

**G**eographic Information Systems (GIS) have long been the "nearly" technology, the next big thing in business tools just waiting to happen.

But with many vendors focusing more on the technology rather than what businesses can actually do with the applications, it's been the specialist marketing services providers that have shown what they can achieve.

### A modular approach

The two modules of MICROVISION reviewed here cover most marketers' needs, with Marketing Manager offering visualisation, profiling, penetration and other analyses based on the CAMEO range of segmentation systems (and a company's own customer data obviously). Market Maker concentrates on branch network

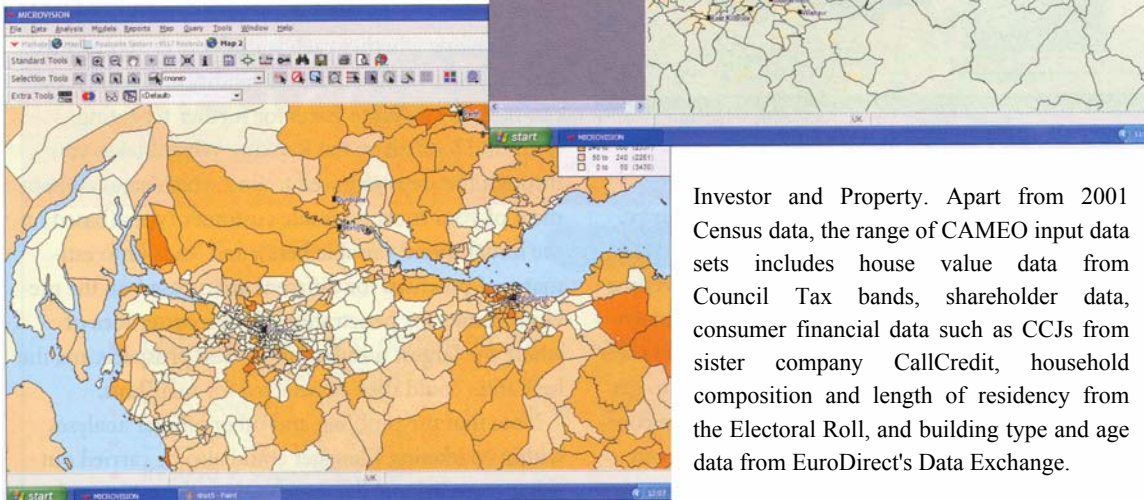
developed from GMAP's considerable site location experience.

The CAMEO range of consumer classifications which come with MICROVISION are a key element of the package as they will be usually be the "universe" on which profiling and so on will be based. The CAMEO range employs a broad range of data inputs with clustering at postcode level though analysis will often take place at higher levels of geography. Other vendors combine their data into one classification, but EuroDirect chooses to keep its separate so that users can choose which one offers the best discrimination in a particular analysis.

As well as CAMEO UK, the other flavours of classification provided are Income, Financial, Unemployment,

# BIG AND CLEVER

**Geographic Information Systems offer a powerful platform on which to analyse and visualise your own and external customer data. James Lawson tries out EuroDirect's MICROVISION.**



The user chooses a suitable icon to display customer locations, in this case, a red dot.

**Thematic mapping is the best way to visualise large numbers of customers.**

optimisation, sales territory planning and other such functions.

In January last year, EuroDirect brought together (and fully revamped) the functions of its previous system DemoGraf\* with subsidiary GMAP Consulting's MICROVISION. Though Market Maker employs drive time analysis to define catchments and offers, two other modules Optimiser and Modeller - greatly extend this capability using extra data sets (consumer demand, competitor activity) and client-specific gravity models

Investor and Property. Apart from 2001 Census data, the range of CAMEO input data sets includes house value data from Council Tax bands, shareholder data, consumer financial data such as CCJs from sister company CallCredit, household composition and length of residency from the Electoral Roll, and building type and age data from EuroDirect's Data Exchange.

MICROVISION can include CAMEO, media boundaries for radio, press and TV, sector-level 2001 Census data and market research data. Mapping datasets are mostly vector-based with a backdrop raster map to give more detail on where roads run and so forth. The package can work happily with other map formats, for instance, MapInfo .TAB files. Various other datasets such as drive time look-up tables level lurk in the background to enable different functions.

