TRAINING TECHNOLOGY TODAY & TOMORROW

New Technologies in Training

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'Making the case' is all important in securing action, support and resource allocation in a large company. Such decisions are often influenced not only by the validity of the case itself, but by the way in which it is presented. At the same time, quality of presentation is important in creating and promoting a company image, both within and outside of the company itself.

At Glaxo Pharmaceuticals, the Company's Management Services Division introduced graphic presentation systems on the Company's four sites specifically to help staff 'present a good case' for these purposes. These systems have been used extensively over the past year by directors, senior and middle management, and technicians. This article outlines the reasoning behind this investment and gives examples of how it has already proved its value. Although here used as a management support system, the hardware/software discussed would be equally valuable to the trainer.

Antecedents
Over the past 2 years, many hundred company staff have become users of Vectra personal computers, the high quality IBM AT compatible launched by Hewlett Packard in this country in 1985. This opened up new possibilities for manipulating Company data on the PC for reporting and graphics output. Management Services Division's End-User Support Unit, charged with evaluating available products on behalf of the Company's users, have continually reviewed and reassessed the marketplace over this period. The initial take-up of graphics packages was of products familiar to users of the HP150 PC - Picture Perfect for line/bar/pie charts and Diagraph for free form drawing and use of icon libraries. The standard output device tended to be one of Hewlett Packard's plotters (ColorPro, 7550a, etc.), producing 6-8 colour lead acetates for overhead projection or hard copy for incorporation into reports.

The quality of output has improved with the advent of more sophisticated graphics packages. Decisionnel Graphics (from ADE Marketing) and VCN Concorde were preferred by some because of their three dimensional capabilities. HP's Charting Gallery then became very popular, partly because of its integration with other HP supported products (notably Vectra Word and HPDraw). Over the past six months, however, Lotus's Graphwriter and Freelance products have emerged as key strategic products, partly because of the new possibilities offered by the Videoshow presentation system (see next section).

Throughout this period, there had been many requests from users about getting graphics packages to output in 35mm slide format. Polaroid Palette was tried and tested, but found to have the problem that it required an IBM CGA card and monitor to be fitted to the HP Vec- tra, as the system would not interface with HP's multimode video card. Nevertheless, it did enable slides to be produced, which the Training Department on one of the factory sites were very keen to achieve. Incidentally Polaroid have recently introduced their Palette Plus which is compatible with most PCs which have an EGA graphics capability - a great advantage.

In the Autumn of 1986, however, General Parametrics Videoshow became available in this country for the first time. This system added a new dimension to business graphics presentations and radically changed our thinking on strategic products in this field.

Videoshow Image Design and Presentation System
The Videoshow system comprises the following:

Presentation Design Software: There are a range of software packages available that are compatible with this system, but the main two are Pictorellt and Lotus Freelance Plus both of which run on IBM PC compatibles. Pictorellt enables the user to design bar, pie, line, organization and word charts in a range of predetermined formats. It is extremely easy to use and contains sufficient variety to facilitate the design of a reasonable presentation. For more specialized needs, Freelance Plus can be used. This is a freeform drawing package, with a range of icon libraries, and can be coalesced with Pictorellt images. Graphs can also be imported from other software packages (including Lotus 1-2-3 and Symphony) or plotted in Freelance Plus, Graphwriter or Pictorellt direct from information held in spreadsheets. Standard 80 column 25 line text screens can also be converted to VideoShow format and edited using VIP, the Videoshow Interface Programme.

VideoShow presentation system: Having prepared the presentation with software running on the PC, the PC can now be forgotten, for the time being at least. Armed with the
floppy disc containing VideoShow images and the VideoShow presentation hardware, the presentation can be given to a large audience via a projector (eg Barco Data 3 or Electrohome ECP 2000) or via a colour monitor for smaller audiences. The wide range of colours available (1000 or 5000 depending on the system used) as well as the range of formats available makes this a convenient way to present material suitable for a 35mm slide presentation. The obvious advantages include the portability of the presentation (one floppy disc can hold as many as 200 images) and the fact that the presentation is always in the correct order, the right way up and there are no focusing problems. (Ease of editing will be dealt with in the following section.)

The main disadvantage is that the VideoShow hardware is not always readily available. This is overcome with the PhotoMaker (35mm slide preparation system) and PrintMaker (overhead and paper hardcopy printing system) options.

