MAIL STOP: ML5-2/T53

MESSAGE ID: 5186756069

SUBJECT: YOUR MEMO ON HUMAN ENGINEERING INTERFACE OF 10 DEC 82

Dave, I would like to address two issues which you raised in the
above memo. First of all, I agree in principle with the
philosophical statements as outlined by you. During the recent
Engineering LRP Woods meeting attention was given to various elements
you discussed. I will forward you copies of the action items which
were generated (by Rick Corben). You will notice there are a number
of items on the question of menu interfaces, compatibility for
application software across our various products, etc. I suggest you
interact with the individuals who have been given the assignments to
close the action items.

The other area that I want to address is Visicorp. I am extremely
distressed at your behavior with respect to Visicorp. We have
entered into an important business relationship with that
corporation. This relationship has had support at the highest levels
within our corporation. You seem through various memos to call to
question our business relationship with Visicorp. I do not recall
any serious attempt on your part to discuss these issues with me.
Visicorp is not our enemy, Apple (with Lisa) is. We have a business
relationship with that corporation which I expect you to respect.

I would like to have a meeting with you within the next month to
cover Visicorp. If you are coming to the United States for the Sales
Meeting on the week of the 23rd, I would like to set up some time
then. If not than I suggest we schedule a phone conference this week
or next week. In the meantime, may I ask you to desist from sending
memos throughout the company which call to question our business
relationship with Visicorp. You can do us and them serious damage
with this behavior.

I would appreciate your letting me know by return, if you will be in
the United States or if not when the best time would be for me to
reach you.

Action Items from Stow II Woods are being forwarded separately.

3-JAN-83 18:12:17 S 03262 MLEM
MLEM MESSAGE ID: 5186760232

"CC" DISTRIBUTION:

DON BUSIEK   *WIN HINDLE   BOB HUGHES
ANDY KNOWLES   JULIUS MARCUS   JACK SHIELDS
JACK SMITH

Interoffice   Memorandum   *O. C.* *[signature]*

To: see "TO" DISTRIBUTION   Memo: 5313853348COR43
                                       Date: Fri 27 Jun 1986 10:53 AM EDT
                                       From: KEN OLSEN
cc: see "CC" DISTRIBUTION   Dept: ADMINISTRATION
                                       Tel: 223-2301
                                       Adr: ML012-1/A50*

Subject: COMPLETE BUDGETING OF PROJECTS

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****

We had a small meeting in the Little Brown House in which we
talked about a number of engineering projects. It was quite
clear that the attitude of most engineers is that we should
engineer as many products as we have engineering money for.
There is little responsibility felt by the engineers to finish
the projects to the point where they are documented enough for
marketing, and almost no feeling for the cost of introducing,
marketing and training a sales force on new products.

For example, Jeff Kalb was quiet but showed some irritation over
the fact that the engineering budget did not allow him to
engineer a number of Q-Bus modules to interface factory or
laboratory devices. The Executive Committee properly shut this
off because they knew we couldn't go into new businesses without
a massive investment in training and developing a whole new sales
force. This is particularly true in an area where there are
already many smaller companies.

However, we owe it to our managers to have them lay out a
complete business plan when they propose new products, so that
they are in a position to learn that it is impractical, much too
difficult or it takes too much energy to engineer, tool up,
manufacture, market, sell and service a new set of products.
Most of the time, when people lay out a complete plan for a new
product, they will probably realize that the Corporation just
can't take on the obligation, but we also owe it to them to have
the techniques representing the whole business plan so they can
argue when they believe it is a wise thing for the Corporation.
When the Strecker Committee makes decisions, they are probably
right and wise most of the time, but if it appears arbitrary,
we're developing managers who we've never given the opportunity
to learn.

KHO:ld
KO:135
DICTATED 6/26/86 BUT NOT READ

"TO" DISTRIBUTION:

GEORGE CHAMBERLAIN   JIM OSTERHOFF
JACK SMITH   PETER SMITH

"CC" DISTRIBUTION:

WIN HINDLE*   IVAN POLLACK
JACK SHIELDS   JOHN SIMS
RON SMART   BILL STRECKER

I n t e r o f f i c e   M e m o r a n d u m

To: WIN HINDLE*   Memo: 5309552804COR84
    INK::BUREK   Date: Thu 15 May 1986 10:00 AM EDT
    ANNE KREIDLER   From: BUREK
    DONNA MICHAEL   Dept:
    KEN OLSEN   Tel:
    MARK STEINKRAUSS   Adr:

Subject: IEEE COMPUTER SOCIETY AWARD

The following release will be issued to all local, business and trade
press on Tuesday, May 20.

Mary Ann Burek
617/264-1549

                 IEEE COMPUTER SOCIETY PRESENTS FIRST
            COMPUTER ENTREPRENEUR AWARD TO KENNETH H. OLSEN
                     OF DIGITAL EQUIPMENT CORPORATION

CAMBRIDGE, MA -- MAY 20, 1986 -- The Institute of Electrical and
Electronics Engineers (IEEE) Computer Society today presented the
1986 Computer Entrepreneur Award to Kenneth H. Olsen, President,
Digital Equipment Corporation.

     The presentation was made by Dr. Ming T. Liu, Vice
President, IEEE Computer Society, at the International Conference
on Distributed Computer Systems, held in Cambridge,
Massachusetts.

     The prestigious award, presented this year for the first
time, was established to "recognize and honor technical managers
whose outstanding leadership developed the growth of some segment
of the computer industry."

     Kenneth H. Olsen was chosen to be the recipient of the
first Computer Entrepreneur Award for "having pioneered the
development of small computers, and for his foresight in the
founding of Digital Equipment Corporation, which began with three
individuals in 1957, and has grown to become the world's leading
manufacturer of networked computer systems."

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CORP - 351

Interoffice Memorandum   *Op. Com.* Ken Swanton Taylor mtg

To: KEN SWANTON

cc: see "CC" DISTRIBUTION

Subject: LONG RANGE PLANNING

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I believe long range planning shouldn't be a wish list of all the things we would like the company to be in the future. Instead, it should be a model of the company at each step that shows the weaknesses, stupidities and inconsistencies of our dreams.

I would like the long range plan to be based on the salesmen. We should decide how many different categories of products we'll sell and assume we'll have a separate sales force for each one. Then for each year we should spell out what we think should be in his bag of products. We should then decide how many months of the twelve he should spend in school so he is able to sell those products and do all that is necessary to take care of the customer. We should also decide how big his bag has to be to take along all the catalogs and how much help, or how simple the product lines will be so he can quickly, easily and efficiently make the sales.

We should add up how many salespeople it is going to take and the sales cost for the dollar volume we expect on each piece.

Then we can go backward and figure out what it will cost to engineer that bag of products, what it will cost to manufacture them and all the other costs of supplying the salesmen.

I think we are way beyond just wishing for products or paying engineers to develop them and just assuming that the sales and marketing will take care of itself. Our Long Range Plan should assume that salesmen and marketing are the leading factors in growth. We should plan these in detail and the other factors in the plan will then fall into place.

KHO:ld
KO5:S4.63
DICTATED 3/3/86 BUT NOT READ

"CC" DISTRIBUTION:

WIN HINDLE*   JIM OSTERHOFF
IVAN POLLACK   JACK SHIELDS
JOHN SIMS   RON SMART
JACK SMITH

Interoffice Memorandum

To: see "TO" DISTRIBUTION

cc: JEFF KALB

Memo: 5308769882COR74
Date: Wed 7 May 1986   3:35 PM EDT
From: KEN OLSEN
Dept: ADMINISTRATION
Tel: 223-2301
Adr: MLO10-2/A50*

Subject: SEPARATE TERMINAL BUSINESS

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In a closed session, before we meet on the budget, I'd
like to give a test to the Executive Committee and ask how
today's budget breaks down compared to the budget ten years ago.
If we put all marketing together, all engineering together, and
all manufacturing together, we could try to determine the trend
of the ratios.

Then I'd like to ask, now that we are selling more directly and
we are giving a lot less discounts to the people who build the
systems and finish the products, what should the model of our
business be? I assume that those jobs which we used to pay the
OEM's to finish that we now pay ourselves and that the marketing
and selling the OEM's used to do that we now pay for ourselves
are somewhere. I also assume that we have to, very carefully,
separate the OEM part of our business from the end user part to
make sure we use the appropriate model in each.

I'd also like someone to discuss the possibility of a separate
terminal business. This would only be on paper, but we would
allocate only the cost to one very high-production, simple
terminal and run it as if it made no contributions to VAX
development, VAX inventory, large disk development, or clustering
development.   This way we would have a business that could
compete directly with the terminal manufacturers on the terminal
manufacturers terms. This company could have mail a order
business that, at a very low price, could mail for next day
delivery, terminals anywhere in the United States that could just
be plugged in and used. I believe this could make a very good
profit.

Some people argue that the Terminal group should pay their share
of VAX development. The result is that we loose the terminal
business and we get nothing. By claiming you made a commodity
you have to run it like a commodity business.

This further means that the Terminal group will not have 10
percent of their NOR to spend on hobbies, but they will have to
concentrate just on the engineering for one product, and because
it's made in a large quantity the engineering cost should be low.
They also can't spend their marketing dollars on many hobbies
because the marketing cost will also be concentrated on one
terminal, and because the number is large, the marketing cost
should be low.

KHO:ld
DICTATED 5/7/86 BUT NOT READ

"TO" DISTRIBUTION:

WIN HINDLE*   JIM OSTERHOFF
IVAN POLLACK   JACK SHIELDS
JOHN SIMS   RON SMART
JACK SMITH

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Interoffice   Memo

TO: JIM OSTERHOFF
    JACK SMITH
cc: see "CC" DISTRIBUTION

DATE: TUE 12 NOV 1985 10:24 AM EST
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5291180374

SUBJECT: OVERHEAD STRUCTURING IN MANUFACTURING

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Our engineers are frustrated by the overhead structure we have in
Manufacturing. It seems that, regardless of what we do for
design, there is nothing we can do to become more competitive in
our manufacturing. The only hope seems to be to have our
products manufactured outside, where we don't have the terrible
overhead structure.

Before the Board of Directors asks us about our manufacturing
overhead, (which they may do at any time), please come to the
Executive Committee and explain exactly what is going on in this
area.

The Skunkbox backplane, which is to be made in Kanata has an
overhead of one-hundred dollars per hour. This is a project that
we worked awfully hard on to make straightforward, and
inexpensive. It seems that all the effort (and I put in quite a
bit of my own time on this project), was in vain. If we had made
a very complicated, and very expensive backplane that we couldn't
make at Digital at all, it would have been cheaper than making a
very simple unit that we want to make in Kanata.

If we want to have our engineers work effectively, we are going
to have to give them some rules, and some overhead figures which
are meaningfull.

KHO:mt
KO5:S2.21
DICTATED 11/12/85 BUT NOT READ

"CC" DISTRIBUTION:

WIN HINDLE   IVAN POLLACK   JACK SHIELDS
JOHN SIMS   RON SMART

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Interoffice Memo

TO: JIM OSTERHOFF

cc: see "CC" DISTRIBUTION

DATE: MON 14 OCT 1985 10:09 AM EDT
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5288271467

SUBJECT: SAVING MONEY AND MAKING MONEY

****
         VERY CONFIDENTIAL - DESTROY AFTER READING -

****

We have an infinite number of areas to save money in, but the
Financial people only tend to concentrate on the big projects that are
important to the Company. I would like to concentrate on the
unimportant ones to save money on, because constantly trying on the
important ones I don't believe we are investing in marketing as we
should.

Our key products are Networking, MicroVAX and 8600. Please prepare,
for the next Executive Committee discussion, a chart showing how much
we invest in marketing, training, and advertising these key products.

I am afraid we are in a situation of hurting badly because we do
almost no marketing for the key projects; we have concluded we won't
spend money there because it will hurt profits. We are piling up cash
and starving for marketing and not making good products because we
don't market.

In our fight to drive to save money, IBM may overwhelm us in a matter
of months, and we will have to explain that we lost the fight because
we were saving money to help profits.

KHO:ml
KO5:Sl.44
DICTATED BUT NOT READ

"CC" DISTRIBUTION:

GEORGE CHAMBERLAIN   *WIN HINDLE   IVAN POLLACK
BRUCE RYAN   JACK SHIELDS   JOHN SIMS
RON SMART   JACK SMITH

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TO: CORP PROJECT STAFF: DATE: MON 23 SEP 1985   9:17 AM EDT
    JACK SMITH   FROM: KEN OLSEN
cc: see "CC" DISTRIBUTION   DEPT: ADMINISTRATION
                                           EXT: 223-2301
                                           LOC/MAIL STOP: ML10-2/A50

                                           MESSAGE ID: 5286162816

SUBJECT: REVIEW OF PLANS AT EXECUTIVE COMMITTEE MEETINGS

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A number of months ago I asked that plans be reviewed at every
Executive Committee meeting so that each plan is reviewed at
least once each quarter, and, therefore, once a month.