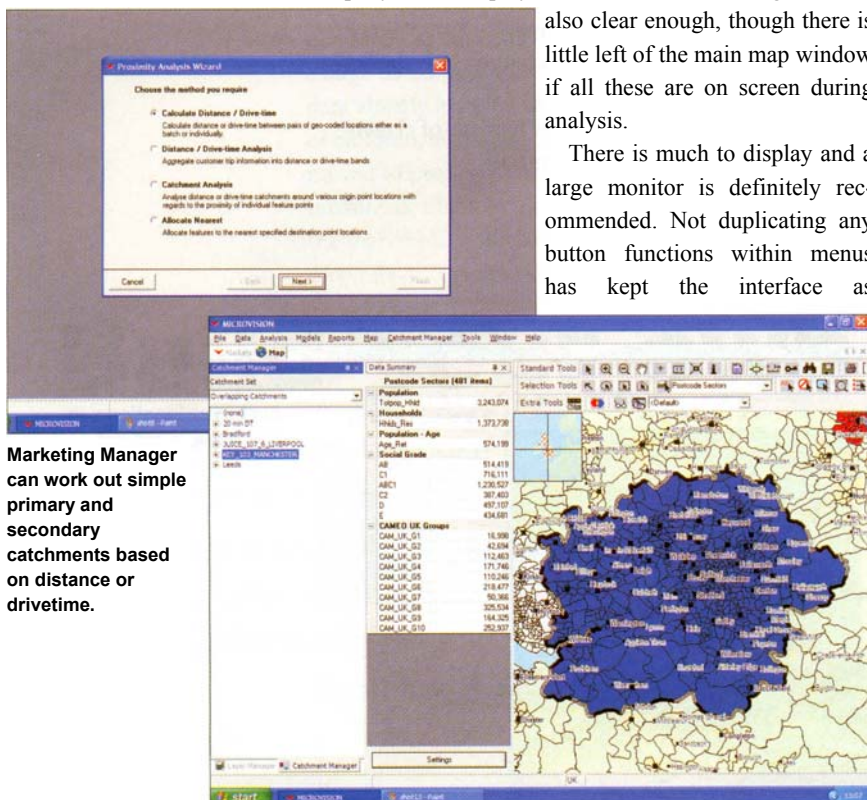
EuroDirect also offers a range of international CAMEO classifications, with 30 countries covered at the last count, including Japan, Australia, Canada, USA,

and Singapore. Profiles generated in one country with one version of CAMEO can be translated to other regions via the International Classification, with obvious applications for expanding multinationals.

The package was simple to install, taking about half an hour. The main interface is clear, with a large number of mapping tool buttons on show. Subsidiary windows, such as the Layer Manager used to choose which map layers are displayed or the Selection Manager, are

also clear enough, though there is little left of the main map window if all these are on screen during analysis.

There is much to display and a large monitor is definitely recommended. Not duplicating any button functions within menus has kept the interface as



Marketing Manager can work out simple primary and secondary catchments based on distance or drivetime.

The Data Summary window can display a wide range of counts on the selected catchment.

uncluttered and simple to navigate as any GIS can be.

Analysis can be run at full postcode level, output area level, postcode sector and higher for profiling work, though drive time analysis is at sector-level. As with any customer analytics, looking at sizeable (millions of customers) data sets at full postcode level may require a powerful PC to get answers in a reasonable time when running more complex catchment analysis. You can derive a postcode-based profile of desirable prospects, but to extract a list of individual names and addresses that you can mail directly you either have to plug MICROVISION into EuroDirect's data extraction tool Intelligence Creation or take your profile to EuroDirect (or elsewhere) to buy the data you need.

The software is full of modular wizards to help you run a standard piece of work - loading in a dataset, geocoding it, mapping it and then profiling it - that make performing the different tasks simple when compared to standard GIS, though a clear idea of what is going on is still required. There are a host of other utilities such as the Table Manager that joins tables within relational databases. Using the Data Manager, records

can be pulled in from a variety of file types, including directly from relational databases such as Access.

Our sample customer file held IDs, postcodes and a figure for spend. Once imported, the Geocoding wizard is used to parse and format the postcodes in your data. This helps maximise the success of the next step which is to match the postcodes to the reference data set to append a CAMEO code and XY co-ordinates. CAMEO holds historical postcodes to help with this, though customer data should ideally be PAF-verified before use.

