

# VIDEOTEX

## COMPUTER POWER TO THE PEOPLE

### WHAT IS VIDEOTEX?

**V**ideotex is more a new way of communicating rather than another way of computing. The success of an electronic communications project can be measured in several ways. It might create cost savings, new business opportunities, save money, or provide more accurate information to decision makers to make them more effective.

The success of any computer system is dependent not only upon harnessing the technology, it must also recognise and harness the skills and abilities of the people who will be using that system. The results are dependent upon the marriage between the user and the computer.

The quality of information and its effective exploitation is emerging as a significant concern in the business community. Consultants may not immediately think of videotex as the first choice for the basis of an interactive computer system. However, videotex offers a solution to the growing problem of how to use IT as an effective business weapon.

### BIG BUDGET. WHAT BENEFIT?

Enormous budgets are spent on computer systems, and senior managers are increasingly asking how they can justify that expense. Most of those budgets have been spent on the technology rather than its maximising its effective use.

Information Technology (IT) can still be used to improve a com-

pany's competitive advantage as well as improving efficiency. Many managers though are finding it difficult to define either quantifiable benefits or qualitative improvements yielded by high IT spends.

### COST JUSTIFIED

The communications medium of videotex offers commercial managers the opportunity of visibly increasing the effectiveness of a company's IT spend.

In some senses videotex avoids the problem associated with other IT systems – its simplicity ensures its use and the effective harnessing for commercial use of the information it makes available. The benefits can be more easily quantified, and the system cost justified. Videotex can also be used to better exploit existing systems, and so make them more cost justifiable too.

### DESIGNED FOR EVERYONE

Videotex is the simplest way of accessing sophisticated applications and databases for people with little time or inclination to learn computer skills. This could be an entirely new system, or incorporated into an existing one. Videotex is an ideal medium for anyone from a member of the public accessing a public information system, right up to senior executives who lack the time to learn about computers but nevertheless require information on which to base decisions.

Videotex can put the ability to find and manipulate information stored locally or remotely in databases, on many types of computer, into the hands of *anyone* – therein lying its power and flexibility over more complex trad-

itional PC-based information systems.

Videotex is typically used for discontinuous on-line transaction processing at the point of sale of complex products and services. These include vehicles, retail, credit finance, travel and tours etc, where the person using the videotex system need not be computer literate.

Simplicity of use though need not mean a simple system. Videotex systems can provide easy access to complex systems. Nor is videotex simply an easy to use front end to a standard computer system. ROCC Computers offers an integrated approach: hardware, software, and an operating system designed to manage complex videotex applications and efficient interfacing with different types of computer systems from many vendors.

### SYSTEM COMPONENTS

But what do you need? At its simplest, a videotex system includes a computer to process information, a telephone line to connect it to a user, a television to present the information, a keyboard for the user to interrogate the system with and a printer to produce hardcopy. More complex systems could involve dozens of terminals, a powerful videotex processor, and link into a number of separate mainframes for its data.

The user of the videotex system is typically a considerable distance from the computer. However, as the system uses standard telephone lines, the system user can be at great distance from the processor, at home or work, without the cost of linking into the system being very high. Large savings are made over systems

with constant on-line access, since videotex users are only active some of the time, and only incur normal telephone charges for that time. If the owner of the videotex system uses a VAN, the telephone charges incurred by the user are often then at local rates.

### THE INTEGRATED APPROACH

ROCC claims to be the only vertically integrated videotex company that builds the hardware and offers a complete software package – enabling ROCC to offer more efficient operation of applications.

Many videotex systems at some point interface to an existing corporate information system. At this point the advantage of a custom designed videotex operating system becomes apparent. Many computer manufacturers offer videotex adaptations of their software, but efficient videotex applications require an operating system which is designed to handle high traffic volume interfacing between the videotex terminals and the computer holding the database.

Most mainframe systems are designed to manage networks of dumb terminals. Their operating systems have to go through code and protocol conversions in order to converse with dial-up asynchronous videotex devices.

The videotex operating system is designed to allow each videotex user the functions of a mainframe terminal, but with front-end local database access, data validation and computation. The user is able to achieve better productivity, because more work is processed locally.

There is less use made of mainframe time, errors are detected by the front-end processor before sending information to the mainframe, and the user can continue working whilst information is being passed between the videotex processor and the mainframe. Mainframe terminals have to wait for the processing to be completed.

### WHY VIDEOTEX?

ROCC is able to develop even complex bespoke videotex applications within about ninety days, much faster than equivalent mainframe application development. Since the bulk of the videotex system is independent of the sys-

tems into which it links, development is not complicated by the problems and risk of writing into and onto existing mainframe software.

