Subject: The future of micros and CDs
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Since it now appears almost certain that optical Compact Disc (CD)
drives are "on the way", it would seem to make sense to ask what
impact this trend will have.

What will be put on these disks?

What sorts of databases will become available? Obviously dictionaries,
encyclopaedias, etc - but what else? Super clip art volumes? All of
the works an artist, in super resolution and color? "Chunks" of encoded
music, ready to run a synthesizer? Catalogs of digitized sound effects,
to add to your software or include in your letters home (Oink! said the
postcard...)? Will all future textbooks be on CD as well as printed?

How will they affect distribution of software? Will all the software
you will ever want be packaged on a single disk which comes included
in the cost of a system? Or will some sort of "encryption" be used
to allow selling a single program on a disk with many programs? (This
might work by using two keys - one is the user's password, protecting
his data, and the other of which is created to match that to allow
decryption, without ever re-recreating a single key that can decode the
text. Anyone who hands out both keys risks others messing with his
data, or the company tracking him down. Or, a disk full of games might
be sold on a "monthly payment" basis, with a new de-cryption key passed
out each month - you keep the disk as long as you make payments.)

What ways will software be affected? Games that use many digitized
views of real scenes (EG a castle and surrounding countryside), to be
overlaid by generated graphics? True expert systems on PCs?

How will the industry be affected by the lack of a comparable cost
writable medium of about the same order of magnitude density? Will
only commercial developers create CD products? Or will companies spring
up to make CDs from user's data, owing to a widespread demand for use
of the CD initially as an archival medium, which shortly provide the

basis for moderate entry cost entrepreneurial activities? Will low cost software plus the lack of an equal writable medium result in a boom in new "users", and industry then ignoring the relatively small "developers" market segement in their new machines (Let them use Vaxen...)? Or will a writable medium be developed at a cost individual developers can afford?

Will the need for huge volumes of software, (to make a disk competitive) result in stagnation of the development of new hardware? (- since you need a large volume of software, all compatible with the same environment.) IBM may realize this, and that they would have a big edge, if the "standard" happppened to be theirs. Obviously, the way around this is to build an IBM PC on a chip, and put it into your new super-whammo system... In any case, doesnt it look like the IBM PC default standard is going to be around a Loooong time? Or will the impact of the CD, or some other coming trend be great enough in other ways to inspire a lot of new software for other machines?

No matter what is going to happen, it sure looks like the CD is going to have a huge impact on the personal computer industry. I think we can expect a fair number of unimaginative uses, at first, (EG a huge collection of IBM PC software) followed by a fair sized flood of innovative products, and perhaps a "data revolution" that finally makes the "microcomputer revolution" a reality. So how about it - what's likely to come?

Tom Craver hou5a!trc