

# THE OFFICE

The Oxford Dictionary defines "revolution" as "complete change, turning upside down, great reversal of conditions esp. forcible substitution by subject of new ruler or policy for the old".

And that is precisely what Redifon Computers are doing with a unique multi-technology computer system which they call, quite simply "The Office Revolution". The aim of the system is to enable enterprises to improve dramatically their communication with, and thereby their service to, customers. At the same time, communication within the enterprise is greatly improved.

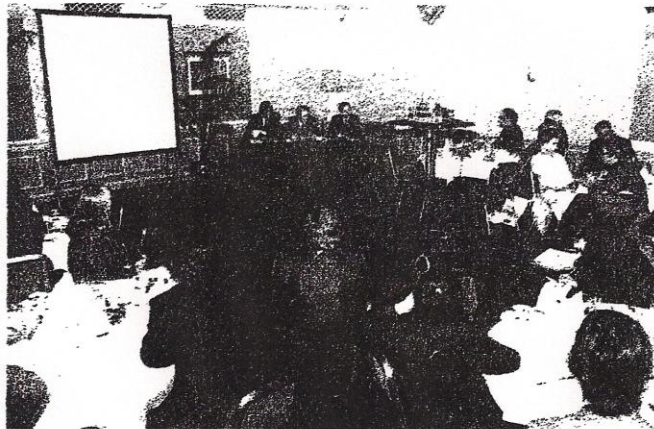
The new range is called the R1800 series, and it combines multiple advanced technologies into one easy-to-use system. They are viewdata plus, word processing, data processing, distributed processing, image processing and data entry. It is the first system in the world to combine all of them in the same system.

Five major technologies are brought together in the R1800 series: computers, televisions, image processing, telecommunications, and "human interface software".

Commenting on the new system, which was launched at a press conference in London in March, Redifon Managing Director Michael Aldrich said:

"The R1800 Series will revolutionise office procedures in terms of providing a service of communication and recording both within an enterprise, and with the customers, clients, agents and distributors of an enterprise. For the first time it is practical and highly cost-effective to converge both these activities. Redifon will supply, service and support the entire systems including the intelligent televisions.

It is in this sense that the Office Revolution is unique. It focusses for the first time on both the "within" - the internal - and the "without" - the external.



The new system was launched publicly at a press conference in March. Shown at the far end answering journalists' questions are, from left, Roger Newman, technical director, Norman Wating, manufacturing director, and Michael Aldrich, managing director.

Redifon's definition of an office differs markedly from prior definition by addressing both internal and external communications. They focus on the objective of an office rather than its function.

The nature of the business will, say Redifon completely change. For instance, the impact will be felt on all direct sales activities where the salesman's time is today split generally 70% communication, administration and travelling to 30% selling. Improved communication will cut administrative paperwork, telephone bills and much travelling. The impact will be felt in every marketing activity because much of the problem of communicating with the customer has been eliminated.

New business will mushroom. A whole new business will be created and others irrevocably changed. The new business Redifon calls the "Value Added Information Business" or "Information Service Broker".

The "Information Service Broker" will install a Redifon Viewdata Plus system with intelligent colour televisions located in his clients' premises. He will provide a directory of information and action services. For example, local shops would "advertise" special offers on his system. The broker would take the order, pass it on to the shop, arrange delivery and even collect money. He would make a profit on the value of transactions handled, paid by the suppliers of goods.

The various "service" businesses, particularly travel agents, estate agents and insurance brokers will be immediately affected. Real-time transaction completion and improved communication will change the nature of the business.



Redifon Computers Future Office System is an integrated office system capable of handling data, text, image and graphics from three sources - 'intelligent' televisions, hand-print terminals and visual display units. It is this which makes the system unique.

The "directories" business will change. What point "Yellow Pages" if one could go into a computer using Alphabetic Search to find a telephone number, automatically dial it - and then "talk" to the computer which would dispense detailed information and offer action?

The impact on education and training will be substantial. Programmed learning with proper dialogue between computer and pupil will be simple. The computer can be used to score, pace and guide the student.

So Redifon sees the systems as a major contributor to communications and shared understanding in companies. As enterprises grow, with more people, more products, more locations, more complex transactions, more complicated regulations and laws, and more intricate human problems, communications becomes vitally important. By improving internal communications, Redifon believe productivity will increase and overheads will be reduced.

An important element in the system is the use of "intelligent" televisions - and here, Redifon has been able to use the Rediffusion television companies to assist it. Redifon has worked on the development of the television with Rediffusion Consumer Electronics throughout its research - and the development of the television is seen as the key to the development of the information handling systems.

# REVOLUTIONARIES

So how does the new system work? Communications with customers are made by using "intelligent" televisions and hand-print terminals installed at the customer's agents or own local branch premises. The intelligent televisions and the hand-print terminals are connected by standard dial-up telephone lines to a computer system or a series of computer systems operated by the enterprise.