I also asked that people propose what incremental income they
could get for incremental expenditures. I believe I asked that
these decisions be made by the Executive Committee, and these
incremental plans be reviewed each month.

At tomorrow's Executive Committee meeting I would like the first
agenda item to be a review of my requests, and an explanation as
to what happened to them.

I would feel very offended if the staff felt that they had to
agree on decisions before they let me, and the Executive
Committee, consider them.

KHO:mt
KO4:S12.85
DICTATED 9/23/85 BUT NOT READ

"CC" DISTRIBUTION:

*WIN HINDLE   JIM OSTERHOFF   JACK SHIELDS
JOHN SIMS

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TO: PETER SMITH   DATE: WED 4 SEP 1985   8:52 AM EDT
                                         FROM: KEN OLSEN
cc: see "CC" DISTRIBUTION   DEPT: ADMINISTRATION
                                         EXT: 223-2301
                                         LOC/MAIL STOP: ML10-2/A50

                                         MESSAGE ID: 5284253583

SUBJECT: TROUBLE IN THE SALES DEPARTMENT

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We are now experiencing a high rate of complaints. Our salesmen
are not answering inquiries, and they don't spend the time that
the potential customer expects. I would like you to make a brief
study of the situation.

We can say "Salesmen should be better trained, and they should be
better organized to cover all inquiries." However, it may not be
that easy. The salemen and sales managers have two comflicting
pieces of advice. The first is: concentrate your effort on those
customers who will pay off the quickest, and the most easily.
The second is: be sure that you contact everybody who is
interested in our equipment.

Please come to the Strategy Committee meeting on September 9th
and outline the questions, and then come on September 30th with
tentative answers. The questions are:

   1. If we limit the size of our catalogue from 80,000 items to
      a few dozen, how much business would we lose because we
      didn't try to sell all 80,000? How much would we gain
      because a salesman would thoroughly understand, feel at
      ease, and feel confident with the few dozen that we do
      leave in the catalogue?

   2. If we give the Sales Department a list of those
      applications for which we have competitive solutions, and
      recommend that they graciously turn away customers who
      should go elsewhere, how many more orders would we get
      because the salesmen will have time to spend on customers
      with problems that we can solve?

   3. How many pieces of literature does a field office have
      today? How many would a saleman have to carry in order to
      sell our product line?

   4. How much business would we lose, and how much business
      would we gain, if we concentrated our whole product line
      in one set of literature that a salesman could carry
      easily in his briefcase?

5. If we concentrated our sales pitch on a tutorial non-sales video cassette for each of our major product pitches, how many cassettes would it take? How would this ease the salesman's load?

6. Do we have something like a decision tree for each salesman for each type of application?   Does a salesman spend more time dancing around the problems we can't solve, or can't solve efficiently, than he does some of the problems we can solve? Are we reluctant to lay out exactly what we can do in a decision tree format, because we would have to identify the things we cannot do well?

On September 30th, please have someone like Henry Ancona make a presentation on what a decision tree would be like for Electronic Mail. Suppose there were 4-6 questions like:

1.   Number of users: 10, 100, 1,000, 10,000, 100,000

2.   Does the customer want the following application package:

    a.   Electronic Mail or Word Processing
    b.   a plus common budgeting
    c.   a and b plus controlled redistribution of total budget
    d.   a,b,c plus controlled access to various databases
    e.   Mail lists
    f.   Data entry

3.   Will the customer use:

    a.   All DECmates
    b.   All PC's
    c.   Combination of PC's and DECmates
    d.   A motley collection of whatever happens to be in the organization

4.   Are all stations:

    a.   In the same building
    b.   In the same campus
    c.   In the same country
    d.   On the same planet

Please don't obtain this information by asking the salepeople. Their professional pride makes it impossible for them to answer. They dislike having to admit that they can't sell something even though they don't understand it. They are always very conscious of the order they lost because we didn't have a fast FORTRAN engine, and some of them are proud of a few obscure items in our catalogue that they know about that no one else knows about.

Instead, analyze it from a more direct common sense point of view. Just what is the workload of the job we impose upon the

salesmen, and can it be done? What is the optimum workload to
get optimum results?

If you ask the salespeople they will say more training or less
training will help. But, a common sense engineering approach
would say that zero weeks of training is not enough, and
fifty-two weeks is too much. We know, without interviewing, that
zero and one-hundred percent are the minima, and we have to find
the approximation of where, in between, the maxima lies.

KHO:mt
KO4:SECT12.34
DICTATED 9/3/85 BUT NOT READ

"CC" DISTRIBUTION:

HENRY ANCONA	*WIN HINDLE	JIM OSTERHOFF
IVAN POLLACK	JACK SHIELDS	JOHN SIMS
RON SMART	JACK SMITH	STRATEGY COMMITTEE:

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TO: see "TO" DISTRIBUTION

DATE: TUE 3 SEP 1985 12:47 PM EDT
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5284153119

SUBJECT: INTEGRATING MARKETING INTO "THE ONE COMPANY"

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************************************************************************
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I am so pleased at how the cooperative spirit of the Company has
developed in the last few years. We are, to a large degree, one
Company with one strategy and one message, except in Marketing.

This long weekend I cleaned and started to ~~through~~ *throw* away many
expensive, heavy glossy magazines, generalized vague pieces of
literature, and proposals made by marketing groups. In doing so,
I got the very distinct and clear feeling that each of the
marketing groups feels that they are independent of the Company,
and definitely in competition with the other marketers, and that
they measure themselves on their ability to make more expensive
magazines than anyone else in the Company. The content of the
literature and magazines is inversely proportional to the expense
of the paper, and the quality of the printing job.

The party line I expound for the Corporation is that we sell the
same hardware, the same software, and the same integrated
networking approach to the Office, the Department, the Small
Business, the Factory, and the Laboratory. One surely doesn't
get that feeling from the magazines and literature marketing
produces.

We pronounce the theory that marketing's job is to make selling
and purchasing easy, efficient, and interesting. The vague, glib
promises made in our literature surely doesn't contribute to that
goal.

At the November Woods meeting I would like each of the marketers
there. We should set as a goal that we will have one integrated
marketing pitch that we can present to all customers, and also,
in an organized way, a separate pitch that we can have for each
application.

Please start now organizing people to work the problem so that at
that November Woods meeting we will have one pitch and one
magazine (and catalogue). At that time, we should also have the
detailed sales information for each application in a form that
will be easy and efficient for the purchaser and the salesperson,
and that will be fun and exciting.

If at all possible, I'd like to make the theme of the Annual
Report "One Company, One Message, One Strategy", and present all
of our marketing pitches in this context.

KHO:mt
KO4:SECT12.33
DICTATED 9/3/85 BUT NOT READ

"TO" DISTRIBUTION:

DICK BERUBE	*WIN HINDLE	BOB HUGHES
PETER JANCOURTZ	JIM OSTERHOFF	IVAN POLLACK
JACK SHIELDS	JOHN SIMS	RON SMART
PETER SMITH	JACK SMITH	STRATEGY COMMITTEE:

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Interoffice Memo

TO: JIM OSTERHOFF

cc: see "CC" DISTRIBUTION

DATE: FRI 23 AUG 1985   3:45 PM EDT
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5283049225

SUBJECT: OVERHEAD AT DIGITAL

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**********************************************************************
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I don't want to announce that we will cut out 10,000 overhead
jobs, as Ford has just done. However, I would like to concentrate
our cost savings in overhead areas and in project and production
areas.

For years, our Accounting has concentrated on systems that added
up correctly and the systems that helped manage groups. We
averaged overhead so that managers felt no obligation to be
economical with facilities and equipment. For this reason, they
quite commonly turned in old furniture, terminals, and computers
for the latest models because it had no affect on their budgets.
The Financial Department seemed to feel that it was my job to
teach people, "to do right," even though there was no motivation
from Accounting. I only know how to do this by using Accounting.

I would like to re-do our Accounting system so that all the
motivation to be economical and to make profit are available to
each manager, at all levels.

I would like a committee of Senior Controllers to lay out a plan
so that each manager will have available to him the overhead data
he needs to manage his operation. When he has this information,
and it is available to his superiors, the pressure to be
economical will be very clear.

Once a month, I would like this committee to report to the
Executive Committee on how they are doing. Then, I would like to
spend a whole WOODS day deciding just what we should institute.

KHO:ml
KO4:S12.10
DICTATED BUT NOT READ

"CC" DISTRIBUTION:

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ELLEN KARP   IVAN POLLACK   BRUCE RYAN

KEN SENIOR   JACK SHIELDS   JOHN SIMS
RON SMART   JACK SMITH   KEN SWANTON

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Interoffice Memo

TO: see "TO" DISTRIBUTION

cc: see "CC" DISTRIBUTION

DATE: MON 29 JUL 1985 11:03 AM EDT
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5280535273

SUBJECT: ENGINEERING PRESENTATION TO AUGUST 19TH BOD MEETING

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For some time now, we have planned to take the whole August Board
of Directors' meeting for the Engineering budget, the approval of
Engineering plans, the approval of those things which we are
doing, but never brought to the Board of Directors before, and a
general review of Engineering.

The first presentation should be a detailed organizational chart
showing how things fit together, how much money we put into each
group in the last five years, what products we have gotten out,
and what profit we made on them, with some indication of how well
we feel each group has managed.

We should also make a presentation showing what products we have
put into production the last six to twelve months, and those we
plan to get into production the next six to twelve months. We
should indicate how much went into research, how much went into
getting ready to manufacture, what the total cost will be for
each project, and what the approval status is for each product.
There should be some indication as to how the cost of engineering
for these products, and the other costs add up to the total
budget. Hopefully, the engineering going into our products in
any one year add up to a reasonable percentage of the total
Engineering budget in that year.

It might be very worthwhile if we make a plot for the past five
years, and two to five years ahead, and show what the Engineering
budget was, how much of that went into products that went into
production that year, how much went into supporting old products,
and how much went into the future investments. I think all
budgets should be for several years in the past and several in
the future, and they should all be in the same format.

I'd like to recast the Engineering budget as if each of these
groups were a division or a separate company, into the following
categories:

1. "ETHERNET and other Networking" - These two should be
    separated so that we see how much we are investing in the
    general ETHERNET, and how much for the somewhat specialized

things for specialized customers. I'd like these numbers presented as if each of these groups were a division, or a separate company.

2. "VAX/VMS products", which includes the hardware and the software.

3. "Other computers", which are 11'S, PPA, Real Time, maybe a UNIX, maybe a LISP, maybe a super computer in the future. This category is separated from the others so that decisions are made on incremental return for incremental investment. Each computer in this category should be considered a separate business. The cost of its hardware development, peripherals, software development, documentation, and everything else so we can evaluate the decisions and justify them to ourselves, and to the Board of Directors individually.

   For the "other computers" let's present the figures two ways. Let's present them assuming that all the disks, storage, packaging, and other services done for VAX/VMS are free to a new computer because this is the way we can evaluate the decision to make one more computer or not. Let's also present the figures assuming they pay their fair share of these other machines, because this is the way we evaluate the quality of results afterward. It might be very good business to do one more additional computer because it cost the Company very little additional money to do it, and the additional profits may overwhelm the additional resources invested.

4. All the common products such as disks, memories, etc.

5. We also should make a pass at our research projects. We should be particularly careful in identifying how much we invested in each group, and what results have come out of the groups that have been of use to the Company. There are probably projects outside the research group that should be included in this category. We should include in this group, work done on the "architecture of the future".

We then should present the Engineering budget for next year to the Board of Directors in quite a bit of detail.

KHO:mt
KO4:SECT11.62
DICTATED 7/29/85 BUT NOT READ

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JACK SMITH

"CC" DISTRIBUTION:

IVAN POLLACK   EDWARD A. SCHWARTZ   RON SMART
BILL STRECKER

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TO: see "TO" DISTRIBUTION

cc: see "CC" DISTRIBUTION

DATE: FRI 26 JUL 1985   4:55 PM EDT
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5280234964

SUBJECT: INDEPENDENT BUSINESS UNITS/NEW BUSINESS OPPORTUNITIES

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***********************************************************************
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I believe that we do not have the growth potential in the
traditional Digital business.

