

TO: Executive Committee Abbott Weiss DATE: November 7, 1988 FROM: Win Hindle DEPT: Corporate Operations EXT: 223-2338 LOC: MLO12-1/A53

SUBJ: STRAW PROPOSAL FOR ORGANIZATION MOVES

I believe that with a very few organization changes, we could simplify the Company and make it much easier for everyone to get their jobs done.

First, I propose a set of PRODUCT-BASED BUSINESSES reporting to Jack Smith. Second, we should continue with the set of SERVICE-BASED BUSINESSES reporting to Jack Shields, with a minor adjustment. Finally, we need a MARKETING manager reporting to Ken and a member of the Executive Committee. The rest of the structure would remain the same. Following are more details of the proposal and the people I suggest to run the businessess:

A. PRODUCT-BASED BUSINESSES

1.	Desk Top Products	-	Terminals, Work Stations, and PCs - Dom LaCava
2.	Large Systems	-	Aquarius, OLTP, and Fault Tolerant Systems - Bob Glorioso
3.	Small Systems and Servers	-	Calypso and MicroVAX Systems - Bill Demmer
	a		Bill Johnson

4. Networks - Bill Johnson

These four group managers should be the new Systems Task Force that listens to proposals from all other engineering groups and passes judgment on the engineering budget. Bill Strecker's current Systems Task Force should be changed to the Technology Strategy Committee with a mission to ensure that our base technology and research directions are competitive. **B. SERVICE-BASED BUSINESSES**

1.	Field Service	-	As it is today - Don Zereski
2.	Systems Integration	_	Enterprise-wide systems and consulting, and large special projects - Don Busiek
3.	Support Resources	_	Education Services, CSS, and PSS -

I also propose that a U.S. Manager be named right away to take the same responsibility in the U.S. as Pier-Carlo Falotti has for Europe. I propose Dave Grainger in that position and Chick Shue becoming the Marketing and Sales Manager for the United States. Europe and GIA should not change from their current structure.

Pat Cataldo

C. MARKETING FUNCTION

I propose that we combine the product marketing function with Industry Marketing. The new marketing group's task should be to understand market needs, propose market strategy, build or acquire application products, and define system requirements to the engineering organization. I propose Pete Smith for this position.

WRH:DK

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TO: Jack Smith Jack Shields Jim Osterhoff John Sims Win Hindle Abbott Weiss

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DATE: 16 November FROM: Ken Olsen DEPT: Corporate Administration M/S: ML012-1/A50 EXT: 223-2301

FC.

SUBJ: PROBLEMS FOR JACK AND JACK TO SOLVE

I'd like Jack Smith to do the following things:

- Organize a budget in detail so the infinite number of small jobs get reviewed and those that are duplicated get cut out and those that are not necessary get cut out. When new projects come, we should staff them from people who are doing unnecessary work.
- 2. Lead the transition from CPUs to complete products.
- 3. Each plant should be autonomous do their own budgeting and planning and be treated like mature, experienced, and competent managers.

 Have marketing become a service to the salesman enough to fill corporate goals.

5. Offer packages with published prices and then enclose all services and installations.

I plan, personally, to:

- 1. Drive the program of giving all responsibility for budgeting, planning, and decision making to the district offices and eliminating most of the staff in the areas and headquarters.
- Develop the feeling that the salesman is the important one and everyone else in the Company is there to serve him.
- Have one database for all orders so the salesman does not have to worry about following orders through the whole Company.

4. With great detail and effort, go over every single aspect of the overhead of sales and cut out all staff and other overhead functions that aren't necessary particularly in the areas and in headquarters.

KHO:dao KO:2385 DICTATED ON 11/15/88, BUT NOT READ

E.C. fecd 11/16/88 Handdelivered

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TO: Jack Smith Jack Shields Jim Osterhoff Abbott Weiss John Sims Win Hindle DATE: 16 November FROM: Ken Olsen DEPT: Corporate Administration M/S: ML012-1/A50 EXT: 223-2301

CC: Pat Spratt

SUBJ: ORGANIZATION OF 1990 BUDGET

I'd like to decide immediately on how we are going to do the 1990 budget. The Controllers have organized some ideas which we should consider on Thursday.

I think it's agreed that we should do our budget by business units and not by services. The business units should include in their budget the cost for field service, software services, planning, manufacturing, and so forth.

All cost centers should have a report of the costs they incur every week or every two weeks. They should be sent to individual cost centers and summarized for the business units and for the services.

We should report on revenue and profit each month for all field operations as we do today and in addition for the business units. Each of these groupings should add up to the revenue and profit of the corporation.

We should decide on the business units and who is responsible for each one and get the first pass at the three-year budget during December. There should be a business unit and a budget for every new category that we want to grow into in the next few years, such as small businesses and large scale integration.

Each business unit will have to consult with the services on what it will cost to accomplish what they want to accomplish and to work out different options in order to accomplish their needs.

Business units will budget product and services for the U.S. The other countries will look at these plans and decide how much they will commit to in their country from each of these business units so that all the other countries will still make their own budgets except maybe Canada. We may want to combine Canada with U.S. again. In general, the business units will naturally have their own engineering and will naturally have their own marketing.

The budgeting system should be detailed enough to be a real strategic plan and a real business plan and it should force us to think of what we want to do year after next and the year after that. However, it cannot be so complex that it takes an overwhelming chunk of our time. Each of the groups has a task to do and budgeting is to help, not in the place of the job.

KHO:dao KO:2381 DICTATED ON 11/15/88, BUT NOT READ

CORMTS ALL-IN-1 SYSTEM

Date: 28-Nov-1988 01:03pm EST From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301

Background

TO: See Below

Subject: 1990 U.S. FIELD BUDGET

I would like to propose some changes in the field organization for the 1990 U.S. budget. We should start very soon on the 1990 budget, and so we should make these decisions very quickly.

DISTRICT OFFICES:

I would like the responsibility for decision making clearly divided between U.S. Headquarters and the U.S. Districts.

I clearly did not say the power or authority to make decision, I said the responsibility for decisions. We will report weekly, monthly, and quarterly on all the business done in each district, and it should be very obvious which decisions were wise and which were unwise, and whether decisions were made at headquarters or in the district.

Each district will make a complete budget. Budgets as proposed may not be accepted, but when they are finally accepted, it is clearly their responsibility to make their budget work.

The districts will budget their space and facilities. They will budget personnel which includes the breakdown between sales and sales support, and any other support personnel.

Their budget will include software services, field service and education, although, the services will continue to be business units with their own P&L.

They will budget the orders and it is expected, in general, that the salesmen will make their budget. The budget will tend to be broken down to match the various parts of the corporation.

Each month we will publish how they have done in absolute dollars and against budget, and we will publish a list ranking districts by performance to plan, growth, and cost of sales. The orders will be placed by the salesmen directly into one database at headquarters. This could be done with a lap computer at the customer site. For orders that need no coordination or for orders that were coordinated ahead of time by the district manager, there will be an instantaneous acknowledgment.

For those cases that the computer flags for review, the central database will be committed to give a response in two days.

Ahead of time, before the order is the placed, the District Manager will be responsible for coordinating unusual discounts, orders that cross district boundaries, orders with national accounts, or those that are watched for special reasons.

HEADQUARTERS:

Headquarters will manage the order processing system so that when orders are placed electronically in the central database and electronically acknowledged, a copy is sent to every portion of the corporation that is participating in that order. Headquarters will make sure that this is followed up and reviewed, and will take responsibility for all changes. This should immediately free the salesman to spend all of his time on getting orders rather than following up with various parts of the company. When the order is ready for shipment, this database should check to make sure all the components are there and that they are correct.

Headquarters will supervise the National Account Managers and make sure that they help the salesman and are not more red tape.

Headquarters should make sure that all work is coordinated readily and efficiently between districts.

FIELD SERVICES:

Software Services and Field Service should have an international organization plus a national and a district organization. Actual business decisions are made at the district sales level, but the Field Service organization will still have a P&L statement and a budget, and be responsible for managing the operation.

In addition, there will be a systems integration organization made up of Field Service and Software Services. They will take on large projects. They will be a business unit and will make business commitments with the authority and power to staff them and complete them even though the people come from regular field operations.

The field organizations work for the districts and they work for the systems integration organization and they are responsible to make sure that the needs of these groups are met and that people are optimally used between them.

MARKETING:

The job of marketing is to serve the salesmen. They are to give the salesmen all the services and help they need. They will be independent business units and so their goals, their results, how helpful they are to sales, how efficiently they spend their money, and the results they get will be readily measured.

ACTs will be their responsibility. They will justify the expenditures by the results, and they will take responsibility for increasing or decreasing the expenditures in their own ACT. The ACTs will be staffed, managed, watched, supervised, and probably scheduled on a daily basis by the appropriate marketing group. The ACT is an arm of the marketing group. This is not an automatically funded overhead sales expense.

Marketing groups will also fund DECworld, golf tournaments and traveling shows, and they will be funded only when they are justifiable and not goals of the marketing group.

I would like your comments by tomorrow morning, November 29th, before I meet with the area managers.

KO:2419 (DICTATED ON 11/27/88, BUT NOT READ)

Distribution:

TO: Win Hindle TO: Jim Osterhoff TO: John Sims TO: Jack Shields TO: Jack Smith

CC: Abbott Weiss CC: Don Busiek CC: CHICK SHUE CC: Dave Grainger (HINDLE.WIN)
(OSTERHOFF.JIM)
(SIMS.JOHN)
(SHIELDS.JACK)
(SMITH.JACK)

(WEISS.ABBOTT)
(BUSIEK.DON)
(SHUE.CHICK)
(GRAINGER.DAVE)

CORMTS ALL-IN-1 SYSTEM

Date: 28-Nov-1988 05:22pm EST From: Win Hindle HINDLE.WIN Dept: Corporate Operations Tel No: 223-2338

Buckyound

TO: See Below

Subject: COMMENTS ON "1990 U.S. FIELD BUDGET" (11/28/88 MEMO)

- 1. There should be some statements about the responsibility of the areas. Since there are 60 districts in the U.S., the area manager position must continue. I believe the areas should provide the national and international account coordination for sales and for the services. Also, they should provide shared customer support that cannot be economically put in place at each district. In addition, the area managers should be Digital's primary sales executives involved in building long-term business relationships with customers in their areas.
- 2. It was not clear whether you intended that the systems integration business be a part of each district and budgeted by each district. I suggest that the systems integration business should be a part of each district and a part of the district budget, but that it be managed as a separate business unit.
- 3. I believe the ACTs, DECworld, traveling shows, and golf tournaments (in fact, all direct sales-support functions), should be proposed by marketing groups as an aid to Sales. However, these programs should only be funded if Sales approves and sees the benefit to them as a part of sales overhead. If Marketing is able to proceed ahead on these supporting programs without Sales approval, we could create far too many overhead programs that are not worth the investment and place unnecessary demands on precious sales resources.

WRH:BC COR.2589

Distribution:

TO:	Remote	Addressee
cc:	Remote	Addressee

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(KEN OLSEN @CORE)

(JACK SHIELDS @CORE)
(JACK SMITH @CORE)
(JOHN SIMS @CORE)
(JIM OSTERHOFF @CORE)
(ABBOTT WEISS @CORE)
(DON BUSIEK @OGO)
(CHICK SHUE @MRO)
(DAVE GRAINGER @OGO)

INTEROFFICE MEMORANDUM CORMTS ALL-IN-1 SYSTEM Date: 28-Nov-1988 05:09pm EST From: Abbott Weiss WEISS.ABBOTT AT A1 at CORA a Dept: Administration Tel No: 223-3996

Background

TO: See Below

Subject: 1990 U.S. FIELD BUDGET

In response to your memo on the 1990 U.S. Field Budget, I have four comments:

- 1. I believe there is a role for Area Teams in all functions which you could make clear. This role would include at least three pieces:
 - a). Help and guidance for Districts
 - b). Leadership/modeling of cross-functional collaboration
 - c). Critical mass for some programs --closer to the customer than Headquarters --appropriate size for the work and resources required, e.g. training, Corporate and National Accounts, etc.
- I would keep the supervision of Corporate and National Account Managers as it currently is. I have a limited view of this, but from what I see:
 - a). We have just moved the reporting relationship to geographies from Headquarters in the past few months.
 - b). This has caused much improved communications.
 - c). It appears to help cause better integration with Sales and Service people in the geographies, where most of the people and the work are.
- 3. "The job of Marketing is to serve the salesmen". To this I would add "short and long term", so that we have some key resources focused on the things we should do today to make selling easier a year and a half from now.

4. You have proposed that the ACTs will be staffed, managed, supervised, and even scheduled by the appropriate Marketing Group. I would recommend that instead, the ACTs be managed by Software Services as they are today, but that each one becomes the responsibility of the appropriate Marketing Group and is funded accordingly. My rationale is "if it ain't broke, don't fix it". I have heard consistent support for the ACTs today as they are currently being run. Perhaps there is a need to add a stipulation that there should be no geographic boundaries on who uses them.

Hope this is helpful.

/cas

Distribution:

TO: KEN OLSEN @CORE

CC: CHICK SHUE @CORE CC: DAVE GRAINGER @CORE CC: DON BUSIEK @CORE CC: JACK SMITH @CORE CC: JOHN SIMS @CORE CC: JACK SHIELDS @CORE CC: JIM OSTERHOFF @CORE CC: WIN HINDLE @CORE

CORMTS ALL-IN-1 SYSTEM

Date: 22-Nov-1988 09:49am EST From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301

TO: See Below

Subject: "OVERHEAD BUDGETING" FOR 1990

There are two things I'd like to make clear as a result of our 1990 budgeting.

- 1. I'd like to be very clear, albeit not completely precise how much new product investment, how much sales investment, and how much marketing investment we are making in each market?
- 2. On the assumption that overhead is a creeping pestilence that will take over the land if not stopped and on the assumption that we have probably passed the day when we can keep increasing prices to cover the overhead we would like to keep adding, I'd like to report on each one of our financial statements, the overhead components, product development, and selling.

I'd like each business unit to budget new product development which would include their portion of central engineering, their portion of systems engineering, and special software. For both components of new product development, I'd like listed direct cost, personnel payroll overhead, other overhead, and the total. (The percentage of direct costs that are overhead functions performed by those people who are counted as direct cost.) For the engineer who is considered direct cost, how much of his time is spent on overhead functions? Today, some salesman would claim that 75 percent of their time is spent in overhead functions satisfying the overhead people in the corporation. These numbers don't have to be precise, but if they are published, it would give us a feeling and those people whose time is estimated this way would readily gives us an opinion as to whether we are right or not.

Under selling, I'd like to do the same.

I assume that marketing is either part of the systems cost or it is overhead to selling so all marketing should be broken down into these two components.

In summary, every marketer is either an overhead to selling or a new product developer and every one in new product development is either a direct developer or an overhead person.

This may sound unbearably honest and it does go against the tradition that overhead people are the primary reason for the organization.

KHO:dao KO:2412 DICTATED ON 11/21/88, BUT NOT READ

Distribution:

TO: Jim Osterhoff TO: Win Hindle TO: John Sims TO: Jack Smith TO: Jack Shields TO: Abbott Weiss TO: Remote Addressee TO: BRUCE J RYAN @CORE (OSTERHOFF.JIM)
(HINDLE.WIN)
(SIMS.JOHN)
(SMITH.JACK)
(SHIELDS.JACK)
(WEISS.ABBOTT)
(PAT SPRATT @MLO)
(RYAN.BRUCE J)

"F.C. Backgourd attached KD

CORMTS ALL-IN-1 SYSTEM

Date: 28-Dec-1988 03:48pm EST From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301

TO: See Below

Subject: MORE ON 1990 BUDGETING PROCEDURE

The goal of the 1990 budgeting procedure is to give a vehicle around which to make decisions and to <u>make everything open and</u> formal. Today, the organization is set up to hide budget decisions so that they're not obvious, and the feeling of managers is that they are, therefore, political; and they spend a very, very large percentage of their time politicking to make sure that their projects are funded and they're not destroyed.

We keep searching for ways of organizing that will make budgeting decisions automatic. They are the decisions which make management, and there is no way around them except to work on them. The way we set about to do this budget will give us the information necessary to make decisions, and it will present the commitment of the manager who's going to do a job along with what he proposes it will cost to get it done. This is quite different from the approach which the Corporation decides what they want to do, and they will hire people who are then lacking in the commitment to the plan.

Today, we break the organization down into the traditional pyramid so that no one has a large number of people working for him. The unfortunate result of this is that every time a project is given to someone to manage, he feels that the budget for that project is his to stand as he sees. Every time there is a decision to be made, there is a tendency on his part to use those funds in the project which he thinks are most important to himself.

For example, we gave channels and small business to the North American operation to run. It sounds like a good place to do it. The result is that every dollar which is spent on small business and channels is one dollar not spent in the North American sales operation. Decisions are not made in the wisdom of a plan or made relative to the good of the Corporation, but instead, are weighed to determine which money is more desirably spent on small

business and channels or North American sales.

This is the way we use to run Europe. We would limit how much money we would give to Europe because we didn't think they could manage any larger growth. They took this as an implication that we could only afford so much money, and it was their job to distribute that among the European countries according to their wisdom. The managers of Europe came from the four largest countries and, of course, as you might expect, their wisdom said that all of that growth money should go to the four largest countries.

Today, each country budgets itself, and we make a commitment, supposedly, according to the wisdom of that plan and not with the idea that if we give a dollar to Belgium, we take it away from the U.K.

Europe did very well as soon as we made a change, because the budgeting is a commitment by the people who are going to make things happen. When a country makes a commitment, they have an enormous feeling of obligation to make it happen. When the plans were made in Geneva and bore no relationship to the problems and to the potentials of the country, there was no commitment.

DECISION MAKING

I propose that the rules for the rest of 1989 and all of 1990 are that we hire no professional people. Any growth we want to accomplish in certain areas will have to be done by recruiting people from areas which are less important. This means that we will hire no salesman for the field, but instead, we will develop them from extra field service personnel, headquarters' people, or area staff. It also means that if we increase the efficiencies of the sales people by a large factor, we will end up with a very large increase in sales activities.

We, then, should have a budget from each activity in the Company that we plan to continue or start. For example, I have asked that Jim Liu make a budget for the things he thinks are important for SERIAL lines, Ethernet, and office networking. I have also asked Bill Steul and others to ask Jim to include in his budget all those things that they think are critical to the businesses we plan to go into.

I told Bill Johnson that this should be Jim Liu's proposal of what Jim Liu would like to commit to and should not be limited by the fact that Bill Johnson or John Adams looks at the total networking budget and considers anything spent by Jim Liu as taking away from high-speed token rings.

Bill Johnson comes back with the obvious question, "How will the decisions be made if we get all of these proposals?" My answer is, you have two choices, you can let it be done secretly by John Adams weighing his own projects against Bill Steul's projects or we can have them all out in the open and then work the problem with all the information available to us.

KHO:dao KO:2539 DICTATED ON 12/28/88, BUT NOT READ

Distribution:

TO: Jim Osterhoff TO: Win Hindle TO: John Sims TO: Jack Smith TO: Jack Shields TO: Abbott Weiss (OSTERHOFF.JIM)
(HINDLE.WIN)
(SIMS.JOHN)
(SMITH.JACK)
(SHIELDS.JACK)
(WEISS.ABBOTT)

CC: Remote Addressee

(PAT SPRATT @MLO)

INTEROFFICE MEMORANDUM

CORMTS ALL-IN-1 SYSTEM

Date: 28-Dec-1988 09:09am EST From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301 KO

FC.

TO: See Below

Subject: MEASUREMENT FOR FIELD SALES

Allocating a certain percentage of total sales for discounts to each district doesn't always create the optimum decisions. If we give each district a certain percentage to give away as discounts, you can be sure they'll give exactly that percentage.

Instead, I'd like to have a more realistic measurement. For example, suppose we make an approximate formula for the profit of each sale and then measure people on how much of that profit they can earn for the Corporation.

One possible formula would be to take the sales price, subtract 75 percent plus the discount and allowances, and call that calculated profit.

This formula would mean that a district could earn 25 percent calculated profit with no discount or allowance, but zero profit if they gave away a 25 percent discount or allowance. We might use a different set of numbers for different products.

If you have a better formula, please bring it up and let's see if we can't, this next year, have a better way of measuring and motivating the field.

KHO:dao KO:2538 DICTATED ON 12/27/88, BUT NOT READ

Distribution:

TO: Jim Osterhoff TO: Win Hindle TO: John Sims TO: Jack Smith (OSTERHOFF.JIM)
(HINDLE.WIN)
(SIMS.JOHN)
(SMITH.JACK)

TO: Jack Shields TO: Abbott Weiss

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(SHIELDS.JACK) (WEISS.ABBOTT)

14

INTEROFFICE MEMORANDUM CORMTS ALL-IN-1 SYSTEM

Date:

From:

Dept:

Tel No:

21-Dec-1988 10:52am

Ken Olsen

OLSEN.KEN

223-2301

Administration

TO: See Below

file: E.C

Subject: PURITY, CONSISTENCY, AND RALPH WALDO EMERSON

We set impossible goals for our organization. We somehow have gotten the idea that every part has to be organized exactly the same way because there is some unknown rules for consistency, and we also seem to believe that if we organize correctly and measure wisely, we don't have to do any planning or managing and that things will all happen in a good way.

Our neighbor in Concord, Mr. Emerson, once said that "consistency is the hobgobling of little minds." I want to start off with the assumption that consistency doesn't solve problems, measurements solve problems but plans and management do make things happen.

I want a plan for some industries, when it's needed, and I want a plan for every group of applications we go after with which we can justify investments, measure them, and manage the operation and, above all, I want only one layer of marketing. I want it completely clear to the people in the field who is responsible for the marketing of any one product.

In general, I would like the application and marketing for any one segment to be done in one place with one budget, one plan, and one group held completely responsible. Their plan would include the ACTs, the golf tournaments, DECworld, and all other marketing activities today that get lumped under overhead.

I think we should have a group within the field that carries on many of the goals we set for industry marketing such as planning.

I think it's clear that another group should do the same thing by customer to make it possible to manage our approach to all customers and to all industries. However, in no sense, would I make these groups conduits for marketing information between the field and the marketing group.

Then, I would freely make exceptions where it appears to be a

good idea. For example, I believe that it is likely that for the newspaper business all the planning, all the application acquisitions, and all the management should be done by Bob Farquhar in the field with no duplication in applications marketing.

I think we should freely make our organization fit the needs, no two marketing problems or application problems are alike and it's impossible to force them into the same mold.

KHO:dao KO:2522 DICTATED ON 12/20/88, BUT NOT READ

Distribution:

TO: Jack Smith
TO: Jack Shields
TO: Win Hindle
TO: Jim Osterhoff
TO: John Sims
TO: Abbott Weiss
TO: Bob Hughes
TO: PETER SMITH

(SMITH.JACK)
(SHIELDS.JACK)
(HINDLE.WIN)
(OSTERHOFF.JIM)
(SIMS.JOHN)
(WEISS.ABBOTT)
(HUGHES.BOB)
(SMITH.PETER)

Lotte E.C.