PhotoMaker allows a VideoShow presentation to be converted to high quality 35mm slide format using standard colour transparency film (eg Ektachrome 2000) using the VideoShow computer and a CRT camera. For ‘instant’ slides Polachrome film can be used though there is some loss of quality. A new system, PhotoMetric 200PC, allows slides of even higher quality to be generated directly from the design PC. Both these systems have the basic disadvantage that only PictureIt compatible software packages can be photographed.

Other software graphics can be photographed direct from the PC, albeit at slightly lower quality using the Polaroid Palette camera. Using this equipment and a PC with IBM CGA graphics adapter, virtually any IBM compatible software can be used to generate 35mm slides.

**Advantages/disadvantages of in-house slide production**

Generating ‘in-house’ 35mm slides has many distinct advantages over going to outside specialists, the most important of which is cost. Here is a short case study:

Using the PhotoMetric system, the total number of 35mm slides made from February to June 1987 was 372. The cost of the film used was £78, thus the cost per slide was £0.21, excluding computer time and photgraphic developing. This compares favourably with the minimum cost to produce one 35mm slide through a commercial agency of £7.8. At £8 per slide the total cost to Glaxo (excluding courier fees, etc) would have been £2976. The cost of PhotoMaker camera and software is £2631 (excluding corporate discount).

The break even number is calculated by using a commercial price of £8, the actual cost of £0.21 and disregarding the cost of the PC, VideoShow, design software and PC-user time to design slides. These costs

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The figures in brackets include the cost of IBM CCA card and monitor required since Polaroid Palette will not run off the HP multimode card used at Glaxo.
will be offset by reduction in cost of graphic designers, couriers, etc.

There are some disadvantages using these systems: There is a slight loss of photographic quality compared to good agency produced slides and there are limitations to what the software can produce. Improvements in both hardware and software are reducing the importance of these problems and since more graphics packages are becoming VideoShow compatible (eg Graphics Gallery and Davrelle) the range of icons and formats is increasing. However, not every PC user has the skill or taste to produce good colour images.

The advantages of using this technology, other than cost, outweigh the disadvantages. An average presentation of twenty 35mm slides takes about three working days to produce from scratch (we have done it in less than one) and repeat copies can be produced in less than six hours. The software is easy to use (especially Picturelt) and takes very little time to master, with non-computer personnel able to produce excellent results after only four hours experience. Editing is simple and very rapid thus allowing managers and trainers to take an active role in the artistic design and editing of their slides. Editing of presentation discs have been executed within 10 minutes of a VideoShow presentation starting and also during the process of slide shooting. Since the entire process (including photographic developing at Glaxo) takes place on site, sensitive information remains secure.

**Hard copies**

PrintMaker is a system which allows paper or acetate hard-copy of VideoShow images to be made. Colour inkjet printers, eg Xerox 4020, allow good quality images to be made but the system is less cost effective than PhotoMaker and the printing is slow and requires manual paper/acetate feed. The newly available PhotoMaker 20C using the Calcomp Plotmaster printer has improved quality and allows autofeed.

**Concluding remarks**

Because of their business and presentation graphics potential as well as their VideoShow compatibility, Freelance Plus/Graphwriter II/Picturelt have become key products in Glaxo and are being favoured over other systems. A further advantage is the compatibility with Lotus 1–2–3 and Symphony Dbase III and the predrawn add-on libraries, eg PicturePak and Hotshots.

The introduction of the VideoShow 180 and Professional systems has further reinforced the decision to favour the above software packages. These new products allow colour images to be scanned in for use in VideoShow presentations as well as for 35mm slides thus further enhancing the all round capabilities of in-house production of presentations of outstanding quality.

**Product details**

Further details on the principal products mentioned in this article can be obtained as follows:

VideoShow Presentation system - Main dealers are:

Mediatech, Unit 16, Northfield Industrial Estate, Beresford Avenue, Wembley, Middx HA0 1YH, tel: 01-903 4372.

Reflex Ltd, Viewpoint, Gardner Rd, Maidenhead, Berks SL6 7RJ, tel: 0628 771414.


Lotus Development UK, Consort House, Victoria St, Windsor, Berks SL4 1EX.

Polaroid (UK) Ltd Ashley Rd, St Albans, Herts AL1 5PR, tel: 0727 59191.

CalComp Ltd, Vector House, Ruscombe Business Park, Twyford, Berks RG10 9NU, tel: 0734 320032.

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