I would like to break the Company into two pieces. One would be
the independent business units that run VMS products and
components for Ethernet. The rest of the Company I would like to
call New Business, which would not be limited by the engineering
budget for the mainline part of the Company. In general, these
new businesses should be products that can be integrated into
Ethernet, but will not be limited to our usual way to computing.

Some parts of the independent business units should be UNIX
machines, LISP, super computers, fast data rate computers, and
machines optimized for certain types of problems.

Each of these machines and products should have their own
business plan, balance their investments in research, software,
marketing, literature, education, and so forth, with the profit
that they will make. Sometimes, they will make a hardware
product, and sometimes, they will show how someone elses products
can be hooked to Ethernet.

KO4:S11.61
(DICTATED 7/26/85 BUT NOT READ)

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JOHN SIMS	JACK SMITH	

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RON SMART	PETER SMITH	BILL STRECKER
HARVEY WEISS		

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!___!___!___!___!___!___!___!
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TO: see "TO" DISTRIBUTION   DATE: MON 22 JUL 1985   2:23 PM EDT
                                         FROM: KEN OLSEN
                                         DEPT: ADMINISTRATION
                                         EXT: 223-2301
                                         LOC/MAIL STOP: ML10-2/A50

                                         MESSAGE ID: 5279831898

SUBJECT: ONE COMPANY, ETC.


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********************************************************************
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When we say "One Company, One Strategy, One Message", people have
come to believe that this means that all we do is VMS, and we
have to have every possible CPU unit that one could chart out to
do VMS.

It, of course, doesn't mean this. It simply means one strategy.

The "One Company Strategy" could say that, in addition to all VMS
type applications, we want 70% of all terminals, 60% of all UNIX
machines, 70% of all network to PC's.

One example of inconsistant strategies that seems to bother no
one is shown in the Networks group. They have set a strategy
which seems right to them, because they always did set the
strategy, which says that the highest priority is to make all our
products industry standard. They think I'm an absolute heretic
because I'd like to use all our R and D effort to give us a
competitive advantage. I think it's obvious that if we do well
there will only be ourselves, American Telephone, and IBM. If we
don't do well there will just be American Telephone, and IBM, and
it's clear they will not pick our R and D results as industry
standard. If we wait to make our products industry standard, or
wait until it is an industry standard, we will delay any
advantage we have with respect to these two, and give all of our
advantages away to Data General, Prime, and Hewlett-Packard.

However, talking to the Newtworks group is like talking to a
Shi'ite who believes that dying for his country is the highest
calling, and he will do anything to die for his country.

Now, I belive that dying for ones country can be useful, and it
is sometimes the duty of a person to do so, but I'd like to make
sure, before I die for my country, that it has a possibility of
being useful, and that it isn't an end in itself.

At times, making our products industry standard is useful, and
sometimes we should do it for the good of the world, or for our
good, but, like dying for ones country, it is not, in itself, an

absolute goal.

Right now the Networks group, if not as a whole, at least in
parts believe just the opposite from the strategy I have been
propagating for the Corporation. I believe the results of our
R and D should be used as a competitive advantage and for the
good of the Company. They believe we should wait until we can
make it an industry standard, and I feel this is an example of
not having one strategy.

If we set about to get a large fraction of the terminal business,
not all of which is doing VMS, I don't think that is an example
of inconsistant strategy as long as we make it the Corporate
strategy.

KHO:mt
KO4:SECT11.33
DICTATED 7/22/85 BUT NOT READ

"TO" DISTRIBUTION:

*WIN HINDLE	JIM OSTERHOFF	IVAN POLLACK
JACK SHIELDS	JOHN SIMS	RON SMART
JACK SMITH		

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D.C.

TO: JACK SMITH   DATE: FRI 19 JUL 1985 12:23 PM EDT
                                    FROM: KEN OLSEN
cc: see "CC" DISTRIBUTION   DEPT: ADMINISTRATION
                                    EXT: 223-2301
                                    LOC/MAIL STOP: ML10-2/A50

                                    MESSAGE ID: 5279530837

SUBJECT: ENGINEERING BUDGET PRESENTATION TO THE BOD

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The Engineering Budget is a concise statement of the Corporate
strategy for the next several years. I'd like to take the whole
Board of Directors meeting in August to present this budget. I
would take the whole Executive Committee meeting on the 30th of
July as the first pass of this presentation, and save a good part
of the meeting on the 6th of August for the parts we want to
redo.

I'd like to break this into several parts which we will define as
we go along, and probably will redefine after the July 30
meeting.

First of all, I'd like to lay out all the machines that we are
planning to go into production on a timescale with the
engineering investment, the capital inventory investment, and the
number of units, the volume, and profit we propose to get from
these. The same chart should also include the income from memory
storage, terminals, service, ect., in order to be complete. We
can't wait to make a thorough, detailed, and precise presentation
on this, but what we had in our heads when we picked the budget,
in quite rough approximation, would give the general picture of
what we're proposing.

Next, we should breakdown the market for computers by size each
of the next five years, and indicate how much of each size
computer is available to VMS type machines so that we can
indicate how successful the Corporation will be in the next five
years.

We should then breakdown the budget by component, for example:
How much is going into research, and what do we expect out of the
research?   How can we report to the Board of Directors on its
results? What has been the investment and the results from
research in the last five years?

We can indicate how much of engineering does have goals that can
be measured.

We, in particular, should propose measurement for our investments

in things like networking. We've been accused in the past of measuring our success in how difficult a job we can accomplish, and showed little interest in competitive attitudes such as: What percentage of the market would we get? How much money would we make? Do we concentrate first on getting the easiest part of the market?

I don't think that the Budget Committee had precise estimates for these questions during the budgeting process. But, they did have ideas in their heads, and I think that we have to put numbers on these ideas before we present them to the Board of Directors.

"One Company, etc", does not mean one software system, it means one strategy, and one business plan which is integrated across all parts of the Company, in which all parts of the Company know their part and do their part.

KHO:mt
KO4:SECT11.29
DICTATED 7/20/85 BUT NOT READ

"CC" DISTRIBUTION:

*WIN HINDLE	JIM OSTERHOFF	IVAN POLLACK
EDWARD A. SCHWARTZ	JACK SHIELDS	JOHN SIMS
RON SMART		

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O.C. [signature]

Interoffice   Memo

TO: see "TO" DISTRIBUTION

DATE: FRI 19 JUL 1985   11:44 AM EDT
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5279530805

SUBJECT: ENGINEERING BUDGET AS KEY FACTOR IN CORPORATE STRATEGY

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I don't seem to do very well in explaining why I don't think that
squeezing the engineering budget into an arbitrary number is the
business-like way of fixing the strategy of a large corporation.
Corporate strategy should be an Executive Committee issue and a
Board of Directors issue. It should be much broader than how
many central processors we can squeeze into the Engineering
Budget, and what other products have to be left out in order to
accomplish this.

We probably should look at all the central processors we are
building, and put what the total market is for these in the next
five years. Then, assuming that we will get a significant share
of each of these markets, we should decide if the NOR and profit
is going to be big enough to support the Company we think we
should be.

I think this is a real problem today, and I don't think we are
facing this as we make these key future strategy decisions.

I believe that today, with MicroVAX, Digital alone can make all
the super mini-computers that the world needs, and that in a
short period of time with C-VAX, Digital alone can take care of
most of the computing the world needs, and we won't get very much
money for it.

This means that we have to look into other areas which we are or
should be expert in. If this is limited by the view of the
zelots for CPU's, we may be getting into very serious problems in
the future.

The traditional approach to this problem is to ask each of the
business units in the Corporation to propose to senior management
and the Board of Directors when businesses, or expansion of
present businesses can give the Company the growth it desires.

I propose that we look at our planning from a much broader point
of view and say that our problem is getting new products that
will make the Company grow, and is not eliminating products so
that we can get more and more of the same kind of central

processor.

"TO" DISTRIBUTION:

*WIN HINDLE	JIM OSTERHOFF	IVAN POLLACK
JACK SHIELDS	JOHN SIMS	RON SMART
JACK SMITH		

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TO: see "TO" DISTRIBUTION   DATE: FRI 12 JUL 1985   3:49 PM EDT
                                         FROM: KEN OLSEN
cc: EDWARD A. SCHWARTZ   DEPT: ADMINISTRATION
                                         EXT: 223-2301
                                         LOC/MAIL STOP: ML10-2/A50

                                         MESSAGE ID: 5278827503

SUBJECT: ENGINEERING BUDGET AND THE BOARD OF DIRECTORS

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We have not yet had the Engineering budget approved by the
Executive Committee and the Board of Directors. I'd like to plan
the August Board of Directors' meeting on being largely a product
plan for the next two or three years, and we'll present this in
the form of the Engineering budget.

I'd like to prepare for this in three steps. First of all, I'd
like the Engineering budget presented in the next week, or so, to
the Executive Committee, showing what each group spent last year,
and what the new proposed budget is, and then chart this out
relative to what products are making money this fiscal year, and
what products we expect to make money the following fiscal year.
It is feared that the budgeting process cut out the best
organized products because they were easy to handle, and left in
that large number of tiny things and research projects which were
hard to get a handle on. It is, therefore, important that we
prove to ourselves that the Engineering budget is aiming toward
the products we need, and not all that large number of things
which we can't get a handle on.

The next step would be , I'd like to have the Engineering staff
and the Marketing staff get together and organize a chart for the
Executive Committee which we will then present to the Board of
Directors, that will show those products which marketing plans
say are important next year, the year after, and maybe the year
after that. What marketing group needs, what specialized CPU,
what specialized networks, what kind of terminals, and what kind
of software are needed? How does this map into our Engineering
plans?

For those areas which we spend on "research", let's spell out
what we expect to get, how much we expect to pay for it, and
justify investing in some of the groups by seeing what we've
gotten in the past.

KHO:mt
KO4:SECT11.6
DICTATED 7/11/85 BUT NOT READ

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| | | |
|---|---|---|
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| BILL KOTEFF | JIM OSTERHOFF | IVAN POLLACK |
| JACK SHIELDS | JOHN SIMS | RON SMART |
| JACK SMITH | KEN SWANTON | |

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TO: *WIN HINDLE   DATE: MON 1 JUL 1985   5:56 PM EDT
                                       FROM: TOM STOCKEBRAND
                                       DEPT: SOUTHWEST ENG
                                       EXT: 552-2551
                                       LOC/MAIL STOP: ABO/A1

                                       MESSAGE ID: 5277722430

SUBJECT: "MANDATE" NOTE   (LATEST EDIT)

     There is a big problem with "Mandate Memos" (such as "No outside
hiring", "Wage freeze" etc.) now that the means to communicate them is
instantaneous. They hurt the people who are running a tight ship and
relatively help those who have been out of control. We have come away
from our trust relationship with our people.

     These memos are written out of frustration by upper management
with some intractable condition that exists with the expectation that
the underlying problem will surface and be worked properly. But most of
the time the mandate is NOT accompanied with a statement of that
problem. Often the mandate memo is forwarded company wide by subordinates
and becomes absolute immediately even though it usually says,
"...unless exceptions cleared thru me". Policies promulgated like this
are don't get rescinded and after awhile become a joke.

     --One should state the problem, not the solution, in the expectation
the solution is different in different areas:

          TRUST   (NO TRUST)———————————————>

     "We need to cut the budget 10%"   "Hiring Freeze"
     "We are 35% over in headcount"   "No Travel"

     I recognize the frustration that leads to these mandates but
blanket prohibitions, retransmitted verbatim, hurt only those that
have been doing a good job because they are already operating tightly.
If a blanket prohibition seems necessary, then it should apply to ones
the DIRECT REPORTS only and not be forwarded down by them to their
subordinates except over their own signature, not as a note from the
big boss.

     The place to establish controls with ones own direct reports, not
with those below them.

CONCLUSION:

     State in all "Mandate type" memos that if they are to be forwarded
they must be rewritten over the signature of the recipient. However,
the ISSUE or the problem CAN/SHOULD be transmited onward. The obvious
thing to do is not write Mandate memos in the first place but rather
"Problem statement" memos and make the mandates verbally to the direct
reports, along with statements of the consequences of non-compliance.
Then the people lower down can forward the memos without comment all
THEY WISH.

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```

TO: JIM OSTERHOFF   DATE: THU 27 JUN 1985 10:19 AM EDT
                                     FROM: KEN OLSEN
cc: see "CC" DISTRIBUTION   DEPT: ADMINISTRATION
                                     EXT: 223-2301
                                     LOC/MAIL STOP: ML10-2/A50

                                     MESSAGE ID: 5277319305

SUBJECT: DISCOUNT POLICIES AS A PROFIT DRAIN

****
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We've dealt with discount policies in which we gave the discounts
at the beginning of the year based on what the customer promises
he will buy. If he doesn't take this, we often don't claim the
discount which belongs to us. This was not part of the plan, and
it is not presented when the discount policies are proposed.

