digital INTEROFFICE MEMORANDUM

SUBJECT: PDP-15 Review

DATE: October 2, 1970

TO: Bob McInnis

FROM: Ted Johnson

cc: Stan Olsen
Ron Smart
Larry Portner
Ken Olsen

DEPARTMENT: Sales, 5-3

I have asked several salesmen to review certain products. This one by Vern Poulter, our Salt Lake City District Manager, was received and looks very thorough and thoughtful.

mr
Enclosure

DATE: September 23, 1970

SUBJECT:

TO: Ted Johnson
CC: John Leng

FROM: Vern Poulter
Salt Lake City

DEPARTMENT: Sales

John Leng asked me to prepare a report on the PDP-15 and how we can improve its sales. In order to understand the PDP-15 market, I first surveyed all PDP-15 and PDP-9 installations. I included the PDP-9 because they are essentually the same product. Then I talked to 10 of the sales people and all of the district managers. This gave a general feeling for the product, its weaknesses and strengths, as viewed by the sales people. It also turned up an interesting fact that I don't believe I understand well enough to comment on.

The general observations are as follows:

1) Experience with other DEC products, and DEC's good reputation have been the main factors in making sales. A review of present (Sept. 70) installations bears this idea out.

2) Customers are very happy with the product (with a few noteable exceptions).

3) It appears the software has helped in sales yet has contributed to losses. Taking the hardware and software as a system, it is awkward and expensive in general purpose computing, yet it is successful in specific, dedicated applications; physics and graphics appear to be top of the list.

4) The Fortran Compiler is one of its weakest points.

5) Taking the software and hardware as a system, it appears the PDP-15 is to expensive as a "mini", yet the system preforms more like a "mini" a medium sized machine.

6) I believe both salesmen and managers had a general feeling of frustration with the product.

7) The product has shown a high degree of activity in the past, yet, there is at present, a total lack of customer generated interest ie "Bingo Cards".

These observations were arrived at by abstracting the common denominators out of the interviews. I hope these observations are objective and not largely my personal feeling.

A review of current installations revealed that the PDP-15 usually was sold as a result of a very good relationship between DEC and the customer. Most of the current PDP-15 installations are at locations where a PDP-9 has been used. The PDP-8 seems to be the second most popular forrunner. Salesmen, in general, feel this is also true of the orders we have received but not yet installed.

Customers are very happy with the PDP-15 hardware. It is very reliable as a product. There were some complaints about software and Maynard support but no more than would be expected. Current customers seem to be very willing to recommend the PDP-15 and DEC. We really should capitalize on this.

Now to the real crux of the problem. That of software, hardware, and how it works as a system. I made the statement earlier that the software is both an asset and a debit. The way this works out is as follows: The PDP-15 software system works very well with single user. It is very good in developing applications for which the machine is to be dedicated. This, as it turns out, is the type of use at most of the present installations. However, when you view the system as a general purpose machine including Fortran, systems of 16K words of core are required. This puts the equipment in a price range where the customer would like to have a classic BATCH system in order to prepare programs off line. The monitor really doesn't allow this. As expressed by one of the salesmen; "The software feels like a mini, while its priced as a moderate sized system."

The 18 vs 16 bit argument works well in graphics, physics, real-time work and where the customer has a fetish about that sort of thing, but as a general purpose computer, those extra two bits really can't be counted on (no pun intended).

The Fortran, which has been a reason for losing, is really very slow. (It makes the 800 usec core look more like 2.5 usec.) This should be improved for general purpose work. An improvement would also help in the RSX effort and graphics. The speed of Fortran becomes a significant factor in both these cases. I would like to propose that we concider hardware floating point to give us the speed. This would enable us to pass the cost on as a hardware option, as opposed to a change in software.

The District managers and salesmen seemed to feel frustrated about the PDP-15. I think we would like to think of this product as a "large PDP-8", when in fact it is a much larger product and should be sold as such. As mentioned earlier we really

need a faster operating Fortran and a better BATCH before we can really do it justice as a large machine.

Managers felt the product was in trouble and the product line group easy to deal with. The salesmen felt the product was reasonably well off and the product line _very_ hard to get along with. On all other points, managers agreed with their salesmen; however, on these two, they are diametrically opposed. I don't feel like I really understand the reason for this difference. It may be the managers are removed from the real world; It may mean we are not really aware of problems and therefore are not working to correct them; or it may be that the problem is being viewed from two points of view. The managers, for instance, expressed concern over lack of "Bingo Cards". Salesmen on the otherhand made no mention of same.

Everyone wanted some new thing. The requests ranged from cheap disks to lower cost in line printers, to inexpensive card punches, to hardware floating point.

These requests, coupled with the differences of opinion mentioned earlier, appear to be causing some frustration. I believe the managers and product line should work to open up communications between the product line and the salesmen. This should not be in the form of product line "selling" the product to the salesmen; they are weary of this approach.

I would like to say a market direction such as "sell to the traditional customer" would help in overcoming this frustration, however, it appears that the "traditional customer" is one with a PDP-9 that likes DEC, and we may be running out of this type.

I really believe better communication between product line and salesmen, better training of salesmen so they really understand the scope of the product, and a system which can be used more in line with its cost, as mentioned earlier, will go a long way in overcoming this frustration.

I also detected a general feeling of no excitment towards the product, which could be symptomatic of the same problem that resulted in frustration.

The final critique is one that has all managers very concerned. It is the complete lack of customer generated interest such as "Bingo Cards". We do not see any activity at this time and it is the consensus that the past activity was mainly with existing customers. The survey of installations tends to bear this out. There appears to be two ways to overcome this: First, with saturation coverage of each district by the salesmen; Second, by a more hard hitting Public Relations campaign. Several commented on the present ad campaign as not really generating

interest; it is too subtle and doesn't project a meaningful
image. I wish I knew enough about Public Relations to suggest
an alternate or what would project a "meaningful image". My
incompetence on this point, however, should not dilute its im-
portance.

In summary, I feel we should do the following:

1) Managers and product line should work more closely with
   salesmen, thus avoiding misunderstandings. Managers and
   product line should work to overcome the feeling that
   "product line" is hard to get along with.

2) Managers should work to instill a feeling of a mature,
   competent product; one in which the customer is gen-
   erally very pleased (this point should be emphasized).
   They must also recreate a spirit of excitement with the
   salesmen, although I don't quite know how to bring this
   about since what works with my people may not work with
   others.

3) We should capitalize on the very successful use of the
   PDP-15 in dedicated applications. Physics appears to be
   filling up, but graphics and realtime work are still good
   areas.

4) We should have a hardware floating point option, and a
   better BATCH. This would enhance the product and make
   it perform more in line with its cost when used in gen-
   eral purpose scientific computing.

5) If item 4 is realized, we could concentrate on the IBM
   1130 type of user. I feel this is a very large market
   in which the PDP-15 is not really being sold.

I realize I did not give any specific recommendation of how to
create a quantum jump in sales that would be felt in the near
future. I believe that I speak for the district managers when
I state that we really don't know how this could be done be-
yond the five items mentioned. I would like to follow up on
this question and see if the passage of time has allowed our
creative thinking to produce anything after it was stimulated.