

forward to working with you Lee!

Then there is a bit of future personnel planning - at least, that's what I'm calling Donna's and James's babies! Congratulations to both sets of parents!

And finally, Maggie Toomer and Dawn Gordon are going off to Programmer retraining.

We wish them well.

If you are aware of other people movements, in Hursley or Raleigh, let us know so we can tell others.

Thought for the month

taken from: PEOPLE FORUM at Hursley

Comment in one of the trade journals this week on poor customer support "When a corporate customer rings Company X with a problem he quickly finds out why they are much cheaper than IBM."

Once More Into The Breach, Dear Friends

by Doug Glading

(Some of the folk battling away at the frontiers of voice processing may not realise that IBM and Hursley have been there before. An honoured few of the current CATS team can still remember those days. In this article Doug Glading recounts what we were trying to do, and some of the lessons that emerged. I guess the main one is You have to market it! Lawrence)

In Voice processing today we are offering voice record/replay. We offer the ability to get data from a host by 3270 emulation, controlled by the keys pressed by a caller. Information can be spoken to the caller by recorded voice segments. We have just added Text-to-Speech (which lets any data be read out - eg Profs notes). We are looking at voice messaging. We are wondering about annotating documents with recorded voice explanations. We are wondering about 'first party call processing', where you have facilities on your personal PC that lets it act like a phone - eg you can point at a number in a document and the system calls it for you.

Well, in October 1985 we announced all the above.

The IBM Voice Communications Option was announced in the USA - and it came with a set of announcements of quite comprehensive, IBM written, applications. (If you want all the details, Ivory letter \$185128 can still be found online).

Firstly let me describe what was provided, then discuss why it did not capture the world.

The 'VCO': The VCO itself was a PC card, with quite powerful Digital Signalling Processor chips (DSPs). You just put it in your PC, unplugged your phone from the wall and plugged it into the card. Then you plugged the card into a (indeed two if you wanted) phone socket.

The card gave you:

- Audio Record - with a choice of three compression rates (up to 9.2 minutes per megabyte)
- Replay
- Text-to-Speech (with intelligent differentiation between abbreviations (eg knew if 'Dr.' should be Doctor or Drive)

All the above could use the telephone or a local microphone and speaker

- Voice Recognition, using a user-defined 64-word vocabulary. (This was only provided from a local mike or phoneset)
- Detection and Generation of DTMF tones
- Detection of call progress signals (busy, ringing, voice, silence)
- And, in addition to all the above, it worked as a conventional modem too.

-- not a bad spec, even today! List price of the card was about 1200 dollars.

Applications: Announced too was a good set of utilities and complete applications, mostly at Day 1.

- A carefully defined and documented Application Programming Interface enabling (as we would say today) all the above functions.
- Voice/Phone Assistant - a voice mail system, with touch-tone access, passwords etc
- Telephone Access to Office Systems - dial-up your Profs system and listen to (and delete!) all your Profs mail. (Easily adaptable to other systems - I had an insurance customer who modified it to give out insurance quotes from their Cics system).
- Personal Telephone Manager - dial-out from a number on your screen. Included a complete directory system.
- Audio annotation of documents, using the popular DW4 word processor.
- Voice-Activated Keyboard Utility - so you could work PC applications by voice alone
- Augmented Phone Services - a nice application that helped hearing and/or speech impaired people hold conversations over the phone (eg use the phone keys for input, of both numbers and text).

Why Didn't It Capture The World?: A number of readers will immediately know the one-word answer to that - 'Homologation'!

The product was not designed with any thought to non-US Approvals requirements, or to the characteristics of non-US telephone systems.

Hursley was in fact brought in to try to produce solutions for non-US markets. We did design a product for sale in Europe. This was a reworked card plus a large box that had to sit outside the PC. It had the various transformers, relays, circuitry and sockets necessary - it was big, and

pretty costly. We also had to cripple some of the functions - eg the software modem couldn't be used - and limit some of the applications.

The expense of all this meant the business case for European announcement was impossible.

So Why Didn't It Fly In Just The USA?: Well, with 20/20 hindsight there were a variety of factors. The following are my personal views of some of the reasons.

TOO MANY FUNCTIONS - strangely it was probably too rich a product. The people who wanted local voice recognition didn't want telephony; the people who wanted an answering machine didn't want TTS, etc. There wasn't one 'unique selling proposition'.

BENEFITS - it was a comprehensive product, with a number of uses. But the benefits in any one use were not often tangible. A clever voice mail application on your PC wasn't clearly a better bet than a cheap answering machine. Voice input to your PC didn't really show a good dollar saving.

MARKETING - It was just another adaptor card. In the nature of adaptor cards it was just 'thrown over the wall', onto the dealers' shelves. They didn't have time to understand it. It was too small and complex (relatively) for the IBM salesman. There was, I think, one advertisement run for it.

Eight Years On: Now a lot of PCs on the market have basic functions cheaply available, or built-in - giving record/replay/annotation, even synthesis. These extra, local, functions are becoming standard.

The telephony solutions have become much more focussed 'system' solutions. You don't ring up your PC to ask it to read out something from the DP DB - you ring a multi-line system box. Voice Mail is also a shared capability, for all users, rather than a personal one.

What we still don't have is the merger. We don't have telephony capabilities in every workstation - to place calls, send voice over the LAN, etc. (Nor, sadly, do we have IBM products that help the handicapped in all the ways our skills could).

But, we do have some very beneficial solutions for the marketplace, with very tangible, provable, benefits. And we have P2P condensing from the gallocast dust....

Doug

Lunchtime Seminars

Have you noticed the Various **Lunchtime Seminars** advertised on LOOKUP at Hursley? They're very informal and worth attending.

This week I've been to two:

- The New Hursley Switch by Tim Gilson

Especially interesting to CATS people and to those who have to cope with the changes it will impose ...

- What did Deming really say?

Chaired by Keith Watson, this consisted largely of excerpts from two videos in which one could here the great man (or crusty old ... depending on your point of view!) enunciate his ideas personally.

So I recommend you keep an eye on LOOKUP and consider going. For those of you not in Hursley, if you're interested, let me know, and I'll try and work out how we can export some of this stuff!

Lawrence

Who's Dat Cat?

Did you get last months? Well it was **Doug Glading**.

How about trying your luck with this one? Or better still, send me your own description!

(I've got one to include in April. Thing is, I can't work out who it is yet!!!)

Lawrence

Who is X???

X is:

- BSc, PGCE
- A Campanologist (retired!)
- Feels sheepish every time he goes home
- Comes from a country "Left in the hands of an unfriendly power" (according to Flanders and Swann)
- Intends to take SRO in the year 2003, Heinz permitting!
- Knows what a scaphoid is....

And Finally.....

(gleaned from the Christmas edition of *New Scientist*) by **Doug Glading**

Three statisticians went duck hunting

- As a duck flies by the first takes a shot, which goes a foot too high
- The second tries, but his shot goes a foot too low
- The third leaps up and shouts "we got it"....