CORMTS ALL-IN-1 SYSTEM

Date: 12-Dec-1988 02:34pm EST From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301

TO: See Below

Subject: HOW TO BUILD A RUSSIAN COMPUTER

The Russians are very rational, logical, and organized. It is difficult to argue against their way of building computers.

They have one group which organizes the goals, needs, characteristics, and the specifications of the computer. It is then turned over to another group who designs the computer and is turned over to another group that develops the technology and implements the design. This is then turned over to another group which makes the design ready for production and then it is turned over to production and to another group which tests it and then delivered to the customer.

The computer rarely works, and the customer is never happy. There is a lot of finger pointing and everybody hates each other.

When variations of this approach to product development are proposed or pronounced, they have meetings and have a difficult time finding out what's wrong with it because it sounds so logical. We very rarely see papers proposing this approach to product development because it is never successful, but even so, it is often accepted because one feels he can argue against the clear, valid logic in this approach. A variation of this that we tried using (those five years we went without products a short time ago) was the variation of this that we tried doing our marketing for the last period of time. It is usually proposed by managers who cannot, themselves, take complete responsibility and, therefore, assume no one can be trusted to take complete responsibility.

They only way I know to make a complex project satisfactory is to have one team with one leader responsible for the project all the way through from conception to complete customer satisfaction.

1990 BUDGET

Having concluded the 1990 budget, we have to eliminate all artificial barriers to responsibility and communication and for every project, one leader has to be completely responsible. Their job is only done when the customer is completely happy. The goal is never to meet arbitrary specifications or to fill in organizational charts but to make the customer happy.

Goals also are not to over commit the Company, not to do more than possible, and to do it profitably. This will only be done with one team with that responsibility which is responsible for the budget and all the planning.

In a group, no leader has authority over all the suppliers he is depending on, but he still has the responsibility to make the budget and the plan that will work and will be profitable.

SYSTEMS ENGINEERING

I concluded that systems engineering has to be the responsibility of the computer design group. Lipcon, Demmer, and Glorioso for their systems have to take the responsibility for integrating all the components necessary to supply systems for the various applications. We can have a separate systems groups who tie disks, tapes, printers, readers, and so forth to make systems. These groups will have to limit their development of computers and take broader responsibility to make sure we offer complete systems.

MARKETING

We now have many and many layers of marketing and nothing goes out to the salesman. We will not argue any longer about whether we organize marketing by industry or by application. It should normally be done by application because the first job of the marketer is to realize that we can only afford a tiny number of applications each year and decide which ones these are and to do a marketing to offer those to the customers. His job is to pick that tiny number of applications that we can afford, and that we can get completed to not only make the customers satisfied but enthusiastic. We must be sure that those applications are well done, tested, and meet all Digital standards. He has the responsibility to be sure that we satisfy the customer both by delivering and by quality.

He is responsible to find out what can be done, who can do it, figure out how this fits into the budget, and how the return will be made. He is responsible to figure out ahead of time if the delivery will be made on time and on budget. He knows ahead of time about the risk of an earthquake, fire, storm, and late delivery by engineering, and, if he can't make a plan that takes these into account, he should turn down the job or make a plan that will be possible, still profitable, and satisfy the customer. The marketer has to live with engineering, live with the third party application supplier, and still spend twenty-four hours a day with each of the customers with the goal of helping, supporting, training, teaching, encouraging, and inspiring every salesman.

The marketing group and the manager take complete responsibility, and there can be no finger pointing. There will be no division of labor with other marketing groups.

The break down of groups for budgeting will sometime be labeled by applications and sometime labeled by industry but the budgeting will be done by application. One group might be labeled banking and insurance, each of the applications or a group of applications will be budgeted, and all the measurements will be made by that application.

Our office group under Henry today has All-In-One, desktop publishing, imaging, and data processing, and we will keep them in the office group, but each one will be budgeted individually by a separate individual.

KHO:dao KO:2493 DICTATED ON 12/11/88, BUT NOT READ

Distribution:

TO: Jim Osterhoff TO: Win Hindle TO: John Sims TO: Jack Smith TO: Jack Shields TO: Abbott Weiss (OSTERHOFF.JIM) (HINDLE.WIN) (SIMS.JOHN) (SMITH.JACK) (SHIELDS.JACK) (WEISS.ABBOTT)

NO Lfite E.C.

CORMTS ALL-IN-1 SYSTEM

Date: 12-Dec-1988 03:22pm EST From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301

TO: See Below

Subject: THREE LAYERS OF SYSTEMS SOPHISTICATION

I think there are three layers of sophistication in computer systems marketing. The first, which is the one Digital is good at is OEM-type marketing. Here, we expect the customer to take all the responsibility, the customer has to learn the technology of the details we are not interested in. This might include SERIAL line technology or it might integrate third-party software, or all the things that Digital is not interested in doing in order to make the product work.

The second layer of sophistication is what we call solutions. This is where the customer is smart enough to understand what his problems are, and he has a good feeling of what to ask for. He studies the literature, he knows all of his competition, he knows about their successes and failures, he knows what all our competition offers and about their successes and failures, and he knows exactly what he wants to ask for. This is the level of sophistication that we are trying hard to obtain, and we have made some successes; but there is a limited number of companies that are smart enough to compensate for our limited sophistication. These tend to be the customers who are aggressive enough to come after us, and we think this is the world of computer users.

The third level of sophistication is where we go in and tell people what their problem is, what the solution is, and convince them that we can do the whole thing for them. When they give us the order, we tell them how to run that part of their business. This is the area which I believe is the overwhelming available business to us. We can prove it doesn't exist because the only people we talk to are the first or second level, and we have no communication with the third level because they don't even speak our language, don't know our words, and they can't even communicate with us.

It might be many years before Digital is emotionally ready to

face the third category. We were taught in school that you listen to the customer and do what he wants, and the only customers we listen to are those in the first and second levels.

Until the present layer of vice presidents retire, I don't think we can change Digital, but I would like to see if we can't sneak a few ideas in through your small business and retail operations. Today, we are successful in some retail and some small business, but we are dependent on the smarts of the customer. It's obvious that an enormous percentage of today's American retail organizations are doing a terrible job, and many of them are failing. They do need someone to show them how to do the operation and IBM is not at all successful in doing so.

We have, at times, had products in the third category. Typesetting at one time was one of these, but the OEM mentality exerts enormous pressure on anyone trying to do things differently and in time, we turned the typesetting business into a OEM-type operation.

Why don't you see if you can make your operation an island of sophistication within the high tech world of Digital.

KHO:dao KO:2500 DICTATED ON 12/11/88, BUT NOT READ

Distribution:

TO: JERRY WITMORE

CC: Jim Osterhoff CC: Win Hindle CC: John Sims CC: Jack Smith CC: Jack Shields CC: Abbott Weiss (WITMORE.JERRY)

(OSTERHOFF.JIM)
(HINDLE.WIN)
(SIMS.JOHN)
(SMITH.JACK)
(SHIELDS.JACK)
(WEISS.ABBOTT)

F.C. TO

CORMTS ALL-IN-1 SYSTEM

Date: From: Dept: Tel No:

1-Dec-1988 11:11am EST Ken Olsen OLSEN.KEN Administration 223-2301

TO: See Below

Subject: THE COMMODITY BUSINESS

I'd like to make the commodity business separate from the rest of the Company. I'd like to sell terminals, PCs, and workstations with a completely different set of accounting, distribution system, and discount system. I'd like it treated as if it was a completely different company and there are no cost discounts.

I'd like to price low. I'd like to assume that the low price makes selling costs low and then the resulting cost will increase the total profit even though the price has been lowered.

I believe that you take into account the price, the selling cost, and resulting ease or difficulty of selling the optimum profit will come from a low price. Low price not only makes selling very cheap but it also makes growth very large.

I'd like the burden on the salesman to be very small. I'd like to eliminate all the red tape we have today, but I would like the salesman to break his orders into three pieces:

- 1. DECdirect
- 2. Systems
- Commodity

The <u>commodity discount should be dependent on the quantity</u> ordered at any one time for a one-time delivery. We probably should advertise the price for quantities of ten and there should be <u>no cumulative quantities</u> that we have to keep track of, and above all, they should not bear any relationship to other business they do with Digital.

Will you please lay out for me how you would organize this

business and the discount policy, particularly, taking into account distributors and OEMs.

KHO:dao KO:2473 (DICTATED ON 12/1/88, BUT NOT READ)

Distribution:

TO: JERRY WITMORE

CC: Dom LaCava CC: Jay Atlas CC: Jim Osterhoff CC: Win Hindle CC: John Sims CC: Jack Smith CC: Jack Shields CC: Abbott Weiss (WITMORE.JERRY)

(LACAVA.DOM)
(ATLAS.JAY)
(OSTERHOFF.JIM)
(HINDLE.WIN)
(SIMS.JOHN)
(SMITH.JACK)
(SHIELDS.JACK)
(WEISS.ABBOTT)

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CORMTS ALL-IN-1 SYSTEM

Date: 7-Dec-1988 10:43am EST From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301

TO: See Below

Subject: CAPITAL BUDGET

I'd like to have the capital budget broken down into pieces to see if we can get an understanding of it.

First of all, I'd like to separate out those capital investments for <u>equipment</u>, <u>research</u>, <u>and production</u>. I'd like <u>Jack Smith</u> to outline these expenditures and then to make a short statement of justification.

Then, I would like to break down all the building projects into categories to see if we can get a feeling for them. I'd like this to be a list of building projects and then, quite separately, we will propose which ones would be purchased and which ones would be rented. The justification for the list is independent of whether we build them or rent them.

First, I'd like John Sims to make a list of all the buildings that are in process or proposed. I'd like them divided into categories by country or by area within North America.

I assume that in each country they raise their prices to compensate for increase in space cost. Each country runs as a separate business. If they want to spend money on buildings or if they would rather spend it on people, or spend it on lower prices, we should trust their business judgment and just ask them to justify it to the point that we believe they are using good business judgment. However, we should not mix those buildings up with buildings in other countries because it just confuses the feeling for what's going on.

I assume that every building has been proposed and justified on paper to John Sims' group, and that they have been approved by Jack Shields or Jack Smith. If possible, it would be good to have the summary page from these justifications and these approval sheets included with this package. It would also be good for each unit to make a simple statement about the space situation in their group today, the need, the cost today, and what the new building will do to solve the problems and the needs of the group.

Then, I would like Jack Smith and Jack Shields to be prepared to take their portion of each of these and send it first to the Executive Committee and then to the Board of Directors and justify, one at a time, each of their buildings.

KHO:dao KO:2485 DICTATED ON 12/5/88, BUT NOT READ

Distribution:

Jim Osterhoff TO: Jack Shields TO: Jack Smith TO: John Sims TO:

(OSTERHOFF.JIM) SHIELDS.JACK) SMITH.JACK) (SIMS.JOHN)

(

(

Abbott Weiss CC: Win Hindle CC:

(WEISS.ABBOTT) (HINDLE.WIN)

INTEROFFICE MEMORANDUM CORMTS ALL-IN-1 SYSTEM Date: 5-Dec-1988 01:29pm EST From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301

F.C. KO

TO: Jack Smith TO: Jack Shields TO: Win Hindle

(SMITH.JACK) (SHIELDS.JACK) (HINDLE.WIN)

Subject: MANAGER FOR IMAGING

I believe imaging is going to fail forever if we don't put someone clearly in charge. We have to do it immediately so he can do the budgeting for next year, and if at all possible, I'd like to have you pick the man and have him go with Jack Shields and I to Aetna this Friday.

Probably the most important thing to make our plans work, when we started twenty-five years ago, was that we said there was no one without responsibility telling those with responsibility what they should do. Nowadays, we have thousands and thousands of people with no responsibility telling a very small number of people, and sometimes non-existent people, what they can and can't do. Under circumstances like this, a rumor like, "Ken Olsen is against imaging," is an excuse for the group of people without responsibility to kill imaging for years no matter how often it is disclaimed. Someone in charge would have a tough time maintaining that excuse for failure.

Would you please pick this man, give him the job, give him a list of all those people in the Company who can say no to him in this area, and list all those people in the Company who can tell him what to do. We should then formally approve the name and the two lists at the Executive Committee.

KHO:dao KO:2476 DICTATED ON 12/4/88, BUT NOT READ

CORMTS ALL-IN-1 SYSTEM

Date: 28-Nov-1988 09:49am EST From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301

TO: See Below

Subject: UNNECESSARY OVERHEAD

I would like to hire a consultant to go over every single group of the Corporation and tell us what overhead is unnecessary, and in particular, what overhead burdens people instead of helping them.

Should we hire an outside firm to come in and do this or should we develop teams inside the Company to set about to do it?

There is, of course, a very serious weakness in doing it with inside people because they tend to protect each other.

At the next Executive Committee meeting, tell us how you think we should go about doing this. Next ξ_{c} . Next ξ_{c} .

KO:2417 (DICTATED ON 11/27/88, BUT NOT READ)

Distribution:

TO: Jim Osterhoff

(OSTERHOFF.JIM)

(HINDLE.WIN)
(SIMS.JOHN)
(SHIELDS.JACK)
(SMITH.JACK)
(WEISS.ABBOTT)

CC: Win Hindle CC: John Sims CC: Jack Shields CC: Jack Smith CC: Abbott Weiss

CORMTS ALL-IN-1 SYSTEM

Date: 22-Nov-1988 09:44am EST From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301

TO: See Below

Subject: ORDER PROCESSING AND OVERHEAD

In every organization, overhead grows. People can make more and more reasons to add helpers into the system but alas there is a limit beyond which you cannot raise prices to pay for all this help and there is a limit beyond which the people doing the work such as salesman can't tolerate any more help. There is eventually no time left for selling.

I'd like to make some gross changes in order processing to eliminate a large amount of the "help" we now give our salespeople.

I'd like all orders, except those to DECdirect, to be sent to one database where it is either automatically acknowledged to the salesman and the customer immediately, or it is flagged for review. After review, copies are sent to all parties involved with that order. All responsibility for follow up, for checking, for changes, and for acknowledgment are then the responsibility of the manager of that database and very clearly not that of the individual salesman.

I then would like to give the district manager broad responsibility to make decisions, commitments, and negotiate where necessary between the various groups of the Company including special systems, field service, software services, education, and software sales.

In summary, I would like to do simply in order processing that negotiating and follow-up that overwhelms our salesman today, and I'd like to give to the district manager that responsibility which is now distributed between the overhead people at headquarters and the overhead people at the area.

I would then limit the Area Office to personnel, payroll, and very specific marketing specialities which are clearly there to help the salesman.

KHO:dao

KO:2411 DICTATED ON 11/21/88, BUT NOT READ

Distribution:

TO: Remote Addressee

CC: Jim Osterhoff CC: Win Hindle CC: Jack Shields CC: Jack Smith CC: John Sims CC: Abbott Weiss (MIKE KALAGHER @CHM)

(OSTERHOFF.JIM)
(HINDLE.WIN)
(SHIELDS.JACK)

(SMITH.JACK)

(SIMS.JOHN) (WEISS.ABBOTT)

.

CORMTS ALL-IN-1 SYSTEM

Date: 18-Nov-1988 11:12am EST From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301 KO

FC.

TO: See Below

Subject: KEN OLSEN'S AXIOMS

1. Every time we decentralize, overhead goes up, more titles are formed, and staff and space get bigger.

Corollary

- Every time you centralize, overhead goes up, more titles are formed, and staff and space gets bigger.
- 2. Every time you decentralize, the new leaders are more interested in who has the power, the accoutrements of the office, who has the budget, and who gets the credit rather than in cutting overhead, and staff, and the ease of doing business.

Corollary

- 1. Every time you centralize, it's the same.
- 3. Every time an organization grows, usually the staff and overhead grows faster than the work force.

Corollary

- Every time you cut the work force, overhead goes up because the staff does the cutting. They never cut themselves and usually they grow when the work crew gets cut.
- 4. Measurements of an organization never show the problems of overhead and too large a staff because the measurements are always generated by the staff and the overhead group.

KHO:dao KO:2398 DICTATED 11/17/88, BUT NOT READ

Distribution:

TO: Jack Smith TO: Jack Shields TO: Abbott Weiss TO: Win Hindle TO: Jim Osterhoff TO: John Sims SMITH.JACK)
SHIELDS.JACK)
WEISS.ABBOTT)
HINDLE.WIN)
OSTERHOFF.JIM)
SIMS.JOHN)

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INTEROFFICE MEMORANDUM CORMTS ALL-IN-1 SYSTEM Date: 28-Nov-1988 05:22pm EST From: Win Hindle HINDLE.WIN Dept: Corporate Operations Tel No: 223-2338 Below

Serv.

TO: See Below

- 1. There should be some statements about the responsibility of the areas. Since there are 60 districts in the U.S., the area manager position must continue. I believe the areas should provide the national and international account coordination for sales and for the services. Also, they should provide shared customer support that cannot be economically put in place at each district. In addition, the area managers should be Digital's primary sales executives involved in building long-term business relationships with customers in their areas.
- 2. It was not clear whether you intended that the systems integration business be a part of each district and budgeted by each district. I suggest that the systems integration business should be a part of each district and a part of the district budget, but that it be managed as a separate business unit.
- 3. I believe the ACTs, DECworld, traveling shows, and golf tournaments (in fact, all direct sales-support functions), should be proposed by marketing groups as an aid to Sales. However, these programs should only be funded if Sales approves and sees the benefit to them as a part of sales overhead. If Marketing is able to proceed ahead on these supporting programs without Sales approval, we could create far too many overhead programs that are not worth the investment and place unnecessary demands on precious sales resources.

WRH:BC COR.2589

Distribution:

TO:	Remote	Addressee	
CC: CC: CC: CC: CC: CC: CC: CC:	Remote Remote Remote Remote Remote	Addressee Addressee Addressee Addressee Addressee Addressee Addressee Addressee	

(KEN OLSEN @CORE)

(JACK SHIELDS @CORE) (JACK SMITH @CORE) (JOHN SIMS @CORE) (JIM OSTERHOFF @CORE) (ABBOTT WEISS @CORE) (DON BUSIEK @OGO) (CHICK SHUE @MRO) (DAVE GRAINGER @OGO)

1

E.C. (Lup attachid Te my response Ter same menur MEMORANDUM From Ken)

INTEROFFICE

CORMTS ALL-IN-1 SYSTEM

> 28-Nov-1988 05:09pm EST Date: Abbott Weiss From: WEISS.ABBOTT AT A1 at CORA Administration Dept: 223-3996 Tel No:

TO: See Below

Subject: 1990 U.S. FIELD BUDGET

* COMPANY CONFIDENTIAL -- DO NOT COPY OR FORWARD

In response to your memo on the 1990 U.S. Field Budget, I have four comments:

- I believe there is a role for Area Teams in all functions which 1. you could make clear. This role would include at least three pieces:
 - Help and guidance for Districts a).
 - Leadership/modeling of cross-functional collaboration b).
 - Critical mass for some programs c). --closer to the customer than Headquarters --appropriate size for the work and resources required, e.g. training, Corporate and National Accounts, etc.
- I would keep the supervision of Corporate and National Account 2. Managers as it currently is. I have a limited view of this, but from what I see:
 - We have just moved the reporting relationship to geographies a). from Headquarters in the past few months.
 - This has caused much improved communications. b).
 - It appears to help cause better integration with Sales and c). Service people in the geographies, where most of the people and the work are.
- "The job of Marketing is to serve the salesmen". To this I would 3. add "short and long term", so that we have some key resources focused on the things we should do today to make selling easier a year and a half from now.

4. You have proposed that the ACTs will be staffed, managed, supervised, and even scheduled by the appropriate Marketing Group. I would recommend that instead, the ACTs be managed by Software Services as they are today, but that each one becomes the responsibility of the appropriate Marketing Group and is funded accordingly. My rationale is "if it ain't broke, don't fix it". I have heard consistent support for the ACTs today as they are currently being run. Perhaps there is a need to add a stipulation that there should be no geographic boundaries on who uses them.

Hope this is helpful.

/cas

Distribution:

TO: KEN OLSEN @CORE

CC: CHICK SHUE @CORE DAVE GRAINGER @CORE CC: DON BUSIEK @CORE CC: JACK SMITH @CORE CC: JOHN SIMS @CORE CC: JACK SHIELDS @CORE CC: JIM OSTERHOFF @CORE CC: CC: WIN HINDLE @CORE

CORMTS ALL-IN-1 SYSTEM

Date:	28-Nov-1988	01:03pm	EST
From:	Ken Olsen		
	OLSEN.KEN		
Dept:	Administrat	ion	
Tel No:	223-2301		
Dept: Tel No:	Administrat:	ion	

TO: See Below

Subject: 1990 U.S. FIELD BUDGET

I would like to propose some changes in the field organization for the 1990 U.S. budget. We should start very soon on the 1990 budget, and so we should make these decisions very quickly.

DISTRICT OFFICES:

I would like the responsibility for decision making clearly divided between U.S. Headquarters and the U.S. Districts.

I clearly <u>did not say the power or authority to make decision</u>, I said the responsibility for decisions. We will report weekly, monthly, and quarterly on all the business done in each district, and it should be very obvious which decisions were wise and which were unwise, and whether decisions were made at headquarters or in the district.

Each district will make a complete budget. Budgets as proposed may not be accepted, but when they are finally accepted, it is clearly their responsibility to make their budget work.

The districts will budget their space and facilities. They will budget personnel which includes the breakdown between sales and sales support, and any other support personnel.

Their budget will include software services, field service and education, although, the services will continue to be business units with their own P&L.

They will budget the orders and it is expected, in general, that the salesmen will make their budget. The budget will tend to be broken down to match the various parts of the corporation.

Each month we will publish how they have done in absolute dollars and against budget, and we will publish a list ranking districts by performance to plan, growth, and cost of sales. Le orders will be placed by the salesmen directly into one atabase at headquarters. This could be done with a lap computer at the customer site. For orders that need no coordination or for orders that were coordinated ahead of time by the district manager, there will be an instantaneous acknowledgment.

For those cases that the computer flags for review, the central database will be committed to give a response in two days.

Ahead of time, before the order is **MUMM** placed, the District Manager will be responsible for coordinating unusual discounts, orders that cross district boundaries, orders with national accounts, or those that are watched for special reasons.

HEADQUARTERS:

Headquarters will manage the order processing system so that when orders are placed electronically in the central database and electronically acknowledged, a copy is sent to every portion of the corporation that is participating in that order. Headquarters will make sure that this is followed up and reviewed, and will take responsibility for all changes. This should immediately free the salesman to spend all of his time on getting orders rather than following up with various parts of the company. When the order is ready for shipment, this database should check to make sure all the components are there and that they are correct.

Headquarters will supervise the National Account Managers and make sure that they help the salesman and are not more red tape.

Headquarters should make sure that all work is coordinated readily and efficiently between districts.