I believe it is the responsibility of the Finance Department to
enforce these discount policies. It is ridiculous to leave up to
the individual salesman, sales manager, marketing manager, or
marketing vice president the decision to forgive discounts. I
think the controller's function should make sure that, if our
policy says, people get a certain discount for a certain
quantity, it should be enforced, or a written, public stated
policy should be presented which says, we forgive all discounts
not earned.

The first of this fiscal year, I'd like you to be sure that all
new contracts, or renewed contracts are done with the
understanding that discounts will be given as they are earned.
People must have a clear understanding that unearned discounts
will be returned to the Corporation at the end of the year. If
there is any other policy, I think it should be formally
presented to the Executive Committee, and formally approved.

Marketers, sales people, and sales managers love the opportunity
to negotiate, and talk, and earn their keep by spending time with
the customer over an infinite amount of detail. This is what
makes our sales expensive and difficult, and this is what ties up
our senior people who are able to talk with customers. When I
say I want automated sales, I mean that sales contracts and
discounts are so straightforward that there are no negotiations,
and no "control of the situation".

The policy should be clear, approved by the Executive Committee,
andd enforced by the Finance Department. This should not be left
to MSSC, Jack Shields, or Ward MacKenzie.

KHO:mt
KO4:SECT10.53

DICTATED 6/27/85 BUT NOT READ

"CC" DISTRIBUTION:

*WIN HINDLE	JACK SHIELDS	JOHN SIMS
RON SMART	JACK SMITH	

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I n t e r o f f i c e   M e m o

TO: WIN HINDLE
    JIM OSTERHOFF
cc: see "CC" DISTRIBUTION

DATE: MON 13 MAY 1985   2:55 PM EDT
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5272885610

SUBJECT: BUDGETS

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The budgeting process has always been the vehicle for assuring
that we have a consistent, rational organization and business
plan. This is the only vehicle which ties everything together.
The people who run the budget have an enormous obligation,
because it is through the budget that we have a check on all the
pieces of the Company, and identify weaknesses that have to be
taken care of.

Over a period of time, the people doing the budgeting took on
much too much authority. The result was that the people who had
business responsibility left that with the budgeters to take care
of and they did not know what was going on in the areas they were
responsible for.

I am afraid we have gone too far in the other direction. Now,
the controller's function believes: I have control of everything
that is going on in the Company and they budget without
critically looking at the organization. Or, if they are
critical, they won't tell me.

I have no other way of looking at the Company except through the
budget. Projects that are not budgeted, consistent, wise, or
that are duplicated, I am unable to see unless the budgeting
system points them out.

At the Executive Committee meeting please review the question,
"What parts have the budgeting system pointed out that should be
taken care of, and, are all parts of the budgeting system playing
the part that is necessary to tie the Company together?"

There is one weakness in our budgeting system as identified with
some marketing and engineering groups. Those who have their
major projects approved have alot of freedom in how they spend
money on side issues, experiments, explorations, etc. Those
whose major budget does not get approved, even though it might be

much more important than the experiments and probes done by the
approved groups, get nothing. There are large areas of the
Company that do not work very hard, and who do not see that they
have particular goals and who go home early, whose budgets get approved,
while other areas can not get money. The budgeting
system should identify these areas rather than hide them.

KHO:mt
KO4:SECT9.57
DICTATED BUT NOT READ

"CC" DISTRIBUTION:

JACK SHIELDS   JOHN SIMS   RON SMART
JACK SMITH

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I n t e r o f f i c e   M e m o

TO: see "TO" DISTRIBUTION

cc: EDWARD A. SCHWARTZ

DATE: FRI 12 APR 1985 11:24 AM EST
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5269761364

SUBJECT: BURDEN ON PROFITS

The biggest burden on our profits comes from inefficiencies in
Sales with our:

    1.   complex discount policies

    2.   complex legal contracts

    3.   complex products

    4.   complex order processing

I want you to explain to the Board what we are doing about this.

KHO:ml
KO4:S9.4
DICTATED BUT NOT READ

"TO" DISTRIBUTION:

*WIN HINDLE   JIM OSTERHOFF   JACK SHIELDS
JACK SMITH

O.C.

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Interoffice Memo

TO: JACK SHIELDS

cc: see "CC" DISTRIBUTION

DATE: THU 21 MAR 1985 11:13 AM EST
FROM: KEN OLSEN
DEPT: ADMINISTRATION
EXT: 223-2301
LOC/MAIL STOP: ML10-2/A50

MESSAGE ID: 5267539680

SUBJECT: ORGANIZATION OF SALES DEPARTMENT

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I'd like to simplify the Sales organization. The Area Managers
are overworked and there is too much for them to do. I don't
think having fewer Area Managers solves the problem. I believe
that there are too many levels of management below the Area
Managers and that they are involved in all the planning and
decision-making, but don't have much to contribute. For
instance, I suspect that all levels pass off on every budget,
which makes no sense.

I propose a simplified organization for the U.S: three Area
Managers, thirty districts, three-hundred offices, and
three-thousand Sales Representatives.

It won't work out this neatly, because we don't have
three-hundred offices, and some of the larger offices need layers
of management. However, from a Corporate point of view, this
model has a simplicity that is easy to remember.

I would then set up two separate industry marketing groups that
would service all the present Sales organizations. I would
designate one man for every one of the lines in Bob Hughes' chart
or, maybe, one man to handle two or three lines. We would
probably have twenty or twenty-five high-level people each
managing the marketing of a particular industry.

The industry marketers perform a service. They do not have
rights or authority, and they will not tell the Field what to do.
They serve by identifying for each office what companies they
should sell to that fall within their particular industry. They
will supply all the helps and aid, and, if they are successful,
each office will take care of each company that they identify.

KHO:mt
KO4:S8.36
DICTATED BUT NOT READ

"CC" DISTRIBUTION:

*WIN HINDLE   KEN SENIOR   JOHN SIMS

JACK SMITH

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TO: JIM FLANAGAN   DATE: THU 21 MAR 1985 11:07 AM EST
    WIN HINDLE   FROM: KEN OLSEN
    DAVE PACKER   DEPT: ADMINISTRATION
                                      EXT: 223-2301
                                      LOC/MAIL STOP: ML10-2/A50

                                      MESSAGE ID: 5267539663

SUBJECT: BOD PRODUCT INFORMATION

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Please re-cast your figures and your studies so that we can
answer the questions that the Board asked. They are: "Why are we
going to make money on our new products when we didn't on our old
products?" And, "Why will we make money on the new PC we are
doing next year?" Also: "Why will we make money on the long list
of VAXes we will have next year?"

How much extra money will we make with each of the new VAXes we
introduce next year, and what is the investment and extra return
we will get from that investment?

Of the hundreds of products we introduce next year, of the worst
30%, what return will we get on: inventory, training, Sales time,
etc.?

The Board will undoubtedly ask: Do we have one person responsible
for each major product, or, do we have parts of each product's
responsibility spread around on the lists of very busy people?
They will also want to know if half-interested committees, with
no responsibility, run the products.

If we break the Company by business, such as: Dealers, Stores,
TOEM, COEM, Small Business, Office, how much did they make last
year? Why will they make a lot more this next year?

Are we pricing our products by component, each one competitive
with the component supplier? If so, can we get our software and
system investments back?

What percentage of a system that we sell because of our software
do we lose to component suppliers? How often do our OEM's force
us to lower our prices because they compete with us?

Will our salesmen, marketers, customers, and vice presidents feel
the product lines are simpler to sell and easier to understand at

the end of next year? Will selling be easier? Will we have fewer
magazines, fewer pieces of literature, and less red tape?

Etc.

KHO:ml
KO4:S8.39
DICTATED BUT NOT READ

O.C. KHO.

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TO: STEVE TEICHER   Date: 3/12/85 Tue 8:56
                                     From: Ken Olsen
CC: <mark>WIN HINDLE</mark>   Dept: Administration
    JIM OSTERHOFF   MS: ML010-2/A50   Ext: 223-2301
    JACK SHIELDS
    JOHN SIMS
    JACK SMITH

SUBJ: COMMITTEE UPDATE/REVIEWING SYSTEM FOR 2 MAJOR PARTS CORP.

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I've asked Win Hindle and Jim Osterhoff to co-chair a committee to
build a model and a budgeting and reviewing system for the two major
parts of the Corporation. These parts are OEM and related products and
MIS products. If you have ideas on a model that will make financial
sense by selling large numbers of Micro-VAX chips, I'm sure they'd
like to hear it.

We are now about a six billion dollar company and growing at 25%-30% a
year. We are spending about 16% of our hardware, and software NOR on
engineering. Most of this is going into developing, testing, and
organizing those VAX systems that will do MIS for medium and large
companies. A good part of our Marketing and Sales costs are aimed at
these markets. Because of the effort and success we've had in these
areas, and because of the enormous investment by Digital in these
markets, they are particularly attractive to OEM's, who would like to
buy just the CPU or chip, and bid against us, using our systems and
software. They like to price against us, using foreign components
with no cost on their part for the software and system development.

I cannot see how we can survive if we absorb all the systems and
software costs and bid against OEM's, who get them free.

What is worse, is that we often make the sale, with all the costs
incurred, and an OEM then bids, and he does not have to pay any
selling, marketing, systems, or software costs. Our own accounting
charges all the lost selling cost towards those few sales we do get
and from our accounting it appears that the OEM orders come with very
little selling cost on our part.

We are then forced into pricing our systems units by component cost in
order to match the OEM's. We cannot charge by component the costs we
incur in developing and selling systems or we will always be a
low-profit, high-cost operation.

The only solution I can see to this dilemma is to sell OEM computers
and chips only to those people who truly incorporate them into their
product. Examples of this would be: an X-ray machine, a Chevrolet, or
a blood testing device; we will not sell them to those people who are
getting our systems investments for free.

It is no longer a question as to whether we make MIS a major market
for the Corporation. We decided that a long time ago when we went to
ETHERNET and clustering and large machines. We already made that
decision when we decided to build four or five thousand VENUS
computers next year. We already made the decision when we decided
that Micro-VAX was the computer for MIS applications in departments
and medium sized companies. The question now is: "How do we return a
resonable profit on the enormous gamble and risks that we have already
taken?"

KHO/mt
KO4:S8.16
DICTATED BUT NOT READ

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TO: KITCHEN CABINET   Date: 25 FEBRUARY 1985
                                       From: Ken Olsen
cc: RON SMART   Dept: Administration
                                         MS: ML010-2/A50   Ext: 223-2301

SUBJ: MARKETING PLANS

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It is apparently believed by the Kitchen Cabinet that we can have no
influence on Business Plans and that all we can do is remove a person
if we completely lose confidence in him. This does not make sense. It
is ridiculous to, every time we change managers, have to wait for a
new plan and to know ahead of time that that plan is going to take two
or three years to make money, with major investments.

It is also believed that to discuss hardware is "un-elegant" from a
computer science point of view and from a business school point of
view. The inventory, capital equipment, accounts receivable, training,
documentation are a major part of our expenses.

At Ford they would not tolerate someone who had an idea for an new
automobile, but talked only with spread sheets. They would want to
know what the product looks like, what features it will have and how
much capital would be tied up in getting it to market.

I suggest that we lay out what we think should be done with hardware,
software and marketing plans and then listen to the managers'
suggestions. In general, however, he takes a contract from the Kitchen
Cabinet.

KHO:ml
KO4:S7.46

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O.C.

TO: see "TO" DISTRIBUTION   DATE: WED 13 FEB 1985   4:40 PM EST
                                           FROM: KEN OLSEN
cc: OFFICERS: DEPT: ADMINISTRATION
                                           EXT: 223-2301
                                           LOC/MAIL STOP: ML10-2/A50

                                           MESSAGE ID: 5263903013

SUBJECT: RECENT RAINBOW PRESS COMMENTS

The following statements will be released to the press in
response to Monday's New York Times article regarding the Rainbow
product:

1. We are NOT abandoning Personal Computers:

    In the wake of recent speculation that it is abandoning the
    personal computer market and, in particular, its RAINBOW
    microcomputer, Digital Equipment Corporation signaled that it
    would announce, next month, significant enhancements to its
    RAINBOW and DECMATE personal computers which, according to
    Digital president, Ken Olsen, "will set new standards of
    versatility and functionality for personal computers". Olsen
    did not provide specific details on the announcement, but
    said that the planned enhancements and options would combine
    the best features of personal computing, word processing and
    office automation. He said the new offerings would deliver
    important price/performance improvements in environments
    where interconnected personal computers are used as the user
    interface to larger systems.