Although there are many technical reasons which make videotex an excellent choice as an interactive information system, the major reason remains its flexibility and ease of use. Information – the key weapon in all companies if distributed, controlled and manipulated properly – is made available more quickly and in a more adaptable form than before.

By creating systems which are simple to operate, videotex can be used to bring information to the front of the company. It gives those in the firing line access to greater resources than ever before. The company is able to offer an effective IT strategy, with the need only for a minimal training investment.

### WHERE AND WHEN

Videotex has a huge number of applications. It is effective both in terms of the system user and in terms of being an optimal element in an IT plan in many environments. Videotex using ROCC software works well for low-cost transaction processing, as an interactive training system, an executive information system and as a method of managing remote teams like maintenance engineers or a sales force.

### CURRENT TYPES OF SYSTEM

Using a number of own-built and designed hardware platforms, and bespoke software, ROCC videotex offers custom solutions to individual problems. It is wrong therefore to think of videotex as a number of off-the-peg kits. The solution chosen will reflect the optimum for each customer's application.

The principal difference in the types of system is the amount of processing which is done at the front-end. Some applications will be new, closed systems. In many companies there will already exist systems and computers which must be integrated into any new system. In addition, the task of many videotex systems will be to visualise and manipulate data which is stored on those other systems.

One approach is the stand alone system. The system is built around a multiuser minicomputer, running specialised videotex applications. Mostly used for new systems they work well, but lack the flexibility of an integrated system.

A second method is Alias, which enables a videotex terminal to collect information from the host mainframe as if it were a native terminal, and then reformats the data and presents it as videotex on the videotex terminal. If coupled to a front-end processor, data can be manipulated or corrected before being sent to the mainframe.

The most complex videotex system is a combination of both of these. This synergistic system enables numerous videotex ports to access up to eight hosts with distributed databases. It weaves the elements of the local videotex and the mainframe at the application level. This gives the system the capability of processing parts of the data or the whole of the data wherever best suits the application.

Videotex offers strategic managers a cost justifiable route of implementing complex systems and applications which will be valuable to the users, for innumerable applications, which can be implemented faster and with less difficulty than with conventional system expansion.

### THE ROCC ROUTE

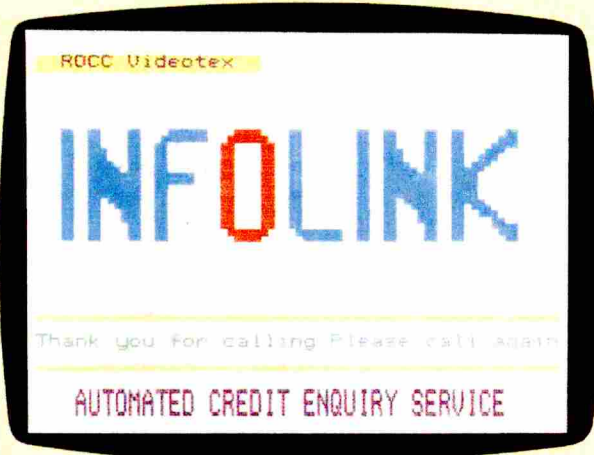
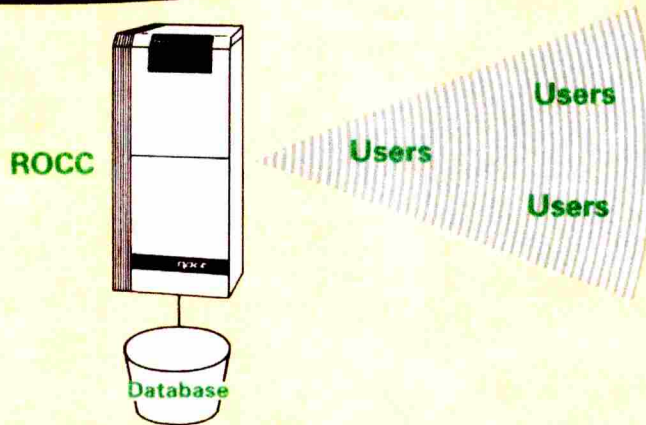
ROCC's integrated approach offers significant advantages for potential customers. Its dedicated videotex 4GL allows fast prototyping, lower development resources, less complex maintenance and quicker staff training. Purpose designed hardware and software offers better system productivity and simpler system management. A single vendor solution provides a better integrated service, the ability to react to the market faster, to tailor solutions more accurately to individual customer requirements, and faster product development cycles. Single integrated sourcing means not only a more reliable system, but also, in the event of requiring system support, the supplier support is more effective.

Full screen addressing improves performance, especially in transaction processing applications.