FIELD SERVICES:

Software Services and Field Service should have an international organization plus a national and a district organization. Actual business decisions are made at the district sales level, but the Field Service organization will still have a P&L statement and a budget, and be responsible for managing the operation.

In addition, there will be a systems integration organization made up of Field Service and Software Services. They will take on large projects. They will be a business unit and will make business commitments with the authority and power to staff them and complete them even though the people come from regular field operations.

The field organizations work for the districts and they work for the systems integration organization and they are responsible to make sure that the needs of these groups are met and that people are optimally used between them.

ARKETING:

The job of marketing is to serve the salesmen. They are to give the salesmen all the services and help they need. They will be independent business units and so their goals, their results, how helpful they are to sales, how efficiently they spend their money, and the results they get will be readily measured.

ACTs will be their responsibility. They will justify the expenditures by the results, and they will take responsibility for increasing or decreasing the expenditures in their own ACT. The ACTs will be staffed, managed, watched, supervised, and probably scheduled on a daily basis by the appropriate marketing group. The ACT is an arm of the marketing group. This is not an automatically funded overhead sales expense.

Marketing groups will also fund DECworld, golf tournaments and traveling shows, and they will be funded only when they are justifiable and not goals of the marketing group.

I would like your comments by tomorrow morning, November 29th, before I meet with the area managers.

KO:2419 (DICTATED ON 11/27/88, BUT NOT READ)

Distribution:

TO: Win Hindle TO: Jim Osterhoff TO: John Sims TO: Jack Shields TO: Jack Smith

CC: Abbott Weiss CC: Don Busiek CC: CHICK SHUE

CC: Dave Grainger

(HINDLE.WIN)
(OSTERHOFF.JIM)
(SIMS.JOHN)
(SHIELDS.JACK)
(SMITH.JACK)

(WEISS.ABBOTT) (BUSIEK.DON) (SHUE.CHICK) (GRAINGER.DAVE) people spend their energy anticipating the next replacement in the field.

KO:2315 (DICTATED 10/25/88 BUT NOT READ)

Distribution:

TO: Win Hindle TO: Jim Osterhoff TO: Jack Shields TO: John Sims TO: Jack Smith

CC: Abbott Weiss

HINDLE.WIN) OSTERHOFF.JIM) SHIELDS.JACK) SIMS.JOHN) SMITH.JACK)

WEISS.ABBOTT)

INTEROFFICE MEMORANDUM CORMTS ALL - IN - 1SYSTEM 26-Oct-1988 09:07am EDT Date: Ken Olsen From: OLSEN.KEN Dept: Administration Tel No: 223-2301 HINDLE.WIN) OSTERHOFF.JIM) (SHIELDS.JACK) (SIMS.JOHN) (SMITH.JACK)

TO: Win Hindle TO: Jim Osterhoff TO: Jack Shields TO: John Sims TO: Jack Smith

Subject: LEAKS TO THE OUTSIDE WORLD

A stockbroker called about the BOD meeting today and Channel 5 called about a press meeting about our being taken over.

This concerns me because maybe people in house sensed the unusual preparation for the Audit Committee meeting and told their friends in the financial world what they knew about what was going on in the Company.

KO:2319 (DICTATED 10/25/88 BUT NOT READ)

CORMTS ALL-IN-1 SYSTEM

> 17-Oct-1988 03:46pm EDT Date: From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301

F.C.

TO: See Below

Subject: SOCIAL ACTIVITIES AND SELLING

CONFIDENTIAL - DO NOT DISTRIBUTE OR COPY

Alas, the World Series is not coming to Boston, but it is time to again review our policy of using sports and other social activities in selling. Do we have a policy? Do we keep good, separate accounting of these things?

As a minimum, I think that every activity like this should have a calculated cost and should be assigned to one person. It is particularly true when Company jets are involved.

We might also want to have activities like this signed for by a second person as we do for expense accounts.

I think it would be particularly good to have these things separated out so they are obviously watched and recorded if they are ever questioned.

KO:2297 (DICTATED 10/17/88 BUT NOT READ)

Distribution:

Jim Osterhoff TO:

Win Hindle CC:

- CC: John Sims CC: Jack Smith
- CC: Jack Shields
- Abbott Weiss
- CC:

(OSTERHOFF.JIM)

(HINDLE.WIN) (SIMS.JOHN) (SMITH.JACK) (SHIELDS.JACK) (WEISS.ABBOTT)

FC.

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INTEROFFICE MEMO

TO: Win Hindle Jim Osterhoff Jack Shields John Sims Jack Smith

Date: 14 October 1988 From: Ken Olsen Dept: Administration MS: ML010-2/A50 Ext: 223-2301

CC: Abbott Weiss

SUBJ: The New Digital

VERY CONFIDENTIAL NOT TO BE REPRODUCED

Here's how I would like to organize Digital before we start the next budget cycle. I'd like to divide the Company into five businesses each with their own accounting, their own balance sheet, their own P&L statement, and, above all, their own budget.

The five businesses I'd like to see are:

- desktop computing, time-sharing, group computing and LANS $~^{
 u}$ Series Ind. M. Fg. Ι.
- OLTP plus related computing II.
- III. real time and embedded computing
- wide area networking and networking between LANS and IV. network management.
- large system integration / v.

I'd like each one of these business units to justify their part of the engineering budget, their computers and disks, their part of the corporate software and their own software, and justify the applications which they are going to make part of the major corporate thrust.

I believe, when organized this way, we will probably select a minimum number of CPUs for the future, and they will consist of probably one fast computer which would be the fastest we could make and the balance for OLTP.

mid-range computer 1.

2. one or two small computers

3. a small number of desktop computers and workstations.

Each workstation above the basic commodity workstation would have to be justified in great detail to the Board of Directors to be included on the list.

Each computer will probably have both a UNIX version and a VMS version.

Special computers will take particular justification. These will include a high reliability computer, massively parallel computer, etc.

I'd like to outline the characteristics of computers and discuss computer needs in terms of these characteristics. The result I would look for is that we would do memory systems and in/out systems in much the same way across the range. As models change, we would maintain the same list of features on all computers as much as possible so that the software necessary to introduce a new computer is minimal.

Disks and other components would then be decided on by the business units and proposed to the Board of Directors.

The business units would maintain a list of applications from which they make major investments in which they will do a complete job for the customer and in which they will be the world's best expert. Some of these applications are: 1) various OLTP applications, 2) trader workstations, 3) small business, 4) shop floor control, 5) manufacturing management, 6) office, 7) laboratory support, 8) networking establishments world wide, 8) manipulation of documents, drawings or images.

Some of the things I'd like to accomplish with the budgeting change is to rationalize our marketing. We now have three or more levels of marketing, one in the component group, one in the application group and one in the industry group. They often duplicate, conflict, make their own announcements independent of each other, and their party lines are not coordinated. Of course, duplication is wasteful and expensive.

Today, under Jack Shields, most of the big jobs are done, but there is limited help or cooperation from engineering. I'd like to set as a goal complete and open cooperation between engineering and the field for selling and for accomplishing very large projects.

KHO:ld KO:2291 (DICTATED 10/14/88 BUT NOT READ)

E.C.

CORMTS ALL-IN-1 SYSTEM

Date: 7-Oct-1988 02:25pm EDT From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301

TO: See Below

Subject: PROFIT IMPROVEMENT

We have two problems.

First of all, we have too many engineering and sales people in certain areas.

Secondly, we have many large system opportunities, but we don't have the resources to offer complete solutions. We talk as if solutions were just software, and, to the customers, big system solutions mean everything to do the job.

Jack Shields' field operation is very reluctant to ask for help. Many of their new large customer sales people do not have systems experience, and, by tradition, they cannot ask for it. Jack Smith has a surplus of engineering people, but, by tradition, they develop components and are never called upon to do a real system for a big customer.

I would like Dick Fishburn and George Chamberlain to make a list of all engineering and field people who could be drafted into teams to generate complete solutions for customers (complete from the customer's point of view).

From these lists, I would like to generate a task force for the major systems jobs we know about like Milliken, Boeing, Caterpillar, Aetna, and, in fact, all large companies.

I think the engineering and sales people would probably remain working where they are and for whom they are working today, but their bosses would have the additional responsibility of solving the systems problem.

KHO:ld KO:2263 (DICTATED 10/7/88 BUT NOT READ)

Distribution:

TO: Win Hindle TO: Jim Osterhoff TO: John Sims TO: Jack Shields TO: Jack Smith TO: BILL STRECKER CC: Abbott Weiss

CC: George Chamberlain

CC: Dick Fishburn

(HINDLE.WIN)
(OSTERHOFF.JIM)
(SIMS.JOHN)
(SHIELDS.JACK)
(SMITH.JACK)
(STRECKER.BILL)

(WEISS.ABBOTT) (CHAMBERLAIN.GEORGE) (FISHBURN.DICK)

CORMTS ALL-IN-1 SYSTEM

Date: 13-Oct-1988 09:00am EDT From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301

FC

TO: See Below

Subject: MARKETING

We have a ridiculous way of organizing our product marketing and financing systems for which we get orders.

First of all, there is no end to confusion in having the industry marketing people laying out product strategy in addition to the product application people laying out product strategy. Let's instantly get back to the point where industry marketing is a help to the sales department, but they do not lay out product strategy.

Secondly, it is unbelievably foolish to take an order for a large system, like a trader workstation, and then have to go to central engineering's budget to get the money to accomplish the order which we had already taken. This way, every success we have making a system that involves some engineering means that we have to cut back on our product development, and it means we can't get started until we struggle with the whole engineering budget to decide who we are going to steal the money from.

Common sense says that we do it like the field does. When we get the order, part of the money from the order goes to pay for the product, for all the services involved, and for the development of the product which is special for that customer.

If we are going to be in the systems business, we have to streamline it and do efficient accounting.

KHO:dao KO:2276 DICTATED ON 10/12/88, BUT NOT READ

Distribution:

TO: Jim Osterhoff TO: Win Hindle TO: Jack Shields TO: Jack Smith TO: John Sims TO: Abbott Weiss

.

(OSTERHOFF.JIM)
(HINDLE.WIN)
(SHIELDS.JACK)
(SMITH.JACK)
(SIMS.JOHN)
(WEISS.ABBOTT)

CORMTS ALL-IN-1 SYSTEM

Date: 12-Oct-1988 01:22pm EDT From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301

TO: See Below

Subject: TOO MANY MARKETING GROUPS

The Europeans smile at us for having so many marketing groups that overlap and conflict with each other. They combine the applications and the industry marketing groups into a single group so that one group would take care of the market plus all the applications that obviously fit in that market. The manufacturing group does not separate discrete and process and does not separate the applications and the hardware and software engineering, but have them all combined into one area. They then have one center of excellence in Munich, and they feel it all integrates without the expense and complexity of many groups.

KHO:dao KO:2270 DICTATED ON 10/12/88, BUT NOT READ

Distribution:

TO: Jim Osterhoff TO: Win Hindle TO: John Sims TO: Jack Shields TO: Jack Smith TO: Abbott Weiss (OSTERHOFF.JIM)
(HINDLE.WIN)
(SIMS.JOHN)
(SHIELDS.JACK)
(SMITH.JACK)
(WEISS.ABBOTT)

CORMTS ALL-IN-1 SYSTEM

Date: 5-Oct-1988 08:43am EDT From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301

TO: See Below

Subject: IMAGING

If I want to set up a separate business to do imaging, who do you think would like to run it? This business should be independent of MSSC, independent of you, independent of STF and run like a separate business. We should lay out a plan and a budget to cover all the details, mechanical packaging, hardware, software, terminals, networking, etc. They should assume that field service, systems integration services, networking services, and software services are all tools in which they play with and they should propose the profit level these groups should make.

The plan would get hassled no end at the proposal stage until it made sense. We would argue about every component they want to make that we should buy. We would argue about all the complexity and variations that may not be necessary, but when we make a commitment, their budget would be sacred as long as they fulfill their goals and pass their checkpoint, and every year their budget wouldn't be reviewed by the committees.

KHO:dao KO:2250 DICTATED ON 10/3/88, BUT NOT READ

Distribution:

TO: Win Hindle

CC: Jim Osterhoff CC: Jack Smith CC: Jack Shields CC: John Sims CC: Abbott Weiss (HINDLE.WIN)

(OSTERHOFF.JIM)
(SMITH.JACK)
(SHIELDS.JACK)
(SIMS.JOHN)
(WEISS.ABBOTT)

INTEROFFICE MEMORANDUM

CORMTS ALL-IN-1 SYSTEM

Date: 5-Oct-1988 08:41am EDT From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301

E.C.

TO: See Below

Subject: OLTP

If I want to set up a separate business to do OLTP, who do you think would like to run it? This business should be independent of MSSC, independent of you, independent of STF and run like a separate business. We should lay out a plan and a budget to cover all the details, mechanical packaging, hardware, software, terminals, networking, etc. They should assume that field service, systems integration services, networking services, and software services are all tools in which they play with and they should propose the profit level these groups should make.

The plan would get hassled no end at the proposal stage until it made sense. We would argue about every component they want to make that we should buy. We would argue about all the complexity and variations that may not be necessary, but when we make a commitment, their budget would be sacred as long as they fulfill their goals and pass their checkpoint, and every year their budget wouldn't be reviewed by the committees.

KHO:dao KO:2245 DICTATED ON 10/3/88, BUT NOT READ

Distribution:

TO: Bob Glorioso

CC: Jim Osterhoff CC: Win Hindle CC: Jack Smith CC: Jack Shields CC: John Sims CC: Abbott Weiss (GLORIOSO.BOB)

(OSTERHOFF.JIM)
(HINDLE.WIN)
(SMITH.JACK)
(SHIELDS.JACK)
(SIMS.JOHN)
(WEISS.ABBOTT)

CORMTS ALL-IN-1 SYSTEM

Date: 4-Oct-1988 04:59pm EDT From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301

FC

TO: See Below

Subject: DIGITAL'S PLAN TO BE AN OEM SUPPLIER - A SELF DESTRUCT PLAN

MSSC makes the major corporate strategy decisions without presentation of a model or a plan to the Executive Committee.

It appears that the MSSC strategy for the Corporation is to make Digital a supplier to OEMs and system integrators and make it impossible for anyone to take complete responsibility for a business within Digital, such as small business, imaging, trader stations, etc.

I'd like the Executive Committee to make a model of the Company, assuming we follow the MSSC strategy. What will the Company look like in a few years? If we are dependent upon OEMs or partners to do the systems work, because we don't want to take responsibility for it or because we don't trust anyone within Digital or the committees don't want to give up their power to an individual to run a business, is this in conflict with our policy to keep raising prices for VMS? This last year, VMS lost a lot of popularity with OEMs because of high prices. If we continue to raise prices, we'll be left without the systems business and without the OEM business.

If we are going to be an OEM supplier, shouldn't we cut out all of the support, security, and other features that we charge OEMs for that they really don't need?

Let's build a UNIX model also. If we are going to have exactly the same machines as everybody else and sell through OEMs, will that market support our desire to do things the OEMs don't need?

I suspect that the model is going to generate negative growth each year and we will continue to be adding costs that the OEMs don't want, and we are going to quickly have to face a serious problem.

Let's then take any one of these businesses, which we're better

positioned to go into than anyone else, and compare setting it up as a separate business in which we will do the whole job for the customer, lay out a plan to satisfy him, to build what we have to build, to buy what we can buy, to use field service and software services and Digital's system integration services not as separate businesses but as an integrated company to do the whole customer's job.

It's clear that we have a large number of very experienced and very expensive people that we've hired in the last six years. Many of them came from organizations like Digital where they are not given an opportunity to take responsibility and many of them, at this late date, could not do it if they were given the opportunity. In that number, there surely must be a few who would like to take complete responsibility for planning, budgeting, and generating business.

We have so many committees whose job it is to make rules, limitations, and decisions that, right now, it would be impossible to run a business.

However, suppose we had a group who wanted to do a trader workstation business. They want to have a set of electronic modules, furniture modules, and software modules in which they go in, bid a job, install it, set it up, and make it run. They need another plan saying what it would cost, and what their return would be. If they got their plan approved, they would have those resources to make the investment. Part of their plan would be the pricing and their plan would say what they had to buy, what they had to make, and these details wouldn't be nit picked by MSSC or STF or any number of other people.

There would be gross unemployment, but I bet we would have a number of really very successful businesses because of the assets we offer those businesses.

KHO:dao KO:2242 DICTATED ON 10/3/88, BUT NOT READ

Distribution:

TO: Jim Osterhoff TO: Win Hindle TO: Jack Shields TO: Jack Smith TO: John Sims TO: Abbott Weiss

CC: BILL STRECKER

(OSTERHOFF.JIM)
(HINDLE.WIN)
(SHIELDS.JACK)
(SMITH.JACK)
(SIMS.JOHN)
(WEISS.ABBOTT)

(STRECKER.BILL)

FC.

CORMTS ALL-IN-1 SYSTEM

Date: 18-Aug-1988 04:55pm EDT From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301

TO: See Below

Subject: PC ANNOUNCEMENT

I do not like the idea of announcing to the world that we are in the PC business. It will go over like a lead balloon. I propose that we announce a PC network system.

This should be very simple, easy to understand and it should make for ads that are real grabbers.

I propose that we rent systems because small businesses, and big businesses too, are afraid that they will be disappointed or the systems will not work, and they will be stuck with them. Rental means we take the obligation to make them work.

We can announce a MicroVAX server with the cheapest Tandy PC, tied together with Ethernet, and with a simple easy to understand price list:

\$20/day	Mainframe 2000	
\$4/day	Each PC	
\$3/day	Printer	
\$1/day	Modem	
\$10/day	Workstation	

Footnote should say: Footnote should say:

- 1. Here are the other printers with their prices.
- Workstations make a great CAD system with Auto CAD software for a cost of \$10/day.

3. Etc.

KO:2111

CORMTS ALL-IN-1 SYSTEM

Date:	4-Aug-1988	04:47pm	EDT
From:	Ken Olsen		
	OLSEN.KEN		
Dept:	Administrat	ion	
Tel No:	223-2301		
	Administrat	ion	

F.C.

TO: See Below

Subject: MORE ON HISTORY OF SALES

I apologize again for changing my request, but the more we talk about it the clearer the questions become.

Of all the sales activities we charge against products, how many are needed for that product? When you list the total cost for the total things we do for sales, how much of it is allocated to workstations, small business computers, PC's and terminals?

I will then ask someone else how important the Senior's Golf Classic, DECworld, ACT's, and traveling shows are to PC's, terminals, workstations, small business and so forth.

After we break the company into pieces, we will ask each one for a model, and they will decide how much of these activities their products need. If they cannot compete because of these activities and we have to drop the product line because these activities are forced on them, we ought to understand it.

I am not asking you to answer these two questions but telling you that I propose to ask them after we get the data, but if you can identify the overhead in the Sales Department outside of these activities, then we can be sure that it is needed for each of these very competitive products.

KO:2071 (DICTATED 8/4/88, BUT NOT READ)

Distribution:

TO: Dick Fishburn

CC: Win Hindle CC: Jim Osterhoff FISHBURN.DICK)

(HINDLE.WIN) (OSTERHOFF.JIM) CC: Jack Shields CC: John Sims CC: Jack Smith CC: Abbott Weiss (SHIELDS.JACK)
(SIMS.JOHN)
(SMITH.JACK)
(WEISS.ABBOTT)

CORMTS ALL-IN-1 SYSTEM

Date: From: Dept: Tel No: 3-Aug-1988 01:46pm EDT Ken Olsen OLSEN.KEN Administration 223-2301

FC

TO: See Below

Subject: MODELS AND NUMBERS

I was disappointed in yesterday's Executive Committee discussion of models. We showed great confusion in the difference between generating numbers, charts, models, and managing the Company.

There are two issues about which I feel very strongly; first, leaders must have a vision, a dream, and a model of where they want to go or how can they lead? Secondly, however, this does not mean that all the charts, all the graphs, and all the models are made for them so they can manage everything.

We missed the point completely on all our discussions yesterday in that we appeared to believe that the numbers and the models were an end themselves.

The numbers and the models should be a vehicle to make it very clear who has responsibility for that segment of the business, who should show the initiative when things aren't working well, who deserves credit when they do, and whose responsibility it is to worry about every single detail necessary to make the system work.

Any business, or segment of a business, is only successful when somebody worries full time about all the details and feels the authority and the responsibility to take care of them. We, as the Executive Committee, sometimes think we are all powerful and we can run everything. It is clear that 2/3s of our products aren't even marketed, and we don't have the energy to take of any of them and nobody will have the energy to take care of them until we allocate the responsibility.

Then, to prove our cloudy thinking, we almost accepted the Tandy proposal which I would paraphrase into saying, "hey guys, we discovered one more piece of hardware and we got the start of a good deal." They, indeed, did discover a good piece of hardware and made a good deal. However, if we accepted it yesterday, there would be a very clear implication that we, the Executive Committee, once more in our good tradition, have accepted the responsibility for marketing, selling, and completing the budget for this product. They clearly proposed or were given no responsibility and it is therefore clear that they were no more than the people who wanted to add one more product to the list of products not marketed or sold, and we were also accepting responsibility for this.

KHO:dao KO:2061 DICTATED ON 8/3/88, BUT NOT READ

Distribution:

TO: Win Hindle TO: Jim Osterhoff TO: Jack Shields TO: John Sims TO: Jack Smith TO: Abbott Weiss (HINDLE.WIN)
(OSTERHOFF.JIM)
(SHIELDS.JACK)
(SIMS.JOHN)
(SMITH.JACK)
(WEISS.ABBOTT)

CORMTS ALL-IN-1 SYSTEM

Date: 20-Jul-1988 09:51am EDT From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301

EC

TO: See Below

Subject: SOFTWARE STANDARDS

I would immediately like to institute formal standards for software. Today the STF and others developed and proposed standards, but they are not formally documented to the point where they can be proposed to the Executive Committee and where they can be imposed on every software designer in the Corporation. It is said today the STF feels the obligation to talk everybody into using them but they feel that everybody has the right of going in any direction they want if they are not talked into it.

It's difficult to talk them into it when they can change their mind at any time, but it is also difficult because they are never formally put in one place and formally approved by a higher body.

I'd like Pete Smith and Bill Strecker to bring to the Executive Woods meeting next week, as a first step in formally doing this for many parts of the Corporation and as a first formal step in defining "software for the '90's", a list of all software standards and interfaces which they agree are ready to impose on everyone and which they have informally been trying to talk people into.

This list should probably be in two pieces. The first part is those things which everyone who writes software has to follow unless they get formal dispensation from the Executive Committee. The second part of the list is those things which should be followed only if they are pertinent to that piece of software.

Then I would like them to present another list of all those standards which they are almost agreed on but which are not yet ready to be formally included in the list of standards for Executive Committee approval.

There might even be a third list of those things which they

personally think should be on the list soon but for which there is not yet common agreement.

I am going to propose to the Executive Committee that we develop two other committees to do in other areas what the STF has done in their areas of concentration. Because they worked hard at it, and because they are competent and experienced, their work has been invaluable to the Corporation.

