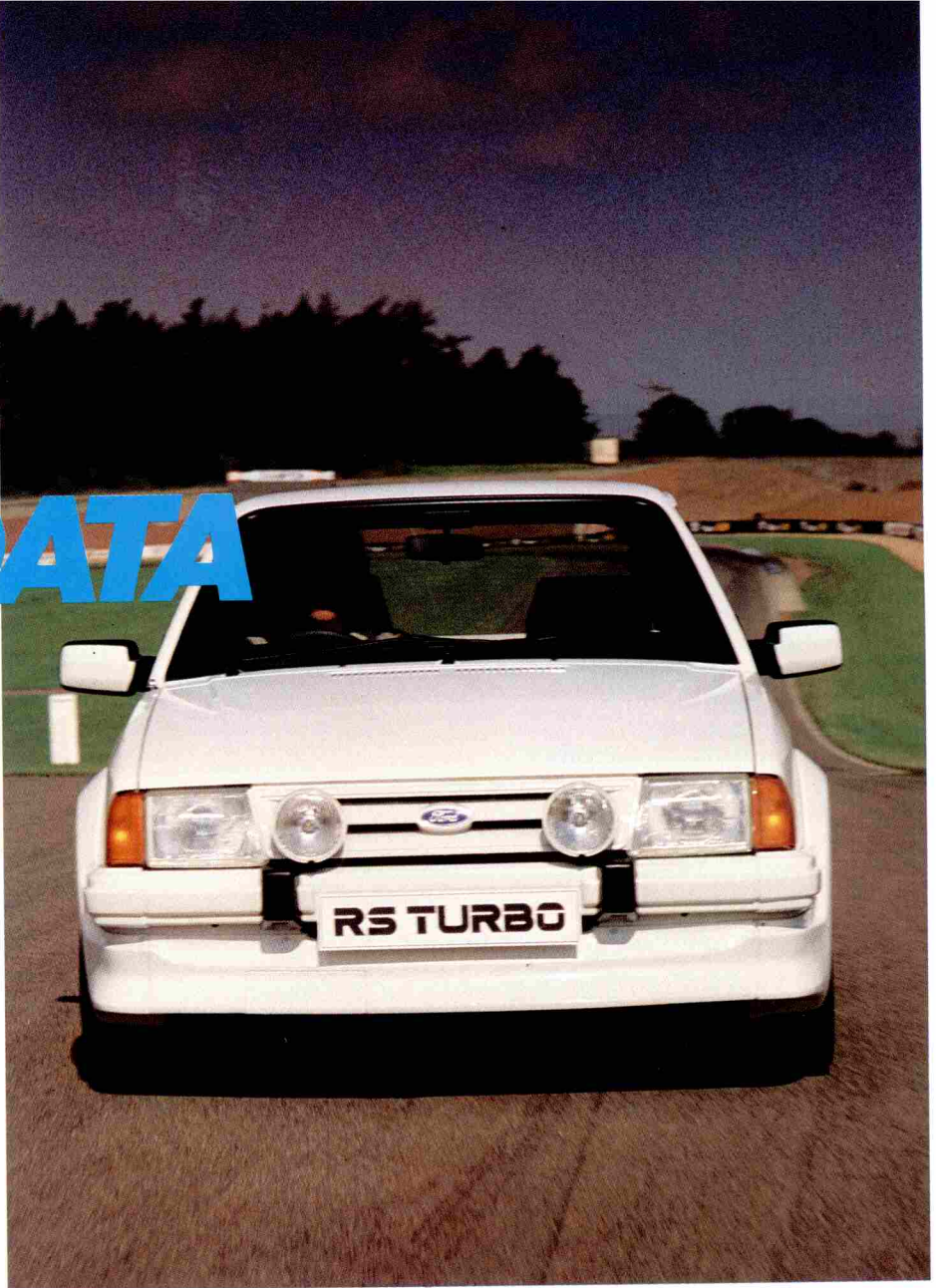# ROCC

Information Management

FORD FINDS THAT VIEWDATA GIVES YOU MORE

Ford has outsold every other car maker in the UK for as long as many of today's younger car-buyers can remember. Maintaining that leadership is a full-time task and one which, in the 1980s, increasingly requires the application of high technology to every step of the design, manufacturing and sales process.

Time was when a potential car buyer who found his local dealer without a particular model in stock had an unhappy choice – try another dealer or place an order for delivery months later.

Today, the same buyer walking into a Ford main dealer can, within minutes, determine whether the particular car he wants is available from stock not just from that dealer but from anywhere in the country. Such vehicle locater systems are not, of course, unique to Ford but, true to its sales leadership position, the company's recently completed viewdata communications system, developed in conjunction with ROCC Computers, is probably the most sophisticated in the industry. From the beginning of this year, the same system has also been available in Spain, as the expertise gained in the UK market is extended to Ford's Spanish operation.

