digital INTEROFFICE MEMORANDUM

TO: The Operations Committee   DATE: September 20, 1971
   cc/John Leng
      Larry Portner   FROM: David Stone
      Dick Clayton
      Computer Strategy Committee   DEPT:

SUBJ:

On behalf of the Computer Strategy Committee, I have put together

the attached proposal for your consideration.   It is a suggestion

of a way to go, rather than a detailed implementation plan.   Com-

ments on the validity of the proposal as well as the propriety of

our making it are requested.

attachment

Proposal to build a low cost hardware system capable
of running current DEC System-10 software

. The target is $200K to $500K systems inside the computational
market; this system fills the gap under the DEC system 1040.

. We should build this system to exploit the 100 man-years of perfected,
heavily used PDP-10 software now in existence. DEC system 10 soft-
ware is ideally suited to both batch and time-sharing computational
users and we are adding to it at a rate of 25 man-years per year.
We should broaden the market for the software we have already got--
it's a superior product.

. We should plan to start soon and be able to deliver a system by
January, 1974. It is important to know now what we are going to
do, because the PDP-10 plans in this area affect the 11/45 marketing
plans. [The alternative plan of capturing this market with 11/45
based software would be more costly and take longer.]

System Prices

The system we need to capture this market is:

	1040 (now)		Low Cost	11/45 (now)		[in $(000 =
	MFG	SALE	MFG	MFG	SALE	
CPU	33		8	5		
48 K core (36 bits)	60		24	30		
RPO2 DISK	32		22	23		
Card Reader	6		5	2		
Line Printer	23		10	10		
8 Local Teletypes	8		8	9		
Totals:	162	487	77	79	192	

We can reasonably expect to manufacture the low-cost DEC System 10
for under $80 K, allowing us to sell it for $250 K and up.

The only part of the system not now under way in the PDP-10 pro-
duct line is the low-cost cpu.

What We Are Selling

We are selling a **proven** product - DEC System 10 software. We
would not expect to sell the hardware by itself. For this reason,
the speed of the hardware is not critical. We are offering this
market its first chance to get at all the DEC System 10 software
facilities; it is not so much the speed with which they execute,
but rather that they are available at all for this price that
will sell the system. Cobol is an excellent case in point.

In addition to the software, we have an excellent set of documen-
tation, a competent and trained field support staff and a set
of training courses already available.

11/45 Implications

If we decide to implement this proposal, the 11/45 systems should
be aimed to complement the low cost DEC System 10. In addition
to upgraded support of the 11/20 systems (DOS, RSTS, RSX, COMTEX)
we should emphasize the real time systems aspect of the 11/45
hardware and software - for the real time is the PDP-10's weak-
est point. Other complementary strategies include remote batch
station use, communication front ends and computational systems
up to $250 K. I believe it is important to decide on this market
strategy before the 11/45 announcement is made and hence feel that
we must make the PDP-10 system decision soon.