The other two areas which we need the same work plus the formality of formal standards approved by the Executive Committee and formal review for budget suggestions, are, first of all, a committee to be responsible for power supply, packaging, communications, connectors and electrical standards (this probably should also mean fiber optic mechanical standards).

Informally trying to talk designers into using the accepted but not formally approved standards in these areas is very expensive. The first thought most designers have, is that they have the prerogative to design their own package, their own power supply and use their own connectors, electrical circuits and electrical standards for communications. Sometimes it seems that people will use an infinite number of excuses to avoid getting down to the business of designing their equipment or even designing their software if they can use packaging and connectors as a delay to postpone doing the job they are supposed to do.

The third committee is the engineering, marketing and systems committee. This group should write standards and maintain reviews like STF does in the area of marketing and all those things which make "systemness".

The reviews should make sure that every product we have designed does have a plan which is measured to get that product sold and that, when we sell systems, everything is done with consistency and in order to do all the things that we include in the word "systemness".

I believe that if we add this formality, we can do a much better and a much more thorough job, because everyone will have to lay out plans and budget everything all over again each time but will base their work on what is done previously. We can save quite a bit of money, because we will cut down on the duplication.

I am going to propose that, when these standards are formally accepted by the Executive Committee, everyone has to follow them or get formal dispensation to do otherwise. If someone has a better idea, they are free to propose doing different things; and if the idea is better, it should be changed into a new standard that everyone else will follow.

KHO:1d KO:2022 (DICTATED 7/19/88 BUT NOT READ)

Distribution:

TO:	BILL STRECKER
TO:	PETER SMITH
cc:	Win Hindle
cc:	Jim Osterhoff
CC:	John Sims
cc:	Jack Shields
CC:	Jack Smith
cc:	Ivan Pollack
cc:	Abbott Weiss

(STRECKER.BILL) (SMITH.PETER)

(HINDLE.WIN)
(OSTERHOFF.JIM)
(SIMS.JOHN)
(SHIELDS.JACK)
(SMITH.JACK)
(POLLACK.IVAN)
(WEISS.ABBOTT)

Frevious memo has been discarded

CORMTS ALL-IN-1 SYSTEM

Date: From: Dept: Tel No: 3-Jun-1988 09:53am EDT Ken Olsen OLSEN.KEN Administration 223-2301

TO: See Below

Subject: PMAX AND VAX 64

THIS IS A REVISED VERSION OF MEMO DATED 2 JUNE ON THE SAME SUBJECT. PLEASE DISREGARD THE FIRST MEMO.

Our Wednesday's discussion on how we get a quick, fast UNIX workstation and we get the 64 bit VAX for the 90's was good. However, most of the data was presented as opinion in a very qualitative, way and the decision was left to picking between opinions.

We learned, many years ago, that numbers help in making decisions. They don't make decisions automatic, but they can help avoid getting into catastrophic trouble. Sometimes we sound like a family who buys something because the neighbors could afford it, or bought things because they thought they absolutely had to have them. They then never figured out why they had so many financial problems.

I would like to have this question raised before the Board of Directors a week from Monday. We should present three alternate financial plans. Each plan should take into account the cost of money, both while it is being used and while it's being tied up until the project is productive. The plan should also put the cost of lost opportunity for every week delayed in getting the product out.

The cost should also be separated so one can find out how much is thrown away at the end of the project and how much is useful or needed for the next project.

We should be able to assure the Directors that we are confident to be able to get all the parts necessary for each of the plans. We should never say it is a great plan except we will never get the memory chips or CPU chips.

The plans should be laid out so that components of cost which are common to all projects are listed separately. The list of UNIX

applications that we need for PVAX and today's workstation might be the same list for a PMAX.

Let's assume for the presentation that we need two things. First of all, a very fast, very traditional, UNIX-type workstation that is very inexpensive. The choice is PMAX which is a MIPSCO CPU on a PVAX mother board. Everything is the same as PVAX which people believe could be ready for announcement in December and shipment soon afterwards.

The second alternative is the uPRISM chip which would come sometime later but would have the advantage of being part of the PRISM program.

The second question also has two choices. We assume that "computing for the 90's" needs 64 bits and it has to play traditional VMS software and ULTRIX. Being 64 bits, we assume that everybody understands that the software has to be recompiled for this system. The Digital-made hardware portion of this has been called "PRISM" and the software portion has been called "MICA". I would like to call it VAX 64, because it clearly implies we are not dropping the VAX.

We have two choices for VAX 64--our PRISM CPU or MIPSCO CPU. Our PRISM would be easier and safer. However, the cost would be significant, and the product would be late. We could not equal the resources that many companies together will be putting on the MIPSCO architecture.

The argument for MIPSCO architecture for the VAX 64 hardware is, first of all, well under way, has a head start, and many foundries are already working on today's chips and future ECL chips. The argument against that is we would then be committed to one manufacturer over whom we have no control. Some of the things like multi-processing and vectoring are not easy with that chip.

If these two questions are looked at, the obvious conclusion is to go MIPSCO for the immediate, quick workstation and PRISM for our VAX 64 program. However, some people say the cost of doing two architectures would be overwhelming. The retort is that you don't have to, because they are doing different things and one is small and the other is large. The answer to that is yes; but the small one will be successful, and there will be great pressure to make it grow large.

We have to add mathematics and dollars to each of these decisions and, in particular, the question of whether it is practical to have two architectures in this area. We have to lay out a plan for two architectures, spell out the costs, spell out the concerns, put dollar signs on them and have a rational, understandable discussion, not one of emotions and pronouncements of doom for which the only quantitative measure is the emotions with which it is presented.

I think there are only three possibilities worth considering. The first is all the way with MIPSCO, the second is all the way with VAX 64, which includes PRISM and MICA, and the third is MIPSCO for the quick, fast workstation and uPRISM for the longer term application. What are the plans, the costs, the returns, and the mathematical arguments (pro and con) for each of these?

We also have to justify the market sizes. There are some things we have not yet stopped to justify. We make the religious assumption that workstations are going to overtake the world, everyone is going to need one and every company is going to buy one for everybody. This should be tested. If an organization bought a workstation for some reasonable percentage of their people, what percentage of the capital expenditures for a normal company would this be, and what will it do to the costs of that company? I assume it would have to be networked and backed up with real computer.

Much of the world has made the simple extrapolation that the enthusiasm for UNIX in the workstation area is inevitably going to take over the rest of the world. We have to justify this extrapolation if we are going to base our plans on it. In some ways, it sounds like the extrapolation people made five years ago that all the mips on the desk with PCs are going to take over the world of computing. We should be able to tell what part of the world's computing can be done with workstations, and, if so, how much will it cost to network them together in a way which they can be used for large projects and still have security. We also have to be able to explain to the Board of Directors how workstation computing is different from business computing. Workstation computing is where people have the attitude that you run the program over and over again until the answer looks right; if it doesn't, try another computer. In normal business computing, people feel they cannot tolerate a single error.

We should try to explain qualitatively what took us many years to accomplish with VMS, with enormous documentation and red tape which now can be done overnight, without discipline, using UNIX.

KHO:dao KO:1890

Distribution:

TO: Remote Addressee TO: Sam Fuller TO: Jack Smith George Chamberlain TO: TO: Don McInnis TO: Dom LaCava Remote Addressee TO: TO: BILL STRECKER Win Hindle CC: John Sims CC: Jack Shields CC:

(BOB SUPNIK @HLO)
(FULLER.SAM)
(SMITH.JACK)
(CHAMBERLAIN.GEORGE)
(MCINNIS.DON)
(LACAVA.DOM)
(CUTLER @WILBUR @VAXMAIL)
(STRECKER.BILL)

HINDLE.WIN) SIMS.JOHN) SHIELDS.JACK) CC: Jim Osterhoff CC: Ivan Pollack CC: ROBERT R. EVERETT CC: Abbott Weiss (OSTERHOFF.JIM)
(POLLACK.IVAN)
(EVERETT.ROBERT)
(WEISS.ABBOTT)

E.C.

CORMTS ALL-IN-1 SYSTEM

Date: From: Dept: Tel No:

23-May-1988 12:08pm EDT Ken Olsen OLSEN.KEN Administration 223-2301

TO: See Below

Subject: KEN OLSEN'S PROJECTS

Here are some of the projects I have gotten going.

- I've asked George and Dick to estimate the cost of various sizes of computers for various applications to see how important the central processor is and to see if it will make a difference in the cost if it was replaced with a RISC CPU.
- 2. I've asked the marketers to prepare for us a outline of the whole computer market so we know where the dollars are spent, where the profit is made and then to give us an estimate as to how important industry standard software is for each of these markets.
- 3. I have asked Frank McCabe to plan the QC and testing program for PVAX and PMAX to be sure it is optimized for the timing and for quality and not just to follow ritual and traditional rules.
- 4. I've asked to have European engineering reviewed to see if we are getting our money's worth from it. It doesn't receive very much attention and many of the projects are years late or don't work, and I think we should have a report as to whether it is worth while or not. People like the European engineers, but are we getting our money's worth. Should we contract or should we grow? Was it done largely for political reasons and does this alone justify the investment?
- 5. We have a huge number of products, most of which aren't marketed. We have a huge number of applications and markets, but we don't sell a broad range of products to each of these areas. Some of our managers are terrified by any hint at measuring results because of the late bad days of product lines and that we have no way of measuring market plans and

budgets to know what we are covering, how well we are covering it and if we are spending our money wisely.

There is a tendency for the senior managers to feel they will run it all. The problem is much too complex, and we have to delegate responsibility for planning and measuring and then review to make sure we are covering all products and all portions of any market we try to go into.

We owe it to every manager to have the obligation to make out a budget and a plan and to be reviewed. Sometimes this review should be done by the senior committee of the company.

6. I understand there are 9,000 people with the title of marketer in the Corporation. If each one of those had a budget, a plan, a set of goals, against which he measured himself and was measured it will be clear which of those are gofers and which of those are out to compete against other parts of the Corporation for sales resources, etc.

It would also be clear to the Executive Committee when reviewing these goals that whether or not they are working hard to have a set of products which are easy to understand by the salesmen and the customer, that are easy to sell, easy to install and use. It would also be easy to tell if their goal is to make it clear to the customer just what products, what configurations should be used for each application.

I believe it would also be clear that each of the 9,000 marketers should spend two or three days every week out selling to try out the efficiency which they should have produced in selling.

KHO:1d KO:1859

Distribution:

TO: John Sims
TO: Win Hindle
TO: Jim Osterhoff
TO: Jack Shields
TO: Jack Smith
TO: Ivan Pollack
TO: Abbot Weiss @CORE

(SIMS.JOHN)
(HINDLE.WIN)
(OSTERHOFF.JIM)
(SHIELDS.JACK)
(SMITH.JACK)
(POLLACK.IVAN)
(WEISS.ABBOT)

INTEROFFICE MEMORANDUM

CORMTS ALL-IN-1 SYSTEM

Date: 20-May-1988 10:59am EDT From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301

EC

TO: See Below

Subject: RISC COMPUTERS

We are now about to make major investments in RISC computers for workstations. I am sure this is a good idea because that's where the software is being written, and RISC computers do seem to make a positive contribution in this area.

I do believe however, that it is risky to extrapolate these conclusions to the rest of the computer world without some data. Could you make an approximation for several categories of computers and several applications on the various costs?

How much of the cost of a system is in the central processor part that could be replaced by a RISC chip? How much in the floating point, the buses and all the other things that are part of the central processor? How much in the memory? How much in the disks? How much in the peripherals? How much in the networking? How much in the clustering controls and the clustering equipment? Then, how much of the total cost to the customer is in telephone, operating cost, space, power and staff?

How much of the bill that Digital collects is in services? How much is in the system design, the installation, the software support, the education and the servicing? How much of our costs are in the writing, testing, servicing and maintaining of the software? How much of our costs are in the patient long term selling before the order is placed?

We only want approximate numbers. In fact, your educated guess would probably be good enough. The simple question is: How much could the cost of a computer system be lowered if that part of the CPU was replaced with a RISC machine that cost half as much as a VAX machine? We are only looking for that part of the CPU that would be different if RISC was used. KHO:1d KO:1850 (DICTATED 5/20/88 BUT NOT READ)

Distribution:

TO: George Chamberlain Dick Fishburn TO:

John Sims CC: Jack Smith CC: CC: Jack Shields CC: Jim Osterhoff CC: Win Hindle Bob Glorioso CC: CC: Bill Heffner Roger Heinen CC: BILL STRECKER CC: Don McInnis CC:

(CHAMBERLAIN.GEORGE) (FISHBURN.DICK)

(SIMS.JOHN) (SMITH.JACK) (SHIELDS.JACK) OSTERHOFF.JIM) HINDLE.WIN) (GLORIOSO.BOB) (HEFFNER.BILL) (HEINEN.ROGER) (STRECKER.BILL) (MCINNIS.DON)

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INTEROFFICE MEMORANDUM

CORMTS ALL-IN-1 SYSTEM

Date:	2-May-1988 01:48pm	EDT
From:	Ken Olsen	
	OLSEN.KEN	
Dept:	Administration	
Tel No:	223-2301	

FC

TO: See Distribution

Subject: THREE FAILURES AT DIGITAL

Several years ago, we decided to completely re-do Digital and eliminate the product lines with the problems that developed therein. We decided that we would approach the market in a planned, disciplined way, and that there would be no internal competition in front of the customers.

We have done amazingly well. We have probably done better than we ever dreamed, and we probably have a higher degree of working together than any other company, any time in history. However, we still have a few weaknesses that are remnants of the old days.

1. Our IBU's are still competing the way they did in the old product line days. They all demand a fair share of the salespersons time. We don't want to be fair to the various product lines. We want to give the customer what is best for them and best for Digital.

It is clear that we have to do as we say we do, which is to plan ahead of time what each machine is best for. We have to make a clear statement from engineering and marketing as to which application each machine is best for, and then all our literature, all our training, and all our sales pitches have to be consistent with that plan.

2. There are still areas of the company, such as the high end of the workstation business, the office, and TP, where we are out answering the most competent competitors, rather than laying out the whole market and putting some concentration in those areas which we have particular advantages.

We should lay out what the need is for each size company from very small to very large, and what the needs are for each application within an industry.

It takes a certain amount of nerve to look at what the

markets are that the competition is not yet active in, but it is obviously the sound, rational thing to do. For example, we should lay out all the applications for TP, all the applications for workstations, and all the applications for the office. For the workstation, we should lay out the needs of every engineer, every financial analyst, every software writer, and every maintenance man. How big is the market, and how do we satisfy that instead of simply looking for those somewhat specialized applications that need many computers?

It also takes a lot of nerve to talk about these other things, because it leaves you open to the criticism that you are running away from the competition that has already announced what the world needs.

The NAC group should lay out what the networking needs are for a tiny company, the medium size company, and the giant company for all types of industry. The NAC group has a tendency to concentrate on wide area networks that no one else can do, or local area networks that are very complex and have multiple vendors. Did we low se out on the huge market for tiny LAN's because we ignored that market and looked only for the harder things?

3. The third failure in Digital, is that we do not integrate our messages. Our desktop device is the key to all of our human interfaces. We divide the work up by IBU and do not present to the user a complete picture of just what he will do with the workstation or PC. We don't tell him what he can or cannot do, and we don't tell him how it changes if he is a tiny company or a giant company.

What is our uniform message to the desktop user? How do we integrate word processing, mail, software engineering, design, spreadsheets, and all the other things of which some people need only one of. With Digital, do you need several workstations in order to do several kinds of work? Do we leave it to the salesperson to figure out?

May WOODS Meeting and Independent Business Units

Product lines worked very well for many years. They felt enormous responsibility to the markets and the products they had been assigned. The product lines fell apart when as independent business units, they decided that they had rights that were more important than their responsibilities. We have absolutely no hints that these negative attitudes are starting up again today, but I would like to spend the May WOODS reviewing the responsibilities of independent business units. I would like Bill Johnson for NAC, Henry Ancona for office, Dom Lacava for desktop, Gary Eichhorn for laboratory, Dave Copeland for factory, and Bob Glorioso for TP, etc., lay out the computer market for which they have taken stewardship.

I would like each one to chart out the markets that may possibly use these technologies by size and by the nature of the market, and then identify those which they propose we reject, those that we tolerate, and those that we aggressively go after.

I would like to identify those areas which we are not going after, because we only concentrate on those that have already been educated by the competition, and therefore, know the vocabulary, the measurements, and the features.

I would also like to put on the chart those areas which people want to "do it themselves", and only are interested in features. Also define those which are mainly interested in getting the whole job done and don't care about mips.

I would also like to block off those which are technically challenging, and therefore, we are going after them, and those that are boring, such as small local area networks, and therefore, are not worth our while.

Another interesting chart, would be to identify those parts of the market which the other companies have rejected because of all the reasons we rejected them. It would be interesting to see how big those markets are, and how the people there are hungry for computers. These are the kind of markets we usually did well in. After all the big companies tried and failed in the newspaper business, they left it completely to us, and we did very well for many years.

I don't want books written for this WOODS meeting, and I don't want to be impressed with all the work that a huge staff has done to prepare for it. Instead, I would like to know that the person in charge has a feeling for where he is going, why, and that he takes the responsibility for proposing what he wants to go for. I would also like to understand whether or not he can explain while standing on his feet, what he has to offer to people who might be as innocent as the customers.

KHO:mc KO:1810 DICTATED ON 5/2/88

Distribution:

Distribution withheld. Use PDL option to print memo with distribution shown.

F.C.

INTEROFFICE MEMORANDUM

CORMTS ALL-IN-1 SYSTEM

29-Apr-1988 02:04pm EDT	
Ken Olsen	
OLSEN.KEN	
Administration	
223-2301	
	Ken Olsen OLSEN.KEN Administration

(SMITH.JACK) (SHIELDS.JACK)

> (SIMS.JOHN) (HINDLE.WIN) (OSTERHOFF.JIM)

TO: Jack Smith TO: Jack Shields

CC: John Sims CC: Win Hindle CC: Jim Osterhoff

Subject: PROBLEM SOLVING

The solutions to many of our problems were learned by society many years ago. Many of them are in Roberts Rules of Order, and many of them are implied in the traditional military organization charts. For example, the normal traditional and formal information flow is to pass all the information up to the vice president and the vice president pass it over to the other vice president who then distributes it to his people. The most useful information is passed on informally and directly, and this should be encouraged because it is so efficient. However, it should always be kept in mind that this is an informal bypassing of the traditional formal way of doing things. When we get into trouble with this informality, we should immediately, without embarrassment, fall back on the formal process.

For example, Jack Shields suffers so pathetically from pressure from all the independent business units to get equal time in selling their specific computer. He seems to agree that they all have equal rights, and so when they complain, he tries to give them their equal share of salesmen's time. This is nonsense.

Jack Shields' organization can learn a lot listening and talking to the engineering people, but they should insist on a very formal, organized, documented, disciplined set of rules and guidelines for selling our whole list of computers. This list should be based on the assumption that we are looking for solutions to problems, and it should simply and easily tell the salesmen and the customer what is the best solution for any set of problems, and it should have nothing to do with equal rights for independent business units. The result is, we should be able to eliminate a large percentage of the marketing costs within each independent business unit. Marketing should just be limited to documentation and not to compete with other independent business units.

KHO:ld KO:1806 (DICTATED 4/29/88 BUT NOT READ) Interoffice Memorandum

To: DOM LACAVA JERRY PAXTON

CC: JIM OSTERHOFF JACK SHIELDS JACK SMITH Memo: 5377568339COR37 Date: Fri 25 Mar 1988 2:03 PM EDT From: KEN OLSEN* Dept: ADMINISTRATION Tel: 223-2301 Adr: MLO12-1/A50*

Subject: PVAX PLANS

Before the PRO personal computer was finished, before the models were working, and before the software was done, Andy Knowles ordered parts for 300,000 units because he felt he had to quickly get market share. Further, he would not make any units for in-house use or to sell to our employees because he wanted to get market share. He also did not have the infrastructure set up to deliver them and install them. The result was a catastrophe.

Since then, people have been very conservative in picking the numbers for a new product they plan to build and sell, in order to be safe. However, life is not that simple. One has to be absolutely sure that the hardware works, the software works, and every part of the infrastructure is developed so that they can be shipped, delivered, installed, and made to work in the customer site. Then, if the product is good and the demand is there, it has to be manufactured in quantities necessary to seize the market share which has been earned with all the development of product software and infrastructure. Being conservative in numbers does not eliminate risk. Failure of a product can be the result of any failure in any of the details in preparation. Failure can also come about by not being able to deliver enough product to seize the market share while it is available to this product.

We can think of a lot of reasons why we failed in the first computer business. They are probably all true. But we rarely face the issue that even with Andy's bold numbers, and even if he fulfilled more of the details necessary to make it work, IBM was the only one big enough to fill the demand and gain market share in a short period of time. They are the only ones big enough and able to think big enough to set up the infrastructure necessary.

Our job is obviously to take care of every detail and to commit to relatively conservative numbers, but at the same time, be ready to supply very large numbers if we are successful.

I think it is clear what things we should do to be successful. They are:

1. Get products and software in use inside the company and with

customers as soon as possible, and make sure the product is good.

- 2. Lay out the terms and conditions, the ordering, the installation, the training, and the manuals for those products which will be low priced and delivered over night, and separately for those products which will be sold through the traditional system.
- Lay out the <u>manufacturing</u>, the <u>assembly</u>, and the <u>distribution</u> systems for each part of the world, and for initial quantities and the maximum quantity we could possibly want per year.
- 4. It seems to me that we most likely should have the various sub-assemblies built and tested in the optimum place in the world, and they should do all the testing so that only go/no-go testing is necessary after final assembly.

I believe that the power supplies would be made in Hong Kong, the boards would be made in Puerto Rico, the disks would be assembled and tested on the shelf at the disk manufacturer, and the metal box and the cardboard box that go around it would be made wherever convenient.

We will pick an optimum distribution site that might be at a UPS center or a Federal Express center. The orders will come into that place, the units will be assembled and delivered by the delivering service that we pick.

The assembly facility should not be in a Digital plant. Digital facilities generate overhead in some proportion to the dollar volume that passes through. But the assembly of these pre-tested parts takes so little effort and so little manpower, there should be very little overhead, and we should, therefore, probably contract this to a lean, small company.

Most important, is to be sure that each of the components suppliers to these PVAX's has a plan laid out to satisfy the initial demand, and in addition, has a plan to fulfill the demand for any of the increased increments that we might want.

Then, in addition, we should also look at the components that go into these. We should make sure that there are enough available integrated circuits to fulfill any demand, and enough of everything else that is needed.

Please prepare to show a few of us your first pass at a plan to include all of these details.

KHO:mc KO:1701 DICTATED ON 3/25/88 BUT NOT READ To: JACK SHIELDS JACK SMITH

cc: see "CC" DISTRIBUTION

Memo: 5377566748COR99 Date: Fri 25 Mar 1988 1:33 PM EDT From: KEN OLSEN Dept: ADMINISTRATION Tel: 223-2301 Adr: ML012-1/A50*

FC.