Apart from being able to search for a specific model and colour of car with a selected engine size, transmission and option list, the Ford vehicle locator can search for similar models within a range as specified by the customer, eg 'I want any metallic colour, either automatic or 5-speed transmission, but only if a sunroof is

"It is the sophistication that sets the Ford system apart from others . . ."

fitted'. The system then conducts a 'spiral' search from each requesting dealer's location, looking first at fellow dealers within the same region and only extending further afield if necessary. Assuming a suitable car or cars are found, the system provides the local dealer with details needed to contact the stockist and negotiate a deal on behalf of the buyer.

These include an indication of whether a particular dealer is keen to trade on that particular car or not.

Should the car not be available from stock and need to be ordered from the factory, the system will 'track' it through the various stages of its progress from order, to plant, to release and eventual delivery, keeping both dealer and car buyer up-to-date.

If and when the customer does decide to buy, the same system handles the paperwork of transferring title to the car from Ford to the dealer, and raises the necessary invoices to pay the car tax, VAT and Ford itself in a single, automated process. It is the sophistication of this title transfer and payment function, including a variety of built-in interactive validity checks, that sets the Ford system apart from others in the industry, according to Alan Warn, manager of Ford's Vehicle Information Systems Office in Brentwood, Essex.

"Most 'vehicle locator systems' are simply that, with few if any additional functions," Warn says. "Our vehicle locator is probably the best in

the business, but in some respects is just the icing on the cake of our dealer communications."

Warn explains that the original justification for funding the system, dating back to early 1981, came from its usefulness in dealer sales reporting (called 'adoptions' in the trade, because the dealer in effect tells Ford it has sold a vehicle and therefore wishes to adopt title to it) and meeting legal requirements in the timing of VAT and car tax payments to the Government. The opportunity to add a more 'public face', in the form of the vehicle locator and status reporting system, offered attractive additional sales potential plus a high-tech customer image for a modest additional investment.

The use of viewdata technology was by no means a foregone conclusion when Ford began its evaluation studies, Warn adds. First to be looked at were various means of extending the audio response system, already installed throughout the Ford dealer network for rush parts orders, to cope with vehicle adoptions as well. Audio response was cheap, widely used and generally liked by its dealers, Warn says, so presented no problems of acceptability if expanded into other areas of data communications. Unfortunately, it was also relatively limited in terms of two-way, interactive communications, which restricted its potential for

continuing development. Vehicle locator enquiries, for example, were being handled via a telephone answering service by an operator at a computer terminal, and there seemed

"Demonstrations by ROCC . . ."

no effective way of adding these to an audio response system at some future date.

Demonstrations by ROCC of some of the ways viewdata could be applied to the problem quickly convinced Ford of the benefits of taking that route, Warn said. In particular, the availability of full alphanumeric characters (audio response could only deal with numbers), on-screen confirmation of entries and responses, and a much increased 'horizon' of future development opportunities weighed heavily in favour of viewdata.

"Prestel offered another, similar option," Warn adds, "but on a status reporting basis only, with information updated overnight. We wanted a fully interactive service, preferably with in-house control, and that simply isn't possible with an outside service provider."

From the decision to go ahead with development of Ford's own in-house viewdata system, events moved rapidly. By the fourth quarter of 1981, 14 Ford main dealers were

linked into a pilot vehicle adoptions system running on a single R800/70 for further development. By mid-1982, the system was ready to go national, and within weeks all 400 of Ford's UK main dealers were on board, supported by twin R1800/50s.

"Response to the new system was positive and enthusiastic," comments Warn. "As predicted from the pilot studies, there was virtually no terminal-phobia on the part of dealers. Viewdata was, and is, accepted as easily as colour TV into the office environment."

Stage 2 was the addition of the vehicle locator and status reporting services to the system, which again was tackled on a pilot study basis, beginning in February 1983. From the very beginning, usage outstripped predictions, requiring a series of equipment upgrades until, by the end of August 1983, the system was supporting every Ford main dealer in the UK. By then, three R2830s had been drafted in to handle the communications traffic on the system – a flow which has continued to grow unabated ever since, leading to the addition of a fourth R2830 in 1984.

With 96 'ports' or lines available at any one time, the system is currently handling an average of 2000 locator enquiries and 2000 adoptions a day, plus 1200 vehicle transfers, 100 status checks and miscellaneous other traffic – well in excess of predicted loads. Despite this level of usage, Warn says, improvements jointly implemented by ROCC and Ford have reduced the average search time for a locator request from three to five minutes at system launch to only 1½ minutes today.