    Olsen stressed that the enhanced capabilities would also be
    available as upgrades to current RAINBOW/DECMATE users.

2. VENUS is doing well .... but:

    As the business activity in the electronics industry softens,
    our orders from this segment are softening.

3. We are NOT planning to have a layoff:

    We are improving manufacturing efficiencies through major new
    technologies like LSI, reduced overhead costs by simplifying
    our organization and structure, improved inventory management
    techniques and continued increases in the quality and
    reliability of our products.

    Our success in these areas has allowed us over three years to
    nearly double our sales without increasing our manufacturing
    population.
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Our competitiveness demands that we accelerate and expand on these programs to improve productivity. Therefore, over the next several years, we plan to be able to support increasing sales levels with a reduced manufacturing population.

KHO:ml
KO4:S7.37

"TO" DISTRIBUTION:

VERNON ALDEN	PHILIP CALDWELL	ARNAUD DE VITRY
GEN. GEORGES DORIOT	WILLIAM MCLEAN	DOROTHY ROWE

Forward to Hand & Staff K.C.

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I n t e r o f f i c e   M e m o

TO: FOMC:
    MANAGEMENT COMM:
    JOE NAHIL
    STRATEGY COMMITTEE:

DATE: WED 13 FEB 1985 2:10 PM EST
FROM: JERRY PAXTON
DEPT: CORPORATE SALES
EXT: 276-8990
LOC/MAIL STOP: STOW, MASS./OGO1-1 MO2

MESSAGE ID: 5263902815

SUBJECT: ATTACHED MESSAGE FROM JACK SHIELDS

TO: Worldwide Subscribers   DATE: 13 February 1985
                                      FROM: Jack Shields
                                        DEPT: V.P. Field Operations
                                        EXT: 276-9890
                                        LOC/MAIL STOP: OGO1-1/MO2

SUBJECT: RESPONSE TO NEW YORK TIMES ARTICLE

The New York Times published an article in their February 12,
1985 edition entitled "Product Abandoned by Digital" and
subtitled "Rainbow Plant Being Refitted".

This article has been the basis for articles in various other
publications addressing the same topic. The misleading
impressions which the article gives require clarification which
we are currently addressing with the press. However, to benefit
you in discussions with our customers, the facts surrounding
those issues are as follows:

WESTFIELD FACILITY

Digital has been planning for some time to build up a large
inventory of Rainbow computers so that it could shut down the
production line and refit it for another computer product. By
producing in volume to meet both our current sales and inventory
requirements, we have been able to take advantage of
manufacturing efficiencies so necessary to stay competitive. If
our inventory is not sufficient to meet our projected needs, then
Manufacturing capability is available to provide systems as
required.

MANUFACTURING IN GENERAL

Digital has publicly stated its ongoing goal to reduce its
manufacturing costs. This involves a continuing effort to make
more effective use of our facilities and people each time we
refit a facility for new product manufacture. In fact, because
of the number of new products soon to be announced, you may hear
of more situations where plants are converted from current
product manufacture to new products. Each conversion offers us

the opportunity to make efficiencies in the manufacturing process.

PC STRATEGY

We have stated publicly, and will continue to reinforce, the importance of personal computing to Digital's overall corporate product strategy. We are making significant investments in Rainbow enhancements, which will be announced in the very near term, as well as a new personal computer-class system, which will be announced in the future. You can, with confidence, ensure your customers that DEC's current products, soon-to-be announced enhancements, and follow-on products will provide them the same competitive advantages that Digital products have always provided.

In summary, what has been billed as "news" is inaccurate in assuming that we are moving out of the Rainbow PC business and misleading in representing our commitment to continued manufacturing efficiencies. Our Rainbow PC Strategy and commitment to manufacturing efficiencies are both positive positions which, unfortunately, came out negatively.

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13-FEB-85 15:00:08 S 04220 CLEM
CLEM MESSAGE ID: 5263907641

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O.C.

TO: *WIN HINDLE   DATE: THU 31 JAN 1985 10:37 AM EST
    KEN OLSEN   FROM: JACK SMITH
    JIM OSTERHOFF   DEPT: ENG & MFG ADMIN.
    JACK SHIELDS   EXT: 223-2231
    JOHN SIMS   LOC/MAIL STOP: ML01-4/A54

                                     MESSAGE ID: 5262687459

SUBJECT: MARKETING AND MANAGEMENT AT DEC

        ****** C O N F I D E N T I A L ******

Well, it has finally happened -- the legendary 'Jack Smith tolerance level for
ambiguity and nonsense' has been reached. The blank stares and seemingly
unknowledgeable questions by our Marketing VP's when discussing our product
strategy at Monday's Strategy Committee did the trick. Bill Strecker said it
well, and I quote, "I am abhorred after all the work Engineering has done
with Marketing; the lack of willingness on the part of Marketing to understand
our products and formulate comprehensive Marketing plans based on application
requirements in the field". We have a problem when the attitude of our
Marketing folks is, 'aha, but the product doesn't do this; don't have this
application?; no good to me; you mean you forgot this application?' This
after-the-fact attitude on their part is intolerable. Remember we reorganized
the Company so that our Marketing people would have the time to give the
Engineering community this kind of direction as one of their key
responsibilities. They should actually feel they have failed when we find a
hole in the Engineering Strategy that effects their application/market base.
Instead, the attitude is, 'well, Engineering did it to me again'. Nonsense.
And then, when I'm asked, "Jack, can you tell us what a comprehensive
Marketing plan would look like"? Patience my foot -- I would like to stomp on
someone.

Ken, you contribute to the nonsense by letting our Marketing VP's off the
hook; they do work for you. Ken, out of frustration, has given up on our
Marketing VP's and ever getting anything meaningful from them. His approach
is therefore to push the problem onto Engineering. "The Engineering isn't
complete until the Marketing is done". Well Ken, there are 3,000 people in
Marketing in this Corporation. I think it is relevant that you understand
that I don't have that many folks walking around in Engineering waiting for
some Marketing work to do. 3,000 folks in Marketing. That number is close to
half the total number of folks we have in Engineering. Does that feel right
to you?
                        K.C.
Now all us "senior" folks based on our Harvard and other lofty institution
experiences, have rationalized most of our domestic problems are basically
externally driven, economic in nature. I suspect most of this is nonsense and
our problems are basically internal to DEC; the result of how we are managing
or, more appropriate, not managing.

But everyone else is having problems I hear, so it must be the economy; HP,
Wang, Honeywell, etc., etc. Another piece of nonsense. We (Engineering)

pointed out in many of our Product Strategy reviews many months back that companies with good products would continue to do well; DEC, DG, Prime, IBM, Apollo, etc., etc.   In turn, certain companies would run out of "product steam"; HP, Wang, Honeywell, Sperry, etc., etc. The majority of our problem is not economic in nature. If you have the products, you should be doing well and continue to do well for some time.

Now we are doing well in Europe. I suggest for the following reasons:

o   "Our product strategies are too complex, we can't understand them". This is unacceptable to European management. The direction to their Marketing and Sales management folks is clear -- you will understand our products and, based on this, you will formulate comprehensive Marketing/Sales plans driven by an understanding of the application requirements of our customers. Somehow it happens and they are 3000 miles distant from Engineering. Somehow they understand because they are expected and managed to understand.

o   Marketing and Sales formulate their plans together in close positive working relationships. No such nonsense as -- we can't clean up an OEM/End User co-existent situation because we can't get Marketing and Sales together.

o   The identified field segments (countries) understand, to the line items, what products they will sell. Selling what hasn't been ordered or what we don't have is completely foreign to them, pardon the pun.

o   All the individual segments are managed within a well planned integrating management process directed by Pier-Carlo personally just about in real time. Trade off between the segments are therefore timely, constant and consistent. They all know, at any point in time, exactly where they are and what must be traded off resulting in clear real time direction.

o   The bag-carrying Sales folk know the products - the result of good, comprehensive Marketing plans focused on application, a somewhat more focused approach to selling and a relatively lower turnover rate.

Now Win and Sims insist we must work with the Marketing VP's in such a way as to not hurt their fragile feelings. Well at this point I could care less. I want comprehensive Marketing/Sales plans that will move my product and we don't have them. We are investing a ton of money to get this done and I want it done without all the excuses of structure, lack of data, lack of power, etc., etc.

Instead of these all day - all evening woods meetings between the Marketing VP's to solve the "Company problems", I would suggest they work on comprehensive Marketing/Sales plans based on an understanding of the application needs of our customers. Plans that will help our Sales folks be better prepared to sell our products. Plans that give direction to our Engineering folks for the development of the right system applications. Don't invite me to anymore meetings until I have these plans. I will be busy, doing the best I can, formulating Marketing/Sales plans that I can't get from the 3,000 folks who have the responsibility.

Now I hope in some way I have offended each of you. If I somehow missed

someone, it certainly wasn't intentional. We are screwed up, (sorry John, you can't completely take the street out of the man), we are not managing, we are not leading, we are missing enormous opportunities because of our internal confusion and blaming it on external conditions. The problem lies with us folks "at the top of the house". We are not getting the job done, pure and simple. We are not structuring ourselves through either process and/or organization to format data, understand, review and give direction based on an integrated view of any meaningful segment of our business. At this point I could care less if the segments be geography, product, application, industry or whatever. Just so that we can understand cause and effect across the Company and the influences or lack of influences on our customers.

As the unofficial, illegitimate senior group operating within some ill-defined management process, we should be helping Ken (the ONLY integrating, monitoring point in the Corporation) run the Company. WE HAVE SOME WORK TO DO - what should we look at? - what content? - who? - how? - when? Set direction, follow up, initiate action! - get out there (in the field, inside DEC), understand, influence, push, shove, stomp, stroke. This is lots of work (and takes losts of time) but it MUST be done. The options are clear - if one can't do it all then one must choose to be part of the senior management team helping Ken run the Company, or choose to manage a function. BOTH jobs must be done. The one choice we do not have is to allow opportunity to slip away because we haven't postured outselves to manage it.

We are on the threshold of unprecedented Corporate success - if we blow it we have no one to blame but ourselves.

31-JAN-85 11:31:45 S 02293 CLEM
CLEM MESSAGE ID: 5262693869

*OC
History*

To: see "TO" DISTRIBUTION

Memo: 5348861126COR94
Date: Fri 12 Jun 1987 1:00 PM EDT
From: KEN OLSEN
Dept: ADMINISTRATION
Tel: 223-2301
Adr: MLO12-1/A50*

Subject: JULY OR AUGUST WOODS MEETING FOR EXECUTIVE COMMITTEE


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I would like to spend a full two days in Maine in July or August going over the heart of Digital's business.

In detail, I would like to review every product in which we have invested in the last four years to see what we can learn from them. I would like to organize what we have learned and see if we can from that pass judgment on this years engineering and product plans. Why do some products succeed and others fail? Is it generally true that only those which have high concentration of interest from the top ever succeed? Why do some of those such as PC All-In-1, for which there is enormous demand and from which we expected the highest return, end up doing almost nothing?

I would also like to evaluate how broad a product line can the sales department handle. Is it necessary to have every single possible variation of size and capability of computers, or is it impossible for the salesman to handle so many? Would we do better having a very small number of computers with large gaps between them?

Then I would also like to go over our Engineering/Manufacturing costs. Is our overhead and our red tape too expensive? Why does it cost a million and a half dollars just to make a simple module? Why does it cost $300K just to change connectors in a simple modem product? Why is our overhead in small products so high that it really doesn't pay to improve the products? Why do the engineers feel they are measured on things that obviously are not valid?

Other big companies are buying small companies so that they can separate out small jobs that don't need a large company system. Should we do this or should we just not do small jobs and only do the large jobs?

I would also like to measure the efficiency of our sales department. It appears that we don't have a simple pitch and a simple party line for the bulk of our products and that a salesman has to bring in an expert who has to bring in an expert, who then often has to bring in one more expert. Could we concentrate on a set of products for which every salesman can be expert, and then sell the complicated ones from a separate organization at a much higher cost?

I would like George Chamberlain and Ivan to propose an outline and then I would like to divide the work up between the Executive Committee.