Subject: DUMB THINGS IN ORDERING AND PRODUCT STRATEGY

I would like to spend half a day or a day at next month's Woods meeting on all the dumb things we are doing in taking orders and laying out our products.

In particular, I am interested in the complexity of our orders the number of line items that have to be specified, the complexity of our cable ordering and all the things that frustrate the salesmen and the customer and make for so many mistakes and reorders.

I'd also like to review our software strategy. I'd like to have it presented in a simple clear way and be sure that it can be explained in a very short period of time to the Executive Committee as being very logical and reasonable so we can be sure it can also be explained to the customers and salesmen.

I'd like the software looked at from two points of view, an ordering discount license point of view for single users and network users and also from the point of view of how we use third party software houses. How much of what a customer needs do we say he has to buy from a third party and we take no responsibility? How much of what they order from a third party do they really want and need from Digital?

How many other items that are a key part of the system do we say they have to buy from a third party and that we take no responsibility?

Let's go over the list of all the third party items so that we are convinced that what we are doing is smart and nice for the customers.

KHO:1d KO:1698

"CC" DISTRIBUTION:

WIN HINDLE* IVAN POLLACK JIM OSTERHOFF JOHN SIMS FEB 2 3 1988

Interoffice Memorandum

To: ROGER HEINEN BILL STRECKER man

cc: see "CC" DISTRIBUTION

Memo: 5374377856COR92 Date: Mon 22 Feb 1988 4:39 PM EDT From: KEN OLSEN Dept: ADMINISTRATION Tel: 223-2301 Adr: MLO12-1/A50*

Subject: DIGITAL'S COMPUTING STRATEGY FOR THE 1990'S

I think it is now time that we document our strategy for the 1990's in a package that would be good for public consumption. I would like Roger and Bill to organize a program to get a major news release of our strategy for the 1990's ready for DECworld or the month after.

This could be a big bash and give us the opportunity to explain our science, laboratory, factory, TP, desktop, and CPU strategies. If the first pass, which we should get done later this spring and during the summer, is to be made for <u>public</u> <u>consumption</u>, it would have to be done in simple form in a way that we all understand it. After the <u>public</u> announcement, we then can add the myriad of details that most people would be bored with, but that would be important to carry out the strategy.

This will give us a wonderful opportunity to get all our messages across on standards, UNIX, desktop, workstations, and networks. It would also give us an opportunity to explain our use of both UNIX and VMS and how we plan to fit them together. We could also explain how we are planning to go to 64 bit CPU's in the future.

We have some more work to do on our desktop strategy. We also have a number of things to do before we can make our May announcement on TP. But after these are done, I think it's time to arrange a series of meetings to formulate this strategy and use it to communicate to our own people, to the customers, to the press, and financial community, exactly what our plans are and what the advantages are to our way of doing things.

KHO:mc KO:1627 DICTATED ON 2/22/88 BUT NOT READ

"CC" DISTRIBUTION:

BILL DEMMER WIN HINDLE JIM OSTERHOFF JACK SHIELDS JACK SMITH* BILL HEFFNER DOM LACAVA GRANT SAVIERS JOHN SIMS To: ROGER HEINEN BILL STRECKER

cc: see "CC" DISTRIBUTION

Memo: 5374377856COR92 Date: Mon 22 Feb 1988 4:39 PM EDT From: KEN OLSEN Dept: ADMINISTRATION Tel: 223-2301 Adr: MLO12-1/A50*

E.C.

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KHO:mc KO:1627 DICTATED ON 2/22/88 BUT NOT READ

"CC" DISTRIBUTION:

BILL DEMMER WIN HINDLE* JIM OSTERHOFF JACK SHIELDS JACK SMITH BILL HEFFNER DOM LACAVA GRANT SAVIERS JOHN SIMS Interoffice Memorandum

To: see "TO" DISTRIBUTION

Memo: 5374356802COR76 Date: Mon 22 Feb 1988 10:49 AM EDT From: KEN OLSEN Dept: ADMINISTRATION Tel: 223-2301 Adr: MLO12-1/A50*

FC

Subject: MANAGERS, DECISION MAKERS, AND GOAL SETTERS

Back in our years of product line managers, it was believed that the product line manager had freedom to make all decisions, do anything the way he wanted to do it, and no one, including the Executive Committee or the Board of Directors, had any moral right to make decisions in this area. This, of course, was nonsense. Managers should manage, and decisions made by the appropriate groups in the company.

Some of this old tradition has developed in the areas of project engineering. Some people think that when someone is put in charge of managing a project, he can make all the decisions, and set the pattern and details, including the business operations of the project. He may indeed have a lot of influence because he has to make proposals and direct the project day by day. However, it is clear that he is a manager. He is not a czar.

These beliefs create a lot of problems in our engineering area. The manager who appears to be a czar to much of the company, becomes a victim to all kinds of pressures from all directions to include many things in the project. People believe that if they can pressure him into saying yes, they get their whim into the project.

Some people believe they can be threatened by software people, that iff something such as a component, a special feature for a special market, or any number of things, is not included in the software, it won't be supported. The result is a lot of frustration on the part of the manager and an unbelievably complex and often inordinately late group of projects.

We can't afford to have this happen in the PVAX project. I would like to set a new tradition for decision making. The configurations for the PVAX are already fixed and decided on. The ways of selling and pricing have been decided on. All proposals for additions, changes, modifications, and features have to be presented to a committee to be incorporated into the PVAX.

This committee will consist of Dave Poole, Bill Strecker, Roger Heinen, Dom Lacava, and Ken Olsen.

When people suggest or pressure Dave Poole into adding something or changing something, his stock answer now will be, "write it down and I will be happy to present it to the committee".

KHO:mc KO:1621 DICTATED ON 2/22/88 BUT NOT READ

"TO" DISTRIBUTION:

ROGER HEINEN DOM LACAVA POOLE JOHN SIMS BILL STRECKER WIN HINDLE* JIM OSTERHOFF JACK SHIELDS JACK SMITH

Information Processing

DEC DISCOVERS IT CAN'T LIVE BY VAX ALONE

So it's branching out from the venerable mini strategy

t was a sign of how quickly things can change. The scene was Digital Equipment Corp.'s annual meeting on Nov. 3. DEC founder Kenneth H. Olsen was assuring investors that all was well despite a 17% drop in profits in the Oct. 1. first quarter on a 16% gain in sales. Then he offered a wry assessment: There are problems only in one product line and one country, he said. "They just happen to be a big product and a big country." The product is DEC's largest, most profitable computer. The country is the U. S.

Just a year ago, Olsen was basking in the overwhelming success of a brilliant strategy: Stick with one computer design, using a single set of software, and make it in many different sizes. That way, no matter how big or small, any DEC computer could share information with any other. It was an easy idea to sell, especially against IBM, which had one or more architectures and sets of software for each size of computer it sold. Between 1984 and 1988, DEC's sales doubled, and its earnings quadrupled.

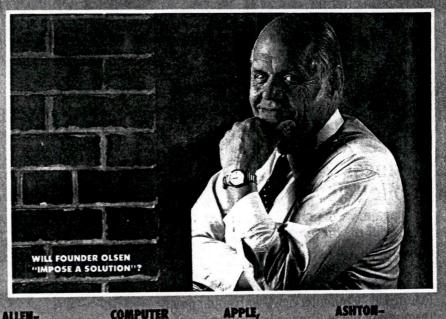
Today things are a lot more complicated at DEC. Its VAX computer design, in all of its permutations, remains the core of the business. But suddenly, VAX can't do it all. Customers are shifting more computing jobs to networks of low-cost desktop machines, reducing the need for large minicomputers. And they're demanding hardware and software that can connect with many different sizes and brands of computers. Though it recently has announced a spate of jointdevelopment deals and alliances to ride this trend (table), DEC has been slow to react. And Olsen insists that a large VAX, powering hundreds of terminals, is still the most cost-effective way to deliver computing power to desktops.

'GUT-WRENCHING.' While he may be technically right, that thinking helped DEC misread the market in 1988, a year Olsen had viewed as a chance "to seize market share." DEC geared up to sell big VAXes, doubling its capital budget to \$1.5 billion and increasing its 111,000-employee payroll by 10%. But the demand never materialized—in part, Olsen says, because financial-services companies stopped buying after the stock market crash. Now analysts think that DEC will bottom out in fiscal 1989, ending June 30. The consensus: an earnings drop of 9%, to \$1.2 billion, on sales of \$13 billion.

That has caused a change in plans. Now, Olsen is relying for growth on new products that have little in common with his beloved VAX. In 1989, DEC will sell clones of the IBM PC/AT as well as engineering workstations that use a version

LET'S MAKE A DEAL

Joint ventures, alliances, and marketing deals are helping DEC fill holes in its product line and strategic plan. Some will boost VAX minicomputer sales. Others create non-VAX businesses. Here are the latest deals:



MIPS COMPUTER SYSTEMS DEC has bou

out in early 1989

SETH RESNICK

HOTOGRAPH BY

SYSTEMS m DEC has bought a pu 5% stake in MIPS D Computer and will use MIPS microchips to build highperformance Unix workstations, due

TANDY DEC will sell Tandymade personal computers under the

puters under the DEC label, giving it a competitively priced clone of the IBM PC/AT.

ALLEN-BRADLEY Allen-Bradley will sell DEC computers in factory automation systems, potentially giving DEC a major boost in a key market

ASSOCIATES A major supplier of software for mainframes, Computer Associates has agreed to adapt several key products for use on VAX systems

DATA: COMPANY REPORTS; BW

APPLE, OLIVETTI, AND COMPAQ

These PC suppliers and DEC are smoothing the connections between their machines. DEC will service the PCs when they're connected to VAXes

TATE Ashton-Tate will adapt its popular PC data-base program, dBase, so that VAXes and PCs can

VAXes and PCs can share information more easily. DEC will sell the program

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INFORMATION PROCESSING

of AT&T's Unix operating system. While IBM is still a threat, Olsen may have to worry more about such spry competitors as Sun Microsystems, Apollo Computer, Apple, and Compaq, against whom the VAX isn't much of a weapon. Even if Olsen does well, he'll be competing in markets where 45% gross margins are the norm—vs. the 58% that DEC usually gets. "The change is going to be gutwrenching," says Dale Kutnick, an industry consultant.

Investors have already figured that out. The company's stock, which hit 199 in mid-1987, fell to 87 last month, giving DEC a multiple of less than 10 times earnings—a valuation 10% less than the S&P 500 price-earnings average. Only a 10-million-share buyback helped push the stock back above 90.

t

STEPCHILD. The stock may not return to favor soon, given the cloudy future of the minicomputer business. In recent years, overall growth in minicomputer sales has slowed to around 6% annually, according to market researcher International Data Corp., vs. 30% for competing products such as workstations. For a while, DEC took minicomputer market share from IBM faster than workstation makers stole business from DEC. But IBM's new AS/400 minicomputer is keeping its customers in the fold. And that's forcing DEC to compete in an arena that it would rather avoid: the market for open systems.

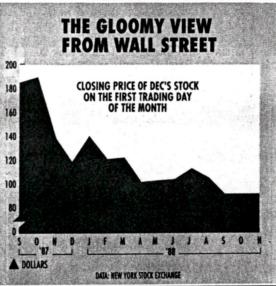
These are systems built around widely accepted software and

communications standards, often including some version of the Unix operating system, a computer's primary software. DEC sells about \$1 billion worth of machines each year that use its version of Unix, called Ultrix. It also is backing the Open Software Foundation, a group pushing a standard based on IBM's version of Unix. But until recently, DEC treated Unix like a stepchild. At the annual meeting, Olsen again belittled it as a system inferior to VMS, the primary VAX software.

His motives are understandable, given his investment in the more profitable VMS. "Anybody who has a dominant market share really wants closed systems," notes W. Ford Calhoun, a vicepresident of information science at Smith Kline & French Laboratories. Olsen argues that he can sell VAX side by side with Ultrix and other non-VAX products, though he concedes that his sales pitch will be more confusing than when VAX was king. "We may have to work on the phrasing a bit," he says.

Confusing message or not, there's no doubt within DEC about what has to be done: Work feverishly to succeed in open systems. The company has established a special department with 400 software engineers to focus on open systems. DEC is also beefing up Ultrix: The catalog of applications software such as spreadsheets or data base managers for Ultrix has swollen from 150 to 1,000 in just nine months.

KEY TEST. By far the boldest move, however, is DEC's joint development with MIPS Computer Systems Inc. After its own efforts to design a so-called RISC (reduced instruction set computer) chip fell short, DEC turned to MIPS for the critical component. RISC machines achieve higher speeds at lower cost by eliminating all but the most important instructions. Sun Microsystems Inc. and Hewlett-Packard Co. are already selling



RISC-based machines, and companies ranging from Apple Computer to Xerox Corp. are designing them—all able to do many jobs VAXes now do, more cheaply. DEC's first RISC machine, an Ultrix workstation aimed at the engineering market, is due in January. And DEC officials say an entire line of RISC machines will follow. Eventually, the RISC line will extend from desktop machines to mainframecaliber systems, the way the VAX line now does.

The RISC workstation will be a key test of how well this strategy works. DEC sold about \$750 million worth of VAX workstations this year, but it didn't reach its goal of displacing Sun, whose fiscal 1988 revenues hit \$1 billion. The company is tuning into other desktop markets, too. It is working with PC makers such as Apple, and has contracted with Tandy Corp. to make an IBM PC/AT clone—replacing the VAXmate, an awkward combination of a VAX terminal and a PC. VAX customers also will get their lowest-priced computer yet, a "PVaX" that will reportedly list for below \$5,000.

A big win with these new machines would solve many of DEC's problemsbut also create new ones. For example, a successful MIPS-based workstation, while shoring up DEC's faltering position in engineering departments, could hurt earnings. To compete in the Unix market, these machines will have to be priced far below the proprietary VAX line—as much as 75% lower in processing power per dollar, analysts say. That "has the potential of wreaking havoc on their pricing structure," says Robert Randolph of TFS Inc., a Boston area consultant.

GOOD NEWS. The danger is that DEC's own customers will switch from the VAX to the Unix system. Already, analysts say, earnings are down because customers are buying smaller VAXes, which have lower margins. "If we don't do a good job, we'll have a mess on our

hands," says Don McInnes, vicepresident of DEC's Engineering Systems group.

It won't help that DEC will simultaneously step up the VAX assault on IBM. DEC is perfecting new software to make VAX more competitive in the \$27 billion transaction-processing market, such as bank teller machines. "We will be going after customers we haven't gone after before," says William D. Strecker, vice-president for product strategies and architecture. A recent marketing deal with Allen-Bradlev Co. should also boost DEC's prospects in factory automation. Although one project to beef up the top end of the VAX line was killed, a second is ahead of schedule. Due out next fall, it's expect-

ed to have four times the performance of today's largest VAX—for about the same price.

The good news is that DEC's challenges pale in comparison to those facing other minicomputer makers (page 106). DEC has 30,000 VAX customers, most of whom will keep buying the proprietary design that currently runs their software. Kutnick predicts that DEC will boost its minicomputer market share from 27% now to 31% by 1993. And, even after the stock buyback, DEC will have \$2 billion in cash to invest in maintaining VAX while developing new businesses.

If a crisis occurs, moreover, DEC still has an amazing resource in Ken Olsen. Every six or seven years, the founder has taken a more direct role in DEC's management, often to clarify a new direction. The last time was when he laid down the VAX-only rule. Lately, he has left most day-to-day operations to John J. Shields and John F. Smith, senior vicepresidents. But says IDC analyst Don Bellomy: "It may be necessary again for Ken to come down from the mountain and impose a solution."

By Leslie Helm in Boston

NG

F(

INTEROFFICE MEMORANDUM CORMTS ALL-IN-1 SYSTEM

> Date: 14-Nov-1988 03:49pm EST From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301

TO: See Below

Subject: IBM HAS IT NOW

As I have been visiting U.S. Sales offices, I find that there is a strong feeling that the Area offices, Headquarters, the services to the field, and the Business Units are their biggest burden. They spend 75 percent of their time negotiating with all of the people they have to do business with within Digital, and 25 percent of their time is spent with the customer.

Even worse yet, they do not feel they get any help from the marketers, and they do not feel they get any help from our advertisements.

Our prices are a lot higher than IBM, HP, NOVEL and NCR, and our sales people struggle valiantly to explain why our product is worth more, but they get no help from marketing or advertising.

The IBM AT and the AS400 are beating us everywhere. HP, NCR, and of course, NOVEL are a lot less expensive for the same job.

We are still advertising that "Digital Has It Now"; but, from the customer's point of view, IBM has it now, and it costs a lot less. We should decide what we have and tell the message of what we have.

Testimonials have been effective, but they mean nothing to people who have a mid-size computer and six dozen PC's to do a miscellaneous set of things, including TP. They believe IBM's AS400 is cheaper, and they have the security of IBM; and, of course, NOVEL is a lot cheaper for a PC network. Our ads give no useful information in helping the salesman with his problem. This is probably the size project which has the biggest growth opportunity for the Company. There are thousands of companies, thousands of subsidiaries, and thousands of departments that need just this machine. Our ads, our strategy, our marketing, our new messages and even our thinking contributed nothing to this huge market.

It seems to me that, if we really hit this hard, sold a product, and compared it with IBM and NOVEL, we would first of all learn we have to change our prices and then we would have a message that they would understand. Customers wouldn't buy exactly the product we advertised, but they would sure have a feeling that small variations of it would not overwhelm them.

I know very well someone who manages part of a subsidiary that needs a machine like this. For years he has beat off the mother company who wanted all IBM because the DEC machine was half the cost. This time he is not even going to consider Digital because everyone knows that now IBM has it, their prices are low, and they are the industry leader. To top if off, everyone knows that NOVEL is better and cheaper, and they are the big play in LAN's.

KO:2368 (DICTATED 11/14/88 BUT NOT READ)

Distribution:

TO: Peter Jancourtz TO: Ed Kamins TO: Dallas Kirk

CC: Jack Smith CC: Dom LaCava CC: KEN SWANTON CC: Bill Demmer CC: Bob Glorioso CC: Jack Shields CC: Win Hindle (JANCOURTZ.PETER)
(KAMINS.ED)
(KIRK.DALLAS)

(SMITH.JACK)
(LACAVA.DOM)
(SWANTON.KEN)
(DEMMER.BILL)
(GLORIOSO.BOB)
(SHIELDS.JACK)
(HINDLE.WIN)

E.C. Background attached (ken's lost memo on Subject).

INTEROFFICE MEMORANDUM

CORMTS ALL-IN-1 SYSTEM

Date: 14-Nov-1988 03:59pm EST From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301

TO: See Below

Subject: MORE NOTES FOR DISCUSSION AT THE AREA MANAGERS DINNER

Here are some more details of what I would like to discuss at our dinner on November 29. I understand that today, salesmen spend 75 percent of their time negotiating with the Corporation, only 25 percent of their time is left to work with the customer, and they get little or no help from headquarters, the area, or the marketers. They are supposed to take all of the infinite amount of paper dumped on them, and out of that, figure out that message.

I would like to make changes so that almost all the staff disappears from the area headquarters and from the U.S., headquarters. I would like all orders to go to one point, with one data base, with one person in charge and with an automatic system that insures all seven groups who have responsibility get the information and carry out their responsibility without any help from the sales person.

I would like to make a first pass at this by picking the five best districts in the country and give them responsibility for budgeting their district in detail. They will pick their volume and allocate resources including sales people, sales support, field service and software service. They will take responsibility for discounts and will not have to go through many, many stages and many, many waits to make decisions. They will make them all themselves.

At the dinner, I would like to work out all the details and then a plan for accomplishing this for all districts, and for finding new jobs for the staff in the areas and headquarters. At this meeting, I would like to lay out specifications for the group who will make the one data base for all orders and who is responsible to make sure that every group does their part and who immediately sends back acknowledgments for all orders. I want a system which means no delays in getting decisions for the sales people. There will be no one week or three month delays for answers back from the Corporation. I want every sales person to spend 100 percent of his time to be spent on the things he is supposed to be working on which is selling the customer.

Then, I would like to define the job of marketers. First of fall they should be a service to the sales people, and not vice versa, and all their work should be measured on how easy it makes the job of the sales people.

KO:2370 (DICTATED 11/14/88 BUT NOT READ)

Distribution:

TO: Abbott Weiss TO: Jack Shields TO: CHICK SHUE TO: Jack Smith

CC: Win Hindle CC: John Sims CC: Jim Osterhoff (WEISS.ABBOTT)
(SHIELDS.JACK)
(SHUE.CHICK)
(SMITH.JACK)

(HINDLE.WIN) (SIMS.JOHN) (OSTERHOFF.JIM) INTEROFFICE MEMORANDUM CORMTS ALL-IN-1 SYSTEM 9-Nov-1988 03:58pm EST Date: From: Ken Olsen OLSEN.KEN Administration Dept: Tel No: 223-2301 (OSTERHOFF.JIM) (HINDLE.WIN) (SIMS.JOHN) (SMITH.JACK)

TO: Jim Osterhoff TO: Win Hindle TO: John Sims TO: Jack Smith

Subject: AREA MANAGERS' MEETING

Blind	Carbon	Copy:	Jim (Osterho	ff
		- 27 C	Win 1	Hindle	
			John	Sims	
			Jack	Smith	

/dao

INTEROFFICE MEMORANDUM CORMTS ALL-IN-1 SYSTEM Date: 9-Nov-1988 03:52pm EST From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301 Remote Addressee (ANN JENKINS @MLO) Abbott Weiss (WEISS.ABBOTT) Jack Shields (SHIELDS.JACK) CHICK SHUE (SHUE.CHICK)

Subject: AREA MANAGERS' MEETING

TO:

TO:

CC:

CC:

On the week of November 28th, Chick Shue is having a Sales Managers' meeting in Boston and Littleton. I'd like to invite the Area Managers to have dinner with me on the night of November 30th. I will be in Littleton that afternoon, and I'd like to meet them at 4:00 o'clock in a room in Littleton and then at 7:00 o'clock take them to dinner somewhere.

Will you invite the Area Managers plus Don Busiek, Don Zereski, and Dave Grainger to the meeting and dinner and arrange a place for us to go for dinner. I don't want a fancy place, but we should get a room where we can talk alone and as long as we would like.

The three subjects I would like to discuss:

- How do we integrate the field services with sales to look like one company that's efficient and all working together, and how do we get Areas to cooperate when customers overlap more than one area?
- 2. I'd also like to hear their opinions on the nature of our business is changing for most of the last years, we sold boxes to OEMs or people who had the capability of tying them together or willing to pay us to tie them together. How long can we grow with this model, and to what degree do we have to offer more complete solutions?
- 3. Six years ago, we changed Europe where each country made out their own budget and allocated their own resources with amazing results in productivity and growth. Is that possible in this country? If we want to try five

districts and have them make out their own budget for the last six months of FY'89 and twelve months of FY'90, which five districts would we pick?