In the case of the intelligent television — a colour television capable of receiving broadcast television (BBC1, BBC2, ITV), broadcast text (Ceefax, Oracle) plus a telephone connection enabling it to send and receive information to and from any number of computers — the customer chooses a telephone number from the directory held by the television's memory and commands the TV to "phone" the chosen computer. The TV obeys and connection is made automatically. The computer sends a "greetings" page of information and offers a "menu" of services. The customer uses a hand-held key-pad, rather like a TV remote control, to select services from the menu.

These services could include:—

- **Enquiry** — information on products, services, people, locations, telephone numbers, statistics, advertising, presentational material, and so on. The customer would receive information and the enterprise would merely note that the information has been given (automatically by the computer, of course). With simple security control mechanisms some customers would be permitted to receive more and different information than others — the status of their outstanding orders, for example.

- **Service** — order reservations, order entry, order changes, quotations, estimates, messages, confirmations, complaints handling — in fact any transaction handling. In service mode the customer would be able to complete any transaction with the enterprise without the need for voice to voice, eye to eye or paper to paper connections. Information files are instantly up-dated.

- **Entertainment** — like the TV games facilities provided by separate boxes on conventional TVs, an enterprise might provide these to stimulate interest in its activities, achievements and products, or merely as an added attraction.

- **Education** — an enterprise often has to educate its customers in the use of products and services. Full programmed learning is possible with automatic scoring and automatic pacing.

The intelligent television's colour facilities make presentation stunning and impact immediate. It is, say Redifon, operable by a four-year-old, and fifteen minutes practice is usually enough — for a four-year-old.

Operating costs, excluding standard call charges, are about 70% less than attempting to connect computer terminals over the public switched telephone network (dial-up).

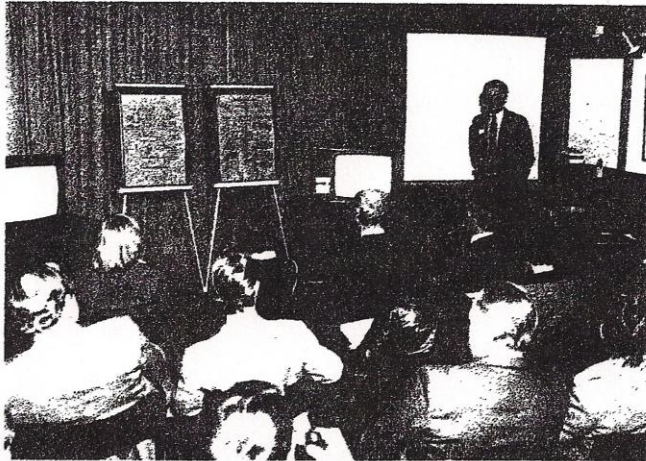
The second element is a hand-print terminal. It reads hand-print directly into the computer, and carries out verification and validation of data entered to the same levels of sophistication as is used in conventional dedicated data entry systems. As with the intelligent television, the hand-print terminals can be local or connected over a telephone line to the enterprise's computer. The terminal has a single line visual display that instantly reproduces every character written. A hard-copy document is produced at the same time enabling orders to be placed, accepted and receipted simultaneously.

no doubts about the importance of the system, are about Redifon.

"In 1970 Redifon announced its first computer system and entered the key-to-disk market," he said. "It is one of the few pioneers to have grown consistently throughout the 1970's, to have made profits every year from its computer operations, to have maintained its same corporate structure and to have grown 16 times through organic growth."

"In 1980, Redifon announces its first office product and looks for an even brighter future through the 1980's," he added.

"Redifon is committed to future office systems development, using the experience gained in the data entry and distributed data processing markets, and using our world-wide experience."



*Pictured introducing delegates to the Office Revolution exhibition in Colchester is Ian Edwards, southern branch manager. The three day event was one of a series held by Redifon throughout the country, and was well attended by companies from all over East Anglia.*

Redifon's Viewdata implementation is called Viewdata Plus.

Using the Viewdata Protocol, it provides full real-time up-date, real-time computation, multi-level indices in an advanced data-management structure, a number of levels of access together so that security is improved, but it retains compatibility with Prestel, so that Redifon's intelligent colour televisions can be used as normal Viewdata terminals connected to Prestel or private Viewdata systems.

The key elements of the system are British designed and British made — R5000, Viewdata system, WRITAWAY system — and most of the product content is European-sourced. Michael Aldrich has

Redifon Computers set out to build an integrated office system to handle data, text, image and simple graphics from three types of multi-function work-stations — intelligent televisions, hand-print terminals and conventional visual display units. Along the way the system had to store, process, manipulate and distribute information, do most of the jobs conventional data processors, word processors, information retrieval systems and data communications systems do today, be extremely simple to use, quick to install and easy to change — and above all it had to fit in an ordinary office with ordinary people. **These goals, they believe, have been achieved.**