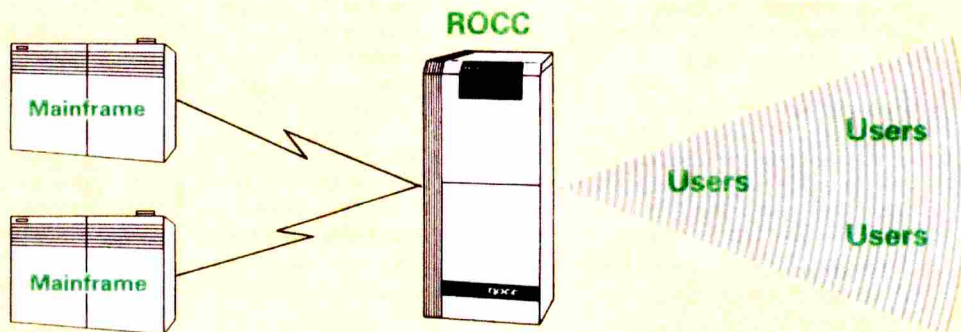
## STANDALONE PVS

In a standalone Private Videotex System (PVS) information and applications are all held and serviced from ROCC's own database and application libraries.



## ALIAS PVS

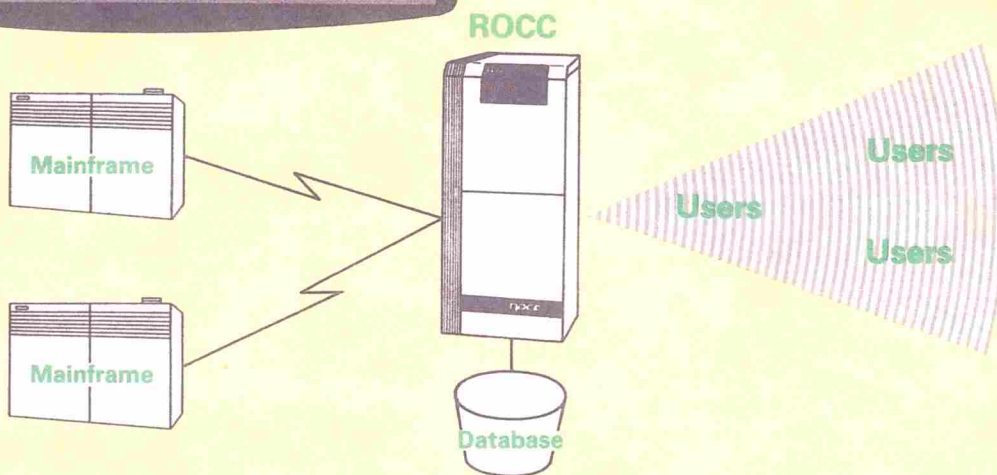
The ALIAS system connects the videotex users to existing mainframe applications. The method of using the application can be altered by the ALIAS system to make it easy to use and suitable for the videotex users without needing to alter the mainframe programs.





## SYNERGISTIC PVS

The Synergistic PVS combines local database enquiries with applications on one or more mainframes. The application programs on the ROCC PVS have complete control over how the mainframe and local applications are combined.



ROCC applications can mix interactive and view-only information pages, check input, and allow error-corrected data transfer to

PCs operating as either videotex terminals or conventional personal computers. Separate videotex port processors also relieve

the mainframe to process the application, it allows users faster dial-in access, and faster release of ports for the next user.

## VIDEOTEK IN ACTION

More profit can be made on the finance of a car rather than on the actual sale. Motor manufacturers are using videotex to capture finance business by arranging it before the customer leaves the showroom...

Salesman uses videotex vehicle locator system to find customer's ideal model.

Terminal dials into car manufacturer's videotex system to use car locator.

Locator reports. Car selected.

Terminal is used as stand alone PC to demonstrate various financing options.

Customer asks for finance. Salesman runs through financing options.

Prints proposal and bank debit forms.

PC sends proposal and customer details to ROCC videotex system, checks credit worthiness of customer and finance approval.

Salesman dials up from terminal into videotex system to check finance is approved.

Videotex system shows to salesman the credit score

Sale and finance agreed.

Instructions send via terminal to videotex system to complete sale and finance transactions.

Mainframe videotex packages have complex protocol converters to cope with managing videotex data and input/output. ROCC computers do more than 'front' a mainframe. They act as a sophisticated application level interface between the mainframe application and the user. As such, ROCC systems are able to utilise mainframe applications without needing to amend the mainframe software.

ROCC's synergistic videotex systems improve system productivity by error checking screens before sending information to the mainframe, and enhance user productivity by making applications simpler to operate. Such systems can be used for any complex application. But a complex application must be made simple to use if it is going to be used. Only systems which yield demonstrable benefits can be justified. A videotex system which yields such benefits cannot be ignored by consultants who are looking to offer companies a cost-efficient computer system. ■