

R O C C C O M P U T E R S L T D

DECISION SUPPCRT APPLICATIONS
FOR SENIOR MANAGEMENT USING
VIDEOTEX

Written by: J Phelan
S Funnell

October 1986

I N T R O D U C T I O N

This document outlines the advantages to an organisation of installing a dedicated ROCC Viewdata System together with Solutions from Decisions software to provide a Management Information System and Report Generator Facility.

The report looks at existing information based systems and considers some of the problems associated with any well established application in responding to changes in requirements. The ROCC approach to such situations is then put forward in terms of its flexibility, independence of existing systems and ease of installation.

Finally, specific examples are given of the type of application where this approach has been successful.

THE MAINFRAME ENVIRONMENT

Senior Management need up to date accurate information on their business to aid them in making correct decisions at the right time. The ability to access summaries of corporate and competitive data, without the necessity of searching through reams of raw data. In some instances the information they need is kept somewhere on their existing system(s), it may even be included in an existing report. All too often however, this information is unavailable to them when they need it. This may be because it is included in a large printed output and is impossible to find, or it may be provided too late to be of use, or it may never reach the very person who needs it.

There are then a number of problems associated with existing mainframe packages in providing crucial information :-

- a) Large mainframe systems are typically very inflexible and there is often a great reluctance to change them. They cannot respond to changed requirements.
- b) Such systems may only be loaded and run at specific times eg. once a month. At other times the only way to access the information they hold is by looking through a large print report which is little more than a dump of the entire system contents. (Worse still it may not be possible to access the information at any other time).
- c) Reports which are produced are often very large containing minute detail. Senior Management are not concerned with detail and require only certain key figures buried somewhere in the mass of data.
- d) Providing a Viewdata service on a mainframe system adds another task to the large number of conflicting interests it already has to serve, it adds one more demand onto a processor which is probably already overloaded and as mentioned in b) above the information required may not be available at all times.

THE ROCC APPROACH

The ROCC approach to the provision of management information has specific features :-

- a) It provides management information in a clear easily understood form by use of a quality colour monitor and hierarchical menus from which selections can be made.
- b) It extracts the important, useful and relevant elements from large reports and databases (both internal and external), and stores these in a structured randomly accessible database.
- c) It provides analysis and comparison of data as an aid to decision making.
- d) It provides the Senior Management in an organisation with the information from which a decision can be made, using a media which management will feel comfortable with.

The ROCC approach is independent of the mainframe system and the Mainframe Data Structure, and can be used in conjunction with 4th Generation Databases or a Flat File system. It is particularly suited to systems which have the large inflexible applications discussed previously. The combination of ROCC data handling and Videotex screen presentation has been used to great effect in transforming cumbersome outputs into useful information. Videotex provides standardised graphics suitable for presentation at board level.

Using a dedicated Viewdata System on ROCC equipment means there is no competition for mainframe processing time. The Videotex network is allocated full system resource thus maintaining a constant rapid response.

Videotex applications are user friendly and are easily used particularly by people who have had little exposure to new technology.

A flexible approach is available. Systems are responsive to user demands during the development phase. The user is not, however, tied to a rigid format when he expands into new areas, the flexible approach is always available.

Development of the system has a minimal effect on existing mainframe operations, often all that is required is a tape copy of an existing print format output.

EXAMPLES OF APPLICATIONS CURRENTLY IN USE

N.I.A.S. at British Gas

N.I.A.S. is the British Gas National Integrated Accounting System, a large application which produces a mass of printed output from an I.C.L. 2900 series mainframe computer, running under the V.M.E. operating system. The reports are inflexible in format and contain a range of figures from the minutest detail up to the Regional totals. The system is only run periodically and there is no on-line facility. The data is transferred to ROCC equipment using a magnetic tape copy of the report spool file.

When displayed via a Videotex System the format of the report has been inverted displaying Regional Totals first with the facility to descend through levels of detail. Colour is used to good effect to differentiate between Budget and Actual figures and to highlight whether variances are adverse or favourable, histograms showing trends and progress towards annual targets are also displayed.

MINE

Management Information Engineering, again a British Gas mainframe system and like N.I.A.S. only run periodically. Data capture from MINE is by R.J.E. Comms. In addition to producing displays similar to those for N.I.A.S. data a number of analyses are carried out on the districts and the calculation of various ratios. These are facilities which were not previously available but which were specifically requested by Engineering Management.

There are various other systems which have been developed at British Gas North Eastern. Generally they take existing reports and extract key figures, usually providing histograms as well as displaying figures. The methods of transfer used vary from direct data entry onto ROCC via a workstation to a route involving transfer from Superbrain floppy disk to ICL floppy disk, from ICL PC to ICL 2900 series mainframe via ICL communications emulation and from ICL 2900 series mainframe to ROCC R2800 Multi-micro system via ICL C03 R.J.E. communications.

BEATSON CLARK - Glass Container Manufacturer

Dispensing Sales Statistics

Data held on NCR mainframe transferred to ROCC via print output format on magnetic tape. The data is manipulated into a form suitable for displaying trends in bottle sales, graphically and statistically.

Customer Details

The initial data source for the customer details was a straight dump of a mainframe file onto magnetic tape media.

The record structure of the file was then expanded to take account of the turnover and the main lines applicable to the customer account.

Enquiry and update routines can be run against this file via Videotex workstations.

Customer Complaints and Customer Enquiries

This was a conversion of a paper based system to computer based. Data capture is via a Videotex workstation (Teleputer) thus effecting real-time data capture. The purpose of the customer enquiry system is to maintain control over the progress of Customer Enquiries for products and to monitor the performance of representatives. The customer complaints system maintains records of complaints received, the source of the complaint and the products involved and details of how the complaint was resolved.

G.M.F. (Glass Manufacturers Federation)

The G.M.F. publish various statistics relating to sales of products from the glass industry. These are combined with Beatson Clark's own figures to produce analyses of Beatson Clark's performance measured as Market Share.

Data capture is a combination of magnetic tape input and direct data capture.

Information is presented as tables of figures and diagrammatically - histograms being effective in displaying the 'Beatson Clark vs The Rest' split.

DATA FLOW DIAGRAM