KHO:mc
KO:1034
DICTATED ON 6/12/87, BUT NOT READ

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INTEROFFICE MEMORANDUM

TO: DISTRIBUTION

CC: IVAN POLLACK
ED SCHWARTZ

DATE: 19 JUNE 1987
FROM: KEN OLSEN
DEPT: CORPORATE ADMINISTRATION
M/S: MLO12-1/A50
EXT: 223-2301

SUBJ: DESK TOP STRATEGY

We had a good desk top Woods meeting. We clarified a lot but raised a lot of questions. I'd like now to organize all we know, all we plan and all we have under consideration into one chart that I'd like presented to the Executive Committee in July and the Board of Directors on the 17th of August.

For this chart, I'd like to assume that we are committed to supporting VMS, UNIX, MS-DOS, OS-2 and Mac. Let's assume that this chart will be a vehicle in helping us decide which of these we will include in our product line. For the sake of the chart, we will assume we also make an MS-DOS machine with no slots but with a floppy in the PVAX box.

The chart will have five columns. The first column is VMS, second UNIX, third MS-DOS, fourth OS-2, fifth Mac, and the sixth is a commentary on management.

Gorden Bell took joy in pointing out that all projects not supervised directly by his inner circle consistently failed. WPS was one of his particular joys. No one has this negative attitude today, but we have yet to prove that projects ignored by the inner circle have a high rate of success. Therefore, in the sixth column I'd like comments on whether or not this part of the project is of burning interest to the engineering management inner circle, or is it in the boonies of no particular interest and no likelihood of success.

Today I am afraid that our strategy in this area looks to the sales department and to the Executive Committee like a bunch of half done things delegated to various parts of the Company without any force to integrate. I'd like you to prove that, at this time, we do have a thought-out, easy-to-understand strategy that we can pull off because it's simple and people understand what they are driving toward.

From history, you can conclude that only the things done by the inner circle of the engineering staff succeed. But you also could conclude that the inner circle only does things which are easy to define with clear cut goals and that they delegate those things for which they don't want to work out the myriad of detail and in which they don't want to rationalize into a simple set of goals.

Right now I don't want to find out. I want to rationalize the goals, simplify them, make sure we succeed and have the inner circle show enthusiasm and interest in management for the whole project.

KHO:ld
KO:1057

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	VMS	UNIX	MS-DOS	OS-2	MAC	COMMENTS ON MANAGEMENT
Diskless CPU	PVAX	PVAX	P32 w/floppy	P32 w/floppy		
CPU with Disk	PVAX or any VAX -------------------------			IBM or Clone ------------		
Network – diskless	Cheapernet	Cheapernet	Cheapernet	Cheapernet	Cheapernet	
Network w/disk						
Office Devices on Network 1) printer 2) printer 3) printer						
1) scanner 2) scanner						
Word Processing 1) poor 2) good 3) better 4) best						
CAD Department 1) printer 2) printer 3) printer						
1) plotter 2) plotter 3) plotter						
1) scanner 2) scanner						
Server Software						
Special Software						
Applications Software						
DEC Software						
Third Party Software						

I n t e r o f f i c e   M e m o r a n d u m

To: see "TO" DISTRIBUTION

cc: TOM SIEKMAN

Memo: 5346554974COR84
Date: Wed 20 May 1987 11:21 AM EDT
From: KEN OLSEN
Dept: ADMINISTRATION
Tel: 223-2301
Adr: MLO12-1/A50*

Subject: DESK TOP PRESENTATION TO THE BOARD OF DIRECTORS

****
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****

There are three major questions involved with the desk top (some
stand on the floor) products. Each of these questions are
exceedingly important and should be raised at the highest level
of the Corporation. The questions are tearing people apart. The
obvious answer is to raise them to the highest level, present the
arguments in an organized, systematic way and look for a
decision.

UNIX

We have to redo our policy on UNIX. The suggestions go all the
way from dropping UNIX altogether and with all haste and all
useful investment, get all the UNIX functions on our VMS
workstations. The suggestions then go all the way to making UNIX
as complete a software system as VMS and competing with VMS.

There are many points of view, and depending on where you stand,
the answer is obvious; however, we have to take into account
every one of the points of view and we will do it in a
systematic, organized way and work on it for several months. The
schedule I'd like to follow is:

I.   On May 27, we will have presented an outline of all the
      points of view and all the alternatives and what the
      costs, advantages and risks are for each.

      We will then present that chart on the 15th of June to the
      Board of Directors, and on the 17th of June, we will spend
      a full day again working the problem. Then on the 29th of
      July, we will have a Woods meeting at Heald Pond and grind
      away at it until we make the decision.

II.   The pricing question is also tearing the Company apart.
      We have to sell inexpensive PC's and workstations, with
      the same CPU with which we make very complex, powerful,
      multi-user systems. One we get little money for, one we
      have to get a lot of money for and regardless of what we
      do, they are interrelated. Of course the questions raise
      the question of corporate strategy on looking for market
      share or making as much money as possible in the immediate
      future. On the 27th or 28th of May, we will outline the
      questions and the alternatives and the advantages and

disadvantages of each in an outline of what marketing plans we would pursue with each alternative.

We will then make this the major presentation to the Board of Directors on the 15th of June and we will make the decision at the Executive Committee Woods meeting on the 18th of June.

III.   The next question is, how many desk top CVAX machines do we have to make in order to accomplish all our goals. It is felt by some that we have to make four or five different versions in order to get four or five different sets of prices. Others claim we are making four versions because we have four groups of engineers to keep busy.

For the Woods meeting the 27th and 28th of May, we'll present a chart showing all the CVAX CPU boards we are laying out. In that chart, we will lay out the cost of each one and evaluate alternative combinations. We will evaluate the cost of tooling, engineering, inventory, and field service. Bill Heffner will present the cost of adapting VMS for three, four or five new machines as compared to one, and George Chamberlain will evaluate the cost of time to market several machines as compared to getting a less optimized machine to market with a higher manufacturing cost.

We'll also ask to have presented a list of ways in which we can accomplish different pricing and evaluate the cost of each one, both in time for marketing, engineering, tooling, delay, inventory risk, training, field service and software.

KHO:ld
KO:979
DICTATED 5/20/87 BUT NOT READ

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STEVE TEICHER

Interoffice Memorandum

To: DSM:

cc: see "CC" DISTRIBUTION

Memo: 53368790520GO29
Date: Thu 12 Feb 1987 1:06 PM EST
From: CHICK SHUE
Dept: US SALES
Tel: 297-6067
Adr: MRO3-3/B13

Subject: FIVE CLEAR AND POWERFUL MESSAGES

"DIGITAL HAS IT NOW!" REMAINS OUR MOST POTENT OFFENSIVE STRATEGY
AGAINST IBM. IBM WILL CONTINUE TO SPEND MILLIONS OF DOLLARS TO CLOUD
OUR MESSAGE, TO BUY TIME, AND TO CAUSE CUSTOMERS TO WAIT UNTIL "IBM
HAS IT!
    --

YOU AND YOUR SALES PEOPLE ARE DOING AN OUTSTANDING JOB BEATING IBM.
WE MUST CONTINUE TO PRESS OUR ADVANTAGE AND HELP OUR CUSTOMERS TO ACT
NOW.

WORDS MAY NO LONGER SEPARATE THE DEC STRATEGY FROM THE IBM STRATEGY,
BUT THE FACTS DO! HERE ARE FIVE CLEAR AND POWERFUL MESSAGES:

****
PLEASE MAKE CERTAIN THAT EVERYONE IN YOUR ORGANIZATION GETS THIS
INFORMATION.
****

1. DIGITAL PROVIDES OUR CUSTOMERS A COMPETITIVE EDGE

    BACKUP:

    OUR CUSTOMERS' BUSINESS STRATEGY COMES FIRST. OUR PRODUCT STRATEGY
    IS COMPLIMENTARY, SUBORDINATE, AND TRANSPARENT TO OUR CUSTOMERS'
    BUSINESS STRATEGY. (IBM'S PRODUCT STRATEGY IS OBSTRUSIVE, AND OFTEN
    FORCES THE CUSTOMER TO CHANGE HIS BUSINESS STRATEGY TO CONFORM WITH
    IBM'S STRATEGY. EVEN NOW, IBM HAS THE NERVE TO TELL THEIR CUSTOMERS
    TO WAIT FOR BETTER PRODUCTS FROM IBM WHEN WORLDWIDE COMPETITIVENESS
    IS A SURVIVAL ISSUE FOR MANY OF THEIR CUSTOMERS.)

    THE SUCCESSFUL ENTERPRISE IS BOTH OPPORTUNISTIC AND STRATEGIC. OUR
    PRODUCTS ARE EASY TO USE, GRANULAR AND COMPETITIVE IN THE SHORT
    RUN, YET, DESIGNED TO A SET OF STANDARDS WHICH ASSURES COMPATIBILITY
    AND PROTECTS OUR CUSTOMERS INVESTMENT IN THE LONG RUN.(CONTRAST
    THIS WITH YOUR CUSTOMER'S HUGE SUNK COST INVESTMENTS IN IBM'S OLD
    "STANDARDS" WHICH HAVE NOT MET THE TEST OF TIME)

    DEC PRODUCTS WORK THE WAY SUCCESSFUL PEOPLE WORK.....WITH EACH
    OTHER. OUR CUSTOMERS NEED FAR FEWER PEOPLE TO UNDERSTAND, OPERATE,
    AND SUPPORT DIGITAL PRODUCTS. OUR COMMITMENT TO INDUSTRY STANDARDS
    AND SIMPLICITY PROVIDES OUR CUSTOMERS A MEASURE OF AUTONOMY
    FROM DIGITAL. YET, FOR A FAIR PRICE, DEC WILL SUPPLY WHATEVER
    SUPPORT OUR CUSTOMERS' NEED. (THIS DEFUSES IBM'S STRATEGY OF
    GIVING AWAY LARGE NUMBERS OF "FREE" SUPPORT PEOPLE TO THEIR

FEB 13 1987

CUSTOMERS. WHO PAYS FOR THESE PEOPLE WHEN THE CUSTOMER BECOMES
DEPENDENT ON IBM?)

2. DIGITAL IS THE INDUSTRY'S LEADING SUPPLIER OF COMPUTER NETWORKS

BACKUP:

DIGITAL IS THE UNDISPUTED INDUSTRY CHAMPION OF COMPUTER NETWORKS.
AS A LEADER OF END USER AND DISTRIBUTED COMPUTING IN THE MID
SIXTIES, DIGITAL WAS NATURALLY COMPELLED TO TAKE A POSITION OF
LEADERSHIP IN COMPUTER NETWORK TECHNOLOGY. TODAY, WE SHIP THOUSANDS
OF WIDE AREA AND LOCAL AREA NETWORKS A MONTH, AND WE LEAD THE
INDUSTRY IN COMPUTER SYSTEM NETWORK SHIPMENTS.

WE ARE COMMITTED TO SETTING AND OR SUPPORTING INDUSTRY STANDARDS.
WE HAVE A TRACK RECORD OF CHOOSING AND SUPPORTING PROVEN NETWORK
PROTOCOLS. FOR EXAMPLE, OUR DIGITAL NETWORK ARCHITECTURE (DNA) IS
BASED ON THE SUCCESSFUL U.S. GOVERNMENT ARPANET PROTOCOL. OUR
LOCAL AREA NETWORK PROTOCOL IS BASED ON THE PROVEN XEROX DEVELOPED
ETHERNET. (CONTRAST OUR CLEAR, OPEN, DELIVERABLE NETWORK STRATEGY
WITH IBM'S SNA AND TOKEN RING STRATEGIES. OR DOES IBM NOW TOUT
ETHERNET SUPPORT? CONFUSING? YOU BET.)

DIGITAL IS LEADING THE INDUSTRY IN OUR SUPPORT OF INTERNATIONAL
NETWORK STANDARDS. WE ARE COMMITTED TO BEING OUR CUSTOMERS MULTI
VENDOR NETWORK SYSTEMS INTEGRATOR (MVNSI). IN SHORT, WE OFFER OUR
CUSTOMERS THE FREEDOM TO CHOOSE THE BEST COMPUTER SYSTEM REGARDLESS
OF VENDOR. (IBM IS COMMITTED TO IBM STANDARDS. THEY TOO SUPPORT
THEIR CUSTOMER'S FREEDOM TO CHOOSE AS LONG AS THE CUSTOMER'S CHOICE
IS IBM)

.........AND SPEAKING OF INDUSTRY STANDARDS...............

3. DIGITAL PRODUCES VAX/VMS, A SINGLE HARDWARE, SINGLE SOFTWARE

ARCHITECTURE , WHICH OFFERS THE BROADEST RANGE OF TOTALLY

COMPATIBLE COMPUTER SYSTEMS.