Then you are into mapping visualisation. A new map layer is created for each data set imported, which can be turned on or off to display the information on the map. The user chooses a suitable custom icon to show their customers, perhaps a red dot. Classic GIS options are available such as thematic mapping; when a large number of customers are involved, this shades an area such as a postcode sector based on how many customers it contains rather than displaying discrete dots. Selection, set-up and customisation is clear and straightforward.

The Profile Wizard is next, with the first choice what is being profiled against what. For example, your customers against the national CAMEO distribution - a gains chart helps show which of the six CAMEO flavours discriminates best - or perhaps campaign responders against the initial mailing file, again by CAMEO code. Tabular and graphical reports show what percentage of the file falls into a certain group and how that compares to the area profiled against, with counts for each type showing whether each is under or over-represented. Z-scores help verify statistical validity and tabular data can be easily piped to Excel for further reporting.

To find look-alikes, the Ranking Wizard takes you through the steps required to find which areas contain most of your most desirable customer types (based on the initial spend variable here), and leads onto estimates of potential for different areas based on the previous results for penetration. With a better idea of where the largest number of the best prospects are, the best areas could then be selected for mail shots or leaflet drops.

Note that the profiling and other tabular analyses within Marketing Manager could also be carried out using conventional database tools such as Access along with the relevant data sets. The mapping technology makes this work much more intuitive through visualisation, but really comes into its own in applications like door drop planning or catchment analysis.

Marketing Manager can work out simple primary and secondary catchments based on distance or drive time using the Proximity Analysis wizard but the Market Maker module makes full use of the spatial analysis power. Here, the separate Catchment Manager is used to define catchments using external boundaries or distance or drive time.



To select an area of customers at varying times and distances from an outlet, you can overlay a drive time band on a custom catchment that you have already defined. Users can also manually edit catchments, for example, to remove "holes" that can appear when they are first defined. The range of control is impressive, the software taking account of overlapping catchments, and powerful batch functions are available for new catchment generation in the Catchment Manager.

Once the catchment(s) have been set up, their constituents can be profiled against other data sets as before, or reported on to show their socio-demographic and economic make-up (with full counts) using the wide range of census data, market research data or client own data, for example, age, social grade or demand estimates or actual sales achieved. An agency wishing to advertise within a catchment can look up the media available there and also the percentage of the catchment that it covers. The Market Research Wizard is a welcome bonus, offering extra detail at both a national or a catchment level for a host of research panel data like TGI, FRS, MORI and EFS.

Catchment-related functions don't end there. There are two extra toolbars for map annotation and catchment editing, both more of use in advanced work, while the Demographic Groups tool enables users to visualise the demographics of individual postcodes customised to their preferences.

Both these modules can report on any piece of work: national or catchment-related profiles, media makeup and so forth. All results can be viewed through a variety of preformatted charts and tables. Reports are fully customizable using advanced editing capabilities.

For example you can add your own logo or change the table field headings.

### Fully functional

Like any fully-fledged GIS, the range of possibilities in MICROVISION can be bewildering to new users but, though the system delivers a high technical spec, non-anoraks will have no trouble getting to grips with it; EuroDirect apparently receives very few helpdesk calls. With wizards for all major functions, the steps required in areas like geocoding are made as simple as they can be, and are a major step forward over the old DemoGraf\* system. But be in no doubt that this is a powerful package capable of seriously ambitious analysis of chains of stores running into the hundreds, each with complex catchments.

Choosing between this system and its competitors will involve working out which underlying set of data you want to profile against and where you want to go to find prospects thereafter. This in turn will mean testing out which segmentation systems provide the best discrimination - and what rate you can negotiate! The ongoing cost to license the GIS itself as well as other mapping data will obviously be another consideration.

Retailers and others with fixed outlets will be the ones to benefit most from a system like this. With its clear focus on usable customer analysis rather than technology, MICROVISION is an excellent way to make UK geography work for you.

### Specification

**MICROVISION requires a minimum P4 1.7GHz with 512Mb RAM and 2.5Gb minimum free disc space, running Windows NT, 2000 or XP. License fees for up to five users start from £12k per year dependant on system configuration. There is a one off charge of £950 for training and installation. The package then includes lifetime training, lifetime helpdesk and two days consultancy.**

**[www.eurodirect.co.uk](http://www.eurodirect.co.uk)**