Today, we have many marketing groups without clear goals and measurements. If we said that every marketing group had the goal of servicing the salesman, how would we state their job description and how would we measure them?

KHO:dao KO:2351 DICTATED ON 11/8/88, BUT NOT READ INTEROFFICE MEMORANDUM

CORMTS ALL-IN-1 SYSTEM

Date: 7-Nov-1988 11:27am EST From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301

FC.

TO: See Below

Subject: NEW MARKETING ORGANIZATION

There are several things I'd like to have as a result of the new marketing organization.

First of all, I'd like <u>a new committee</u> which would consist of the head of each of the marketing or business organizations. This would be a fairly large organization, but I'd like this to be the organization that <u>passes judgment on the plans and the results of</u> each of the groups. The Executive Committee would also be members of this committee.

The second thing I'd like out of the organization is a system for reporting troubles, failures, and delays in all projects. In this I would like to include engineering, software services, field service, and integration services. Right now, one has to hear about delays in engineering by word of mouth, although, good things are told immediately. We also don't hear about failures and unhappy customers in software services and field service until a year or two later which is embarrassing. We also don't hear about lost orders, and they should be reported to this committee. I would not have all of these in a written report, duamu because that would get out to the press; but I would like to have it presented orally at each meeting.

I'd like this committee to be responsible for the large scale integration programs. Right now, we have not gained the confidence of customers. The people we have may not have the apparent stature, or we don't have the organization supported or have senior executives who understand the program at all because it is kept quite secret. I'd like this committee to have the commission to be sure that all the resources of the organization are used for each job.

KHO:dao KO:2348 DICTATED ON 11/7/88, BUT NOT READ

Distribution:

Abbott Weiss TO: Win Hindle TO: Jim Osterhoff TO: TO: John Sims Jack Smith TO: TO: Jack Shields

WEISS.ABBOTT) HINDLE.WIN) OSTERHOFF.JIM) (SIMS.JOHN) (SMITH.JACK) (SHIELDS.JACK)

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INTEROFFICE MEMORANDUM CORMTS ALL-IN-1 SYSTEM 25-Oct-1988 08:33am EDT Date: From: Ken Olsen OLSEN.KEN Administration Dept: Tel No: 223-2301 Win Hindle (HINDLE.WIN) Jim Osterhoff (OSTERHOFF.JIM) (SHIELDS.JACK) (SIMS.JOHN)

Jack Shields John Sims Jack Smith TO:

TO:

TO:

TO:

TO:

(SMITH.JACK)

E.C.

Subject: LAST WEEK'S WOODS MEETING

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Two things became clear to me at the WOODS meeting last week.

- Jack and Jack have too many boxes reporting to them. There 1. is too much data for them to process and to stay in charge of it all.
- It is clear that we should immediately add one, two or 2. three more members to the Executive Committee and that one of them should be in charge of all marketing.
- It is also clear that, if the Executive Committee has to 3. unanimously agree on expansion of the Executive Committee, it will never happen.
- It is clear that I cannot go to the Board of Directors and 4. say that I want to expand the Executive Committee but they won't let me.
- Five years ago, we said to the Board of Directors that we 5. would temporarily have almost every piece of the Company directly report to Jack Smith and Jack Shields. They, of course, said this was unwise, but we said it was just temporary. After a period of five years, it has become a manhood-macho issue even though we are three times bigger and plan to be a lot bigger in a small number of years. It is clear that I am going to have to explain to the Board soon why I have let this promise go so long.

KHO:ld KO:2306 (DICTATED 10/21/88 BUT NOT READ)

FC

INTEROFFICE MEMORANDUM

CORMTS ALL-IN-1 SYSTEM

Date: 26-Oct-1988 09:09am EDT From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301

TO: See Below

Subject: FIELD ORGANIZATION

I have been talking with some senior sales people, and they made the statement that Digital is very lethargic right now. I said it is definitely not true in Maynard, and they said it seems that way from the field.

I suggest we put on a major program to jazz up the field. I think we should ask every senior Officer to pick two or three district offices and go out and spend half a day answering questions and jazzing them up.

I asked how the automobile program was going and if they liked the latest solution. The answer was no. They said they did not want to receive one more letter on any subject from the Company. They never hear from anybody and never talk to anybody; but they just keep getting these letters one right after another, and the contents mean nothing to them.

I would like to take each one of the senior managers for a couple of hours and train them on ordering software and field service and then have them go out and teach the field how easy it really is. Some of those in the field are saying they cannot understand all the different software licenses, services and warranties. They spend a lot of time trying to figure them out, because the support systems are not there to make it easy to get the information. They also say that productivity is down because of this, and, in some cases, they are quoting hardware only because they cannot figure out service costs. They feel we are going to become a hardware company and customer satisfaction is going to suffer.

I also heard that the field is waiting to see who else is going to be replaced in the field. This is also slowing down work as

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TO: Jack Shi Chick Sh Jack Smi Pete Smi	nue Lth	DATE: September 27, 1988 FROM: Win Hindle DEPT: Corporate Operation: EXT: 223-2338 LOC: MLO12-1/A53	5

SUBJ: Competitive Analysis

Attached is a joint proposal from our organizations to improve our competitive analysis function. I will propose it to the Executive Committee, but I want to give you a look at it before proceeding. I think it is an excellent proposal.

/DK Attachment

- Jollow-up

Competitive Analysis Task Force:

Summary Findings & Recommendations to the Executive Committee

June 29, 1988

Paul Kampas, Chairman (Corporate Competitive Analysis) Richard Case (U.S. Sales Competitive Support) Bob Murray (NaC Marketing)

Digital Equipment Corporation

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I. Business Problem/Opportunity

Digital is entering an era of *dramatically intensifying competition*, much of which is already apparent today. Four factors contributing to this increase in competition are:

- a. *DIGITAL'S SUCCESS:* In the process of successfully entering the computer industry's 1st-tier, Digital has become the target of both the 2nd-tier challengers and the 1st-tier defender (IBM).
- b. INDUSTRY GLOBALIZATION: The industry is experiencing the entry of powerful foreign vendors (e.g. Japan), the rapid growth of new foreign markets (e.g. Pacific Rim), and the multi-nationalization of foreign customers (e.g. Japanese banks and auto makers in the U.S.).
- c. *ENTERPRISE INTEGRATION:* The merging of enterprise islands of automation is eliminating protected competitive niches such as Office, CIM, OLTP, Engineering, etc.
- d. ACCELERATING STANDARDIZATION: Standards (e.g. Unix) driven by customer demand and 2nd-tier challengers are reducing the opportunity for proprietary competitive advantage.

Taken together, these factors characterize a *maturing industry* entering a predictable shake-out stage, where: a) there is intense competition for the survival slots; b) there are alliances and acquisitions of vendors jockeying for an advantage; and c) there is increasing pressure on margins and proprietary products due to creeping commoditization.

Digital's challenge is to *successfully navigate* through this competitively intense maturation stage and end up with a secure first-tier position. However, Digital's existing informal Competitive Analysis function is not currently capable of effectively supporting the company's succesful navigation through this period.

II. Competitive Analysis in Digital Today

Competitive Analysis is an *informal* function in Digital today. That is, it has *no established* responsibilities, cross-group processes, job descriptions, work descriptions, goals, or measurements of success.

Based on a company-wide inventory of Competitive Analysts in May, 1988, the population of the Competitive Analysis community is approximately 83 full-time individuals worldwide (13 support Europe and GIA, the other 70 support the U.S.). Of those 70 in the U.S., 60% reside in four groups (U.S. Sales, NaC, Corporate, and Storage Systems). The other 40% reside in 19 groups, while 22 groups have *no full-time* competitive analysts.

Also, in reviewing the deliverables of the various CA groups as part of the inventory, it appears to the Task Force that organizations having a smaller number of full-time Competitive Analysts concentrated in unified teams are more effective than those having a larger number of part-time Competitive Analysts spread around the organization.

III. Recommendations

The Competitive Analysis Task Force recommends that Digital move from an unintegrated, autonomous organization to a networked, distributed function similar to the Quality and Communications functions in Digital today (recommendations on next page).

Restricted Distribution

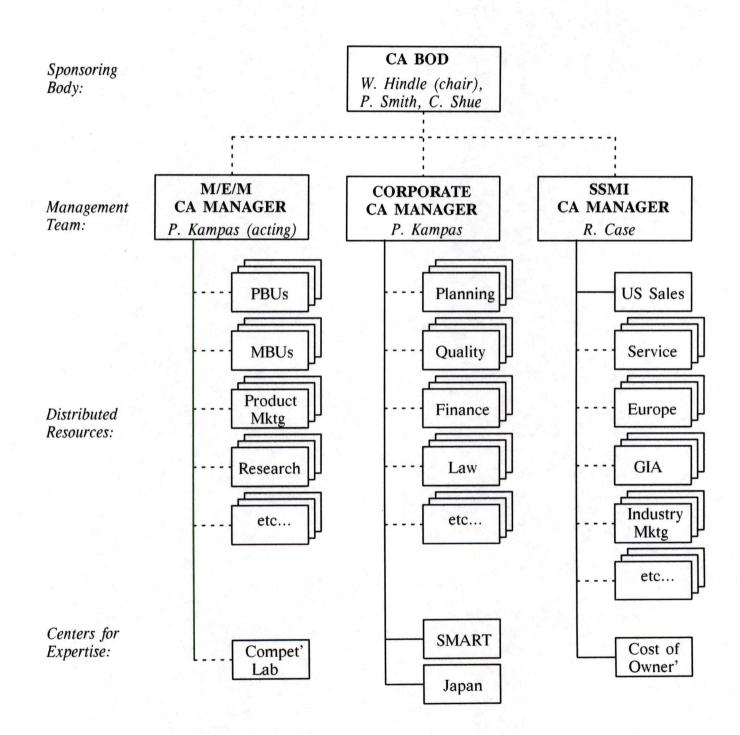
Specifically, the Task Force recommends the following seven actions for approval by the Executive Committee:

- 1. APPOINT A SPONSORING BODY: Appoint an appropriate high-level Sponsoring Body to which the Management Team (see below) is responsible. It is proposed that this body be called the Competitive Analysis Board of Directors (CA BOD), and consist of Win Hindle (chairman), Pete Smith (MEM), and Chick Shue (SSMI). The CA BOD will meet quarterly to review the function, set direction, evaluate funding and resources, ensure group commitment, and resolve conflicts.
- 2. IMPLEMENT A MANAGEMENT TEAM: Implement a 3-person cross-organizational Competitive Analysis Management Team to direct the activity company-wide and be responsible to the CA BOD. It is proposed that this body consist of Paul Kampas, Chairman (representing Corporate Operations), Rick Case (representing SSMI), and Paul Kampas, Acting (representing MEM and dotted-line to Mike Taylor). The CA Management Team will meet bi-weekly to monthly, and will be responsible for: a) establishing the strategies and practices for integrating Digital's Competitive Analysis activities, and; b) ensuring the focus and attention needed to develop a strong, credible function that optimizes Digital's knowledge and actions relative to its competition.
- 3. IDENTIFY GROUP LEADERS: Identify a responsible, qualified Group Competitive Analysis Leader in every major organization in Digital (roughly one per VP for a total of approximately 40 company-wide) to work closely with the CA Management Team. The CA Group Leaders will meet bi-monthly and are responsible for developing and directing the Competitive Analysis function in the organizations they represent.
- 4. ORGANIZE IN UNIFIED TEAMS: Strongly recommend that organizations with dispersed, casual Competitive Analysis resources consolidate them into unified teams of dedicated resources.
- 5. IMPLEMENT STANDARDS & ARCHITECTURES: Implement shared Standards and Architectures to define the work, the responsibilities, the deliverables, the jobs, and the information (including database architectures and document architectures).
- 6. ESTABLISH CENTERS FOR EXPERTISE: Establish shared Centers for Expertise (CFEs) to provide important broad-based deliverables for which no one group has the scope or budget to individually provide. Currently, four CFEs are being proposed and/or implemented, including the Competitive Lab CFE (Rick Case/Mike Taylor), Competitive Cost of Ownership CFE (Rick Case), the SMART (Standards, Methods, Architectures, Resources, and Training) CFE (Paul Kampas), and the Strategic Asian Competition CFE (Paul Kampas).
- 7. MEASURE & REVIEW THE FUNCTION COMPANY-WIDE: Measure and review Competitive Analysis as a unified function company-wide, including goal-setting, funding, head count, performance, etc.

A diagram showing the proposed organizational structure is on the following page.

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The Proposed Competitive Analysis Organization



Copy for albott Weiss. file in E.C.

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INTEROFFICE MEMORANDUM

TO:	Jim Cudmore	DATE:	22 February 1988		
	Ivan Pollack	FROM:	Win Hindle		
	John Sims	DEPT:	Corporate Operations		
	Ron Smart	EXT:	223-2338		
	Ken Swanton	LOC:	ML012-1/A53		

SUBJ: TOM PETERS' ANALYSIS OF DEC IN 1982

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Attached is a memo that came from my files from Tom Peters before he became famous. He taught in a Summer Education Seminar in 1982 put on for engineering managers. In the process, he heard a great deal about our move to "the New Digital".

I find Peters' comments fascinating because, although he did not know DEC very well, he did know H-P, TI, 3M, P&G, and Frito-Lay. The issues he discusses are close to the questions we face today about how to "drive" the business.

WH/sb COR:2147

August 11, 1982

TO: Mike Patten Jim Bailey Larry Portner

FROM: Tom Peters

LARGELY UNWARRANTED REFLECTIONS ON HANOVER

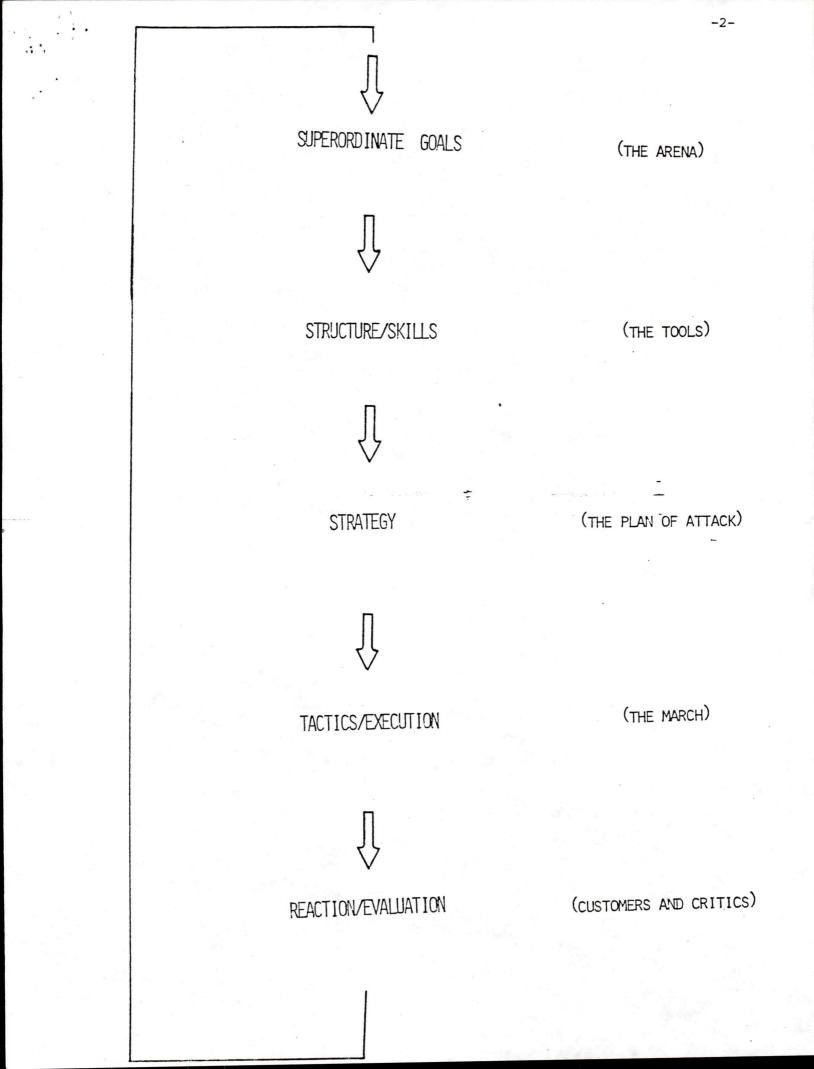
I first thought I'd write you about my impressions in general. My notes are so extensive, and my thoughts so chaotic, that I decided against it. Instead I want to take on two areas and comment on them: (1) organization, and (2) skills and values (superordinate goals).

I - ORGANIZATION

Of the two, it makes sense to start with skills and values, but I won't. I believe we become what we are pointed at. Take me to Alaska and drop me off; return 90 days later and I will have somehow acquired a highly varied wardrobe of coats. Or: strategy follows structure.

That is, companies <u>find</u> strategies, by and large, as a <u>function of</u> how the organization's structure (and procedures) points them. 3M devours \$100 million market niches as a <u>function of</u> its radically decentralized, professional-useraimed structure.

Let me get more fine grained. The following figure is my view of the world. There is--at best--an overarching value/superordinate goal which roughly points the beast (organization) at a sizable arena with loosely-defined boundaries (Julius' old Digital: "We build quality computers of a certain size"). Next, arguably, come the structure and skills, which are the <u>tools</u> that point one at the arena. Structure and skills are <u>substantial limiting devices</u>. At Digital, the quality focus and the hardware (and now, operating system) orientation dominates. As a <u>function of</u> the structure and skills, one de facto narrows the



superordinate goal-aimed-scan by, let's say for the sake of argument, 80 percent.

Next, and only next, comes strategy, in reality. (Of course, strategy can come first. One can strategize and conclude <u>from</u> the sum of strategies that the superordinate goal is thus and such. And one can build, a la the old TI design, a highly variegated structure--each of TI's 90 PCCs was different--to execute the strategies. But such, I believe, is a design for disaster--as TI is now learning to its great consternation.) The strategies, per the figure, are, then, <u>creatures</u> of the superordinate goal/structure/skill mix.

Thence, comes tactics, execution, reaction, and evaluation. One hopes (though it's all too infrequently the case), there is, as per my model, at least one feedback loop.

All of the above is a bit of a diversion aimed at postulating, again only for the sake of argument, a possible dominant role for value/skill/organization structure. But there is a practical point to it: namely, your structure sćares the daylights out of me! In a nutshell, I am mortified by the thought of multibillion-dollar monolithic functional organizations. Moreover, I view the new marketing role as potentially too detached from the real world of execution and, more important, new skill building; I see it as a <u>detached</u> "cowboy analyst" role. Those are summary observations. I want to come back to them after giving you my 5¢ analysis of your structure historically, TI's, HP's (and two HP kin: 3M and Johnson & Johnson), P&G's, and Frito-Lay's. An odd grouping, but selected with some forethought.

DIGITAL

The old Digital was <u>functionally</u> driven. It was hardware/quality oriented. The kings of the hill were, by and large, the engineers. The prime source of energy/commitment was the interaction between Ken and the engineers. The product

-3-

was so good that some say the sales force was a bunch of "order takers." I think that is typical Digital self-criticism. The sales force was <u>not</u> an IBM sales force (service handholders supreme), but it was, especially in non-OEM arenas, a super-skilled bunch of <u>problem solvers</u>--albeit hardware oriented and not software oriented. (HP has an interesting edge here. Its sales force has traditionally also been a bunch of arrogant hardware salesmen, but with one difference. HP's typical instrument customer was sophisticated--like a Digital customer--but not sophisticated about hardware, so HP sales people are inherently more interested in user-friendly toys and higher-level applications problem solving, at least "softwarish" by today's standards.)

I don't suspect marketing's role in the above (old Digital) was all that critical. Your segments largely defined themselves. The marvelous interaction of noncommissioned sales force and engineers was most vital. In such an environment, it's thus not surprising that the marketers eventually became bureaucrats (i.e., managers of the matrix, constructers of excessively complicated resource allocation models which cut bodies into sixteenths at will--Ken's critique). That's a harsh and surely not fully accurate statement, but probably is directionally correct.

So much for the old Digital. Now for the new Digital. Will it become the world's first \$10 or \$50 billion dollar functional organization? I am skeptical. I, more than anyone, applaud: (1) simple organizations (let the engineers engineer, let the manufacturers manufacture), and (2) simple models (marketers, a la Ken's state-of-the-corporation talk, who have simple five variable models in their heads rather than 100 variable resource allocation algorithms on paper).

But: Who is to be king? Where does the <u>energy</u> come from, especially if there is to be a shift of emphasis (from hardware to solutions)? Can you really have a \$10 billion (let alone \$50 billion) functional monolithic organization? Can "the marketers market" in some kind of void? I will come back to these issues

-4-

after reviewing TI, HP, P&G, and Frito-Lay. But I will add some prefatory remarks.

One principal fear is that the marketers, even if they <u>do</u> learn not to be bureaucrats, will turn into what I call "John Wayne analysts" or "cowboy analysts." ("Let's take the hill," he yelled boldly, forgetting that the tanks behind him were made of cardboard with balsa backing.) They are taking to their new role with a vengeance. They analyzed the problems in Hanover like well-seasoned Harvard MBA classroom vets. But damn near every strategy, damn near every skill list seems to me to be an example of "be all things to all people simultaneously." Such an "MBA case analyst" mind set is among the top half dozen problems in corporate America today in my view. One can only play the game if one has a stake. The stake to me must be tied to reality. I am a big fan of general managers: Since they have multifunctional reeponsibilities, they do not take on, if wise, too much more than they can chew--and they are <u>skill</u> driven above all. Cowboy analysts are often pipe-dream driven. They assume that manufacturing and engineering <u>will</u> come through on time, for instance, and that no crisis in other programs will bump theirs egregiously.

I think the structural difficulty I see comes from your apparently seeing only two extreme possibilities. Ken et al dislike the "marketer as bureaucrat" role and I wholly agree. They therefore conclude that to solve that one we must dissociate the marketers from bureaucratic connotations. Again I agree. But this solution may create the marketer as blue sky, cowboy analyst. And that one, I submit, stinks too.

Are there alternatives? Are there alternatives other than the tiny autonomous HP divisions? Let's look at some models.

TI

TI-1 worked well. Early TI, TI-1, was marked, in Pat Haggerty's words, by

-5-

"close coupling," that is, getting resources and multifunctional folks together quickly to solve problems and rush products into the market. Haggerty's objective, subsequently, was to institutionalize TI-1 via OST (Objectives, Strategy, and Tactics). He correctly wanted to have his cake and eat it, too. First, the PCCs (his semidivisions, Product Customer Centers) were to be general managerish units, with close coupling to the market (he, too, was trying to correct the arrogant engineer mind set characteristic of HP, Digital, and TI) and clear responsibility for results. And OST was to provide the strategic, multi-unit coherence on top of the PCCs. OST was to be a commitment generator, since it was to be wholly bottoms-up ("force those who execute the plans to make the plans," Haggerty said in a renowned HBS speech).