        BACKUP:

        --EXPLOIT IBM'S MULTIPLE HARDWARE ARCHITECTURES IN THE MIDRANGE
        --EXPLOIT IBM'S MULTIPLE SOFTWARE SYSTEMS
        --UNDERSTAND THAT IBM'S 9370 COMMITMENT DOES NOT SOLVE THE
          HDWR PROBLEM UNTIL LATE FALL AT THE EARLIEST. ***ALSO, TO
          DATE, THERE IS NO COMMITMENT TO SOLVE THE SOFTWARE PROBLEM!

        CAUTION IBM IS AGGRESSIVELY FUTURE PRICING THE 9370 IN MANY
        LARGE PROJECT BIDS WITH LONG DELIVERY LEAD TIMES. MAKE SURE YOUR
        CUSTOMERS ARE MAKING APPLES TO APPLES COMPARISONS ON PRICE AND
        DELIVERY. KNOW THAT OUR FUTURE PRODUCT PERFORMANCE AND PRICING
        STRATEGY WILL BE EQUAL TO OR BETTER THAN IBM. GET YOUR DISTRICT
        SALES AND OPERATIONS MANAGEMENT INVOLVED IN LARGE PROJECTS TO
        ASSURE THAT YOU HAVE THE FUTURE PRICE PERFORMANCE INFORMATION
        AND COMMITMENTS YOU NEED. NATURALLY, YOUR STRATEGY SHOULD EMPHA-
        SIZE NOW! (TODAY'S PRODUCTS AND PRICES)

DIGITAL'S SERVICES ARE RATED NUMBER ONE OR TWO BY THE MAJOR

INDEPENDENT CUSTOMER SURVEYS

   BACKUP:

   --RECENTLY RATED NUMBER ONE IN THE FORTUNE SERVICE SURVEY
   --WE ARE COMMITTED TO OUR CUSTOMERS'S SUCCESS. THIS COMMITMENT
     EXTENDS TO OUR UNDERSTANDING OF THEIR TRUE BUSINESS PURPOSE
     FOR WHICH OUR SYSTEMS ARE PURCHASED.
   --WE UNDERSTAND THE NEED TO CONNECT OUR CUSTOMERS' PREVIOUS AND
     FUTURE IBM SYSTEM INVESTMENTS. WE WELCOME THE PRIVILEGE AND
     OPPORTUNITY TO INTEGRATE AND SUPPORT THESE INVESTMENTS AS A
     DIGITAL RESPONSIBILITY TO ADD VALUE TO OUR CUSTOMERS' INFOR-
     MATION SYSTEM STRATEGY.
   --IBM'S REDUCED PROFIT MARGIN'S ARE FORCING THOUSANDS OF PEOPLE
     TO BE REDEPLOYED FROM HEADQUARTERS. THEY ARE SURE TO PACKAGE
     THIS AS INCREASED "SUPPORT". HELP YOUR CUSTOMER SEE THROUGH
     THIS. ENCOURAGE THEM NOT TO MEASURE SUPPORT BY THE "BODY COUNT".
     DEC WILL PROVIDE SKILLED PEOPLE TO GET THE JOB DONE AT A FAIR
     PRICE. (OUR SYSTEMS AND SUPPORT ARE PRICED FOR SUCCESS)

. DIGITAL HAS IT NOW!

****

N SUMMARY NO AMOUNT OF ADVERTISING DOLLARS AND RELATED PROPAGANDA
ROM IBM CAN OVERCOME THE FIVE DIGITAL ADVANTAGES EXPRESSED ABOVE.
BM MUST FIRST FIX THEIR DELIVERABLE PRODUCT STRATEGY. THIS WILL TAKE TIME.
ON'T LET IBM BUY TIME AT YOUR CUSTOMER'S EXPENSE. TAKE THE POSITIVE
ALES APPROACH, AND STAY CURRENT WITH YOUR COMPETITIVE INFORMATION.
RESS YOUR ADVANTAGE.

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Interoffice Memorandum

To: see "TO" DISTRIBUTION

Memo: 5346067296COR02
Date: Fri 15 May 1987 2:46 PM EDT
From: KEN OLSEN
Dept: ADMINISTRATION
Tel: 223-2301
Adr: MLO12-1/A50*

Subject: WHY WE LOST FACTORY NETWORKING AT FORD

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*********************************************************************
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I spent a couple of hours this week with the Ford staff that
decides what the standards shall be for Ford factories. I think
I won every point on every argument, but they still want to use
broad band and token bus. I think maybe I would do the same if I
were in their shoes.

They have a simple, elegant system, some of which they've had a
lot of experience with and the rest of which they can visualize
in their head. We present a complex, almost infinite collection
of different gadgets, concepts, things, and ways of doing things.
Each one of us presents a story in a different way; each one of
us has different answers to each problem.

LET'S MAKE AN ELEGANT, SIMPLE PITCH FOR ETHERNET.

Let's try, for the State of the Company meeting, to show how
simple and easy to understand a "BASEWAY + Ethernet" system is to
conceive of, build and operate. Let's include this in "the
book", and let's print the same thing in the booklet.

LET'S PICK A NAME FOR OUR FACTORY SYSTEM SUCH AS "NON-STOP
MANUFACTURING".

We have the software systems from us or our third parties for
what's needed to keep a factory going to introduce products
quickly, to make changes quickly and to avoid stoppage.

We have the equipment to build networks of the highest
reliability and ways of making redundant networks so that they
should never fail.

SOFTWARE

We have the software that makes networking easy and that makes
cell controllers or work groups easy to manage and easy to work
with the rest of the organization. We have partners that supply
a wide range of software to do planning, control inventory, help
product introduction, and help make changes.

NETWORKING

Ford has a system for laying out a factory ahead of time with
broad band which brings a jack out at every position in the

factory. I'm going to ask them for a description of how this is done. I believe it is like wiring an apartment house for closed circuit television. At any apartment you can plug in a television set and you don't have to worry about clamping a device on a cable and doing special stringing. You just freely, at any time, plug anything into the cable and it's all worked out ahead of time.

John Adams and crew should lay out a plan showing how this can be done and showing how this is even better with thin-wire Ethernet. It should show how easy it is to hook up a cell at each jack. We could show how every column in a factory has a BNC connector on it (or two) and how from that every CPU in a cell can be daisy-chained at one jack. Parts of the same cell could be under another column and could even be some distance away on different jacks.

THE ELEGANT TOKEN BUS SYSTEM

Token bus, as presented by GM, is indeed elegant. Everything plugs onto the bus in the same simple way. We point out how foolish it is to plug in tediously low speed things at a high speed bus and we point out how difficult it is to manage and maintain a bus with a lot of random things on it. But I can see how people fall in love with the simplicity of the concept and they hold on to that simple concept even when things like sub-buses are introduced.

THE ELEGANT BASEWAY-ETHERNET SYSTEM

The DEC system is even more elegant, but we never put down on paper a simple system. We have an answer to any problem that is brought up, and by the time we finish a conversation, their heads are swimming in all kinds of concepts and none of it sounds fixed or standard and, above all, not at all elegant.

The factory is broken down into cells which can be very tiny or very large and very complex depending on how it is desired to organize the factory. A cell can consist of just one machine or it can consist of a number of machines, measuring devices, transfer devices, and a number of people. The cell is best made with a BASEWAY computer or Ethernet but could be token bus or any other network system.

ETHERNET BACKBONE

Each cell or work group is then hooked directly to Ethernet, usually by way of the MicroVAX or VAX used to manage the cell or work group. For highest reliability, a redundant network is accomplished by each cell or work group hooking into two separate network backbones so that if one is damaged, the system will still operate.

THE PITCH

The pitch boils down into the simple story that there are two components in the factory, Ethernet, which is indeed trivially simple and can be wired up ahead of time as easily as the television circuits in an apartment house, and cell controllers

(or work groups) which tie each sub-group of the factory together.

Digital has built tens of thousands of Ethernet networks; many are in the factory. They are by far the most standard and most reliable, high speed networks. Besides the factory, they are used in the laboratory, the CAD system, engineering, office, warehousing, inventory control, etc.

Digital minicomputers have been used for many years to tie together random protocols and interfaces in the factory with software called BASEWAY. It is difficult to write the software for devices with poorly defined protocol interfaces. As standards are developed for interfaces and protocols this will get easier. There is software written for BASEWAY for many devices that are today used in the factory.

The same BASEWAY computers can be the cell controllers. They can also supply human interfaces and cell management.

Digital offers rugged packaging for its cell controllers for use in the severe atmosphere of a factory.

MAP OUT MARKETED US

MAP won the hearts of the world with a simple, elegant message. They may never deliver but they won the hearts of the people.

Our message terrifies people. We say, tell us your problem and 12 people at Digital can tell you 12 different ways of hooking up an infinite number of pieces of equipment, each with their own code name. Our message is so complex that we can't write it down, and it's so complex that two people at Digital can't give the same story.

THE COMPETITION'S MARKETING PITCH

Let's remember the competition's pitch is simply, you already have a grid of broad band; if we all work together, and standardize on the interfaces, all you have to do is plug any device directly into your grid.

We know that won't work, but it sounds great and ours sounds inconsistent, complicated and, as a result, quite dubious.

Let's publish and maintain a list of all factory devices for which we have BASEWAY software, and let's maintain a description of all the successful Ethernet factories we have delivered.

KHO:ld
KO:967

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Win

Pete's letter attached

DIGITAL EQUIPMENT CORPORATION

MAYNARD, MASSACHUSETTS 01754

KENNETH H. OLSEN
PRESIDENT

23 September 1982

Mr. Peter J. Kaufmann
P. O. Box 152
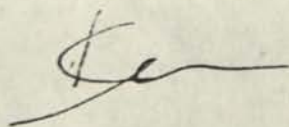Machias, Maine 04654

Dear Pete:

It was good to hear from you again. I am glad to hear
you are still worried about us.

Next time you are in the area, please stop in and
visit. Meanwhile, don't worry about us becoming a
marketing organization. It may appear that we spend
more time helping the marketing area, but that is
because the so-called creative groups have trouble in
doing traditional management and therefore, generating
new leaders and so they take more time. I figure it is
price that sells the product and not any one component
of price. Our immediate goal is to cut out so-called
marketing costs because that is the biggest
contribution to cutting prices, but I am still a
manufacturer at heart.

We are making enormous improvements and gaining
tremendous efficiencies in overhead. If we can keep
this recession going for another year or two, the
Japanese will never be able to touch us.

With best wishes.

Sincerely yours,

KHO:ep

OC Scutfile

September 1982

Dear Ken,

I had the opportunity to work eleven years of my life at digital

and no matter how my life has changed since then, I will always feel a

part of the company. Though, I myself, could never return to

american industry, in any capacity, I wanted to give you my views from

afar.....of your struggles today.

In the late sixties and early seventies, when digital focussed on

marketing for its growth I had misgivings.....for my trip to Japan

had convinced me that ultimately it was the Japanesse not IBM, as Nick

Mazzeresse felt, who would end up as the most formidable competitors.

A joint venture in Japan that Ted Johnson, Ed Schwartz and I proposed

was turned down flatly by the Operations Committee, as they were fearful

of the transfer of technology that might occur.

In both decisions....you were obviously correct.....for the results of the

last ten years show.

But once again, I am called upon to suggest to you that your struggles

 today stem from your success in building a marketing oriented corporation.

The manufacturing organization was also built to service that focus.

Somehow, Ken, it still seems to me that the company that can compete with

Japan in cost, and quality and simplicity is the company that will live.

If it is impossible to turn around the monolith we created then please take

as many resources as you can muster and go after an engineering, manufacturing

and sales organization that is lean enough to compete. (I left out marketing

(Where is Tom Stockebrand?....)   because I have always felt marketing was

immoral.) (Where is Tom Stockebrand ?...)

The U.S. has lost its consumer electronics industry to the Japanesse.

The U.S. has lost its automobile industry to the Japanesse.

Please let us not lose the computer industry to the Japanesse and become

another Chrysler corporation. You are too smart for that.

With great love and humility,   Peter J. Kaufmann alias chip

January 1978

Dear Win,, et al;

By some quirk of fate, your Christmas card actually reached me, though
I am not longer picking up my mail at my post office box........and
it was nice to hear that someone misses my falling asleep at meetings.

As for me, I am alive and well. As you know, I had purchased a piece of
land in the country. Spent the summer in the area......worked as a
carpenter for two months.......wanted to learn how to build a building;
pumped gas at night and an assortment of odd jobs. In the fall, I started
a business consulting firm which specializes in assisting and developing
small, local, privately held companies. (You always did say I would
be a lousy consultant!!) But, as you might have guessed, I operate completely
differently than the normal consultant. I actually tell the owner
what to do, if he agrees, he does it and if he is satisfied with the
results, he pays me for my service. It really is fun, and so far, think,
I am reallying helping some folks.

