Should this be forwarded to mcwinded to mcwin ? YXW-pare 8/12/40 E.C.

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## INTEROFFICE MEMORANDUM

TO: See Below Can - What et al Subjer

030078	
07-Aug-1992 02:15	pm EDT
Ken Olsen	
OLSEN.KEN	
Administration	
223-2301	
	07-Aug-1992 02:15 Ken Olsen OLSEN.KEN Administration

Subject: FINANCING MODULAR COMPUTING

## DIGITAL CONFIDENTIAL DOCUMENT

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I understand your people calculated that it will cost \$75 million to continue the Modular Computer program. I think it will cost a lot less, and I think people are taking into account too many things.

First of all, if money is short, it would be best to cut the beautiful new cabinets. The principles of Modular Computing are not dependent on beautiful cabinets. If we want to use them, they should stand on their own and not be part of the program.

We can leave out the INTEL programs, because they also stand on their own and are independent of the general Modular Computer program.

The ALPHA Laser and the VAX Laser are interesting parts of the program, but are not key to demonstrating what it will do. With large memories and very fast CPU's, it is probably not important.

However, I do think that Pauline Nist, in her budget, should be allowed to demonstrate how her computers work, because they are available right now, are in production, and are a much better choice for people who want a modular multi-processed computer system.

The rational for choosing computers for the Modular Computer system is that they are in production, all the software is written, and no changes are involved. The Laser wins on this account hands down, because it is in production today, and it costs almost nothing to cut out parts to make the CPU a module. I think this work should be under the Laser budget.

The rest of the program should be broken into several pieces and each one budgeted separately. If there is not enough money available for this program, one piece at a time should be cut out. The most interesting, promising part of the program is to make inexpensive VAX computers which have very fast and very large disk storage, do not do multi-processing, and do not need clustering. This is the market we lost in the last few years, and this is the one which is probably the most promising for Modular Computing. This can be done instantly with almost no cost, put in any old cabinet, and the software should work. It should be done with both the VAX and the ALPHA.

Part of the cost of this program probably is to buy or develop a database software system which is as easy to use as the IBM AS400 system. Our present relational database apparently is much too complex for this type of customer to use.

If there is money available and the business plan can justify it, DSSI and CI adapters can quickly be put on the Turbo Channel to drive old-fashioned clusters. This may no longer be important, because the add-on market, for which people can go no where else but Digital, could use the big old boxes we are making today.

Another part of the business is to sell very large database machines. These are machines that have fifty-six or more hard disks in one cabinet and do very large transaction processing jobs very inexpensively. Also, the mechanics are completed, it can be delivered any time, and it does take a certain amount of thinking and rationalizing to figure out the customer's problem and the optimum solution.

The next program is, of course, tying to a Sonoma switch. This has been scheduled, and the price of manufacturing one version of the switch is, of course, a cost to the project, but it does offer very promising ways of doing large scale computing differently from what we have considered in the past.

I think the budget should eliminate these items and each one be separately budgeted and evaluated on its return. Each one has a promise of drastically improving our market share and revolutionizing the Company.

KHO:pm KO:7589 (DICTATED ON 8/7/92, BUT NOT READ)

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