What went wrong? Part of the problem was <u>exactly</u> the one you are trying to correct. The PCC managers became bureaucrats, spending most of their time playing resource allocation games. Then OST became top down <u>and</u> rigid ("You can't spend a nickel around here without everybody knowing it," a planner bragged to me in 1979). The <u>energy</u> in the system was <u>dissipated</u>. (Moreover, I'm told that the Haggerty to Shepherd shift was a problem. Haggerty was tough, but also a cajoler and walker-about. He <u>lived</u> close coupling, and his spirit and presence, a la HP's Hewlett and MBWA, ameliorated the bureaucratic set of OST. Shepherd is purportedly an autocrat who, in a Geneen-like fashion, was delighted-until recently--that OST's armlock on resource allocation was so tight.)

Now TI-2 is set to emerge (e.g., see attachment number one). I am skeptical. I like one part. The basic new building blocks are a half dozen or so autonomous PCCs (call them three-quarter billion dollar companies). But the "close coupled" smaller PCCs (the old version), within the big, will not even be as autonomous as they are today. Moreover, I think TI has learned some wrong lessons from their recent disasters. They think the bureaucratic mess of OST

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hindered their ability to make grand-slam homerun bets efficiently. So TI-2, re big bets, may be even more top down than before. (You know my major problem with this, you've heard me repeat it ad nauseum. I don't believe many bet well. Technology forecasting stinks. Digital's winners, HP's winners, Wang's winners, and TI's past stream of winners have come from being "led around by the nose by customers" and by being responsive. And if that was true in the past, it will be much truer in the future. Your industry has, to put it mildly, not matured or shaken out (e.g., see attachment number two). Custom chips, 80 percent software budgets, and an Apple-a-minute will be the order of the day in the world of 1990. Distributed processing, smart tools, user-friendly applications, AI et al mitigate <u>against</u> a swinging-for-the-fences approach. True, 98 of 100 would-be Apples will fail. So what? Two of 100--Apple? Tandem?--will become the 1990 Digital of the seventies when <u>Fortune</u> writes its wrap-up of the decade ten years from now.)

Enough for TI.

HP

HP (and Johnson & Johnson, 3M) provide a clear alternative model, although probably <u>not</u> the right one for you, I'd contend. Even though HP is, as we said in Hanover, drifting centerist, it is still a general-manager-driven, skunkworkdriven institution. Its 50 or so divisions are very autonomous (except for sales). Interaction, even today, between divisions--e.g., IC divisions and computer divisions--are simple; e.g., driven by simple models with simple transfer pricing schemes and marked by lots of informal interchange without much bureaucratic shenanigans.

Good news of such a structure is three-fold: <u>manageability of units</u>, commitment, and not overly-structured attacks on multiple windows on the world.

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The bad news is important too, though perhaps less so in a software-intense world (depending upon whether primacy is to be placed on system architecture, as some say, or application/AI software, as I am generally inclined to suppose).

The semi-autonomous division is manageable in size, which leads, especially, to an ability to do very rapid product development, tests, adjustments, and deployment. Centralizing tendencies in software and chip technology at HP Labs, and in IC development in some specialized divisions will not, I think, add undue rigidity. HP-ers have a time-tested knack for exploiting others' work without slowing down the division's forward plunge. Next--arguably first--comes <u>commitment</u>. The autonomous division has tremendous drive to get on with "it"--<u>quickly</u>. The <u>marketer</u> is chief strategist, but his principal role is to aid the general manager as coach, coordinator, and cajoler. It's somewhat like the old (and good) Digital marketer and TL PCC marketer role, <u>before</u> bureaucratization. The HP marketer's antidote to bureaucratization is the ability to get 70 percent of the job done <u>within</u> his division and 90 percent within his group (the group being a \$3/4 billion to \$1 billion "company," about the size of the new TI PCCs).

Also, the HP marketer is dealing with a manageable--small--number of strategies. Reality is close to him, and he to it.

The sum of divisions, with their substantially overlapping boundaries, becomes a self-generating, highly varied market-attack mechanism. The division-as-coherent-unit <u>is</u> the strategy in many senses. It will <u>not</u> produce anything like the beautiful Digital hardware of the past, but may provide a better "many windows on many markets" attack mechanism for the future.

Structure, in a funny sort of way, also actually <u>limits</u> at HP the "be all things to all people" tendency that I fear so much. That is, the structure, even with drifting centerist tendencies, will not, indeed, it's my hunch, ever produce the beautiful coherence of IBM or ATT architecture, or Digital's coherence. It,

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a la 3M/J&J, will continue to generate high end, high value-added, applicationsintense products. (In this regard, as I mentioned, HP's "problem solving" past is <u>partially</u> better oriented to the future. Better oriented in that "problem solving" will be a larger share of the name of the game, but at a Digital-like disadvantage in that HP has traditionally been a hardware company, too; application software is not uniformly strong, as you know.)

So the structure/skills/division interchange package at HP adds up to a strong package, but somewhat lacking in coherence. HP would, I think, like some more coherence, and may well over-correct, creating in 1987 their own form of the TI/OST problem or your marketer-as-bureaucrat problem. Or they may achieve a balance. Regardless, the model is different than yours. (I wish I knew Wang better; my hunch is that they are mid-way between you and HP, not a bad middle ground at all.)

P&G

Why mix Ivory soap and computers? The P&G model of the marketer is instructive. It is very close to what Ken wants to achieve, but with some different environmental conditions that, I think, are crucial and which expose serious flaws in your current model.

The P&G marketer is <u>not</u> a bureaucrat; make no mistake. Talk to six-year brand management vets and you'll find that they aren't even allowed in the factory yet. That privilege comes at age 40, after a dozen years or so, when one first gets an inkling of general manager experience.

The P&G marketer is not the Digital marketer in other respects either. He was not ever a salesman. He is a marketer, pure and simple.

But he is also <u>not</u> a cowboy analyst. His role is much too constrained for that. Ken's tirades and juicing up of the troops are unknown in Cincinnati. The

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marketer has a <u>very</u> well-defined job, a <u>very</u> manageable job (the marketing hierarchy is <u>very</u> steep, and one increases responsibility--even within marketing alone--at a snail's pace). (He also need be no genius, just as the IBM salesman need not be--the parallels are striking.)

So the P&G model looks, on the surface, like a good analog. But there are serious problems. The brand management system is now 53 years old. (The first brand manager was appointed in 1929.) Accoutrements such as the "1-page memo" and formalized (limited, rule-driven) internal competition are also 50+ years old. <u>All</u> the bugs have been ironed out; moreover, this ironing out process took place in a manageable, placid environment (there has been no "second industrial revolution" in soap or toothpaste). So, time required to institutionalize this nonbureaucratic marketer system is crucial distinction number one. Number two is the hugely different market conditions. The market is <u>much</u>, <u>much</u> slower, <u>much</u>, <u>much</u> more placid than yours. The competitors have been known for decades (just try to find an Apple or Tandem in the consumer goods business). Market test and retest is the key word; development times are lengthy. (And, of course, the user base is 1794 degrees different; tailored problem solving is not exactly the name of the game.)

The P&G system, which I see you trying to emulate, <u>is</u> indeed the ideal/ ultimate "let the marketers market," "manufacturers manufacture," etc. form. And it is almost wholly unapplicable to your competitive arena. You don't have the time to learn it, and "it" would be wrong even if you did!

(As an aside--a pointed barb, even mother P&G is divisionalized. The \$10 billion company has about six groups, and almost twice that many semi-autonomous subgroups. Again, the \$500 million or so maximum division size rears its head... I mean, come on, guys, not even basic steel and chemicals have \$5 billion functional units!)

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FRITO-LAY

If toothpaste seems a rather silly analog for Digital, potato chips must seem absurd! But perhaps not. Frito's system is not so well-grooved or rigid as P&G's. Yet it's not bureaucratic either. The Frito brand manager has no involvement in, for instance, manufacturing resource allocation (except as manufacturing itself interprets brand management needs). Moreover, Frito's market is not quite so static as most of P&G's. Frito believes in creating the future, and "ignoring the demographics" and product life cycle "inevitabilities."

The Frito brand manager <u>is</u> the source of commitment and energy in the system. Per the P&G model, his task is limited and doable; he can act as a champion and have a chance of inducing success. Although he is in a functional organization (a \$2 billion functional unit) -- and does not play resource allocater/transfer pricer-he <u>does</u> have de facto, significant responsibilities beyond "cowboy analysis." His halfway role as coach/champion is what makes him an interesting analog to me.

If he is to succeed, he will spend 50 percent of his time out of the office aiding and cajoling R & D, sales, manufacturing, et al as they pursue his projects. He has <u>responsibility</u> (<u>no</u> authority) to make the system work. And his charge is limited enough so that he can in good conscience spend that time out of the office (he's not dealing with seven strategies for seven product lines). His boss (the group product manager) views himself as a manager/aid to a stable of champions (product managers). The group manager obviously has responsibility for reviewing strategy, but does not view himself as principal formulator.

To reiterate: Frito brand manager is <u>strategist</u> (for one or two products), <u>cajoler</u> (for the system), and <u>champion/source of commitment and energy</u>. He is neither a bureaucrat who tries to run the show nor a cowboy analyst with ten strategies to develop. I like this model because I think it's closer to Digital's needs than any other.

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A NEW DIGITAL

So where do I come out? The old hardware/engineering focus, with customers "automatically" creating segments is not the world of tomorrow. New skills that focus on planned market creation, fast response to new/more competitors, and more of a problem-solving/higher-level application focus are the new wave. Marketing ought to play a lead role in such a future, as your current plans suggest. It should both be enhanced from the past and not so bureaucratic as in the past. Thus, my assessment and yours/Ken's are in accord.

But the newish, more or less "marketing-driven company" needs a new source of champions/energy/commitment to replace, in part, the traditional Ken/ engineering axis. Moreover, it must be concerned with <u>skill building</u> at least as much as with strategizing. Skill building means, to me, enhancing a <u>very</u> <u>limited</u> number of new themes/skills, not simply being "all things to all people" as a function of a detached view of the external environment.

I don't, in a nutshell, see the cowboy analyst model (albeit my oversimplification) as an effective one. Your proposed model <u>looks</u> closest to P&G, among those I reviewed. They are <u>very</u> similar superficially, but not so in practice. At P&G, remember, the grooves are 50 years deep, the market is stable, and no new skills are needed. I also don't see Digital racing down HP's path. Your product would be misplaced and your unique strength dissipated with fragmented divisions.

I do see, as my choice, a model with two elements: some divisionalization and a Frito-like marketing approach to marketing/product brand management.

Sorry, I just can't buy the \$5 billion (let alone \$10 or \$15 billion) functional monolith. It's too damn big, and you need more sources of "automatic" differences (for all functions) in market focus. It seems to me that two or three (or five or six, even) almost wholly autonomous divisions are essential. (A

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3M-er said to me: "All you need is one principal, not eight. Break it up. To hell with competitive dynamics or segment boundaries. Big is unmanageable and certainly noninnovative.")

Within such units, I do see a vital leadership role for marketing, not as a resource allocator (today's Digital problem) and not as a cowboy analyst (freedom without responsibility). I see it as more of a Frito model. The marketer is strategist/cajoler/coach/champion with doable tasks. The senior marketers are "semigeneral managers"--25 percent strategists and 75 percent managers with stables of narrow-focus product managers-champions.

My hybrid vision: (1) adds some autonomy (a few divisions); (2) adds a new source of energy to replace engineer-driven championing (Frito-like product managers); (3) focuses on new skill building (product managers concerned with doable execution tasks as much as thinking); (4) avoids marketer-as-bureaucrat problems; and (5) focuses on tomorrow's market needs (more of a market-driven/ problem-solving focus).

Long as this diatribe/discourse has been, it barely scratches the surface, is only 10 percent coherent, and is written largely from ignorance. Nonetheless, there it is, aimed at mental stimulation only.

I remind you, gratuitously, that my reason for dwelling on this issue goes back to the figure. We become what we are pointed at. I'm not sure the cowboy analyst structure is pointed at <u>anything</u> (as the old Ken/engineering axis focus surely was); I do see the HP/P&G/Frito models as structures pointed at a rather focused pathway.

I also apologize for befaboring the cowboy analyst metaphor. It ain't that bad. It's just that my experience with big, so-called market-driven companies makes me very afraid of the current model of a giant functional organization with marketing in a detached, think-only mode.

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II - SKILLS

Obviously, individual strategies ought to add up to something, something more than just a \$5, \$10, or \$50 billion company. That is, they should have a reasonably coherent theme running through them. That has surely been the case, albeit principally implicitly, at Digital in the past. The quality-hardware, decentralized computing machine has been what Digital stood for. As Julius noted, that was upgraded substantially by development of top-drawer operating systems. Nonetheless, the theme was still the highly functional black box.

The distinct possibility now arises that one or several new skills need to be learned. The reorganization itself suggests that. The so-called "marketing thrust" is acknowledgment of a world in which more varied attacks on more varied markets must take place if Digital is to realize anywhere near the dominant position that you hope it will ten years from now.

In working on development of the "75" material, as I noted in my Hanover discussion, the skill variable emerged and has taken on greater and greater significance over time. That is, the development of a few key skills, or the modification of one or two frequently seems to drop through the cracks in reorganizations/reorientations. Having good individual strategies, or even the right organizational structure and systems, does not in any way take care of the skill variable "automatically."

My concern relative to the skill issue in reviewing the two-day Hanover effort, is the "be all things to all people" mentality. I am wholeheartedly in favor of a strategy development exercise in which thinking is unfettered. Such an exercise is particularly valuable now, as Digital does face a discontinuity in its environments. Only creative and reasonably unfettered thinking will expose the range of opportunities.

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But my bottom line contention is, nonetheless, that if Digital has a decade in the 80s and early 90s that comes anywhere near matching the success of the last 12 years, it will only be because you have an ability in 1990 to say "We ..." with the same degree of conciseness and certainty--in reference to past excellence--as Julius does when he says, "We build quality computers of a certain size." I.e., you will have developed a concise, new superordinate goal/skill/ distinctive competence.

It's not my intention here to bet on what that skill would be. As I noted, my concern in listening to the range of skills that were put up on the board during the skills exercise, reviewing your last year's strategy efforts, and my concern with the "cowboy analyst" tendency that I see overall, is that <u>there is</u> <u>no focus on the modification or development of the dominant skill or two</u>. Perhaps it's too early. It's certainly too early to button it down. But it certainly isn't too early to start thinking about it--obsessively.

There seems little doubt that the new emergent skill will have something to do with the "problem solving" focus that many suggested. Whether you go the route of becoming the experts in system architecture or the route of pushing strongly into high level software applications, there <u>is</u> a need for something different in the future. That is, "order taking" salesmen selling black boxes that work forever is not likely to be the clear road to future success.

Of course there is a terribly important link, in my view, between this skill analysis and organizational analysis I just ran through. Skills, per se, and, even more so, skill shifts, require "champions," sources of untold energy. The past source of untold energy was the Ken-engineering axis. Where will the new source be? Will it be the marketers? As their role was currently conceived, I don't see them having that degree of clout--or experience, or Ken's true confidence. But it's got to come from <u>somewhere</u>.

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My own strong suggestion is that with, perhaps, a more senior group than Hanover, or with a small group of some sort or other, you start to <u>formally</u> think through this process. I think taking an inventory of what your skills are today, and coming to grips with them, in particular the degree to which the hardware/ black box syndrome has driven the company, is an imperative first step. (For instance, I was amused, in listening to the Data Terminal case analysis, by the number of people who unintentionally said they wanted Data Terminal to deliver "a box that works forever and doesn't need any attention." That's, of course, Digital's time-honored strategy. And whatever environment you get into, that's likely to be the de facto solution that most of today's marketers reach for and apply to it at some subconscious level. I understand that most of the people in that room, in fact, did come from a hardware-oriented, and/or sales-oriented background.)

As an addendum, and part of any strategy process, but especially one that's skill related, I would strongly urge, as I talked to you about, Mike, that you undertake a simpler and less extensive "skill analysis" of your principal competitors. In this regard, I think a corporate-level competitive skill analysis is imperative. Obviously, each strategist can do his own form of competitive skill analysis. But my concern is that at the corporate level you'll focus too much on what potentially may be the wrong enemies. As I noted, it's sadly amusing to still see General Electric fighting Westinghouse, long after Westinghouse has ceased to be a factor in any but a few trivial GE markets. The people that GE should have been mad at, and that GE should have altered its skill base to attack, have now gone on in any number of crucially important areas to surpass GE by a longshot. I feel that codifying your knowledge of Wang, Apple, Hewlett-Packard, and others, as well as IBM certainly, is imperative. I'm sure that 90 percent of what needs to be done is held within the heads of any number of people in the corporation. The issue is getting it out on the table, getting it down on

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paper, and understanding the impact of that on your own strategies. Though it is a simple-minded analogy, I am struck from the chainsaw industry case, as I mentioned, by the degree to which competitor strategies were, undoubtedly unintentionally, shaped by the corporate character of Emerson, Stihl, et al--with virtually no regard for market dynamics. I doubt that this was because, especially in Emerson's case, there was a lack of a unit strategy. It occurred because corporate skills simply tend to overpower everything else--usually unintentionally. For instance a most instructive competitive skills case, I believe, would be a clear look at TI. They, like you and HP, have been a hardware-oriented company. Nonetheless, in the early days, the hardware orientation had the Digital-HP thrust: namely "problem-solving" related hardware for professionals. Then they tried to add two new skills: consumer electronics and low-cost commodity production (in consumer and chips). I believe that they took on much too much. I believe that the dominance which the commodity orientation came to take and ignorance of the consumer business (they were never market focused like IBM), coupled with the OST system which drove out creativity, coupled with much too strong a belief in top-down planning led to the severe problems that TI has now. What is a TI?

There probably isn't much need to say anything more. I would love to spend hours screaming, yelling, and shouting about my observations that virtually nobody who succeeds has ever done so by being all things to all people. My argument, by the way, I freely admit is a moderately conservative one. But it's not at all a negative one. That is, far short of being all things to all people there are tremendous opportunities to add skills at the margin, or even take a nonmarginal skill-addition strategy on as long as it is coherently shaped around the skill development itself (a la some of IBM's past and current massive, multi-10,000 person retraining efforts). Looking back into the fairly recent past, Digital's development of competence in operating system development is just

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the sort of thing I'm talking about. It was clearly a new skill. On the other hand, it is similarly very clearly related to the things you've done best in the past. It was anything but the step that made you all things to all people.

* * *

I'll get down off my high horse now. The last week or two since the seminar has been troublesome. These thoughts have been racing around in my head and occupying a far greater share of my mindless plane time, etc., than I wish were the case. I think it's because the institution is so damned exciting, so damned good. The opportunity to become the \$50 billion company is clearly there. Nonetheless, I am troubled by some attributes of the current change effort. I'm sure that probably 80 percent of my concerns could be explained away if I knew the institution better. I freely admit that what I've written is derived largely from ignorance. Nonetheless, I hope that I have perhaps tweeked a neural pathway here and there that may help you as you assess the strategies when they come back in September.

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CORMTS ALL-IN-1 SYSTEM

Date: 23-Sep-1988 10:30am EDT From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301

FC.

We surely did jazz up the European sales people and their customers the last two weeks at DECworld. They did a lot of work, they were satisfied with it, and they presented a good set of products and applications to their customers. In fact, they want to do it all over again next year.

Things aren't so jazzed up in this country. Sales people set high goals, and they are not guite making them. Some of them are making very good increases but not guite what they proposed, and this is discouraging. They also have been losing for years to Sun and Apollo, and they have been suffering because we have not sold PCs. They have also been ridiculed because other people are selling large numbers of small LANs.

Let's do something to jazz up the sales force and give them some fun, some excitement, and something they can sell easily to their customers with great enthusiasm.

We have a bunch of really great products coming up this fall, and we have a bunch of great products that we had for awhile that we just haven't had the energy, inspiration, and enthusiasm to tell the world about. For example, nobody in the world knows we do desktop publishing, much less know that we do it best. We are just lacking in energy to do anything to pep up desktop publishing, but I think with an inspiring show, we might accomplish it.

Right after the first of the year, let's put on a big show to show off our desktop products. Let's limit the show to only DECtop hardware and the software we have to go with it. Let's put on a grand show that really captures the attention of our sales people.

Suppose we lay out a show which will be a lot smaller than DECworld but big enough to really attract attention and get our messages across. All the equipment is small, and, with some care, we can pack it in trucks and set it up quickly and have a two day show in many cities. We can show it to financial analysts, reporters and consultants in addition to our sales people and their customers.

Let's set a goal that we will truly jazz up our people and give them the satisfaction of knowing that we are better in each desktop application, that our prices are lower, and that our software is easy to use.

KHO:1d KO:2208

Distribution:

TO:	John Sims
TO:	Win Hindle
TO:	Jim Osterhoff
TO:	Jack Shields
TO:	Jack Smith
TO:	Henry Ancona
TO:	Don Busiek
TO:	George Chamberlain
TO:	Dave Copeland
TO:	Henry Crouse
TO:	Jim Cudmore
TO:	Bill Demmer
TO:	Gary Eichhorn
TO:	Sam Fuller
TO:	Rose Ann Giordano
TO:	Bob Glorioso
TO:	Bill Heffner
TO:	Bill Johnson
TO:	Dom LaCava
TO:	JACK MACKEEN
TO:	Don McInnis
TO:	BOB PALMER
	Grant Saviers
TO:	PETER SMITH
	BILL STEUL
TO:	BILL STRECKER
TO:	MIKE TAYLOR
	Dallas Kirk
TO:	Remote Addressee

SIMS.JOHN) (HINDLE.WIN) OSTERHOFF.JIM) SHIELDS.JACK) SMITH.JACK) ANCONA.HENRY) BUSIEK.DON) CHAMBERLAIN.GEORGE) COPELAND. DAVE) CROUSE.HENRY) CUDMORE.JIM) DEMMER.BILL) EICHHORN.GARY) FULLER.SAM) GIORDANO.ROSE ANN) GLORIOSO.BOB) HEFFNER.BILL) JOHNSON.BILL) LACAVA.DOM) MACKEEN.JACK) MCINNIS.DON) PALMER.BOB) SAVIERS.GRANT) SMITH.PETER) STEUL.BILL) STRECKER.BILL) TAYLOR.MIKE) KIRK.DALLAS) MOORE @CURIE @VAXMAIL)

CORMTS ALL-IN-1 SYSTEM

Date: 23-Sep-1988 01:04pm EDT From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301

FC.

TO: See Below

Subject: PAY RAISES

John Sims has been after me to go ahead with pay raises, because I am not ready to change the organization right now. John has forgotten that I didn't promise the Board of Directors that we would reorganize, I promised the Directors that we would solve some problems. I don't want to reorganize right now, because I want to solve the problems first.

My answer, therefore, to John is let's solve the problems and then I'll be happy to go ahead with the pay raises.