Recently, I have received an advance from a publisher for me to continue
writing my book. (I remember deciding to write it at the first Operations
Committee meeting in Bermuda, years ago............it is not about Digital,
so no one should get paranoid.) Have found that it takes intense concentration
and discipline to so some worthwhile writing, but so far am really pleased
with my work.

I am presently living on the land I purchased. Over the years, I hope to
deve-lop this piece of land back into farming, as it was used that way,
years ago. Contrary to popular belief, I am not married, nor at the moment
am I living with anyone. As you know, my Irish ex-schoolteacher had the
great foresight to turn down my proposal and is still living in Dublin.
Marriage is probably marvelous for those that are successful at it, but,
I am one of those that has found it to be much too dibilitating and unless
I should soften again, suspect I will go it alone for a while longer.
(Of course, a relationship from time to time......that is different.)

The girls are fine. Karen is on tour, this month, with a professional
dance group and should graduate this June from Hampshire College. She
plans to do consulting work in creative movement.......which I do not
understand, except that it has nothing to do with sex. Jan is at
Marlboro College in Vermont, hopes to be a veterinarian, but may
end up in forsestry or agriculture because the competition is fierce
for veterinarian school.

Shortly after I left Digital, I gave away all the money that I received
from the sale of my dec stock...........that should keep a few lawyers
and accountants busy for years. It feels so nice to be out of retirement
and back to work again, for the past five years have proved that I am not
one who is happy in retirement. Have so many fine memories of Digital
.......so many fine people......and I often think about how much I learned
from chunky Ken Olsen. In retrospect, he is the sweetest, kindess,
most brilliant, manipulative, one dimensional, huckster I have ever met,
and I love him dearly. Hope he is well and happy.

I promised Ed Shein and others that I would keep in touch, so please feel free to show this letter to the Operations Committee, the Manufacturing Staff and anyone else you think interested.

I am happy, contented and at peace with myself and the world.......a state that few people have seen me in.......and hope this letter finds you the same. Am certain that someday, probably soon, my whereabouts will be discovered and become public knowledge, but until then, my very best love to you and the family...........

P Kaufmann

June 1978

Dear Win,

My personal situation has been cleared up and I thought
that I should write to you and tell you my whereabouts.

I am living in Machiasport, Maine....Jay Peter Chipmann,
P.O. Box 152, Machias, Maine 04654.....telephone number,
(207) 255-3052.

Things have gone well for me. Had a quiet winter....
accomplished alot of writing....learned how to plow snow,
until it got ahead of me, as it did for you f olks,...
...then was skiing (1 1/2 miles) in here with groceries..
.....chopped wood and heated by a woodstove.

Since the spring have been outdoors....clearing land and
finishing the house and barn. Am going to spend the
summer also clearing land (15 acres) and f encing. Have
decided to start with goats as they eat alder roots and
hardack....then on to the blueberries, (have options on
an additional 600 acres, 100 of which, are blueberries.)

Have developed just enough of a consulting business to
pay for the truck, taxes, etc. but hope, someday, this
place i s self sufficient.....the consulting has been fun.

Congratulations on your new job.... hope all is well with
you and your family.....my best regards to everyone.

P.S. You might tell "chunky" Ken Olsen that if he is in
      the area canoeing this summer that I'd love to show
him what I am doing......Machias has a small airport...
....when it isn't fogged in.

TO: Ken Olsen
     Win Hindle

FROM: Peter Kaufmann

SUBJECT: Stock Options

Pitt — You will have to file Form 4
— Does this trade constitute a
   "buy"?
— Why do you admit to 2 years?

See Ken —

On May 1 of each year I am required to pay to my ex-wife a substantial capital payment, as well as the usual monthly alimony payments. Each year I have sold stock to make this payment.

My personal lawyer has advised me that SEC Rule 16 B will apply to me for six months after my July 1, 1977 resignation, (see attached letter). Therefore if I sell stock at this time, I will be unable to purchase the options available to me in June. They are as follows:

6/11/73	@	#4.667	2400	R	4 yrs until
7/2/73	@	27.479	4500	Q	why not 6000?
2/24/75	@	24.146	3750	Q	
6/28/76	@	11.00	450	R	
			2850	R	
			8250	Q	
total # of shares			11,100		

I would like to make the following proposal. In exchange for turning back to Digital all of the above excerciseable stock options, would you exchange them and release the restrictions on the "equivalent" number of options which I have previously excercised? They are as follows:

Release Date				
1/3/78	@ #	2.667	1500	R
6/26/78	@	1.667	2250	R
6/26/78	@	1.333	3870	R
1/3/79	@	2.667	1500	R
6/26/79		1.667	2250	R
6/26/79		1.333	3870	R
1/3/80	@	2.667	1500	R
1/3/81	@	2.667	1500	R
1/3/82	@	2.667	1500	R

_____

19,740 R

Whatever you decide is the "equivalent" number of shares will be satisfactory to me and all the remaining previously exercised shares will be returned to Digital.

It would be helpful to me if the "equivalent" number of shares could be released prior to May 1, but if not, then by July 1, 1977.

The above proposal would relieve me of borrowing money, as well as waiting for six months after I leave inorder to sell the shares I need to sell. For Digital, it will relieve the unstated presedent (which I feel strongly should be discontinued) of giving two years worth of stock options to a person leaving the company.

If I could get an indication of your thinking by April 15, I would appreciate it, as if I need to borrow the funds I can make the necessary arrangements by May 1.

Thanks.

PR

Messages - Pete - Don't say yes so easily
- Make more time for company-wide involvement
- watch your overhead.
- Stan - Be more aggressive in new areas (Point of sale)
where you are strongest -
- Andy - Be clearer on your ideas, keep them in front
of us - we don't remember what you said in 1970.
- Al B. - Focus finance on fundamental business - pricy, etc
- More control in overhead - incl. sales & mfg as well
as Corp + PL.
- Gordon - Spend more time in mfg + understand mfg problems -

- Ted - Be flexible on sales/service org. of the future -
- Watch your overhead.
- Be clearer in your ideas
- Win - Get Personnel to set mechanics straight
- Get PLM to focus on key market issues, set
down plans + needs -

ANDREW C. KNOWLES
VICE PRESIDENT

February 11, 1983

Mr. Kenneth H. Olsen
President
Digital Equipment Corporation
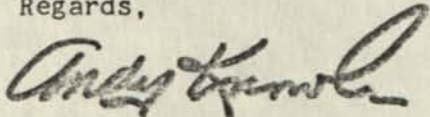Weston Road
Lincoln, Massachusetts 01773

Dear Ken:

There comes a time in everyone's life and career when you must
assess where you are and going. Frankly, this past year has been
a very difficult one for me in that there has been lots of stress
and pressure, and really it's no fun being here anymore. I can
take the pressure if I feel what I am doing is fun. Given it
isn't, I would like to resign from the Company effective
July 1, 1983. As of now, I have no definite plans other than to
maybe take some time off.

It has been a rewarding 13+ years for me at Digital. I will
fondly remember my days with the PDP-11, the Small Computer
Group, the Components Group, and the Technical Group!

Your continued success is certainly my wish. Digital, as the
seventh most respected company in the U.S., certainly has a
bright future and you and your colleagues should be complimented
for the kind of Company and business you have made happen.

Regards,

Andrew C. Knowles

ACK

unbought { 13,314 today
            712 more 2/1/83

owned   1200 will lapse between
             now + 2/1/83

12/15/76
12/14/76
10/19/
11/17 /̶2̶/̶4̶/̶7̶4̶ + 11/26
12/7 /̶2̶/̶4̶/̶2̶6̶

ACK

digital

17 September 1982

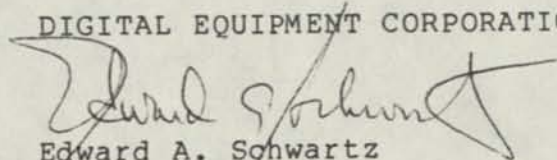Mr. Stanley C. Olsen
5 French Drive
Bedford, New Hampshire 03102

Dear Stan:

I am sorry I have not responded to you sooner on the subject of your retaining certain shares purchased by you under the original Restricted Stock Option Plan; however, as you do know, this was a much discussed issue by the Board of Directors.

I am pleased to state, on behalf of the Company, that the Compensation and Stock Option Committee has elected not to repurchase the 1500 shares of stock which you presently own and purchased under a grant dated 21 June 1981, which would have vested on 4 August 1982. This election withdraws the letter from us dated 9 July 1982 which requested the shares.

We are all pleased with this result and believe that the mutual good will between you and the Company has been preserved.

Sincerely,

DIGITAL EQUIPMENT CORPORATION

Edward A. Schwartz
Vice President & General Counsel

EAS/jp

cc: Win Hindle

SEP 17 1982

| | | | | | | | |
|d|i|g|i|t|a|l| I N T E R O F F I C E   M E M O R A N D U M
| | | | | | | |

DATE: 9/13/82
FROM: Darman Wing
DEPT: Law
EXT: 223-2206
MS: MSO/M6

TO: Ed Schwartz

CC: Win Hindle
Bob Steinbach

SUBJ: Stan Olsen

On Friday, September 10, Win called to pose a question raised by Arnaud deVitry: In electing not to repurchase Stan's 1,500 shares, are we establishing any legal precedence which would obligate us to do the same for others in the future?

In response, I pointed out that while the election not to repurchase Stan's 1,500 shares is in fact a "first", it will not create any future duty to act similarly. I explained that repurchases are wholly discretionary on a case by case basis and will continue to be, that our review of past actions involving other officers who have left show that no fixed standard is applied, and that past treatment of others was unique to each situation. Thus, Stan's treatment would be but another example of treatment fashioned to fit the circumstances: to maintain good will with a founder, a 25 year employee, a significant contribution to the business, etc.

DAW/jp

digital

April 18, 1969

Mr. W. Brewster Kopp
134 Coolidge Hill Road
Cambridge, Massachusetts

Dear Brewster:

We are all very enthusiastic about having you become a member of the management team of Digital Equipment Corporation. We wish to offer you the position of Vice-President, Finance.

During this period of time when we have not had the position filled, we have been able to see the weaknesses in our financial organization, and have developed some ideas as to what we desire to have in the future. As we review these ideas, we are convinced that you are just the one we want to fill the position.

We would like you to take on all the financial responsibilities, which include stock-holder relations, contact with financial analysts, banking, selling of stock, raising of funds, all the functions of controllership, EDP, and budgeting. In addition, we feel an important part of this position is teaching and helping our product line people to understand their operations, carry on their budgeting, prepare their pricing, and, in general, operate in a profitable, businesslike way. We feel that the legal activities should also come under this title, and, in addition, those chores which you might be better suited to run than anyone else in the management team.

3 for 1 split made this 15,000

We would like to offer you a salary of $60,000 (sixty thousand dollars) a year, and ←options for 5,000 (five thousand) shares of DEC stock. Enclosed is a brochure describing our stock option plans. We would like to give you the choice as to how you would like the 5,000 shares divided between the two plans, up to half in the Restricted Plan. I believe the price in the Restricted Plan will be half the market price.

I will be out of town all next week, but Win Hindle and the other Vice-Presidents will be here and will be happy to answer any questions you might have.

Sincerely yours,

Kenneth H. Olsen
President

KHO:ecc

May 6, 1969

Mr. W. Brewster Kopp
393 Fifth Avenue, N. W.
Boca Raton, Florida 33432

Dear Brewster:

We reviewed the points that came up in our discussion last Wednesday
night, and I think we have some answers that should please you.

We feel we have to hold the salary offer firm, but I would like to lower
the price of stock in the Restricted Plan. Next Monday, I plan to go
to our Board of Directors and ask that it be fixed at ~~$20.00~~ per share $15
for the Restricted Plan. I think this would make it quite attractive.

We would very much like to have you take on the responsibilities for
planning and operations research (if we find use for it). Later, if it
still seems worthwhile, Win Hindle would like to be relieved of his
responsibilities of Personnel.

We feel that we cannot offer a title beyond vice-president, nor can we
offer a directorship.

We do hope that you will see your way clear to join our team. The
financial department has to be completely rebuilt, and we have tremendous
challenges ahead in the dramatic growth we're planning for next year.

We are confident that you can be the one to complete and share in the
excitement of growth we see before us.

Sincerely yours,

Kenneth H. Olsen

KHO:ecc