Most 'vehicle locator systems' are simply that, with few if any additional functions. But Ford's vehicle locator is probably the best in the business according to Alan Warn, manager of Ford's Vehicle Information Systems Office, pictured (right). He, with his colleague (left) Adrian Groves, supervisor of Warn's department, have been responsible for the design, development and implementing the Ford viewdata vehicle locator system.

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"By mid-1982, the system was ready to go national . . ."

"The very high level of system usage proves two things," Warn says. "First, it's providing a service that dealers find genuinely useful. Second, it indicates that, rather than sitting idle in the back office, their viewdata terminals are very much an integral part of dealers' daily sales and administrative activities."

The Ford system incorporates a high level of reporting functions on its own activities – 'heartbeat' measurements as Warn likes to call them.

"To manage any interactive on-line system effectively, one needs to know what it's doing (and not

doing!) on virtually an hour-by-hour basis," Warn says. "It isn't good enough to wait for dealers to ring in with complaints."

As a result, the system is designed to report daily on transaction counts, availability rates and average response times, with additional details on distribution of activity hour-by-hour through the day, the number of ports in use at any one time and the numbers of 'engaged tone' responses to dial-ups.

Careful 'tuning' of the system, to measured and expected demand, helped it to cope with an adoptions peak of 10,000 on a single day last year – no prizes for guessing it fell on August 1, first day of the new registration letter year!

## ". . . a flow which has continued to grow . . ."

Lessons learned during implementation of the UK system are currently being applied to a twin system almost up and running in Valencia, Spain, involving some 200 main dealers. Running on a pair of R2830s, the viewdata package is virtually identical to the UK system, but has been fully translated into Spanish.

"Our success in the UK, and the very rapid payback of investment in terms of dealer service, increased sales and better control of cash flow, convinced our Spanish operation we were onto a good thing," Warn says. "Our UK dealers, currently running over 500 terminals on the system, seem to think so too. They tell us they see it as a very effective sales aid, as well as a help in easing administrative chores."

Never one to be complacent, however, Warn is already pushing ahead with plans for further system developments. In particular, he's looking to add further management reporting functions while extending the viewdata facility to Ford's retail dealers in the UK.

". . . plans for further system developments"

"The extended development horizon offered by viewdata was a major attraction for us in choosing this approach," Warn says. "We feel there are dozens of possibilities right in front of us, waiting to be explored, to say nothing of the many more we expect to open up as we, and our dealers, encounter new challenges in what is a constantly changing market."
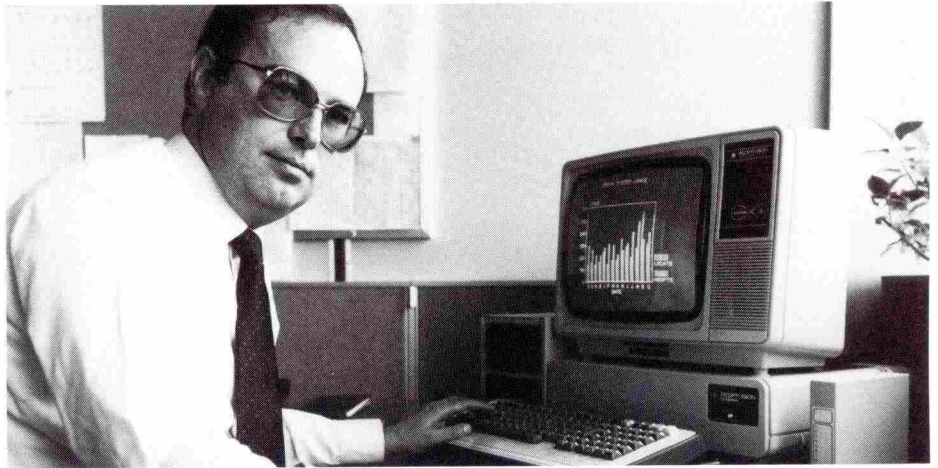
Ford's manager of Vehicle Information Systems Office, Alan Warn, is responsible for the viewdata vehicle locator project which was initially released in 1981 to Ford main dealers.
A twin system is almost up and running in Valencia, Spain, involving 200 main dealers and running on R2830s. The viewdata package is virtually identical to the UK system, but has been fully translated into Spanish.
Warn is pictured checking on the level of access activity on the Spanish system.

Picture shows Ford's viewdata vehicle locator system being used at Laidlaw, a Ford main dealer in Brentwood. The salesman is running through the customer's vehicle option specification to see where there is an identical vehicle available in the UK, so that Laidlaw can 'adopt' it.