KHO:dao KO:2214 DICTATED ON 9/23/88, BUT NOT READ

Distribution:

TO: Jim Osterhoff TO: Jack Shields TO: Jack Smith TO: Win Hindle TO: Abbott Weiss TO: John Sims (OSTERHOFF.JIM)
(SHIELDS.JACK)
(SMITH.JACK)
(HINDLE.WIN)
(WEISS.ABBOTT)
(SIMS.JOHN)

CORMTS ALL-IN-1 SYSTEM

Date: 21-Sep-1988 01:06pm EDT From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301

TO: See Below

Subject: COMMODITY BUSINESS/DECTOP WORLD

This memo has two parts which are quite independent of each other.

I. COMMODITY BUSINESS

I'd like to settle on our commodity business before we complete our tabletop announcements this fall. I'd like to sell terminals, PCs, workstations, terminal servers, and VAX servers. I'd like these items to have the very lowest possible cost of sales, the lowest of manufacturing, the very lowest cost of selling, and the lowest cost of distribution. I would like to make them so simple that the customer could install them himself or could use our service group.

I'd like us to be able to offer to put a terminal on every desk in any size operation whether it be a single desk or 60,000 desks. I'd like all the pieces necessary to do this on the floor of the operation to be available from this commodity business.

To get it started, I'd like Dom LaCava and Don Zereski to propose such a business where Dom is responsible for designing and manufacturing and Don is responsible for selling, delivering, installing, and servicing. Don already is doing selling with his service people and he has plans for a new set of service people who are young, with little training, and who have contact with all customers because they will be servicing the PCs and terminals they have today.

It seems like we will be able to inventory these commodity items at an optimum place in the country such as Texas for PCs and a distribution hub for everything else; and that 24 hours after an order is received, delivery should be made at the customer site by UPS.

If, in addition, we develop a system integration business, it should probably get a fixed discount on these commodity products and it might be the same fixed discount that we give to distributors and OEMs.

Please come and tell us your thoughts and ideas and be prepared then to make a proposal.

II. DECtop WORLD

We surely did jazz up the European sales people and their customers the last two weeks at DECworld. They did a lot of work, they were satisfied with it, and they presented a good set of products and applications to their customers. In fact, we will do it all over again next year.

Things aren't so jazzed up in this country. Sales people set high goals and they are not quite making them. Some of them are making very good increases but not quite what they proposed and this is discouraging. They also have been losing for years to Sun and Apollo and they have been suffering because we have not sold PCs. They have also been ridiculed because other people are selling large numbers of small LANs.

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Suppose we lay out a show which will be a lot smaller than DECworld, but big enough to really attract attention and get our messages across. All the equipment is small and with some care, we can pack it in trucks and set it up quickly and have a two day show in many cities. We can show it to financial analysts, reporters, and consultants

in addition to our sales people and their customers.

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KHO:dao KO:2200

DICTATED ON 9/21/88

Distribution:

TO: Dom LaCava DONALD ZERESKI TO: CC: Dave Grainger CC: BILL STRECKER PETER SMITH CC: CC: Henry Ancona CC: Jim Osterhoff Jack Shields CC: Jack Smith CC: CC: John Sims CC: Win Hindle CC: Abbott Weiss

(LACAVA.DOM)
(ZERESKI.DONALD)
(GRAINGER.DAVE)
(STRECKER.BILL)
(SMITH.PETER)
(ANCONA.HENRY)
(OSTERHOFF.JIM)
(SHIELDS.JACK)
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I'd like to settle on our commodity business before we complete our tabletop announcements this fall. I'd like to sell terminals, PCs, workstations, terminal servers, and VAX servers. I'd like these items to have the very lowest possible cost of sales, the lowest of manufacturing, the very lowest cost of selling, and the lowest cost of distribution. I would like to make them so simple that the customer could install them himself or could use our service group.

I'd like us to be able to offer to put a terminal on every desk in any size operation whether it be a single desk or 60,000 desks. I'd like all the pieces necessary to do this on the floor of the operation to be available from this commodity business.

To get it started, I'd like Dom LaCava and Don Zereski to propose such a business where Dom is responsible for designing and manufacturing and Don is responsible for selling, delivering, installing, and servicing. Don already is doing selling with his service people and he has plans for a new set of service people who are young, with little training, and who have contact with all customers because they will be servicing the PCs and terminals they have today.

It seems like we will be able to inventory these commodity items at an optimum place in the country such as Texas for PCs and a distribution hub for everything else; and that 24 hours after an order is received, delivery should be made at the customer site by UPS.

If, in addition, we develop a system integration business, it should probably get a fixed discount on these commodity products and it might be the same fixed discount that we give to distributors and OEMs.

Please come and tell us your thoughts and ideas and be prepared then to make a proposal.

II. DECtop WORLD

We surely did jazz up the European sales people and their customers the last two weeks at DECworld. They did a lot of work, they were satisfied with it, and they presented a good set of products and applications to their customers. In fact, we will do it all over again next year.

Things aren't so jazzed up in this country. Sales people set high goals and they are not quite making them. Some of them are making very good increases but not quite what they proposed and this is discouraging. They also have been losing for years to Sun and Apollo and they have been suffering because we have not sold PCs. They have also been ridiculed because other people are selling large numbers of small LANs.

Let's do something to jazz up the sales force and give them some fun, some excitement, and something they can sell easily to their customers with great enthusiasm.

We have a bunch of really great products coming up this fall and we have a bunch of great products that we had for a while that we just haven't had the energy, inspiration, and enthusiasm to tell the world about. For example, nobody in the world knows we do desktop publishing, much less, know that we do it best. We are just lacking in energy to do anything to pep up desktop publishing, but I think with a inspiring show, we might accomplish it.

Let's, right after the first of the year, put on a big show to show off our desktop products. Let's limit the show only to DECtop hardware and the software we have to go with it. Let's put on a grand show that really captures the attention of our sales people.

Suppose we lay out a show which will be a lot smaller than DECworld, but big enough to really attract attention and get our messages across. All the equipment is small and with some care, we can pack it in trucks and set it up quickly and have a two day show in many cities. We can show it to financial analysts, reporters, and consultants in addition to our sales people and their customers. Let's set a goal that we will truly jazz up our people and give them the satisfaction of knowing that we are better in each desktop application, our prices are lower, and that our software is easy to use.

KHO:dao KO:2200 DICTATED ON 9/21/88

Distribution:

TO:	Dom LaCava
TO:	DONALD ZERESKI
CC:	Dave Grainger
CC:	BILL STRECKER
CC:	PETER SMITH
CC:	Henry Ancona
CC:	Jim Osterhoff
CC:	Jack Shields
CC:	Jack Smith
CC:	John Sims
CC:	Win Hindle
CC:	Abbott Weiss

(LACAVA.DOM) (ZERESKI.DONALD)

(GRAINGER.DAVE)
(STRECKER.BILL)
(SMITH.PETER)
(ANCONA.HENRY)
(OSTERHOFF.JIM)
(SHIELDS.JACK)
(SMITH.JACK)
(SIMS.JOHN)
(HINDLE.WIN)
(WEISS.ABBOTT)

CORMTS ALL-IN-1 SYSTEM

Date: 22-Aug-1988 03:03pm EDT From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301

F.C.

TO: See Below

Subject: BUDGETING THE NEW, NEW DIGITAL

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There are several things missing in our present budgeting system that we need to install if we want to force each group to control their responsibilities and if we want to be able to check on them.

We should have all our space needs budgeted a long time ahead and assigned to different groups. This space should then be automatically reconciled with the long term expansion plans for that group, which in turn should be reconciled with the growth plans for the Company.

Right now, it appears to the Executive Committee and to the Board that space plans grow independent of any corporate plan and no one is responsible for looking at the whole thing.

Secondly, engineering should tell us, in the beginning of the year and continuously update, what the needs are that they are aiming towards. Today, it seems like each group tries to invent as many machines as they can to encourage the growth of their particular group.

It should be clear, at the start of the year and to everybody all during the year, how many and what size machine is needed in each area. Do we need one big machine, two medium size machines, or three small machines? If that's the case, are we encouraging each of those groups to do two or three times that many? With this made clear, we then can put all activities we hear about and all proposals that are brought to us in perspective because we'll know ahead of time what they are.

As it is today, we are never sure with what anybody has in perspective and whether all these things come up randomly.

KHO:dao KO:2119 DICTATED ON 8/22/88, BUT NOT READ

Distribution:

TO: Win Hindle
TO: Jim Osterhoff
TO: Jack Shields
TO: Jack Smith
TO: John Sims
TO: George Chamberlain

(HINDLE.WIN)
(OSTERHOFF.JIM)
(SHIELDS.JACK)
(SMITH.JACK)
(SIMS.JOHN)
(CHAMBERLAIN.GEORGE)

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TO: Win Hindle Jim Osterhoff Jack Shields Jack Smith John Sims DATE: 15 AUG 1988 FROM: Ken Olsen DEPT: Corporate Administration M/S: ML012-1/A50 EXT: 223-2301

SUBJ: SUMMARY OF AUGUST WOODS MEETING'S GOALS

I'm afraid that we will all be drowned with massive amounts of data and mathematical models and lose the the goals of the WOODS meeting. You have probably already been saturated with numbers, and I think we will do well leaving the numbers behind and just talking about how we run the Company. The models and numbers will then fit into place.

I have three overwhelming goals:

I. Five years ago, the Company was being run by the measurement system into which we had evolved. It was impossible to make a decision because of wisdom for the good of the Company because people were measured by a specific formula. We had to drop that measurement system completely in order to recover from that situation.

Today, business decisions are made on the basis of the measurement system of the field. What businesses we go into, how we price, where we allocate resources, what products we do, and what markets we go into are all based on the measurement system of the field. The field controls resources, the field knows how they are measured; and they make it very clear that this is how decisions are made.

It is now time to make another change. This time we will break the Company up into pieces and segments, and <u>decisions with regard to each segment and measurements of</u> <u>each segment will be made on the obvious quality and wisdom</u> relative to the good of the Company.

II. John Sims, Win Hindle, and Jim Osterhoff have little interest in the business part of the Company, the products, the goals, the marketing, and where we make investments. Jack Shields says he will take care of it and they are happy to let him do it. It is critical that we now get one, and later another, independent member of the Executive Committee, with a passion and excitement and with wisdom and smarts in the running of the Company.

III. I feel it is absolutely vital that each segment of the business be obligated to present their dreams, their passions, their views, their insight, their goals, their belief in the return and the profit of their segment of the business and they not just presenting what their boss believes in.

Two weeks ago, I asked Jay Atlas and Bill Armitage to tell me their dreams, their views, and what they think is necessary to succeed in small business. I specifically ordered them not to check with their boss first. When I called them back, they were in a long meeting with Chick Shue and, of course, I won't bother calling them again. If I wanted to know how small business fit with the measurements of the field, I would have asked Chick Shue.

KHO:dao KO:2092 DICTATED ON 8/15/88, BUT NOT READ

MANA (EC) MODE \$116/88 Leader has Got To have a OREAM -1 Martin Martin Get it from the team (top people should not be expected to originate these dreams.) Must have a financial model (n each dream (at the puper Timi) Eppenses - Mbs. -My Month - Sales -Support services (train; ito.) - Overhead stoff - Prud. Milt - Ind. Mht Dishtop Models - - Prod. System Mid range Hi - und Big Systems -Commelity high rolum products -Systems Integration Group needed - tahes Hoth

INTEROFFICE MEMORANDUM SYSTEM CORMTS/ ALL-IN-1/ 18-Jul-1988 02:21pm EDT Date: PETER SMITH From: SMITH.PETER Product Marketing Dept: 297-5160 Tel/No: TO: See Below Subject: JULY 27/28 K.O. WOODS The following is the general agenda and attendee list for the July 27/28, K.O. Woods meeting. At the current time the meeting is planned for the Large/Conference Room on 10-2 at the Mill.

Sergimo F.C. U

CORMTS ALL-IN-1 SYSTEM

Date: 29-Jul-1988 09:33am EDT From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301

TO: See Below

Subject: AUGUST EXECUTIVE COMMITTEE WOODS MEETING

I would like the Woods meeting not to be my needing to prove there are problems and my trying to get people's attention.

For next Tuesday's Executive Committee meeting, I would like Jack Shields to present all the models of all the businesses in one chart. I would like Jack Shields and Jack Smith to present in chart form who sets the NOR for:

- each business
 each industry
- 3. each product
- 4. each application

I would like Jim Osterhoff to propose a set of accounting systems that will help us run the Company.

KHO:1d KO:2054 (DICTATED 7/29/88 BUT NOT READ)

Distribution:

TO: MHn Hindle TO: Jim Osterhoff TO: John Sims TO: Jack Shields TO: Jack Smith CC: Abbott Weiss

CC: Ivan Pollack

(HINDLE.WIN)
(OSTERHOFF.JIM)
(SIMS.JOHN)
(SHIELDS.JACK)
(SMITH.JACK)

(WEISS.ABBOTT) (POLLACK.IVAN)

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TO:	Executive Committee	DATE:	8 August 1988	
	Ivan Pollack	FROM:	Win Hindle	
	Ron Smart	DEPT:	Corporate Operations	
	Abbott Weiss	EXT:	223-2338	
		LOC:	ML012-1/A53	

SUBJ: IBM RE-STRUCTURING

I just re-read the articles in the IBM internal magazine--THINK-about IBM's recent organization changes. Here is a summary as I understand it:

ROUND ONE (1987) - "The Year of the Customer"

Goals

- 1. Re-focus company in solving customer problems
- 2. Re-fresh the product lines
- 3. Make the company leaner and more efficient

ROUND TWO (1988)

Goals

- 1. Strengthen comprehensive solutions for customers
- 2. Speed up-
 - a. Technological innovation
 - b. Responsiveness to market demands
 - c. Ability to outpoint competitors
- 3. Sharpen accountability within the organization.

The attached organization chart shows the new organization structure that accompanied ROUND TWO. IBM created IBM-US under Terry Lautenbach, who now has responsibility for US revenue, profitability and manufacturing, as well as responsibility for worldwide product development (an amazingly powerful position).

Since this chart was drawn, Ed Lucente has been moved aside, and George Conrades has taken over added responsibility for the US Marketing and Services Group.

Two points of special interest to me are the following:

- Within IBM-US, revenue and profitability are the responsibility of the Systems groups, not the Marketing and Services group.
- Applications development is the responsibility of the US Marketing and Services group.

WH:dc Enclosure



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THE RESTRUCTURING AT A GLANCE

Terry Lautenbach IBM senior vice president and general manager, IBM United States

Responsibilities: U.S. revenue, profit and manufacturing and worldwide product development, including management of product compatibility and connectivity.

Reporting to the U.S. general manager: IBM Personal Systems...IBM Application Business Systems...IBM Enterprise Systems...IBM Technology Products...IBM Communication Systems...U.S. Marketing and Services Group.

George Conrades IBM senior vice president and general manager, IBM Personal Systems

Responsibilities: Worldwide product development, including product line revenue, profit growth, return on assets and marketing planning, as well as U.S. manufacturing for workstations, displays, most printers, typewriters, publishing and con-

sumer systems, systems software. Divisions: Entry Systems Division... Information Products Division.

Stephen Schwartz IBM vice president and general manager, IBM Application Business Systems

Responsibilities: Worldwide product development, including product line revenue, profit growth, return on assets and marketing planning, as well as U.S. manufacturing for IBM System 3/X products, low-end storage, operating systems software.

Carl Conti IBM vice president and general manager, IBM Enterprise Systems

Responsibilities: Worldwide product development, including product line revenue, profit growth, return on assets and marketing planning, as well as U.S. manufacturing for highend products including: IBM System/ 370 architecture products including the IBM 3090, 4381 and 9370 systems, high-end storage, characterband systems printers, systems software.

Divisions: Data Systems Division... System Products Division...General Products Division.

Ellen Hancock IBM vice president and general manager, IBM Communication Systems

Responsibilities: Worldwide product development, including product line revenue, profit growth, return on assets and marketing planning, as well as U.S. manufacturing for communications products and related operating systems software., Divisions: Communication Products Division... ROLM Systems Division.

Patrick Toole IBM vice president and general manager, IBM Technology Products

Responsibilities: Worldwide product development and U.S. manufacturing for semiconductors and circuit packaging, including unit cost performance improvement, cost competitiveness, technological improvement and supply/demand balancing. Divisions: General Technology Division... Systems Technology Division.

Edward Lucente IBM vice president and group executive, U.S. Marketing and Services Group

Responsibilities: U.S. product sales and services and development of IBM application software. Divisions: Application Systems Division ...North-Central Marketing Division ...South-West Marketing Division ...National Service Division ... National Distribution Division.



Date: .	25-Apr-1988 10:42am EDT
From:	Ken Olsen
	OLSEN.KEN
Dept:	Administration
Tel No:	223-2301

TO: See Below

Subject: MAKING MONEY ON THE HIGH-END

Before we complete next year's budget, we have to figure out how we are going to make money in the high-end. We have two problems. First of all, we have an awful lot of selling and design investment, and second, we give a big discount because the customers who buy the high-end are large customers.

Because we are investing more and more in the high-end, it is absolutely critical that we lay out a business plan that will make money in the high-end.

Prepare what you can for discussion at our Woods meeting on Thursday. I suggest you propose that, first of all, we allow no discount for large orders because that just compounds the problem. And secondly, I suggest you propose that we announce we are in the systems integration business. This gives us an opportunity to market the things which we can do so well, and it also gives us a chance to charge for the services which are so costly and which people would pay for if they bought them anywhere else. We do not include all these services when we price the equipment, and we are never going to make money if we don't charge for it.

KHO:ld KO:1778 (DICTATED 4/25/88 BUT NOT READ)

Distribution:

TO: Jack Shields TO: Jim Osterhoff TO: George Chamberlain TO: Dick Fishburn

CC: John Sims CC: Win Hindle CC: Jack Smith (SHIELDS.JACK)
(OSTERHOFF.JIM)
(CHAMBERLAIN.GEORGE)
(FISHBURN.DICK)

(SIMS.JOHN) (HINDLE.WIN) (SMITH.JACK)

Im atru E E C 0 RAN

CORMTS ALL-IN-1 SYSTEM

Date: From: Dept: Tel No: 8-Aug-1988 01:18pm EDT Ken Olsen OLSEN.KEN Administration 223-2301

TO: See Below

Subject: SEPTEMBER BOARD OF DIRECTORS ' PRESENTATIONS

I'd like the main theme of the September Board of Directors meeting in Europe to be a report on European operations. The Board is particularly interested in overhead, efficiency, and how these have changed over the last few years. Please strive to make the facts as clear and simple to the Board as possible.

I think we should have a <u>separate report</u> on selling, service, <u>software services</u>, <u>engineering</u>, and <u>manufacturing</u>, and in a chart form, we should have a report from each of the various countries.

We have a <u>reputation for being a very high overhead company</u> and a company whose overhead has grown very seriously in the last few years. It's this reputation that has destroyed our stock value, and the Board of Directors is very interested in what's happening to our overhead. Please make it a point to summarize how costs have changed in headquarters' operations and in each of the segments.

In engineering, I think we should, in a chart form, present how much we spent in engineering in the last five years, where the money went, what products and what other results we have obtained from it and then compare this with engineering in the States.

I think the presentation should be a simple chart form, mathematical in nature, and without a lot of enthusiastic pros. However, because of my discussions with the Board, they will be very interested to know how much of the overhead and how much of the things we do for corporate advertising and presence are applicable to the desktop devices, the mid-range systems, the financial community, etc.

It was at the Board meeting in Scotland, several years ago, that we started the new Digital. I am sure the Board would like to hear how each country does its budgeting and to what degree the management team in each country feels it is theirs and to what degree they feel it was imposed on them by Geneva and Maynard. How much overwhelming pressure do they feel to sell products which are not competitive?

KHO:dao KO:2076 DICTATED ON 8/8/88, BUT NOT READ

Distribution:

TO: Remote Addressee

CC: Jack Smith CC: Jack Shields CC: Bill Johnson CC: Win Hindle CC: Jim Osterhoff CC: John Sims CC: Abbott Weiss (PIER CARLO FALOTTI @GEO)

(SMITH.JACK)
(SHIELDS.JACK)
(JOHNSON.BILL)
(HINDLE.WIN)
(OSTERHOFF.JIM)
(SIMS.JOHN)
(WEISS.ABBOTT)

TO: Win Hindle Jim Osterhoff Jack Shields Jack Smith John Sims DATE: 16 AUG 1988 FROM: Ken Olsen DEPT: Corporate Administration M/S: ML012-1/A50 EXT: 223-2301

F.C.

SUBJ: MORE NOTES ON THE WOODS MEETING

I think it finally hit the Board of Directors yesterday as to what is our main problem. We make commitments randomly through the year to projects without ranking them relative to each other or relative to the profit level we expect to make. Then, at the end of the year, when we make the budget for the next year we've already committed so many people and so much space that we have almost no freedom left in the budget.

Let's make believe we are General Electric taking over a high tech company. I think we would walk into the company and make sure there is one man (or woman) in charge of each segment of the business and ask him/her to list and rank by importance to the corporation all projects in this category. Then, the Executive Committee or the Board would then draw a line through the list showing for each level a profit in the corporation, what projects would be rejected, and which ones would be accepted.

I propose that we have one man in charge of field, one in charge of engineering, one in charge of marketing, etc. Then each one should present the list, in order of importance, of all projects or capital expenditures in proposed. First, the Executive Committee would agree that they are in the correct order of importance and then the Executive Committee would decide where the break point would be in projects for each level of profit. Then, we should bring it to the Board and ask them which level of profit and which break point we will go along with.

We would then stop adding projects one at a time like we continuously bring to the Board of Directors and the Executive Committee.

KHO:dao KO:2099 DICTATED ON 8/16/88

F.C.

CORMTS ALL-IN-1 SYSTEM

Date: 16-Aug-1988 09:59am EDT From: Ken Olsen OLSEN.KEN Dept: Administration Tel No: 223-2301

TO: Win Hindle TO: Jim Osterhoff TO: Jack Shields TO: Jack Smith TO: John Sims (HINDLE.WIN)
(OSTERHOFF.JIM)
(SHIELDS.JACK)
(SMITH.JACK)
(SIMS.JOHN)

Subject: RESULTS OF THE NEW, NEW DIGITAL

At the next Board of Directors' meeting, I'd like to present several lists:

- I. Let's list all systems with our proposed cost budget, payoff and comments on the risks. The Executive Committee will arrange them in order of importance and will propose a cut off point on the list below.
- II. Components
- III. Software
- IV. Applications
- V. Industries
- VI. Capital equipment items which are not included in the items above.

We will not bring expenditures to the Executive Committee or the Board of Directors one at a time through the year. They will all be presented in perspective and will be compared with all other expenditures.

Each item on each list will have a budget by month, a statement on their results and expenditures by each month.

KHO:dao KO:2095 DICTATED ON 8/15/88, BUT NOT READ